

Draft Environmental Impact Report

SCH# 2017011058

Volume 1
Chapters 1 through 11

KERN COUNTY CANNABIS LAND USE ORDINANCE PROJECT

Kern County Cannabis Land Use Ordinance Revisions to Title 19 – Kern County Zoning Ordinance – 2017 B, Title 5 – Business Licenses and Regulations, and Title 13 – Parks Recreation Areas and Public Places and Agricultural Preserve Standard Uniform Rules for two (2) options – Option A – Ban all commercial cannabis activity or Option B – Regulate all commercial cannabis activity



Kern County
Planning and Natural Resources Department
Bakersfield, California

July 2017

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**PLANNING AND NATURAL
RESOURCES DEPARTMENT**

Planning
Community Development
Administrative Operations

July 27, 2017

File: Kern County Cannabis Land Use
Ordinance Revisions to Title 19

ADDRESSEE LIST (See Distribution List)

Re: Draft Environmental Impact Report – KERN COUNTY CANNABIS LAND USE ORDINANCE REVISION TO TITLE 19 – KERN COUNTY ZONING ORDINANCE – 2017 B, TITLE 5 – BUSINESS LICENSES AND REGULATIONS, AND TITLE 13 – PARKS RECREATION AREAS AND PUBLIC PLACES AND AGRICULTURAL PRESERVE STANDARD UNIFORM RULES

Dear Interested Party:

Kern County has prepared a Draft Environmental Impact Report (Draft EIR) for the **Cannabis Land Use Ordinance Project for two (2) options** – Option A – Ban all commercial cannabis activities or Option B – Regulate all commercial cannabis activities. The project site is defined as the unincorporated areas of Kern County.

The Kern County Planning and Natural Resources Department, as Lead Agency, has determined that preparation of an Environmental Impact Report would be appropriate for the referenced project. Enclosed is a copy of the Draft EIR.

OPPORTUNITIES FOR PUBLIC INVOLVEMENT

Public Briefing – A public briefing will be held prior to the end of the comment period. The briefing has been scheduled for **August 22, 2017 @ 2:00pm** – Board of Supervisors Chambers, First Floor, Kern County Administrative Center, 1115 Truxtun Avenue, Bakersfield, California 93301.

Please be advised that this public briefing will occur prior to the Board of Supervisors receiving a recommendation on the project from the Kern County Planning Commission. As such, no action will be taken by the Kern County Board of Supervisors related to the EIR or the proposed project. The purpose of this briefing is for informational purposes only and is designed to assist responsible agencies and interested parties in providing comments related to the environmental document. Public Comments will be taking during this briefing.

EIR Comment Period – The comment period for this document closes on **September 11, 2017**. Testimony at future public hearing may be limited to those issues raised during the public review period either orally or submitted in writing by 5:00 p.m. the day the comment period closes.

Public Hearing – A public hearing has been scheduled with the Kern County Planning Commission to receive comments on the document on **September 28, 2017, at 7:00 p.m.** or soon thereafter, Chambers of

the Board of Supervisors, First Floor, Kern County Administrative Center, 1115 Truxtun Avenue, Bakersfield, California 93301.

If we have not received a reply from you by **September 11, 2017, at 5:00 P.M.**, we will assume that you have no comments regarding this Draft EIR.

Should you have any questions regarding this project, please do not hesitate to contact me at (661) 862-8614 or via email at BeyelerS@kerncounty.com or Suzanne Hansen at (661) 862-5006 or via email at HansenS@kerncounty.com.

Sincerely,



Shawn Beyeler, Supervising Planner
Advanced Planning Division

Marijuana Land Use Ordinance
WO #PP13001
I:\Planning\WORKGRPS\WP\LABELS\efr01-17(marijuana land use) list.doc
Sc 07/07/17 (07/18/17)

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Bakersfield, CA 93301

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California City Planning Dept
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California City, CA 93515

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401 West Kern Avenue
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City of Ridgecrest
100 West California Avenue
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Taft, CA 93268

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Caliente/Bakersfield
3801 Pegasus Drive
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 Airport Div - Room 3000
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Div Recycling Cert. Sec.
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State Mining and Geology Board
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State Dept of Food & Agriculture
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Tehachapi District
Angeles District - Mojave Desert Sector
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State Water Resources Control Board
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Control Board/Lahontan Region
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County Clerk

Kern County Administrative Officer

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Building & Development/Floodplain

Kern County Public Works Department/
Building & Development/Survey

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Env Health Services Department

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Cary Wright, Fire Marshall

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P.O. Box 634
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Andie Apple

Kern County Parks & Recreation

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Administration

Kern County Public Works Department/
Building & Development/Development
Review

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Department/Operations &
Maintenance/Regulatory Monitoring &
Reporting

Kern County Public Works Department/
Building & Development/Code
Compliance

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Lost Hills Utility Dist
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Stallion Springs Community Services Dist
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Bella Vista Water Co
Attn: Gerald Hyneman
P.O. Box 15309
Weldon, CA 93283

Ashe Water Dist
Dept of Water Resources
4101 Truxtun Avenue
Bakersfield, CA 93309

Bakersfield City Water Resource Dept
1000 Buena Vista Road
Bakersfield, CA 93311

Bodfish Water Co
P.O. Box 842
Lake Isabella, CA 93240

Belridge Water Storage Dist
21908 Seventh Standard Road
McKittrick, CA 93251

Berrenda Mesa Water Dist
14823 Highway 33
Lost Hills, CA 93249-9734

Buttonwillow County Water Dist
P.O. Box 874
Buttonwillow, CA 93206

Brock Mutual Water Co
12001 Brockridge Court
Bakersfield, CA 93309

Buena Vista Water Storage Dist
P.O. Box 756
Buttonwillow, CA 93206

California Regional Water Quality
Control Board/Lahontan Region
14440 Civic Drive, Suite 200
Victorville, CA 92392-2306

Casa Loma Water Co
1016 Lomita Drive
Bakersfield, CA 93307

Cawelo Water Dist
17207 Industrial Farm Road
Bakersfield, CA 93308-9801

Edmonston Acres Muni Water Co
25465 Barbara Street
Arvin, CA 93203

Edgemont Acres Mutual Water Co
16638 Vista Del Oro Avenue
Edwards, CA 93523

Davenport Mutual Water Assn.
P.O. Box 1503
Rosamond, CA 93560

Erskine Creek Water Co
P.O. Box 656
Lake Isabella, CA 93240

Fuller Acres Water Company
P.O. Box 125
Lamont, CA 93241-0125

Edgemont Acres Water Co
P.O. Box 966
North Edwards, CA 93523

Goose Lake Water Co
2515 Wheeler
Bakersfield, CA 93308

Gosford Road Water Assoc
13958 Gosford Road
Bakersfield, CA 93313

Friant Water Users Authority
854 North Harvard Avenue
Lindsay, CA 93247-1715

Indian Wells Valley Water Dist
P.O. Box 1329
Ridgecrest, CA 93556

Indian Wells Water
Management Committee
P.O. Box 1329
Ridgecrest, CA 93556

Greenfield County Water Dist
551 Taft Highway
Bakersfield, CA 93307

Kern Delta Water Dist
501 Taft Highway
Bakersfield, CA 93307

Kern River Watermaster
P.O. Box 81435
Bakersfield, CA 93380-1435

Kern County Water Agency
P.O. Box 58
Bakersfield, CA 93302-0058

Kern-Tulare Water Dist
5001 California Avenue, Suite 102
Bakersfield, CA 93309-1692

Kern Water Bank Authority
1620 Mill Rock Way, Suite 500
Bakersfield, CA 93311

Kern River Valley Water Co
P.O. Box 1260
Lake Isabella, CA 93240

Lamont Storm Water Dist
P.O. Box 543
Lamont, CA 93241

La Hacienda Water Co, Inc.
P.O. Box 60679
Bakersfield, CA 93386-0679

Lake of the Woods Mutual
Water Co.
7025 Cuddy Valley Road
Frazier Park, CA 93225

Long Canyon Water Co
903 Monterey Street
South Pasadena, CA 91030

Los Angeles Dept of Water & Power
111 North Hope Street, Rm 1121
Los Angeles, CA 90012

Lebec County Water Dist
P.O. Box 910
Lebec, CA 93243

Terri Middlemiss
8016 Lorene Avenue
Inyokern, CA 93527

Mettler County Water Dist
1822 Stevens Drive
Bakersfield, CA 93313

Lost Hills Water Dist
1405 Commercial Way, Suite 125
Bakersfield, CA 93309-0620

North Edwards Water Dist
13525 Fran Street
Edwards, CA 93523-3425

North Kern Water Storage Dist
P.O. Box 81435
Bakersfield, CA 93380-1435

Mountain Mesa Water Company
12707 Highway 178
Lake Isabella, CA 93240

Oildale Mutual Water Co
P.O. Box 5638
Bakersfield, CA 93388

Olcese Water Dist
P.O. Box 60679
Bakersfield, CA 93386-0679

North of the River Muni Water Dist
4000 Rio Del Norte Street
Bakersfield, CA 93308-1024

Palm Mutual Water Company
12147 Cliff Avenue
Bakersfield, CA 93306

California Water Service Co
3725 South "H" Street
Bakersfield, CA 93304

Pinion Pines Mutual Water Co
1467 Tecuya Street
Frazier Park, CA 93225

Riverkern Mutual Water Co
P.O. Box 856
Kernville, CA 93238

Rosedale-Rio Bravo Water Dist
P.O. Box 20820
Bakersfield, CA 93390-0820

Rand Communities Co Water Dist
P.O. Box 198
Randsburg, CA 93554

Shafter-Wasco Irrigation Dist
P.O. Box 1168
Wasco, CA 93280-8068

Quail Valley Water Dist
3200 21st Street, Ste 401
Bakersfield, CA 93301

Semi Tropic Water Storage Dist
P.O. Box Z
Wasco, CA 93280

Stockdale Mutual Water Co
P.O. Box 788
Bakersfield, CA 93302

Superior Mountain Water Co
19474 Enos Lane
Bakersfield, CA 93312-9501

Sequoia National Forest
Kern River Ranger Station
P.O. Box 3810
Lake Isabella, CA 93240-3810

Tejon-Castaic Water Dist
P.O. Box 1000
Lebec, CA 93243

Vaughn Water Co.
10014 Glenn Street
Bakersfield, CA 93312

Tehachapi-Cummings Co Water Dist
P.O. Box 326
Tehachapi, CA 93561

Wheeler Ridge-Maricopa Water Dist
12109 Highway 166
Bakersfield, CA 93313-9630

California Water Service Company
7138 Lake Isabella Boulevard
Lake Isabella, CA 93240

West Kern Water Dist
P.O. Box 1105
Taft, CA 93268-1105

Twin Pines Water Company
5712 Alberta Street
Bakersfield, CA 93304

Keene Water District
246 Powers Road
Keene, CA 95127

Ralph De Monte
De Monte Family Trust
2446 Dunstan Street
Oceanside, CA 92054

Dave Regland
6415 Merlin Drive
Carlsbad, CA 92001

Rene Westa-Lusk
405 Montefino Drive
Ridgecrest, CA 93555

Michael Braun
5450 Stockdale Highway
Bakersfield, CA 93309

Cannan Business Law
Attn: Shari
506 Broadway
San Francisco, CA 94133

Tiger Vitality Collection
2222 South Chester Avenue, Suite B
Bakersfield, CA 93304

Organic Health Solutions
1315 West Rosamond Boulevard, Ste 1A
Rosamond, CA 93560

Vape n Bake
2689 Sierra Highway
Rosamond, CA 93560

Life's Healing Solutions
11812 North Chester Avenue
Bakersfield, CA 93308

Tanner Vest Collection
2753 Diamond Street
Rosamond, CA 93560

DASA
1733 Sierra Highway
Rosamond, CA 93560

Taft Highway Collective
3024 Highway 119
Bakersfield, CA 93308

Highway 99 Collective
2980 Saco Road
Bakersfield, CA 93313

Peace and Medicine
2500 South Chester Avenue
Bakersfield, CA 93304

Backyard Organics
2111 River Boulevard
Bakersfield, CA 93305

Knotts Street Collective
902 Knotts Street
Bakersfield, CA 93305

West Coast Healing
3030 Taft Highway
Bakersfield, CA 93313

Diane Gilbert Jones
City of Los Angeles/LA Sanitation
1149 South Broadway, 10th Floor
Los Angeles, CA 90015

Lights Out Wellness
1739 Poplar Street
Rosamond, CA 93560

Sweet Leaf Organic
2011 Niles Street
Bakersfield, CA 93305

Siegmund Shyu, Deputy Counsel
City of Los Angeles, City Attorney Office
City Hall East, Room 701
200 North Main Street
Los Angeles, CA 90012

OCC
608 Cottonwood Road
Bakersfield, CA 93307

Green Flower
2532 Edison Highway
Bakersfield, CA 93307

Prime Spot Wellness
2722 - 100th Street
Rosamond, CA 93560

Cannibal's Medibals
110 Morning Drive
Bakersfield, CA 93306

Therapeutic Health Center
141 North Chester Avenue
Bakersfield, CA 93308

Pine Mountain High
633 San Gabriel Trail
Frazier Park, CA 93225

The Giving Tree
1631 North Chester Avenue
Bakersfield, CA 93308

ASHES
6629 Woofford Boulevard
Wofford Heights, CA 93285

American Organics Club
1737 Locust Street
Rosamond, CA 93560

Green Mile Collective
2613 Diamond Street
Rosamond, CA 93560

Sticky Icky
2125 Edison Highway
Bakersfield, CA 93305

Highway Relief Medical
2939 Sierra Highway
Rosamond, CA 93560

Big O Relief
16940 Highway 14
Mojave, CA 93501

Engel & Company, Inc.
Attn: Joseph Engel
4009 Union Avenue
Bakersfield, CA 93305

Sunselect Produce
Attn: Victor Krahn
20570 Pellisier Road
Tehachapi, CA 93561

Kern Medical Center
Attn: Jared Leavitt – Chief Op Officer
1700 Mount Vernon Avenue
Bakersfield, CA 93306

California Department of Consumer Affairs – Bureau of Medical Cannabis Regulation
P.O. Box 138200
Sacramento, CA 95813-8200

California Department of Public Health –
Office of Manufactured Cannabis
1500 Capitol Ave, Ste. 520
Sacramento, CA 95814

California Department of Public Health –
Office of Manufactured Cannabis
P.O. Box 997377 MS 7606
Sacramento, CA 95899-7377

California Department of Food & Agriculture – CalCannabis Cultivation Licensing
1220 “N”. Street
Sacramento, CA 95814

Kern River Groundwater Sustainability Agency
City of Bakersfield
1600 Truxtun Avenue
Bakersfield, CA 93301

Indian Wells Valley Groundwater Authority
500 W. Ridgecrest Blvd
Ridgecrest, CA 93555

Rosedale-Rio Bravo Water Storage District
c/o Kern Groundwater Authority
P.O. Box 20820
Bakersfield, Ca 93390-0820

Cuyama Basin Groundwater Sustainability Agency
Santa Barbara County Public Works
123 E. Anapamu Street #1
Santa Barbara, CA 93101

Kern County Board of Trade
2101 Oak Street
Bakersfield, CA 93301

Kern County Cattlemen's Association, Inc.
9501 Lokern Road
McKittrick, CA 93251

San Manuel Band of Mission Indians
Attn: Daniel F. McCarthy MS, PRA,
Director – CRM Department
26569 Community Center Drive
Highland, CA 92346

420 Lounge
1807 N. Chester Ave.
Bakersfield, CA 93308

Top Flight Meds
1910 Morning Drive
Bakersfield, CA 93306

Wicked Weed
2735 Sierra Highway
Rosamond, CA 93560

Platinum Wellness Center
2500 South Chester Avenue
Bakersfield, CA 93307

Rite Greens Collective (RGC)
5646 South Union Avenue
Bakersfield, CA 93307

Kern County District Attorney's Office
Attn: Michael J. Yraceburn
Supervising Deputy District Attorney

Bakersfield Chamber of Commerce
1725 Eye Street
Bakersfield, CA 93301

Kern County Employers' Training Resource
1600 E. Belle Terrace Ste. 5
Bakersfield, CA 93307

Kern Economic Development Corporation
2700 "M" Street, Suite 200
Bakersfield, CA 93301

Twenty-Nine Palms Band of Mission Indians
Attn: Darrell Mike, Tribal Chairman
46-200 Harrison, Place
Coachella, CA 92236

Green Frogs Health Corp.
1703 N. Chester Ave.
Bakersfield, CA 93308

Top Flight
1631 N. Chester Ave.
Bakersfield, CA 93308

The Green Empire
1379 Sierra Highway
Rosamond, CA 93560

Cloud 9 Patients Group
2586 S. Union Avenue, Suite B
Bakersfield, CA 93307

Rite Greens Collective (RGC)
5512 South Union Avenue
Bakersfield, CA 93307

Kern County Public Defender
Attn: Konrad Moore, Public Defender

Kern Taxpayers Association
331 Truxtun Avenue
Bakersfield, CA 93301

Kern County Farm Bureau
801 S. Mount Vernon Avenue
Bakersfield, CA 93307

Torres Martinez Desert Cahuilla Indians
Attn: Michael Mirelez, Cultural Resources Coordinator
P.O. Box 1160
Thermal, CA 92274

Twenty-Nine Palms Band of Mission Indians
Attn: Anthony Madrigal Jr., Tribal Grants Administrator
46-200 Harrison Place
Coachella, CA 92236

County Line Organics
1363 W. Inyokern Road
Ridgecrest, CA 93555

Kush King
1808 N. Chester Ave.
Bakersfield, CA 93308

Platinum Wellness Center
115 Price Street
Bakersfield, CA 93307

Good Vibes Dispensary
2931 Henry Lane
Bakersfield, CA 93308

Medi Drop
820 South Union Avenue
Bakersfield, CA 93307

Alisyn J. Palla
Attorney/Broker
1925 "G" Street
Bakersfield, CA 93301

Sacred Mountain Properties
14654 Caliente Creek Road
Caliente, CA 93518

Kern County Sheriff's Office
Attn: Adam Plugge

Kyle D. Hanson
Green Mojave Farms
12127 Mall Blvd, Suite A253
Victorville, CA 92392

Tony Lochhead
Colliers International
3 Park Plaza, Suite 1200
Irvine, CA 92614

Tom Mendes
State of California Board of Equalization
1800 30th Street, Suite 380
Bakersfield, CA 93301

California State Cooperative
Attn: Elizabeth Clarke
1703 - 27th Street
Bakersfield, CA 93301

Sunselect Produce
Attn: Victor Krahn
20570 Pellisier Road
Tehachapi, CA 93561

Anne Burnaugh
Mtn. Comm. FRC
P.O. Box 1902
Frazier Park, CA 93225

Linda Moua
Department of Fish & Wildlife
1234 East Shaw Avenue
Fresno, CA 93710

Passion Care LLC; Foreman Farms
Chuck K. Shakta
1800 Gloucester Drive
Bakersfield, CA 93311

Enrique Zaldivar, Director
City of Los Angeles/LA Sanitation
1149 South Broadway, 9th Floor
Los Angeles, CA 90015

Peace and Medicine
2340 Niles Street
Bakersfield, CA 93306

The Plum Tree Collective
2873 Sierra Highway
Rosamond, CA 93560

Kern County Fire Dept
Brian Marshall, Fire Chief

Andrea K. Leisy
Remy Moose Manley, LLP
555 Capitol Mall, Suite 800
Sacramento, CA 95814

Mojave Foundation
Attn: Todd Quelet
16922 Airport Boulevard
Mojave, CA 93501

Kern County Library
Boron Branch
26967 Twenty Mule Team Road
Boron, CA 93516

Kern County Library
Mojave Branch
16916 1/2 Highway 14, Space D2
Mojave, CA 93501

Kern County Library
California City Branch
9507 California City Boulevard
California City, CA 93505

Kern County Library
Kern River Valley Branch
7054 Lake Isabella Boulevard
Lake Isabella, CA 93240

Kern County Library
Ridgecrest Branch
131 East Las Flores
Ridgecrest, CA 93555

Kern County Library
Tehachapi Branch
1001 West Tehachapi Blvd - Suite 400
Tehachapi, CA 93561

Kern County Library
Wanda Kirk/Rosamond Branch
3611 Rosamond Boulevard
Rosamond, CA 93560

Kern County Library
Wofford Heights Branch
P.O. Box 1285
Wofford Heights, CA 93285

Kern County Library
Frazier Park Branch
3015 Mount Pinos Way
Frazier Park, CA 93225

Kern County Library
Jackson/McFarland Branch
500 Kern Avenue
McFarland, CA 93250

Kern County Library
Shafter Branch

Kern County Library
Taft Branch
27 Emmons Park Drive
Taft, CA 93268

Kern County Library
Wasco Branch
1102 Seventh Street
Wasco, CA 93280

Kern County Library
Buttonwillow Branch
116 Buttonwillow Avenue
Buttonwillow, CA 93206

Kern County Library
Lamont Branch
8304 Segrue Road
Lamont, CA 93241

Kern County Tax Assessor
Attn: John Lifquist

Kern County Tax Collector
Attn: Jordan Kaufman

Kern County Library/Beale
Local History Room

Jeremy Zachary
5140 E. La Palma Ave. #104
Anaheim, CA 92807

Dirk Voss
12561 Skyline Drive
Desert Hot Springs, CA 92240

DRAFT ENVIRONMENTAL IMPACT REPORT NOTICE OF AVAILABILITY FOR PUBLIC REVIEW

This is to advise that the Kern County Planning and Natural Resources Department has prepared an Environmental Impact Report (EIR) for the **Cannabis Land Use Ordinance Options**. As mandated by State law, the minimum public review period for this document is 45 days. The document and documents referenced in the Draft EIR are available for review at the Planning and Natural Resources Department, 2700 "M" Street, Suite 100, Bakersfield, CA 93301 or on the Departmental website (<http://pcd.kerndsa.com/planning/environmental-documents>).

OPPORTUNITIES FOR PUBLIC INVOLVEMENT

Public Briefing – A public briefing will be held prior to the end of the comment period. The briefing has been scheduled for **August 22, 2017 @ 2:00pm** – Board of Supervisors Chambers, First Floor, Kern County Administrative Center, 1115 Truxtun Avenue, Bakersfield, California 93301.

Please be advised that this public briefing will occur prior to the Board of Supervisors receiving a recommendation on the project from the Kern County Planning Commission. As such, no action will be taken by the Kern County Board of Supervisors related to the EIR or the proposed project. The purpose of this briefing is for informational purposes only and is designed to assist responsible agencies and interested parties in providing comments related to the environmental document. Public Comments will be taking during this briefing.

EIR Comment Period – The comment period for this document closes on **September 11, 2017**. Testimony at future public hearing may be limited to those issues raised during the public review period either orally or submitted in writing by 5:00 p.m. the day the comment period closes.

Public Hearing – A public hearing has been scheduled with the Kern County Planning Commission to receive comments on the document on **September 28, 2017, at 7:00 p.m.** or soon thereafter, Chambers of the Board of Supervisors, First Floor, Kern County Administrative Center, 1115 Truxtun Avenue, Bakersfield, California 93301.

Project Title: KERN COUNTY CANNABIS LAND USE ORDINANCE REVISION TO TITLE 19 – KERN COUNTY ZONING ORDINANCE – 2017 B, TITLE 5 – BUSINESS LICENSES AND REGULATIONS, AND TITLE 13 – PARKS RECREATION AREAS AND PUBLIC PLACES AND AGRICULTURAL PRESERVE STANDARD UNIFORM RULES

Project Location: The project is Countywide, encompassing all unincorporated areas of Kern County.

Project Description: Kern County Cannabis Land Use Ordinance revisions to Title 19 – Kern County Zoning Ordinance – 2017 B, Title 5 - Business Licenses and Regulations, and Title 13 - Parks, Recreation Areas and Public Places and Agricultural Preserve Standard Uniform Rules. Proposed text amendments to various Chapters of Title 19 (Kern County Zoning Ordinance), Title 5 - Business licenses and regulations, and Title 13 - Parks, Recreation Areas and Public Places and Agricultural Preserve Standard Uniform Rules to either Ban (Option A) or Regulate (Option B) all cannabis production, sale, and products.

Ban (Option A) Would prohibit and ban all commercial medicinal and adult use (recreational) cannabis businesses and activities of all kinds in the unincorporated areas Countywide that are the subject of Medicinal and Adult-Use Cannabis Regulation and Safety Act (formerly known as the Medical Marijuana Regulation and Safety Act and the Adult Use of Marijuana Act) and to affirm that personal cannabis use in the County of Kern must comply with State law requirements. This option would include changes for consistency to repeal specific sections of various sections of the Kern County Municipal Code. It would provide for a timeframe for legally existing retail medicinal cannabis dispensaries to cease operations. Proposed changes include, but are not limited to, the following:

- a. Repeal Chapter 19.120 - “Medical Marijuana Dispensaries” as ordered by the Court decision on Measure G.
- b. Repeal Section 5.84 - “Medical Marijuana Cooperatives and Collectives.”
- c. Repeal Section 5.85 - “Medical Marijuana Cultivation.”
- d. Repeal Section 5.86 - “Moratorium on new Medical Marijuana dispensaries.”
- e. Add Section 13. 04.210 - To prohibit use of cannabis products in any Kern County Park or other public place.
- f. Amend Chapter 19.08 - “Interpretations and General Standards” to add Section 19.08.055 to prohibit and ban all commercial medicinal and recreational adult use cannabis cultivation, possession, manufacture, distribution, processing, storing, laboratory testing, labeling, transportation, delivery or sale of cannabis and cannabis products in unincorporated parts of Kern County.
- g. Amend Chapter 19.08 - “Interpretations and General Standards” to add Section 19.08.055 to provide the procedure for existing legal medicinal marijuana retail dispensaries to continue operations for a fixed time period before ceasing operations.
- h. Amend Chapter 19.114 - “Enforcement and Penalties” to reflect increased penalties for zoning violations.

Regulate (Option B) would allow commercial medicinal and adult-use (recreational) cannabis cultivation, possession, manufacture, distribution, processing, storing, laboratory testing, labeling, transportation, delivery or sale of cannabis and cannabis products in unincorporated parts of Kern County in specific zone districts under specific detailed regulations. It would provide a timeframe for legally existing retail medicinal cannabis dispensaries to apply for a Conditional Use Permit and be approved or cease operation. This option would include changes for consistency with a Regulate (Option B) approach to repeal specific sections of various sections of the Kern County Municipal Code. Proposed changes include, but are not limited to, the following:

- a. Repeal Chapter 19.120 - “Medical Marijuana Dispensaries” as order by the court decision on Measure G.
- b. Repeal Section 5.84 - “Medical Marijuana Cooperatives and Collectives.”
- c. Repeal Section 5.85 - “Medical Marijuana Cultivation.”
- d. Repeal Section 5.86 - “Moratorium on new Medical Marijuana dispensaries.”
- e. Add Section 13. 04.210 - To prohibit use of cannabis products in any Kern County Park or other public place.
- f. Add Chapter 19.120 - “Cannabis Land Use” with specific regulations for zone districts and procedures for locating and constructing all commercial medicinal and recreational adult use cannabis cultivation, possession, manufacture, distribution, processing, storing, laboratory testing, labeling, transportation, delivery or sale of cannabis and cannabis products in unincorporated parts of Kern County.
- g. Add sections to Chapter 19.120 - “Cannabis Land Use” provide a timeframe for legally existing retail medicinal cannabis dispensaries to apply for a Conditional Use Permit and be approved, and obtain a State license or cease operations.

- h. Amend Chapter 19.82 - “Off-Street Parking” to create standards for commercial cannabis facilities.
- i. Amend Chapter 19.114 - “Enforcement and Penalties” to reflect increased penalties for zoning violations.
- j. Amend the Agricultural Preserve Standard Uniform Rules to prohibit cannabis cultivation or processing and preparation from being eligible for a Williamson Act Land Use Contract or Farmland Security Zone Contract.
- k. Revising various chapters within the Zoning Ordinance to ensure consistency with these proposed changes. These Chapters include:
 - 19.04 Definitions;
 - 19.12 Exclusive Agriculture (A) District;
 - 19.14 Limited Agriculture (A-1) District;
 - 19.30 Neighborhood Commercial (C-1) District;
 - 19.32 General Commercial (C-2) District;
 - 19.34 Highway Commercial (CH) District;
 - 19.36 Light Industrial (M-1) District;
 - 19.38 Medium Industrial (M-2) District;
 - 19.40 Heavy Industrial (M-3) District

Anticipated Significant Impacts on Environment: Aesthetics; Agricultural Resources; Air Quality; Biological Resources; Cultural Resources; Tribal Cultural Resources; Hydrology & Water Quality; Greenhouse Gas Emissions; Noise; Public Services; Transportation & Traffic; and Utilities & Service Systems

Document can be viewed online at: <http://www.co.kern.ca.us/planning/eirs.asp>

For further information, please contact: Shawn Beyeler, Supervising Planner ((661) 862-8614) or email beyelers@kerncounty.com or Suzanne Hansen, Planner ((661) 862-5006) or email hansens@kerncounty.com.

LORELEI OVIATT, AICP, Director
Planning and Natural Resources Department

To be published once only on next available date and as soon as possible

Arvin Tiller;
Bakersfield Californian;
Daily Independent;
Daily Midway Driller;
Delano Record;
Kern Valley Sun;

Lamont Reporter;
Mojave Desert News;
Mountain Enterprise;
Rosamond Weekly News;
Shafter Press;
Tehachapi News; and
Wasco Tribune

SRB:sc (07/17/17)

cc: County Clerk (2) (with fee)
Environmental Status Board
Sierra Club/Kern Kaweah Chapter
Center on Race, Poverty and Environment
Supervisorial District No. All

California Native Plant Society/Kern Chapter
Kern County Archaeological Society
Native American Heritage Pres. Council/Kern County

Notice of Completion & Environmental Document Transmittal

Mail to: State Clearinghouse, P. O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613
For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH # 2017011058

Project Title: EIR 1-17; Kern County Cannabis Land Use Ordinance

Lead Agency: Kern County Planning Department

Contact Person: Shawn Beyeler

Mailing Address: 2700 "M" Street Suite 100

Phone: (661) 862-5015

City: Bakersfield

Zip: 93301-2323

County: Kern

Project Location: County: Kern

City/Nearest Community:

Cross Streets: Countywide

Zip Code:

Lat. / Long.:

Total Acres: 8,202

Assessor's Parcel No.:

Section: _____ Twp.: _____ Range: _____ Base: _____

Within 2 Miles: State Hwy #: I-5, SR-99, SR-58, SR-14

Waterways: Kern River, California Aqueduct

Airports: _____

Railways: _____ Schools: _____

Document Type:

CEQA: NOP
 Early Cons
 Neg Dec
 Mit Neg Dec

Draft EIR
 Supplement/Subsequent EIR
(Prior SCH No.) _____
Other _____

NEPA: NOI
 EA
 Draft EIS
 FONSI

Other: Joint Document
 Final Document
 Other _____

Local Action Type:

General Plan Update
 General Plan Amendment
 General Plan Element
 Community Plan

Specific Plan
 Master Plan
 Planned Unit Development
 Site Plan

Rezone
 Prezone
 Use Permit
 Land Division (Subdivision, etc.)

Annexation
 Redevelopment
 Coastal Permit
 Other Ordinance

Development Type:

Residential: Units _____ Acres _____
 Office: Sq.ft. _____ Acres _____ Employees _____
 Commercial: Sq.ft. _____ Acres _____ Employees _____
 Industrial: Sq.ft. _____ Acres _____ Employees _____
 Educational _____
 Recreational _____

Water Facilities: Type _____ MGD _____
 Transportation: Type _____
 Mining: Mineral _____
 Power: Type _____ MW _____
 Waste Treatment: Type _____ MGD _____
 Hazardous Waste: Type _____
 Other: Countywide Zoning Ordinance Text Amendment

Project Issues Discussed in Document:

<input checked="" type="checkbox"/> Aesthetic/Visual	<input type="checkbox"/> Fiscal	<input checked="" type="checkbox"/> Recreation/Parks	<input checked="" type="checkbox"/> Vegetation
<input checked="" type="checkbox"/> Agricultural Land	<input checked="" type="checkbox"/> Flood Plain/Flooding	<input checked="" type="checkbox"/> Schools/Universities	<input checked="" type="checkbox"/> Water Quality
<input checked="" type="checkbox"/> Air Quality	<input checked="" type="checkbox"/> Forest Land/Fire Hazard	<input checked="" type="checkbox"/> Septic Systems	<input checked="" type="checkbox"/> Water Supply/Groundwater
<input checked="" type="checkbox"/> Archeological/Historical	<input checked="" type="checkbox"/> Geologic/Seismic	<input checked="" type="checkbox"/> Sewer Capacity	<input checked="" type="checkbox"/> Wetland/Riparian
<input checked="" type="checkbox"/> Biological Resources	<input type="checkbox"/> Minerals	<input checked="" type="checkbox"/> Soil Erosion/Compaction/Grading	<input checked="" type="checkbox"/> Wildlife
<input type="checkbox"/> Coastal Zone	<input checked="" type="checkbox"/> Noise	<input checked="" type="checkbox"/> Solid Waste	<input checked="" type="checkbox"/> Growth Inducing
<input checked="" type="checkbox"/> Drainage/Absorption	<input checked="" type="checkbox"/> Population/Housing Balance	<input checked="" type="checkbox"/> Toxic/Hazardous	<input checked="" type="checkbox"/> Land Use
<input type="checkbox"/> Economic/Jobs	<input checked="" type="checkbox"/> Public Services/Facilities	<input checked="" type="checkbox"/> Traffic/Circulation	<input checked="" type="checkbox"/> Cumulative Effects
<input type="checkbox"/> Other _____			

Present Land Use/Zoning/General Plan Designation:

All – proposed Zoning Ordinance text amendment and associated amendments to Title 5 and 13

Project Description: (please use a separate page if necessary) The proposed project consists of Kern County Cannabis Land Use Ordinance revisions to Title 19 – Kern County Zoning Ordinance – 2017 B, Title 5-Business Licenses and Regulations, and Title 13 – Parks, Recreation Areas and Public Places and Agricultural Preserve Standard Uniform Rules. Proposed text amendments to various Chapters of Title 19 (Kern County Zoning Ordinance), Title 5- Business licenses and regulations and Title 13- Parks, Recreation Areas and Public Places and Agricultural Preserve Standard Uniform Rules to either Ban (Option A) or Regulate (Option B) all cannabis production, sale and products.

Reviewing Agencies Checklist

Lead Agencies may recommend State Clearinghouse distribution by marking agencies below with an "X".

If you have already sent your document to the agency please denote that with an "S".

- | | |
|---|---|
| <input type="checkbox"/> S Air Resources Board | <input type="checkbox"/> Office of Emergency Services |
| <input type="checkbox"/> Boating & Waterways, Department of | <input type="checkbox"/> S Office of Historic Preservation |
| <input type="checkbox"/> S California Highway Patrol | <input type="checkbox"/> Office of Public School Construction |
| <input type="checkbox"/> CalFire | <input type="checkbox"/> S Parks & Recreation |
| <input type="checkbox"/> S Caltrans District # 6, 9 | <input type="checkbox"/> Pesticide Regulation, Department of |
| <input type="checkbox"/> S Caltrans Division of Aeronautics | <input checked="" type="checkbox"/> x Public Utilities Commission |
| <input type="checkbox"/> S Caltrans Planning (Headquarters) | <input type="checkbox"/> S Regional WQCB # 5F, 6V |
| <input type="checkbox"/> Central Valley Flood Protection Board | <input type="checkbox"/> Resources Agency |
| <input type="checkbox"/> Coachella Valley Mountains Conservancy | <input type="checkbox"/> S.F. Bay Conservation & Development Commission |
| <input type="checkbox"/> Coastal Commission | <input type="checkbox"/> San Gabriel & Lower L.A. Rivers and Mtns Conservancy |
| <input type="checkbox"/> Colorado River Board | <input type="checkbox"/> San Joaquin River Conservancy |
| <input type="checkbox"/> S Conservation, Department of | <input type="checkbox"/> Santa Monica Mountains Conservancy |
| <input type="checkbox"/> Corrections, Department of | <input type="checkbox"/> State Lands Commission |
| <input type="checkbox"/> Delta Protection Commission | <input type="checkbox"/> SWRCB: Clean Water Grants |
| <input type="checkbox"/> Education, Department of | <input type="checkbox"/> SWRCB: Water Quality |
| <input type="checkbox"/> S Energy Commission | <input type="checkbox"/> SWRCB: Water Rights |
| <input type="checkbox"/> S Fish & Game Region # 4 | <input type="checkbox"/> Tahoe Regional Planning Agency |
| <input type="checkbox"/> S Food & Agriculture, Department of | <input type="checkbox"/> S Toxic Substances Control, Department of |
| <input type="checkbox"/> General Services, Department of | <input type="checkbox"/> S Water Resources, Department of |
| <input type="checkbox"/> Health Services, Department of | <input type="checkbox"/> Other _____ |
| <input type="checkbox"/> Housing & Community Development | <input type="checkbox"/> Other _____ |
| <input type="checkbox"/> Integrated Waste Management Board | |
| <input type="checkbox"/> S Native American Heritage Commission | |

Local Public Review Period (to be filled in by lead agency)

Starting Date July 27, 2017 Ending Date September 11, 2017

Lead Agency (Complete if applicable):

Consulting Firm: _____
Address: _____
City/State/Zip: _____
Contact: _____
Phone: _____

Applicant: _____
Address: _____
City/State/Zip: _____
Phone: _____

Signature of Lead Agency Representative:

Date: 7/27/17

Authority cited: Section 21083, Public Resources Code. Reference: Section 21161, Public Resources Code.

Draft Environmental Impact Report

SCH# 2017011058

***Volume 1
Chapters 1 through 11***

KERN COUNTY CANNABIS LAND USE ORDINANCE PROJECT

Kern County Cannabis Land Use Ordinance Revisions to Title 19 – Kern County Zoning Ordinance – 2017 B, Title 5 – Business Licenses and Regulations, and Title 13 – Parks Recreation Areas and Public Places and Agricultural Preserve Standard Uniform Rules for two (2) options – Option A – Ban all commercial cannabis activity or Option B – Regulate all commercial cannabis activity



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July 2017

Kern County Cannabis Land Use Ordinance Project

Draft Environmental Impact Report

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- L 2017 Moyer Guidelines
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Chapter 1

Executive Summary

Chapter 1

Executive Summary

1.1 Introduction

The Kern County Cannabis Land Use Ordinance Project (proposed project) is a proposal by Kern County (County) to amend Title 19 – Kern County Zoning Ordinance, focusing on Chapter 19.120 (Cannabis Land Use Regulation) of the Kern County Zoning Ordinance, and any other related County ordinances. The Zoning Ordinance and other related ordinances are proposed to be revised to either: (A) ban all medical and adult use cannabis related activities other than what is allowed under California Proposition 64, Adult Use of Marijuana Act (Proposition 64 or AUMA); or (B) include updated standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, testing, and retail cannabis stores with or without mobile delivery. For the purposes of the California Environmental Quality Act (CEQA), the proposed project includes future activities expected to be undertaken pursuant to the proposed Kern County Cannabis Land Use Ordinance. The project site is defined as the unincorporated areas of Kern County (the project site or project area). Kern County is bound by Kings, Tulare, and Inyo counties on the north; San Bernardino County on the east; Los Angeles and Ventura counties on the south; and Santa Barbara and San Luis Obispo counties on the west (Figure 1-1, *Regional Vicinity*; Figure 1-2, *Project Location*). Kern County includes 11 incorporated cities with Arvin, Bakersfield, Delano, Maricopa, McFarland, Shafter, Taft, and Wasco located within the Valley Region; Tehachapi located in the Mountain Region; and California City and Ridgecrest located in the Desert Region.

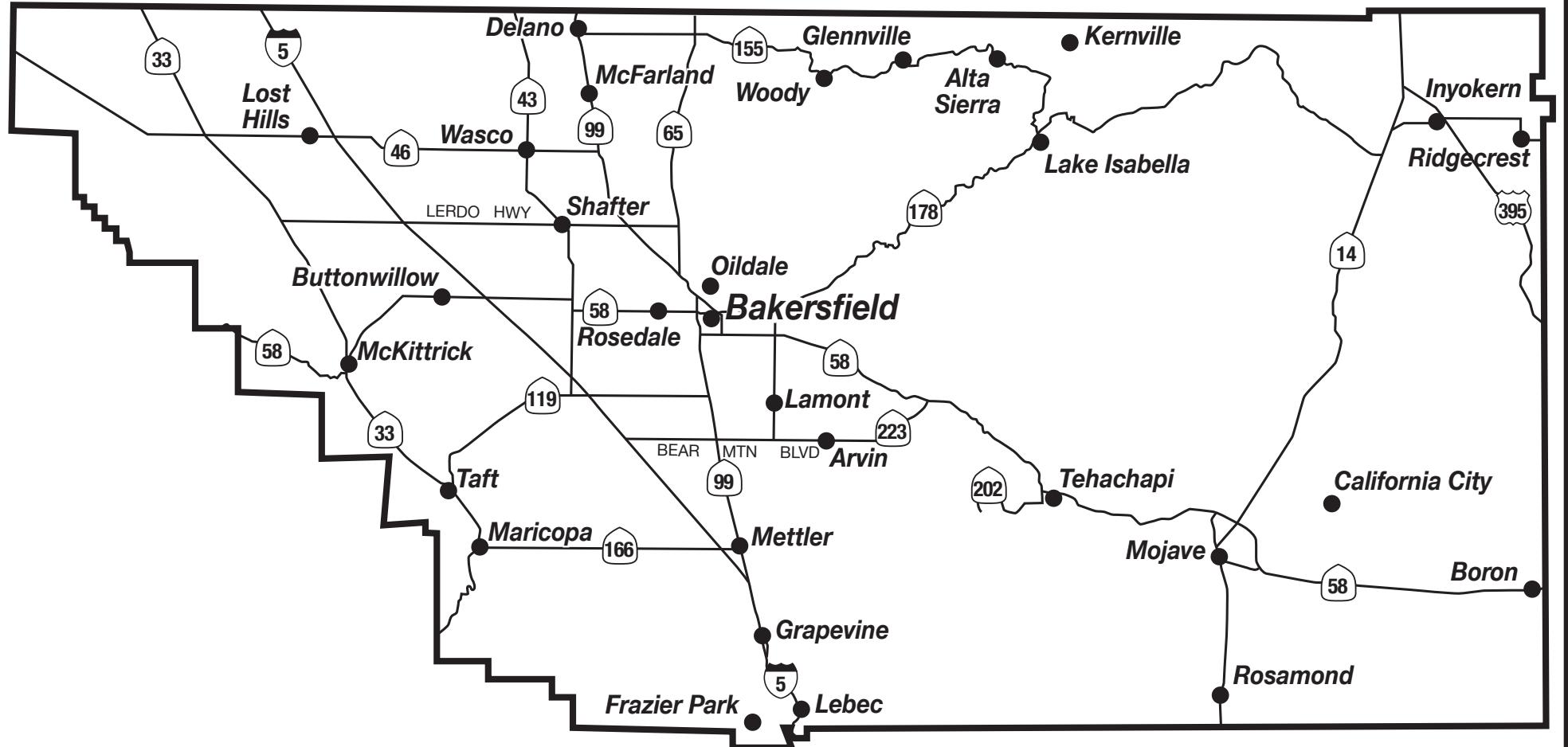
Kern County has determined that consideration of the amendment to the Zoning Ordinance requires a program-level Environmental Impact Report (Program EIR or EIR) under CEQA, with Kern County as the Lead Agency, to cover implementation of the proposed project for the future Kern County cannabis-related activities described below. This Draft Program EIR has been prepared by Kern County as the Lead Agency under the California Environmental Quality Act (CEQA). The EIR provides information about the environmental setting and impacts of the proposed project and alternatives. It informs the public about the proposed project and its impacts and provides information to meet the needs of local, State, and federal permitting agencies that are required when considering the proposed project.

This Executive Summary summarizes the requirements of the CEQA Statutes and Guidelines, provides an overview of the project and alternatives, identifies the purpose of the Draft EIR, outlines the potential impacts of the project and the recommended mitigation measures, and discloses areas of controversy and issues to be resolved.



KERN COUNTY CANNABIS LAND USE ORDINANCE PROJECT EIR
AMENDMENT TO TITLE 19 – KERN COUNTY ZONING
ORDINANCE FOCUSED ON CHAPTER 19.120 (CANNABIS LAND USE REGULATION)

Regional Vicinity



KERN COUNTY CANNABIS LAND USE ORDINANCE PROJECT EIR
AMENDMENT TO TITLE 19 – KERN COUNTY ZONING
ORDINANCE FOCUSED ON CHAPTER 19.120 (CANNABIS LAND USE REGULATION)

Project Location

1.2 Project Summary

This chapter summarizes the proposed project Option A and Option B as follows: (A) ban all medical and adult use cannabis related activities other than what is allowed under Proposition 64, or (B) include updated standards and conditions for future commercial medical and adult use cannabis cultivation, cannabis processing and packaging, distribution, testing, and retail cannabis stores with or without mobile delivery. To ban (Option A) or facilitate (Option B) potential construction of future cannabis-related facilities under either option, the County would require an amendment to the Zoning Ordinance. The Draft Program EIR, once certified, will be used to satisfy the CEQA requirements for the following discretionary actions:

Option A

- Revoke Kern County Code of Ordinances Title 19, *Zoning*, Chapter 19.120, *Medical Marijuana Dispensaries*.
- Revoke Kern County Code of Ordinances Title 5, *Business Licenses and Regulations*, Sections 5.84, *Medical Marijuana Cooperatives or Collectives*, 5.85, *Medical Marijuana Cultivation*, and 5.86, *Moratorium on Establishment of New Medical Marijuana Dispensaries*.
- Amend Title 13, *Parks, Recreation Areas, and Public Spaces* to ban the use of cannabis and cannabis products in any County park and any public places in Kern County, as required by Proposition 64.
- Amend Title 19, *Zoning*, Chapter 19.08, *Interpretation and General Standards*, to include Section 19.08.490, *Cannabis-Related Facilities, Cultivation and Activities*.
- Consider and certify a final Environmental Impact Report (FEIR) with appropriate findings (815091 and 15093), the mitigation monitoring reporting program, and a Statement of Overriding Considerations by the Kern County Planning Commission and Kern County Board of Supervisors.
- Consider and approve at a duly noticed public hearing by the Kern County Board of Supervisors of the proposed project, including the amendments of text and exhibits for Title 19 of the Kern County Zoning Ordinance and other related ordinances.

Option B

- Revoke Kern County Code of Ordinances Title 19, *Zoning*, Chapter 19.120, *Medical Marijuana Dispensaries*.
- Revoke Kern County Code of Ordinances Title 5, *Business Licenses and Regulations*, Sections 5.84, *Medical Marijuana Cooperatives or Collectives*, 5.85, *Medical Marijuana Cultivation*, and 5.86, *Moratorium on Establishment of New Medical Marijuana Dispensaries*.
- Amend Title 13, *Parks, Recreation Areas, and Public Spaces* to ban the use of cannabis and cannabis products in any County park and any public places in Kern County, as required by Proposition 64.
- Amend the Williamson Act uniform rules to exclude cannabis crops from an allowed use to obtain a Williamson Act or Farmland Security Zone Contract, per Proposition 64.
- Adopt Chapter 19.120, *Cannabis Land Use Ordinance*.
- Adopt changes to chapters and sections within Kern County Code of Ordinances Title 19, *Zoning*, to amend language as needed to reflect the adopted Chapter 19.120, *Cannabis Land Use Ordinance*.

- Consider and certify a final Environmental Impact Report (FEIR) with appropriate findings (815091 and 15093), the mitigation monitoring reporting program, and a Statement of Overriding Considerations by the Kern County Planning Commission and Kern County Board of Supervisors.
- Consider and approve at a duly noticed public hearing by the Kern County Board of Supervisors of the proposed project, including the amendments of text and exhibits for Title 19 of the Kern County Zoning Ordinance and other related ordinances.

1.3 Purpose and Use of the Draft EIR

An EIR is a public informational document used in the planning and decision-making process. This project-level EIR will analyze the environmental impacts of the project. The Kern County Planning Commission and Board of Supervisors will consider the information in the EIR, including the public comments and staff response to those comments, during the public hearing process. Because amending the Zoning Ordinance is a legislative action, the final decision is made by the Board of Supervisors, who may approve, conditionally approve, or deny the proposed project. The purpose of an EIR is to identify:

- The significant potential impacts of the proposed project on the environment and indicate the manner in which those significant impacts can be avoided or mitigated;
- Any unavoidable adverse impacts that cannot be mitigated; and
- Reasonable and feasible alternatives to the proposed project that would eliminate any significant adverse environmental impacts or reduce the impacts to a less-than-significant level.

An EIR also discloses growth-inducing impacts; impacts found not to be significant; and significant cumulative impacts of past, present, and reasonably anticipated future projects. CEQA requires an EIR that reflects the independent judgment of the lead agency regarding the impacts, the level of significance of the impacts both before and after mitigation, and mitigation measures proposed to reduce the impacts. A Draft EIR is circulated to responsible agencies, trustee agencies with resources affected by the proposed project, and interested agencies and individuals. The purposes of public and agency review of a Draft EIR include sharing expertise, disclosing agency analyses, checking for accuracy, detecting omissions, discovering public concerns, and soliciting mitigation measures and alternatives capable of avoiding or reducing the significant effects of the proposed project, while still attaining most of the basic objectives of the proposed project.

Reviewers of a Draft EIR are requested to focus on the sufficiency of the document in identifying and analyzing the possible impacts on the environment and ways in which the significant effects of the proposed project might be avoided or mitigated. Comments are most helpful when they suggest additional specific alternatives or mitigation measures that would provide better ways to avoid or mitigate significant environmental effects.

This Draft EIR is being distributed directly to agencies, organizations, and interested groups and persons for comment during a 45-day formal review period in accordance with Section 15087 of the CEQA Guidelines. The EIR process, including means by which members of the public can comment on the EIR, is discussed further in Chapter 2.0, *Introduction*.

1.4 Regulatory History and Background

1.4.1 Federal vs. State Regulatory Background

Challenges arise from the contradiction between State and federal law related to cannabis (also known as marijuana). At the State level, California voters approved Proposition 215, the Compassionate Use Act (CUA), in 1996. The CUA allows a qualified patient and primary caregiver to possess and cultivate as much cannabis as is needed for personal medical use so long as they have a doctor's recommendation. Seven years later, in 2003, the California Legislature enacted the Medical Marijuana Program (MMP) which refined the CUA. Then on November 8, 2016, California voters approved Proposition 64, also known as the AUMA. Proposition 64 legalized adult use cannabis for persons age 21 or older; legalized the cultivation of up to six plants for personal use for persons age 21 or older; legalized person possession of up to one ounce of flower or up to eight grams of concentrates for persons age 21 or older; established sale and cultivation taxes; established packaging, labeling, advertising, and marketing standards and restrictions; and prohibited marketing and advertising directly to minors. Under Proposition 64, retail sales of cannabis by State-licensed establishments are scheduled to begin on January 1, 2018; however, large-scale corporate entities are restricted until 2023. Proposition 64 makes it illegal to consume cannabis in any public place except for specifically licensed premises; continues to let local governments ban medical and adult use cannabis cultivation and sales; bans vaporization in non-smoking areas; and imposes a 15 percent or greater tax increase on medical and adult use cannabis. Proposition 64 did not affect the CUA.

At the federal level, the Controlled Substances Act (CSA) of 1970 makes it a federal crime for the unauthorized manufacturing, distributing, dispensing, and possessing of controlled substances (21 United States Code [USC] Sections 841 and 844). Cannabis is considered a controlled substance under Schedule 1 of the CSA. Medicinal use is not recognized for cannabis (21 USC Section 812) at the federal level. In 2010, the Attorney General initiated the 2010 Indian Country Initiative related to evaluating cannabis enforcement activities in Indian County and government-to-government consultation. By 2014, the USDOJ further defined guidance and enforcement for tribes and tribal land in a memorandum dated October 28, 2014, *Policy Statement Regarding Marijuana Issues in Indian Country*.

In response to recent State laws legalizing medicinal and/or adult use cannabis use, the USDOJ has issued memoranda regarding guidance for federal law enforcement as it relates to cannabis activities. A memorandum dated August 29, 2013, *Guidance Regarding Marijuana Enforcement*, acknowledged that while the USDOJ is committed to enforcing the CSA, it is also committed to using its limited investigative and prosecutorial resources to address the most significant threats in the most effective, consistent, and rational way. The August 2013 memorandum directed federal law enforcement to focus on eight priorities, stating that federal law enforcement “[i]n jurisdictions that have enacted laws legalizing cannabis in some form and that have also implemented strong and effective regulatory and enforcement systems to control the cultivation, distribution, sale, and possession of cannabis, conduct in compliance with those laws and regulations is less likely to threaten the federal priorities set forth...” (U.S. Department of Justice [USDOJ], 2013). The guidance memo further stated that “[t]he Department’s guidance in this memorandum rests on its expectation that states and local governments that have enacted laws authorizing marijuana-related conduct will implement strong and effective regulatory and enforcement systems that will address the threat those State laws could pose to public safety, public health, and other law enforcement interests” (USDOJ, 2013).

The USDOJ issued a follow-up memorandum dated February 14, 2014, *Guidance Regarding Marijuana Related Financial Crimes*, addresses federal law enforcement regarding financial transactions involving proceeds generated by cannabis-related activities, or conduct (18 USC Sections 1956, 1957, and 1960; Bank Security Act [BSA]). The 2014 memorandum further stated that “prosecutors should apply the eight enforcement priorities described in the August 29 guidance” when determining whether to charge individuals or institutions (USDOJ, 2014). The 2014 memorandum further stated that the guidance rests on the expectation that states that have enacted laws authorizing cannabis-related conduct will implement clear, strong and effective regulatory and enforcement systems in order to minimize the threat posed to federal enforcement priorities (USDOJ, 2014).

Even though cannabis is “decriminalized” under California State law, and even with the guidance issued through memoranda by the USDOJ, cannabis activities continue to be illegal and subject to the prosecutorial discretion of the federal government.

1.4.2 Kern County Regulatory Background

On July 25, 2006, the Board of Supervisors passed the County’s first medical cannabis ordinance (2006 Ordinance) to amended Title 5 – Business Licenses and Regulations of the Kern County Code of Ordinances, which added Chapter 5.84 – Medical Marijuana Cooperatives and Collectives. The hallmark of the 2006 Ordinance stated that all medical cannabis dispensaries operating in the unincorporated areas of Kern County were required to obtain a license issued by the Kern County Sheriff. The 2006 Ordinance had a significant number of restrictions, including, but not limited to: (1) hours of operation; (2) registration of employee names; (3) record maintenance requirements; (4) unlimited access by law enforcement; (5) security requirements; and (6) setbacks from schools. Only six dispensaries were provided a license under the 2006 Ordinance.

On March 31, 2009, the Board of Supervisors passed Ordinance No. G-7849 (2009 Ordinance). The 2009 Ordinance repealed the licensing system set forth in the 2006 Ordinance, and removed the majority of the prior restrictions imposed on medical cannabis dispensaries. As with the 2006 Ordinance, the 2009 Ordinance was codified under Title 5 – Business Licenses and Regulations, Chapter 5.84 – Medical Marijuana Cooperatives or Collectives of the Kern County Code of Ordinances. The only restrictions expressly placed on medical cannabis dispensaries under the 2009 Ordinance were:

- (a) A medical marijuana cooperative or collective may not be located within one thousand (1,000) feet of a school, recreation center, or youth center measured from the primary entrance to a cooperative or collective and the closest property line of the property of a school, recreation center, or youth center or on which a school, recreation center, or youth center is operated.
- (b) A medical marijuana cooperative or collective shall be treated as a pharmacy for zoning purposes.
- (c) “Medical marijuana cooperative” and “medical marijuana collective” are defined as set forth in section IV of the California Attorney General *Guidelines for the Security and Non-diversion of Marijuana Grown for Medical Use* issued in August 2008, as they read or as amended.
- (d) Any person who violates and provision in this section is guilty of a misdemeanor.

Title 19 – Kern County Zoning Ordinance, identifies “Pharmacy” under the chapter and section headings of Permitted Uses/Commercial Uses/General Retail Sales - Drugs and Pharmaceuticals and is listed under the following zone districts: C-1 (Neighborhood Commercial), C-2 (General Commercial), CH (Highway Commercial), M-1 (Light Industrial), M-2 (Medium Industrial), and M-3 (Heavy Industrial). To open a new “pharmacy” in any of the listed zone district would require an applicant to apply for and receive approval through one of two types of land use review application processes listed in the Kern County Zoning Ordinance: 1) Chapter 19.56 Precise Development (PD) Combining District; or 2) Chapter 19.80 Special Development Standards. All commercial and industrial zone districts that *do not* include the PD Combining District are subject to the provisions called out in Kern County Zoning Ordinance Section 19.80.030 Development and Performance Standards and may be subject to Kern County Zoning Ordinance Section 19.80.040 Plot Plan Review and Approval if the proposed project requires a building permit.

Per the 2007 California Building Code, Section 108.41 Permits, “A written construction permit shall be obtained from the enforcing agency prior to the erection, construction, reconstruction, installation, moving or alteration of any building or structure except: 1) Work exempt form permits as specified in Appendix Chapter 1, Section 105.2; or 2) Changes, alterations or repairs of a minor nature not affecting structural features, egress, sanitation, safety or accessibility as determined by the enforcing agency.” If an applicant is required to obtain a building permit, the enforcing agency would then notify the Kern County Planning and Natural Resources Department that an application has been made. Planning staff would then conduct a site plan review to see if the project meets the necessary land use requirements; such as, is the proposed land use allowed in that particular zone district and if so, will the project be subject to further review of development standards or a zoning land use permit processed per Kern County Zoning Ordinance Section 19.80.040, as previously stated. All ministerial permit applications are subject to the provisions of Kern County Zoning Ordinance Section 19.102.050 Application – Approval or Denial.

All zone districts that also have a PD Combining District are subject to the provisions of Kern County Zoning Ordinance Section 19.56.130 Site Development Plan Review, which establishes reasonable and necessary development standards for the single-family, multifamily, commercial, and industrial, institutional, and other similar uses to ensure the development subject to this chapter includes appropriate public improvements and is compatible with surrounding uses. The development standards specified in this chapter shall apply to all multifamily development in the R-2 (Medium-density Residential), R-3 (High-density Residential), and all development in the CO (Commercial Office), C-1 (Neighborhood Commercial), C-2 (General Commercial), CH (Highway Commercial), M-1 (Light Industrial), M-2 (Medium Industrial), and M-3 (Heavy Industrial) Districts, excepts as provided in this chapter, and shall apply to those uses in the A (Exclusive Agriculture) and NR (Natural Resource) districts as required by those chapters. The discretionary permits specified in this Section may be issued by the Planning Director following a submission of a completed application and approval at a properly noticed public hearing.

Any proposed projects that are being considered on project sites that already have an approved PD plan, would be subject to the review and approval of either a ministerial “minor” PD Plan modification application process with following the guidelines called out in Section 19.102.040.E. Minor Plan Modifications of the Kern County Zoning Ordinance or a discretionary “major” PD Plan modification application process which would be evaluated by the Planning Director to determine whether the requested modification(s) constitute a substantial change in the previously approved

project. If that determination is made, the application process for a “major” modification would follow the same provisions of the original application process for a publicly noticed hearing.

On August 24, 2010, the Board of Supervisors adopted a one-year moratorium prohibiting any new medical cannabis dispensaries from opening in the County and prohibiting established dispensaries from moving. On August 2, 2011, the moratorium was extended for another year or until such time as the Board of Supervisors enacted another ordinance specifically regulating medical cannabis dispensaries. Then, on August 9, 2011 the Board of Supervisors passed an ordinance which expressly banned all medical cannabis dispensaries in the County (Dispensary Ban). The Dispensary Ban was set to replace the 2009 Ordinance under the Kern County Code of Ordinances Title 5 – Business Licenses and Regulations, Chapter 5.84. The Dispensary Ban was scheduled to take effect on September 9, 2011; however, prior to September 9, 2011, a protest petition was filed and the Dispensary Ban never took effect.

On February 28, 2012, in response to the protest petition, the Board of Supervisors passed the Repeal Ordinance. The Repeal Ordinance, which went into effect on March 30, 2012, repealed Chapter 5.84 of the Kern County Code of Ordinances in its entirety, including the 2009 Ordinance.

Measure G was approved by 69 percent of the voters in Kern County in June 2012. In contrast to all prior medical cannabis dispensary ordinances, Measure G was codified under the Kern County Zoning Ordinance, as opposed to the Health and Safety Ordinance. Measure G permitted medical cannabis dispensaries to operate in areas of the County with zoning classifications of M-2 PD (Medium Industrial Precise Development Combining District) and M-3 PD (Heavy Industrial Precise Development Combining District). Medical cannabis dispensaries were prohibited under Measure G from operating in any other zone district. In addition, Measure G placed significant restrictions on medical cannabis dispensaries, similar to those imposed under the 2006 Ordinance. For example, Measure G imposed restrictions regarding: (1) hours of operation; (2) a site development application requirement; and (3) setbacks from other dispensaries, schools, churches, parks, and daycare centers. However, on February 14, 2014, the Kern County Superior Court ruled that Measure G was invalid and must be set aside because Kern County did not comply with CEQA prior to the Board of Supervisors placing the ordinance on the June 5, 2012 ballot for the voters to adopt.

As a result of the enactment of the Repeal Ordinance and the invalidation of Measure G, there were no provision in the Kern County Zoning Ordinance that permitted the use of land, buildings, or premises for the operation of a medical cannabis dispensaries in the unincorporated portion of Kern County from February 14, 2014 until April of 2016. On April 5, 2016, the Fifth District Court of Appeals ruled in the matter of County of Kern et. al. v. T.C.E.F. et. al., that the County’s Repeal Ordinance violated Government Code Section 9145 because, in response to the referendum, the County repealed the 2009 Ordinance and the Dispensary Ban, rather than only the Dispensary Ban. Thus, the Court of Appeals held that the 2009 Ordinance was in full force and effect.

On May 10, 2016, the Board of Supervisors passed Ordinance No. G-8630, which amended Title 5 – Business Licenses and Regulations which added Chapter 5.86 – Moratorium on Establishment of New Medical Marijuana Dispensaries to the Kern County Code of Ordinances which imposed a moratorium on the establishment of new medical cannabis dispensaries in the County (2016 Moratorium). Pursuant to the 2016 Moratorium, “no Medical Marijuana Dispensary(ies) other than those in existence and operating on the effective date of this ordinance, is permitted within the unincorporated areas of Kern County during the period of time this ordinance is in effect.” The 2016 Moratorium was extended on June 21, 2016 for ten months and 15 days, pursuant to Government

Code section 65858(a). On April 4, 2017, the Kern County Board of Supervisors extended the 2016 Moratorium for a period of one (1) year from May 10, 2017. Therefore, as of the publication of this Program EIR, the 2016 Moratorium remains in effect and no new medical cannabis dispensaries are permitted within the unincorporated areas of Kern County. Those medical cannabis dispensaries that were in operation prior to the 2016 Moratorium must comply with the provisions of the 2009 Ordinance (Ordinance No. G-7849).

1.5 Project Overview

This section describes the local and regional setting, surrounding land uses, project objectives, and project characteristics. The proposed project is described in further detail in Chapter 3.0, *Project Description*.

1.5.1 Project Location and Environmental Setting

Located at the southern end of the Central Valley, Kern County serves as the gateway to southern California, the San Joaquin Valley, and California's high desert. The geography of Kern County is diverse, containing mountainous areas, agricultural lands, and desert areas. The County's dominant land use is agriculture. Kern County is bounded by Kings, Tulare, and Inyo counties on the north; San Bernardino County on the east; Los Angeles and Ventura counties on the south; and Santa Barbara and San Luis Obispo counties on the west (refer to Figures 1-1 and 1-2). Kern County includes 11 incorporated cities with Arvin, Bakersfield, Delano, Maricopa, McFarland, Shafter, Taft, and Wasco located within the Valley Region; Tehachapi located in the Mountain Region; and California City and Ridgecrest located in the Desert Region.

The County contains Intertates (I), U.S. Routes (US), and State Routes (SR). SR-99 is a major freeway servicing the large Central Valley urban areas, including the Metropolitan Bakersfield area, from Kern County north to Sacramento. I-5 enters the County in the southwest and carries traffic on a north-south alignment from Southern California through the Central Valley north to Sacramento, on the west side of the Valley, against the coast range. In eastern Kern County, SR-14 provides linkages to Southern California as well as north to Inyokern, Indian Wells, and Ridgecrest. SR-58 provides east-west connections between the Desert and Valley regions, connecting Mojave to Bakersfield through Tehachapi and continuing to Buttonwillow and McKittrick.

Although the project site encompasses the entire approximately 8,202-square-mile County area, the project site includes only unincorporated County land. Therefore, the EIR analysis includes unincorporated County land within the 409-square-mile Metropolitan Bakersfield Planning Area (a joint planning area containing both County and City land), but excludes all adjacent City of Bakersfield land. The EIR analysis also excludes all other city jurisdictions. Lands under the jurisdiction of various State and federal agencies, including the U.S. Bureau of Land Management (BLM), U.S. Fish and Wildlife Service (USFWS), U.S. Forest Service, U.S. Department of Defense (China Lake Naval Air Weapons Station [NAWS] and the Edwards Air Force Base [AFB]), California Department of Parks and Recreation, and the California State Lands Commission, are also included within the project site but are excluded from the EIR impact analysis. By conservatively assuming all new cannabis-related activities in Kern County would occur in the project site of the County's jurisdictional lands, this EIR presents a conservative analysis of likely impacts in the project site.

The project site is divided into three geographic regions in order to facilitate detailed analysis: Valley Region, Mountain Region, and Desert Region. In general, the subareas are defined by location within the County as well as elevation.

Valley Region

The Valley Region, made up of the San Joaquin Valley, is located in the central portion of the County. The Valley Region is bound by several mountain ranges which intersect forming a horseshoe shaped valley. The Kern County General Plan (KCGP) describes the Valley Region as “the southern San Joaquin Valley below an elevation of 1,000 feet mean sea level” within Kern County. The lowest point in the County is located in the Valley Region and is 206 feet above mean sea level (AMSL). The Valley Region is characterized by relatively low rainfall, averaging less than 10 inches per year. Summers are relatively cloudless, hot, and dry. Winter is generally mild, but an occasional freeze does occur and may cause substantial agricultural damage.

Mountain Region

The Mountain Region is defined by the KCGP as “[t]he westernmost and central portions of the County above the 1,000 foot [mean sea level] contour in the valley and western region of the County and west of the primary alignment of the Los Angeles Aqueduct in the eastern County, including the southernmost portion of the County.” The Mountain Region, from east to west, includes the Sierra Nevada Mountains, Tehachapi Mountains, San Emigdio Range, Temblor Range, and parts of the Coast Range. The highest point in the County is 8,831 feet AMSL at the summit of Mount Pinos. The average rainfall is approximately 15 inches, but can be as high as 35 or more inches. Snow accounts for much of the precipitation above 6,000 feet AMSL.

Desert Region

The Desert Region, including the Mojave Desert with Indian Wells Valley and Antelope Valley, is located in the eastern portion of Kern County, east of the Sierra Nevada and Tehachapi ranges and south of the short transverse range that connects the southernmost Sierra Nevada Mountains with the San Emigdio Mountains. The KCGP defines the Desert Region as “[t]he eastern section of the County east of the primary alignment of the Los Angeles Aqueduct.” The Desert Region is characterized by less than 10 inches of annual rainfall, and an evaporation rate that exceed precipitation.

1.5.2 Surrounding Land Uses

The project site is bordered on the west by San Luis Obispo and Santa Barbara counties; the border between the counties approximates the San Andreas Fault line. The Temblor Range forms a general barrier between the counties. Carizo Plain National Monument is located along the western boundary of Kern County between Kern and San Luis Obispo counties.

To the north, the project site is bordered by Kings, Tulare, and Inyo counties. The bordering areas of these three counties contain agriculture and oil and gas operations, as well as dispersed rural residences. The incorporated City of Delano is located on the northern border of Kern County and adjacent land uses in Tulare County consist of large lot residential, agriculture, and industrial uses. Sequoia National Forest is located in the northeastern portion of the project site, within Kern and Tulare counties. Owens Lake and Owens Valley are located within Inyo County, approximately 40 miles north of the project site, while Death Valley National Park is located approximately 30

miles north and east of the project site, in Inyo and San Bernardino counties. China Lake NAWS is in the northeastern corner of Kern County and extends north in Inyo County.

To the east, the project site is bordered by San Bernardino County, and generally parallels US-395. Ridgecrest and Boron are within Kern County, on the eastern border. This area is within the Mojave Desert and includes rural desert lands, as well as solar energy facilities. Barstow, within San Bernardino County, is located approximately 35 miles east of Boron and the Project site.

Los Padres National Forest is located along the southwestern and southern project site, within the Santa Barbara, Ventura, Los Angeles, and Kern counties. In general, the southwestern boundary generally follows the San Emigdio Mountains and the Tehachapi Mountains. The southeastern boundary is within the Mojave Desert and follows the Kern/Los Angeles County line, which generally parallels, and is to the north of, SR-138. The City of Lancaster is located within Los Angeles County, approximately six miles south of the project site. Edwards AFB is located within the southeastern corner of Kern County.

1.5.3 Areas Not Subject to Kern County Land Use Jurisdiction Located Within Project Site

As discussed above, there are 11 incorporated cities and State- and federally-owned lands, and other resources, that fall within the project site. The proposed project does not directly affect these areas outside the County's land use jurisdiction. This EIR assumes that cannabis-related activities that occur within the incorporated cities will continue to occur in the future; this is considered within the cumulative analysis. Cannabis-related activities on State public lands are not allowed per Proposition 64. Similarly, regarding federally-owned lands, per 21 USC Sections 812, 841 and 844, cannabis-related activities are illegal at the federal level and cannabis-related activities are subject to the prosecutorial discretion of the federal government. Therefore, This Program EIR assumes no activities on these lands and no contribution to the cumulative impact analysis.

In the event that future changes to municipal boundaries result in the removal of a portion of the project site from Kern County's jurisdiction, municipal zoning would apply rather than the County's proposed amendments to the Zoning Ordinance and other related ordinances. As noted above, cities and other local agencies within the project site may use the information included in this Program EIR for local planning and other activities. Conversely, in the event that future changes to municipal boundaries result in a transfer of current municipal lands to the County's jurisdiction, the proposed amendments to the Zoning Ordinance and other related ordinances would apply to those lands.

1.5.4 Existing Kern County Code of Ordinances

on March 31, 2009, the Board of Supervisors passed Ordinance No. G-7849 (the 2009 Ordinance). The 2009 Ordinance repealed the licensing scheme set forth in the 2006 Ordinance, and removed the majority of prior restrictions imposed on medical cannabis dispensaries. As with the 2006 Ordinance, the 2009 Ordinance was codified under Title 5 – Business Licenses and Regulations, Chapter 5.84 – Medical Marijuana Cooperatives or Collectives of the Kern County Code of Ordinances. The only restrictions expressly placed on dispensaries under the 2009 Ordinance were: (a) A medical marijuana cooperative or collective may not be located within one thousand (1,000) feet of a school, recreation center, or youth center measured from the primary entrance to a cooperative or collective and the closest property line of the property of a school, recreation center, or youth center or on which a school, recreation center, or youth center is operated; (b) A medical marijuana cooperative or

collective shall be treated as a pharmacy for zoning purposes; (c) “Medical marijuana cooperative” and “medical marijuana collective” are defined as set forth in section IV of the California Attorney General *Guidelines for the Security and Non-diversion of Marijuana Grown for Medical Use* issued in August, 2008, as they read or as amended; and (d) Any person who violates and provision in this section is guilty of a misdemeanor. The 2009 Ordinance applied only to “Medical Marijuana Cooperatives or Collectives,” as that term is defined under an Attorney General’s Guideline related to dispensaries.

On May 10, 2016, the Board of Supervisors passed Ordinance No. G-8630, which added Chapter 5.86 – Moratorium on Establishment of New Medical Marijuana Dispensaries to the Kern County Code of Ordinances and imposed a moratorium on the establishment of new medical cannabis dispensaries in the County (2016 Moratorium). Pursuant to the 2016 Moratorium, “no Medical Marijuana Dispensaries other than those in existence and operating on the effective date of this ordinance, is permitted within the unincorporated areas of Kern County during the period of time this ordinance is in effect.” As of the publication of this EIR, the 2016 Moratorium remains in effect and no new dispensaries are permitted within the unincorporated areas of the County. Those dispensaries that were in operation prior to the 2016 Moratorium must comply with the provisions of the 2009 Ordinance. On April 4, 2017, the Kern County Board of Supervisors extended the 2016 Moratorium for a period of one year from May 10, 2017. Thus, Chapter 5.84 (Medical Marijuana Cooperatives or Collectives) of the Kern County Code of Ordinances is the underlying existing ordinance and uses the term marijuana instead of cannabis. Therefore, when referring to cannabis as it relates to the existing 2009 Ordinance (Ordinance No. G-7859), this EIR will use the term marijuana.

The Kern County Zoning Ordinance identifies “Pharmacy” under the following zone districts: C-1 (Neighborhood Commercial), C-2 (General Commercial), CH (Highway Commercial), M-1 (Light Industrial), M-2 (Medium Industrial), and M-3 (Heavy Industrial). In order for an applicant to open a new “pharmacy” in any of these zone districts, an applicant would be required to apply for, and receive approval through, one of two types of land use review application processes listed in the Kern County Zoning Ordinance: 1) Chapter 19.56 Precise Development (PD) Combining District; or 2) Chapter 19.80 Special Development Standards. All commercial and industrial zone districts that *do not* include the PD Combining District are subject to the provisions called out in Kern County Zoning Ordinance Section 19.80.030 Development and Performance Standards and may be subject to Section 19.80.040 Plot Plan Review and Approval if a proposed project requires a building permit. All zone districts that have a PD Combining District are subject to the provisions of Kern County Zoning Ordinance Section 19.56.130 Site Development Plan Review, which establishes reasonable and necessary development standards for the single-family, multifamily, commercial, and industrial, institutional, and other similar uses to ensure the development subject to this chapter includes appropriate public improvements and is compatible with surrounding uses.

Any proposed projects that are being considered on project sites that already have an approved PD plan, would be subject to the review and approval of either a ministerial “minor” PD Plan modification application process with following the guidelines called out in Section 19.102.040.E. Minor Plan Modifications of the Kern County Zoning Ordinance or a discretionary “major” PD Plan modification application process which would be evaluated by the Planning Director to determine whether the requested modification(s) constitute a substantial change in the previously approved project. If that determination is made, the application process for a “major” modification would follow the same provisions of the original application process for a publicly noticed hearing.

If an applicant is required to obtain a building permit, the enforcing agency would then notify the Kern County Planning and Natural Resources Department that an application has been made. Kern County Planning staff would then conduct a site plan review to see if the project meets the necessary land use requirements; such as, is the proposed land use allowed in that particular zone district and if so, will the project be subject to further review of development standards or a zoning land use permit processed per Kern County Ordinance Section 19.80.040, as previously stated. All ministerial permit applications are subject to the provisions of Kern County Ordinance Section 19.102.050 Application – Approval or Denial.

1.5.5 Existing Medical Marijuana Dispensaries

A total of 29 medical marijuana dispensaries were in operation within unincorporated Kern County as of November 18, 2016. Of these 29 dispensaries, 7 are in violation of the 2016 Moratorium. The remaining 22 opened before, or illegally after, the 2016 Moratorium and are being reviewed for compliance and are depicted on Figure 3-3, *Existing Dispensary Locations Permitted Prior to the 2016 Moratorium*. As mentioned above, as of the publication of this EIR, the 2016 Moratorium is still in effect. Any medical cannabis dispensaries that have opened between the 2016 Moratorium and the time of this EIR publication are in violation of the 2016 Moratorium and do not appear on Figure 1-3.

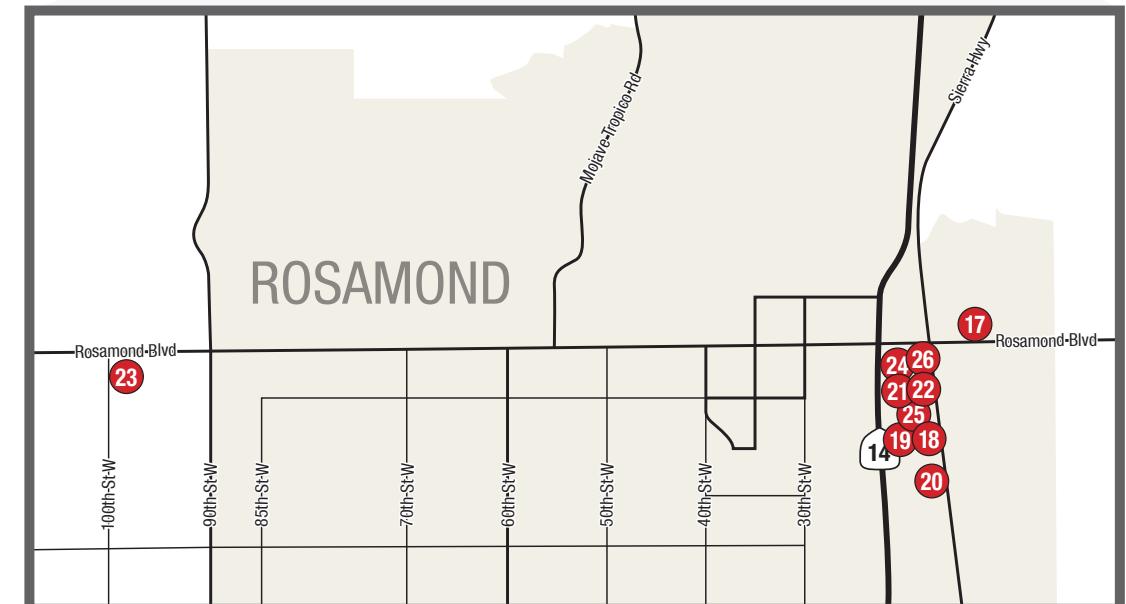
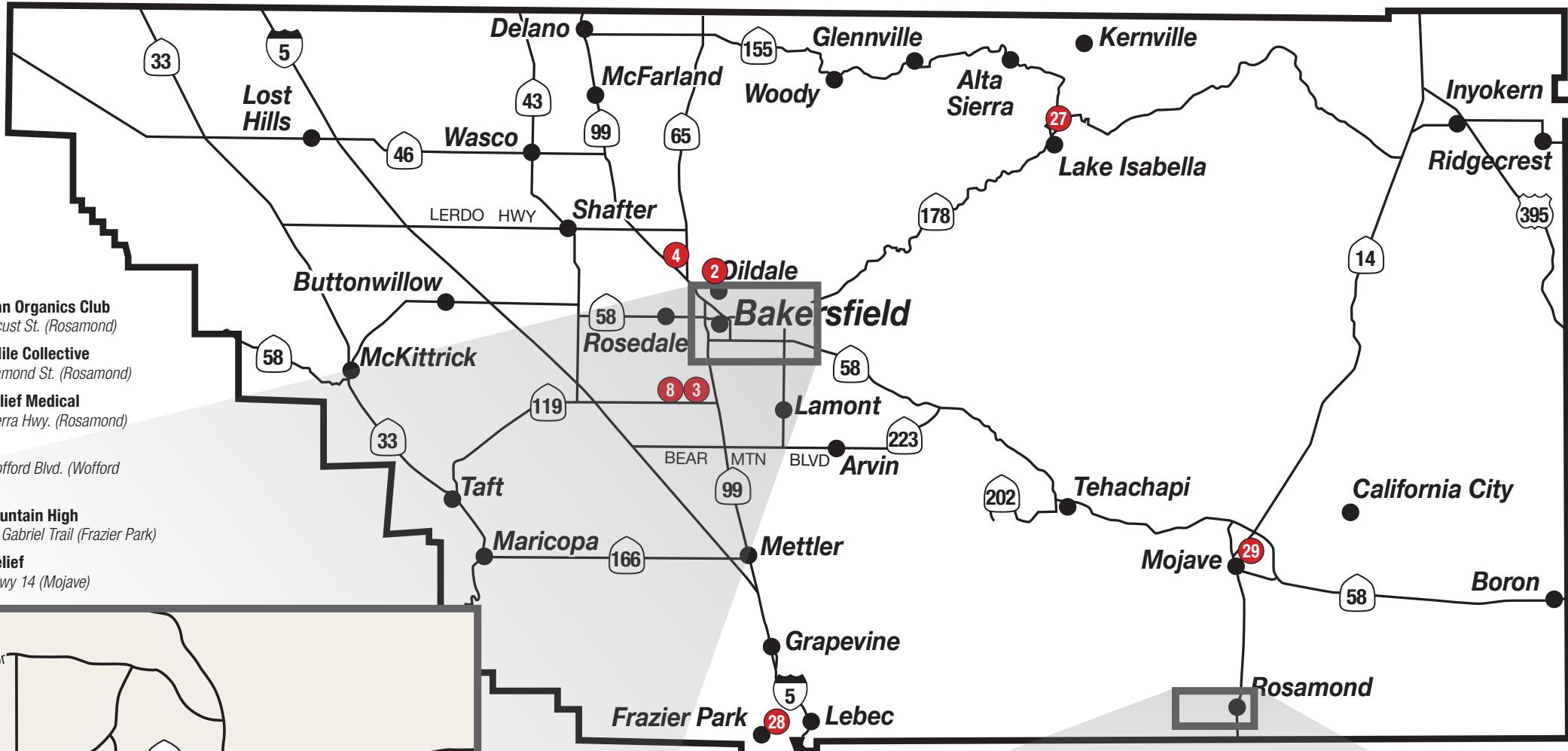
1.5.6 Project Objectives

The County has defined the following objectives for the proposed project:

- Provide county-specific land use and fiscal information and policy recommendations to the Kern County Board of Supervisors for compliance with Proposition 64 (The California Marijuana Legalization Initiative 2016, also known as the Adult Use of Marijuana Act [AUMA]) and permitting by the State of California for Medical and Adult Use Cannabis.
- Implement changes to Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on commercial cannabis-related activities within its boundaries and changes in laws and regulations by outside agencies for the purposes of reducing or eliminating potential significant environmental impacts, to the extent feasible, by ensuring that current County regulation reflects the County's interest in protecting the health, safety, and general welfare of residents and visitors.
- Continue Kern County's ongoing commitment to consult and cooperate with federal, State, regional and local agencies by periodically reviewing adopted regulations to ensure the long-term viability of Kern County's resources, and Kern County Board of Supervisors policy direction
- Encourage appropriate economic development that creates jobs and promotes capital investment in Kern County to enable the County to invest in capital improvement projects and social programs, which benefit County residents, retail businesses, and capital industries which ensures the County's fiscal stability.

- Legend** ●
1. Tiger Vitality Collective
2222 S. Chester Ave., Suite B
 2. Life's Healing Solutions
11812 N. Chester Ave.
 3. Taft Highway Collective
3024 Highway 119
 4. Highway 99 Collective
2980 Saco Rd.
 5. Peace and Medicine
2500 S. Chester Ave.
 6. Peace and Medicine
23444 Niles St.
 7. Knotts Street Collective
902 Knotts St.
 8. West Coast Healing
3030 Taft Hwy.
 9. Backyard Organics
2111 River Blvd.
 10. Sweet Leaf Organic
2011 Niles Street
 11. OCC
608 Cottonwood Road
 12. Green Flower
2532 Edison Hwy.

13. Cannibal's Medibles
110 Morning Drive
14. Therapeutic Health Center
141 N. Chester Ave.
15. The Giving Tree
1631 N. Chester Ave.
16. Sticky Icky
2125 Edison Hwy.
17. Organic Health Solutions
1315 W. Rosamond Blvd., Suite 1A
(Rosamond)
18. Vape n. Bake
2689 Sierra Hwy. (Rosamond)
19. Tanner Vest Collective
2753 Diamond Street (Rosamond)
20. DASA
1733 Sierra Highway (Rosamond)
21. Lights Out Wellness
1739 Poplar Street (Rosamond)
22. The Plum Tree Collective
2873 Sierra Hwy. (Rosamond)
23. Prime Spot Wellness
2722 100th Street (Rosamond)
24. American Organics Club
1737 Locust St. (Rosamond)
25. Green Mile Collective
2613 Diamond St. (Rosamond)
26. Hwy. Relief Medical
2939 Sierra Hwy. (Rosamond)
27. ASHES
6629 Wofford Blvd. (Wofford Heights)
28. Pine Mountain High
633 San Gabriel Trail (Frazier Park)
29. Big O Relief
16940 Hwy 14 (Mojave)



KERN COUNTY CANNABIS LAND USE ORDINANCE PROJECT EIR
AMENDMENT TO TITLE 19 – KERN COUNTY ZONING
ORDINANCE FOCUSED ON CHAPTER 19.120 (CANNABIS LAND USE REGULATION)

Existing Dispensary Locations Permitted Prior to the 2016 Moratorium

1.5.7 Proposed Project Characteristics

As mentioned above, the proposed project consists of an amendment to the Zoning Ordinance and other related ordinances to either: (A) ban all medical and adult use cannabis related activities other than what is allowed under Proposition 64, or (B) include updated standards and conditions for future commercial medical and adult use cannabis cultivation, cannabis processing and packaging, cannabis distribution, cannabis testing facilities, and retail cannabis stores with or without mobile delivery.

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the 2016 Moratorium would be required to cease operation immediately. The proposed amendment to the Kern County Code of Ordinances for Option A can be reviewed in full in Appendix B of this EIR.

Proposed Project Option B

Option B would update standards and conditions within the Zoning Ordinance to provide clarification for the appropriate zone districts where: (1) commercial cannabis cultivation, processing and packaging, distribution, and testing facilities would be an allowable use when full compliance with development standards are achieved; and (2) where dispensaries for either medical and/or adult use cannabis retail sales with or without mobile deliveries would be allowed under an approved conditional use permit (CUP). Option B would require existing medical cannabis dispensaries that do not obtain a CUP from the County to cease operation within the County over a one- to two-year period to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the 2016 Moratorium would be required to cease operation immediately. The draft regulatory structure for the proposed amendment to the Kern County Code of Ordinances Title 19 for Option B is depicted in Figures 1-4 through 1-7 while the amended language is provided in Appendix C of this EIR.

Under Option B, a maximum total square footage limit would be proposed countywide for cultivation, processing and packaging, distribution, and testing facilities. A maximum acreage would be proposed countywide for outdoor cultivation. A maximum number of retail cannabis stores would be proposed countywide, including limits on overconcentration in unincorporated communities. The proposed amendments to the Zoning Ordinance and other related ordinances would contain the following elements.

- **Cultivation**
 - Indoor Cultivation (refer to Figure 3-4, *Indoor Cultivation Draft Regulatory Structure*)
 - State Licenses Required for indoor cultivation: State License Type 1A, 1B, 2A, 2B, 3A, 3B, 4, 5A, and 5B
 - Greenhouses would be allowed in the following zone classifications: A (Exclusive Agriculture) and A-1 (Limited Agriculture).

- Greenhouses would be an allowable use in the above zone classifications when full compliance with development standards is achieved.
- Greenhouses that cannot fully comply with the development standards would require a CUP.
- Indoor Cultivation (i.e., warehouses or other structures) would be allowed in the following zone classifications: A (Exclusive Agriculture), A-1 (Limited Agriculture), M-1 (Light Industrial), M-2 (Medium Industrial), and M-3 (Heavy Industrial).
 - Indoor Cultivation (i.e., warehouses or other structures) would be an allowable use in the above zone classifications when full compliance with development standards is achieved.
 - Indoor cultivation that cannot fully comply with the development standards, regardless of zone classification, would require a CUP.
- Indoor cultivation in an existing structure or existing building would be allowed in zone classifications C-2 (General Commercial) and CH (Highway Commercial) with a CUP.
- A countywide maximum of 2,000,000 square feet (ft^2) of indoor cultivation would be allowed in unincorporated portions of the County with the required State licenses, and, if applicable, CUPs. This total would be split between facility sizes as follows
- Indoor cultivation would be required to be 0.5 mile from any school, day care center, youth center while children are present, or incorporated city limit boundary. Appendices D, E, and F provide maps outlining areas within each zone district that have the potential for future cannabis indoor cultivation facilities using a conservative one-mile radius.
- Outdoor Cultivation (refer to Figure 3-5, *Outdoor Cultivation Draft Regulatory Structure*)
 - State Licenses Required for outdoor cultivation: State License Type 1, 2, 3, and 4.
 - Outdoor cultivation would be allowed in zone classification A (Exclusive Agriculture).
 - Outdoor cultivation would be an allowable use in the above zone classification when full compliance with development standards is achieved.
 - Outdoor cultivation that cannot fully comply with the development standards would require a CUP.
 - Outdoor cultivation would not be allowed on lands that are under Williamson Act contracts.
 - A countywide maximum of 150 acres of outdoor cultivation would be allowed in unincorporated portions of the County with the required State licenses and, if applicable, CUPs.
 - Each individual outdoor cultivation operation would be a maximum of one acre in size.
 - Outdoor cultivation would be required to be 0.5 mile from any school, day care center, youth center while children are present, or incorporated city limit boundary. Appendices D, E, and F provide maps outlining areas within each zone district that have the potential for future cannabis outdoor cultivation facilities using a conservative one-mile radius.

- **Processing, Packaging, and Distribution** (refer to Figure 3-6, *Processing and Packaging and Distribution Draft Regulatory Structure*)
 - State Licenses Required for processing and packaging facilities (manufacturing) and distribution and transport facilities (distribution, transport, and laboratory testing): State License Type 6, 7, 8, 11, and 12 (Transport only, no microbusinesses allowed).
 - Processing and packaging and distribution and transport facilities would be required to obtain the appropriate State license from the CDHP (manufacturing licenses) and the Bureau of Medical Cannabis Regulation within the Department of Consumer Affairs (distribution, transportation, laboratory testing).
 - Processing and packaging facilities and distribution facilities would be allowed in the following zone classifications: A (Exclusive Agriculture), M-2 (Medium Industrial), and M-3 (Heavy Industrial).
 - Processing and packaging facilities and distribution facilities would be an allowable use in the above zone classifications when full compliance with development standards is achieved.
 - Processing and packaging facilities and distribution facilities that cannot fully comply with the development standards, regardless of zone classification, would require a CUP.
 - A countywide maximum of 500,000 ft² of extraction/production for active ingredient, production of edibles, infused drinks and solid application, as well as storage of cannabis products in distribution centers, would be allowed in unincorporated areas of the County with the required State licenses and, if applicable, CUPs.
 - For distribution facilities only, a countywide maximum of three (3) facilities would be allowed in unincorporated areas of the County with the required State licenses and, if applicable, CUPs.
 - Processing and packaging and distribution facilities would be required to be 0.5 mile from any school, day care center, youth center while children are present, or incorporated city limit boundary. Appendices D, E, and F provide maps outlining areas within each zone district that have the potential for future cannabis processing and packaging and distribution facilities using a conservative one-mile radius.
- **Retail Cannabis Store with or without Mobile Delivery** (refer to Figure 3-7, *Retail Cannabis Stores with or without Mobile Delivery Draft Regulatory Structure*)
 - State Licenses Required for retail cannabis store facilities (retail and sales only): State License Type 10.
 - Retail cannabis stores with or without mobile delivery would be required to obtain the appropriate State license from the Department of Medical Cannabis Regulation within the Department of Consumer Affairs (distribution, transportation, dispensary [sale]).
 - Retail cannabis stores with or without mobile delivery would be allowed in the following zone classifications: C-1 (Neighborhood Commercial); C-2 (General Commercial); CH (Highway Commercial); M-1 (Light Industrial); M-2 (Medium Industrial); and M-3 (Heavy Industrial).
 - Retail cannabis stores with or without mobile delivery would require a County issued CUP.

- A countywide maximum of 40 retail cannabis stores with or without mobile delivery would be allowed within unincorporated portions of Kern County with the required State licenses, and CUPs.
 - No more than two (2) retail cannabis stores with or without mobile delivery would be allowed in each unincorporated community identified in the KCGP or Kern County Housing Element.
 - Retail cannabis stores with or without mobile delivery would be required to meet all setbacks, including being 0.5 mile or more from a school, day care center, or youth center while children are present; 1,000 feet is specified in Proposition 64. Appendices D, E, and F provide maps outlining areas within each zone district that have the potential for future retail cannabis store facilities using the conservative 1,000 feet radius.
- **Personal Adult Use of Cannabis**
 - The County would allow for the personal cultivation and use of cannabis and cannabis products as outlined in Proposition 64.
 - The County would not allow the use of cannabis and cannabis products in parks, recreation areas, public areas, or areas where tobacco use is not allowed, similar to Proposition 64.

Indoor Cultivation

Mandatory State Licenses: Types 1A, 1B, 1C, 2A, 2B, 3A, 3B, 4, 5A, 5B

The State requires proof that a County Permit has been obtained prior to issuing a state license.

Countywide Maximum: 2,000,000 ft²

The combination of greenhouses, warehouses, and other structures cannot exceed a combined total of 2,000,000 ft² within unincorporated areas of Kern County.

Greenhouses

Warehouses and Other Structures

Zone Classifications A & A-1

Consistent with Development Standards

Permit can be issued over the counter

Not Consistent with Development Standards

Requires Processing of a Conditional Use Permit & Review Under the California Environmental Quality Act

Public Hearing

Permit can be issued if approved

Zone Classifications A, A-1, M-1, M-2, & M-3

Consistent with Development Standards

Permit can be issued over the counter

Warehouses and Other Structures

Zone Classifications C-2 & CH

Requires Processing of a Conditional Use Permit & Review Under the California Environmental Quality Act

Public Hearing

Permit can be issued if approved

Notes:

1. If zone classification is not listed above, indoor cultivation is not allowed.
2. Must be 0.5 mile from any school, parks, daycares, or youth centers.
3. No operations can commence until County permit and State license are obtained.
4. "Countywide" refers to only unincorporated County lands. It excludes all incorporated city jurisdictions.

KERN COUNTY CANNABIS LAND USE ORDINANCE PROJECT EIR
AMENDMENT TO TITLE 19 – KERN COUNTY ZONING
ORDINANCE FOCUSED ON CHAPTER 19.120 (CANNABIS LAND USE REGULATION)

Indoor Cultivation Draft Regulatory Structure

Outdoor Cultivation

Mandatory State Licenses: Types 1, 2, 3, 4

The State requires proof that a County Permit has been obtained prior to issuing a State license.

Countywide Maximum: 150 acres

The combination of outdoor cultivation cannot exceed a combined total of 150 acres within unincorporated areas of Kern County. Each individual outdoor cultivation operation cannot exceed one (1) acre in size.

Zone Classifications

A

Consistent with Development Standards

Not Consistent with Development Standards

Permit can be issued over the counter

Requires Processing of a Conditional Use Permit & Review Under the California Environmental Quality Act

Public Hearing

Permit can be issued if approved

Notes:

1. If zone classification is not listed above, outdoor cultivation is not allowed.
2. Must be 0.5 mile from any school, parks, daycares, or youth centers.
3. No operations can commence until County permit and State license are obtained.
4. "Countywide" refers to only unincorporated County lands. It excludes all incorporated city jurisdictions.

KERN COUNTY CANNABIS LAND USE ORDINANCE PROJECT EIR
AMENDMENT TO TITLE 19 – KERN COUNTY ZONING
ORDINANCE FOCUSED ON CHAPTER 19.120 (CANNABIS LAND USE REGULATION)

Outdoor Cultivation Draft Regulatory Structure

Processing and Packaging and Distribution

Mandatory State Licenses: Types 6, 7, 8, 11, 12 (transport only)

The State requires proof that a County Permit has been obtained prior to issuing a State license.

Countywide Maximum: 500,000 ft²

Countywide Maximum: 3 distribution facilities

The combination of processing and packaging operations (extraction/production for active ingredients, production of edibles, infused drinks and solid application) and distribution facilities cannot exceed a combined total of 500,000 ft² within unincorporated areas of Kern County. No more than three (3) distribution facilities are allowed within unincorporated areas of Kern County.



Notes:

1. If zone classification is not listed above, processing and packaging and distribution facilities are not allowed.
2. Must be 0.5 mile from any school, parks, daycares, or youth centers.
3. No operations can commence until County permit and State license are obtained.
4. "Countywide" refers to only unincorporated County lands. It excludes all incorporated city jurisdictions.

KERN COUNTY CANNABIS LAND USE ORDINANCE PROJECT EIR
AMENDMENT TO TITLE 19 – KERN COUNTY ZONING
ORDINANCE FOCUSED ON CHAPTER 19.120 (CANNABIS LAND USE REGULATION)

Processing and Packaging and Distribution Draft Regulatory Structure

Retail Cannabis Stores with or without Mobile Delivery

Mandatory State Licenses: Types 10

The State requires proof that a County Permit has been obtained prior to issuing a State license.

Countywide Maximum: 40 retail cannabis stores

The total number of retail cannabis stores cannot exceed a combined total of 40 within unincorporated areas of Kern County. No more than two (2) retail cannabis stores are allowed in each unincorporated community.

Zone Classifications

C-1, C-2, CH,
M-1, M-2, and M-3

Requires Processing of a
Conditional Use Permit &
Review Under the California
Environmental Quality Act

Public Hearing

Permit can be issued
if approved

Notes:

1. If zone classification is not listed above, a dispensary is not allowed.
2. Must be 1,000 feet from any school, parks, daycares, or youth centers.
3. No operations can commence until County permit and State license are obtained.
4. "Unincorporated community" refers to communities identified within the Kern County General Plan and the Kern County Housing Element
5. "Countywide" refers to only unincorporated County lands. It excludes all incorporated city jurisdictions.

KERN COUNTY CANNABIS LAND USE ORDINANCE PROJECT EIR
AMENDMENT TO TITLE 19 – KERN COUNTY ZONING
ORDINANCE FOCUSED ON CHAPTER 19.120 (CANNABIS LAND USE REGULATION)

Retail Cannabis Stores with or without Mobile Delivery Draft Regulatory Structure

1.6 Environmental Impacts

Section 15128 of the CEQA Guidelines requires that an EIR contain a statement briefly indicating the reasons that various, possible, new significant effects of a project were determined not to be significant, and were therefore not discussed in detail in the EIR. The County has engaged the public to participate in the scoping of the environmental document.

The contents of this Draft EIR were established based on a Notice of Preparation/Initial Study (NOP/IS) prepared in accordance with the CEQA Guidelines, as well as public and agency input that were received during the scoping process. The comments to the NOP/IS are found in Appendix A of this document. Based on the findings of the NOP/IS and the results of scoping, a determination was made that this EIR must contain a comprehensive analysis of all environmental issues identified in Appendix G of the CEQA Guidelines.

1.6.1 Impacts Not Further Considered in this EIR

As discussed in Appendix A (Notice of Preparation/Initial Study) of this EIR, the proposed project was determined to have no impact with regard to the following impact thresholds. These issues are not analyzed further in this EIR.

Hydrology and Water Quality

- Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map.

Land Use and Planning

- Physically divide an established community;

Mineral Resources

- Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State.
- Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

Population and Housing

- Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere.
- Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

1.6.2 Impacts of the Proposed Project

No Potential for Impacts to Occur

Potential environmental effects of the proposed project are discussed in detail in Chapter 4 of this EIR. After full analysis, the following effects were determined to have no potential for impacts to occur:

Aesthetics

Option A

- Impact 4.1-1: Have a Substantial Adverse Effect on a Scenic Vista
- Impact 4.1-2: Substantially Damage Scenic Resources, Including, but not Limited to, Trees, Rock Outcroppings, and Historic Buildings within a State Scenic Highway
- Impact 4.1-3: Substantially Degrade the Existing Visual Character or Quality of the Site and Its Surroundings
- Impact 4.1-4: Create a New Source of Substantial Light or Glare Which Would Adversely Affect Day or Nighttime Views in the Area
- Impact 4.1-5: Contribute to Cumulative Aesthetic Impacts

Option B

- Impact 4.1-1: Have a Substantial Adverse Effect on a Scenic Vista

Agricultural Resources

Option A

- Impact 4.2-1: Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) to Non-Agricultural Use
- Impact 4.2-2: Conflict with Existing Agricultural Zoning or Williamson Act Contracts
- Impact 4.2-3: Conflict with Existing Zoning for, or Cause Rezoning of, Forest Land, Timberland, or Timberland Zoned Timberland Production
- Impact 4.2-4: The Project would Result in the Loss of Forest Land or Conversion of Forest Land to Non-Forest Land
- Impact 4.2-5: The Project Would Involve Other Changes in the Existing Environment Which, Due to Their Location or Nature, Could Result in Conversion of Farmland to Nonagricultural Use or Forest Land to Non-Forest Use
- Impact 4.2-6: The Project Would Result in the Cancellation of an Open Space or Williamson Act Contract Made in Pursuant to the California Land Conservation Act of 1965 or Farmland Security Zone Contract for Any Parcel of 100 or More Acres
- Impact 4.2-7: Contribute to Cumulative Agriculture and Forest Resource Impacts

Option B

- Impact 4.2-2: Conflict with Existing Agricultural Zoning or Williamson Act Contracts

- Impact 4.2-3: Conflict with Existing Zoning for, or Cause Rezoning of, Forest Land, Timberland, or Timberland Zoned Timberland Production.

Air Quality

Option A

- Impact 4.3-4: The Project Would Expose Sensitive Receptors to Substantial Pollutant Concentrations
- Impact 4.3-5: The Project Would Cause the Creation of Objectionable Odors, Affecting a Substantial Number of People.

Option B

None.

Biological Resources

Option A

- Impact 4.4-1: Have a Substantial Adverse Effect, Either Directly or through Habitat Modifications, on any Species Identified as a Candidate, Sensitive, or Special Status Species in Local or Regional Plans, Policies, or Regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service
- Impact 4.4-2: Have a Substantial Adverse Effect on Any Riparian Habitat or Other Sensitive Natural Community Identified in Local or Regional Plans, Policies, Regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service
- Impact 4.4-3: Have a Substantial Adverse Effect on Federally Protected Wetlands as Defined by Section 404 of the Clean Water Act (Including, but not Limited to, Marsh, Vernal Pool, Coastal, etc.) Through Direct Removal, Filling, Hydrological Interruption, or Other Means
- Impact 4.4-4: Interfere Substantially with the Movement of any Native Resident or Migratory Fish or Wildlife Species or with Established Native Resident or Migratory Wildlife Corridors, or Impede the Use of Native Wildlife Nursery Sites
- Impact 4.4-5: Conflict with Any Local Policies or Ordinances Protecting Biological Resources, Such as a Tree Preservation Policy or Ordinance
- Impact 4.4-6: Conflict with the Provisions of an Adopted Habitat Conservation Plan, Natural Communities Conservation Plan, or other Approved Local, Regional, or State Habitat Conservation Plan
- Impact 4.4-7: Contribute to Cumulative Biological Resources Impacts

Option B

None.

Cultural and Tribal Cultural Resources

Option A

- Impact 4.5-1: Cause a Substantial Adverse Change in the Significance of a Historical or Archaeological Resource as Defined in Section 15064.5

- Impact 4.5-2: Directly or Indirectly Destroy a Unique Paleontological Resource or Site or Unique Geologic Feature
- Impact 4.5-3: Disturb any Human Remains, including those Interred outside of Formal Cemeteries
- Impact 4.5-4: Cause a Substantial Adverse Change in the Significance of a Tribal Cultural Resource, defined in PRC Section 21074, that is Listed or Eligible for Listing in the California Register of Historical Resources, or in a Local Register of Historical Resources as Defined in PRC Section 5020.1(k)
- Impact 4.5-5: Cause a Substantial Adverse Change in the Significance of a Tribal Cultural Resource, defined in PRC Section 21074, that is a Resource Determined by Kern County to be Significant Pursuant to Criteria Set Forth in PRC Section 5024.1(c)
- Impact 4.5-6: Contribute to Cumulative Cultural Resources Impacts

Option B

None.

Geology and Soils*Option A*

- Impact 4.6-1: Expose People or Structures to Substantial Adverse Effects, Including the Risk of Loss, Injury, or Death Involving the Rupture of a Known Earthquake Fault
- Impact 4.6-2: Expose People or Structures to Substantial Adverse Effects, Including the Risk of Loss, Injury, or Death Involving Strong Seismic Ground Shaking
- Impact 4.6-3: Expose People or Structures to Substantial Adverse Effects, Including the Risk of Loss, Injury, or Death Involving Seismic-related Ground Failure, Including Liquefaction
- Impact 4.6-4: Expose People or Structures to Substantial Adverse Effects, Including the Risk of Loss, Injury, or Death Involving Landslides
- Impact 4.6-5: Result in Substantial Soil Erosion or Loss of Topsoil
- Impact 4.6-6: Be Located on a Geologic Unit or Soil That Is Unstable, or That Would Become Unstable as a Result of the Project, and Potentially Result in On- or Off-site Landslide, Lateral Spreading, Subsidence, Liquefaction, or Collapse
- Impact 4.6-7: Be Located on Expansive Soil, as Defined in Table 18-1-B of the Uniform Building Code (1994), Creating Substantial Risks to Life or Property
- Impact 4.6-8: Have Soils Incapable of Adequately Supporting the Use of Septic Tanks or Alternative Wastewater Disposal Systems Where Sewers Are Not Available for the Disposal of Wastewater
- Impact 4.6-9: Contribute to Cumulative Geologic and Soils Impacts

Option B

None.

Greenhouse Gas Emissions

Option A

- Impact 4.7-2: Conflict with an Applicable Plan, Policy or Regulation Adopted for the Purpose of Reducing the Emissions of Greenhouse Gases

Option B

- Impact 4.7-2: Conflict with an Applicable Plan, Policy or Regulation Adopted for the Purpose of Reducing the Emissions of Greenhouse Gases

Hazards and Hazardous Materials

Option A

- Impact 4.8-1: Create a Significant Hazard to the Public or the Environment through the Routine Transport, Use, or Disposal of Hazardous Materials
- Impact 4.8-2: Create a Significant Hazard to the Public or the Environment through Reasonably Foreseeable Upset and Accident Conditions Involving the Release of Hazardous Materials into the Environment
- Impact 4.8-3: Emit Hazardous Emissions or Handle Hazardous or Acutely Hazardous Materials, Substances, or Waste within One-Quarter Mile of an Existing or Proposed School
- Impact 4.8-4: Create a Hazard to Public or the Environment as a Result of Being Located on a Site that is Included on a List of Hazardous Material Sites Compiled Pursuant to Government Code Section 65962.5
- Impact 4.8-5: For a Project Located within the Adopted Kern County Airport Land Use Compatibility Plan or within Two Miles of a Public Airport, Would the Project Result in a Safety Hazard for People Residing or Working in the Project Area
- Impact 4.8-6: For a Project Located within the Vicinity of a Private Airstrip, Would the Project Result in a Safety Hazard for People Residing or Working in the Project Area
- Impact 4.8-7: Impair Implementation of, or Physically Interfere with, an Adopted Emergency Response Plan or Emergency Evacuation Plan
- Impact 4.8-8: Expose People or Structures to a Significant Risk of Loss, Injury, or Death Involving Wildland Fires, Including Where Wildlands are Adjacent to Urbanized Areas or Where Residences are Intermixed with Wildlands
- Impact 4.8-9: Would Implementation of the Project Generate Vectors or Have a Component That Includes Agricultural Waste Exceeding Adopted Qualitative Thresholds
- Impact 4.8-10: Cumulative Hazards and Hazardous Materials Impacts

Option B

- Impact 4.8-7: Impair Implementation of, or Physically Interfere with, an Adopted Emergency Response Plan or Emergency Evacuation Plan

Hydrology and Water Quality

Option A

- Impact 4.9-1: Violate Any Water Quality Standards or Waste Discharge Requirements
- Impact 4.9-2: Substantially Deplete Groundwater Supplies or Interfere Substantially with Groundwater Recharge Such That There Would be a Net Deficit in Aquifer Volume or a Lowering of the Local Groundwater Table Level
- Impact 4.9-3: Substantially Alter the Existing Drainage Pattern of the Site or Area, Including through the Alteration of the Course of a Stream or River, or Substantially Increase the Rate or Amount of Surface Runoff in a Manner Which Would Result in Substantial Erosion or Siltation On-site or Off-site
- Impact 4.9-4: Substantially Alter the Existing Drainage Pattern of the Site or Area, Including through the Alteration of the Course of a Stream or River, or Substantially Increase the Rate or Amount of Surface Runoff in a Manner Which Would Result in Substantial Flooding On-site or Off-site
- Impact 4.9-5: Create or Contribute Runoff Water Which Would Exceed the Capacity of Existing or Planned Stormwater Drainage Systems or Provide Substantial Additional Sources of Polluted Runoff
- Impact 4.9-6: Otherwise Substantially Degrade Water Quality
- Impact 4.9-7: Place Structures within a 100-year Flood Hazard Area Which Would Impede or Redirect Flood Flows
- Impact 4.9-8: Expose People or Structures to a significant risk of Loss, Injury, or Death Involving Flooding, Including Flooding as a Result of the Failure of a Levee or Dam
- Impact 4.9-9: Result in Inundation by Seiche, Tsunami, or Mudflow
- Impact 4.9-10: Contribute to Cumulative Hydrology and Water Quality Impacts

Option B

None.

Land Use and Planning

Option A

- Impact 4.10-1: Conflict with Any Applicable Land Use Plan, Policy, or Regulation of an Agency with Jurisdiction over the Project Adopted for the Purpose of Avoiding or Mitigating an Environmental Effect
- Impact 4.10-2: Conflict with Any Applicable Habitat Conservation Plan or Natural Community Conservation Plan
- Impact 4.10-3: Contribute to Cumulative Land Use Impacts

Option B

None.

Noise

Option A

- Impact 4.11-1: Exposure of Persons to, or Generate, Noise Levels in Excess of Standards Established in the Local General Plan or Noise Ordinance or Applicable Standards of Other Agencies
- Impact 4.11-2: Exposure of Persons to, or Generate, Excessive Ground Borne Vibration or Ground Borne Noise Levels
- Impact 4.11-3: Substantial Permanent Increase in Ambient Noise Levels in the Vicinity of Projects above Levels Existing without the Project
- Impact 4.11-4: Substantial Temporary or Periodic Increase in Ambient Noise Levels in Project Vicinities above Levels Existing without the Project
- Impact 4.11-5: For a project located within the Kern County Airport Land Use Compatibility Plan, would the project expose people residing or working in the project area to excessive noise levels
- Impact 4.11-6: For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels.
- Impact 4.11-7: Contribute to Cumulative Noise Impacts

Option B

- Impact 4.11-5: For a project located within the Kern County Airport Land Use Compatibility Plan, would the project expose people residing or working in the project area to excessive noise levels
- Impact 4.11-6: For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels.

Population and Housing

Option A

- Impact 4.12-1: Induce Substantial Population Growth in an Area, Either Directly or Indirectly
- Impact 4.12-2: Contribute to Cumulative Population and Housing Impacts

Option B

- Impact 4.12-1: Induce Substantial Population Growth in an Area, Either Directly or Indirectly
- Impact 4.12-2: Contribute to Cumulative Population and Housing Impacts

Public Services and Utilities

Option A

None.

Option B

None.

Recreation

Option A

- Impact 4.14-1: Result in Increased Use of Existing Neighborhood and Regional Parks or Other Recreational Facilities Such That Substantial Physical Deterioration Would Occur or Be Accelerated
- Impact 4.14-2: Include Recreational Facilities or Require Construction or Expansion of Recreational Facilities That Might Have an Adverse Physical Effect on the Environment
- Impact 4.14-3: Contribute to Cumulative Recreation Impacts

Option B

- Impact 4.14-1: Result in Increased Use of Existing Neighborhood and Regional Parks or Other Recreational Facilities Such That Substantial Physical Deterioration Would Occur or Be Accelerated
- Impact 4.14-2: Include Recreational Facilities or Require Construction or Expansion of Recreational Facilities That Might Have an Adverse Physical Effect on the Environment
- Impact 4.14-3: Contribute to Cumulative Recreation Impacts

Transportation and Traffic

Option A

- Impact 4.15-3: Change in Air Traffic Patterns That Result in Substantial Safety Risks
- Impact 4.15-4: Substantially Increase Hazards Due to a Design Feature or Incompatible Uses
- Impact 4.15-5: Result in Inadequate Emergency Access
- Impact 4.15-6: Conflict with Adopted Policies, Plans, or Programs Supporting Alternative Transportation

Option B

None.

Utilities and Service Systems

Option A

- Impact 4.16-1: Exceed Wastewater Treatment Requirements of the Applicable Regional Water Quality Control Board
- Impact 4.16-2: Require or Result in the Construction of New Water or Wastewater Treatment Facilities or Expansion of Existing Facilities, the Construction of Which Could Cause Significant Environmental Effects
- Impact 4.16-3: Require or Result in the Construction of New Stormwater Drainage Facilities or Expansion of Existing Facilities, the Construction of Which Could Cause Significant Environmental Effects
- Impact 4.16-4: Have Sufficient Water Supplies Available to Serve the Project from Existing Entitlements and Resources, or Are New or Expanded Entitlements Needed

- Impact 4.16-5: Be Served by a Landfill with Sufficient Permitted Capacity to Accommodate the Project's Solid Waste Disposal Needs
- Impact 4.16-6: Comply with Federal, State, and Local Statutes and Regulations Related to Solid Waste
- Impact 4.16-7: Exceed Capacity of an Energy Supplier to Meet the Project's Need
- Impact 4.16-8: Contribute to Cumulative Impacts to Utilities and Service Systems

Option B

None.

Less than Significant with Incorporation of Mitigation Measures

Potential environmental effects of the project and mitigation measures are discussed in detail in Chapter 4 of this EIR. After full analysis, the following effects were determined to be less than significant with the incorporation of mitigation measures.

Aesthetics***Option A***

None.

Option B

- Impact 4.1-2: Substantially Damage Scenic Resources, Including, but not Limited to, Trees, Rock Outcroppings, and Historic Buildings within a State Scenic Highway
- Impact 4.1-3: Substantially Degrade the Existing Visual Character or Quality of the Site and Its Surroundings
- Impact 4.1-4: Create a New Source of Substantial Light or Glare Which Would Adversely Affect Day or Nighttime Views in the Area

Agricultural Resources***Option A***

None.

Option B

- Impact 4.2-4: The Project would Result in the Loss of Forest Land or Conversion of Forest Land to Non-Forest Land
- Impact 4.2-6: The Project Would Result in the Cancellation of an Open Space or Williamson Act Contract Made in Pursuant to the California Land Conservation Act of 1965 or Farmland Security Zone Contract for Any Parcel of 100 or More Acres

Air Quality***Option A***

None.

Option B

- Impact 4.3-1: The Project Would Conflict with or Obstruct Implementation of an Applicable Air Quality Plan
- Impact 4.3-2: The Project Would Violate Any Air Quality Standard as Adopted in Kern County Environmental Checklist (c) i or (c) ii, or as Established by the U.S. Environmental Protection Agency or an Air District, or Contribute Substantially to an Existing or Projected Air Quality Violation
- Impact 4.3-4: The Project Would Expose Sensitive Receptors to Substantial Pollutant Concentrations
- Impact 4.3-5: The Project Would Cause the Creation of Objectionable Odors, Affecting a Substantial Number of People

Biological Resources

Option A

None.

Option B

- Impact 4.4-3: Have a Substantial Adverse Effect on Federally Protected Wetlands as Defined by Section 404 of the Clean Water Act (Including, but not Limited to, Marsh, Vernal Pool, Coastal, etc.) Through Direct Removal, Filling, Hydrological Interruption, or Other Means
- Impact 4.4-4: Interfere Substantially with the Movement of any Native Resident or Migratory Fish or Wildlife Species or with Established Native Resident or Migratory Wildlife Corridors, or Impede the Use of Native Wildlife Nursery Sites
- Impact 4.4-5: Conflict with Any Local Policies or Ordinances Protecting Biological Resources, Such as a Tree Preservation Policy or Ordinance
- Impact 4.4-6: Conflict with the Provisions of an Adopted Habitat Conservation Plan, Natural Communities Conservation Plan, or other Approved Local, Regional, or State Habitat Conservation Plan

Cultural and Tribal Cultural Resources

Option A

None.

Option B

- Impact 4.5-1: Cause a Substantial Adverse Change in the Significance of a Historical or Archaeological Resource as Defined in Section 15064.5
- Impact 4.5-2: Directly or Indirectly Destroy a Unique Paleontological Resource or Site or Unique Geologic Feature
- Impact 4.5-3: Disturb any Human Remains, including those Interred outside of Formal Cemeteries

- Impact 4.5-4: Cause a Substantial Adverse Change in the Significance of a Tribal Cultural Resource, defined in PRC Section 21074, that is Listed or Eligible for Listing in the California Register of Historical Resources, or in a Local Register of Historical Resources as Defined in PRC Section 5020.1(k)
- Impact 4.5-5: Cause a Substantial Adverse Change in the Significance of a Tribal Cultural Resource, defined in PRC Section 21074, that is a Resource Determined by Kern County to be Significant Pursuant to Criteria Set Forth in PRC Section 5024.1(c)

Geology and Soils

Option A

None.

Option B

- Impact 4.6-1: Expose People or Structures to Substantial Adverse Effects, Including the Risk of Loss, Injury, or Death Involving the Rupture of a Known Earthquake Fault
- Impact 4.6-2: Expose People or Structures to Substantial Adverse Effects, Including the Risk of Loss, Injury, or Death Involving Strong Seismic Ground Shaking
- Impact 4.6-3: Expose People or Structures to Substantial Adverse Effects, Including the Risk of Loss, Injury, or Death Involving Seismic-related Ground Failure, Including Liquefaction
- Impact 4.6-4: Expose People or Structures to Substantial Adverse Effects, Including the Risk of Loss, Injury, or Death Involving Landslides
- Impact 4.6-5: Result in Substantial Soil Erosion or Loss of Topsoil
- Impact 4.6-6: Be Located on a Geologic Unit or Soil That Is Unstable, or That Would Become Unstable as a Result of the Project, and Potentially Result in On- or Off-site Landslide, Lateral Spreading, Subsidence, Liquefaction, or Collapse
- Impact 4.6-7: Be Located on Expansive Soil, as Defined in Table 18-1-B of the Uniform Building Code (1994), Creating Substantial Risks to Life or Property
- Impact 4.6-8: Have Soils Incapable of Adequately Supporting the Use of Septic Tanks or Alternative Wastewater Disposal Systems Where Sewers Are Not Available for the Disposal of Wastewater
- Impact 4.6-9: Contribute to Cumulative Geologic and Soils Impacts

Greenhouse Gas Emissions

Option A

None.

Option B

None.

Hazards and Hazardous Materials

Option A

None.

Option B

- Impact 4.8-1: Create a Significant Hazard to the Public or the Environment through the Routine Transport, Use, or Disposal of Hazardous Materials
- Impact 4.8-2: Create a Significant Hazard to the Public or the Environment through Reasonably Foreseeable Upset and Accident Conditions Involving the Release of Hazardous Materials into the Environment
- Impact 4.8-3: Emit Hazardous Emissions or Handle Hazardous or Acutely Hazardous Materials, Substances, or Waste within One-Quarter Mile of an Existing or Proposed School
- Impact 4.8-4: Create a Hazard to Public or the Environment as a Result of Being Located on a Site that is Included on a List of Hazardous Material Sites Compiled Pursuant to Government Code Section 65962.5
- Impact 4.8-5: For a Project Located within the Adopted Kern County Airport Land Use Compatibility Plan or within Two Miles of a Public Airport, Would the Project Result in a Safety Hazard for People Residing or Working in the Project Area
- Impact 4.8-6: For a Project Located within the Vicinity of a Private Airstrip, Would the Project Result in a Safety Hazard for People Residing or Working in the Project Area
- Impact 4.8-8: Expose People or Structures to a Significant Risk of Loss, Injury, or Death Involving Wildland Fires, Including Where Wildlands are Adjacent to Urbanized Areas or Where Residences are Intermixed with Wildlands
- Impact 4.8-9: Would Implementation of the Project Generate Vectors or Have a Component That Includes Agricultural Waste Exceeding Adopted Qualitative Thresholds
- Impact 4.8-10: Cumulative Hazards and Hazardous Materials Impacts

Hydrology and Water Quality

Option A

None.

Option B

- Impact 4.9-1: Violate Any Water Quality Standards or Waste Discharge Requirements
- Impact 4.9-3: Substantially Alter the Existing Drainage Pattern of the Site or Area, Including through the Alteration of the Course of a Stream or River, or Substantially Increase the Rate or Amount of Surface Runoff in a Manner Which Would Result in Substantial Erosion or Siltation On-site or Off-site
- Impact 4.9-4: Substantially Alter the Existing Drainage Pattern of the Site or Area, Including through the Alteration of the Course of a Stream or River, or Substantially Increase the Rate

or Amount of Surface Runoff in a Manner Which Would Result in Substantial Flooding On-site or Off-site

- Impact 4.9-5: Create or Contribute Runoff Water Which Would Exceed the Capacity of Existing or Planned Stormwater Drainage Systems or Provide Substantial Additional Sources of Polluted Runoff
- Impact 4.9-6: Otherwise Substantially Degrade Water Quality
- Impact 4.9-7: Place Structures within a 100-year Flood Hazard Area Which Would Impede or Redirect Flood Flows
- Impact 4.9-8: Expose People or Structures to a significant risk of Loss, Injury, or Death Involving Flooding, Including Flooding as a Result of the Failure of a Levee or Dam
- Impact 4.9-9: Result in Inundation by Seiche, Tsunami, or Mudflow

Land Use and Planning

Option A

None.

Option B

- Impact 4.10-1: Conflict with Any Applicable Land Use Plan, Policy, or Regulation of an Agency with Jurisdiction over the Project Adopted for the Purpose of Avoiding or Mitigating an Environmental Effect
- Impact 4.10-2: Conflict with Any Applicable Habitat Conservation Plan or Natural Community Conservation Plan
- Impact 4.10-3: Contribute to Cumulative Land Use Impacts

Noise

Option A

None.

Option B

- Impact 4.11-1: Exposure of Persons to, or Generate, Noise Levels in Excess of Standards Established in the Local General Plan or Noise Ordinance or Applicable Standards of Other Agencies
- Impact 4.11-2: Exposure of Persons to, or Generate, Excessive Ground Borne Vibration or Ground Borne Noise Levels
- Impact 4.11-3: Substantial Permanent Increase in Ambient Noise Levels in the Vicinity of Projects above Levels Existing without the Project
- Impact 4.11-4: Substantial Temporary or Periodic Increase in Ambient Noise Levels in Project Vicinities above Levels Existing without the Project
- Impact 4.11-7: Contribute to Cumulative Noise Impacts

Population and Housing

Option A

None.

Option B

None.

Public Services

Option A

None.

Option B

- Impact 4.13-1: Result in Substantial Adverse Physical Impacts Associated with the Provision of New or Physically Altered Governmental Facilities, Need for New or Physically Altered Governmental Facilities, the Construction of Which Could Cause Significant Environmental Impacts in order to Maintain Acceptable Service Ratios, Response Times, or Other Performance Objectives for Fire Protection, Law Enforcement Protection, Schools, Parks, or Other Public Facilities
- Impact 4.13-2: Contribute to Cumulative Public Service Impacts

Recreation

Option A

None.

Option B

None.

Transportation and Traffic

Option A

None.

Option B

- Impact 4.15-1: Conflict with an Applicable Plan, Ordinance, or Policy Establishing Measures of Effectiveness for the Performance of the Circulation System
- Impact 4.15-2: Conflict with an Applicable Congestion Management Program, Including, but Not Limited to Level of Service Standards and Travel Demand Measures, or Other Standards Established by the County Congestion Management Agency or Adopted County Threshold for Designated Roads or Highways
- Impact 4.15-3: Change in Air Traffic Patterns That Result in Substantial Safety Risks
- Impact 4.15-4: Substantially Increase Hazards Due to a Design Feature or Incompatible Uses
- Impact 4.15-5: Result in Inadequate Emergency Access

- Impact 4.15-6: Conflict with Adopted Policies, Plans, or Programs Supporting Alternative Transportation

Utilities and Service Systems

Option A

None.

Option B

- Impact 4.16-1: Exceed Wastewater Treatment Requirements of the Applicable Regional Water Quality Control Board
- Impact 4.16-2: Require or Result in the Construction of New Water or Wastewater Treatment Facilities or Expansion of Existing Facilities, the Construction of Which Could Cause Significant Environmental Effects
- Impact 4.16-3: Require or Result in the Construction of New Stormwater Drainage Facilities or Expansion of Existing Facilities, the Construction of Which Could Cause Significant Environmental Effects
- Impact 4.16-5: Be Served by a Landfill with Sufficient Permitted Capacity to Accommodate the Project's Solid Waste Disposal Needs
- Impact 4.16-6: Comply with Federal, State, and Local Statutes and Regulations Related to Solid Waste

Unavoidable Significant Adverse Impacts

Section 15126.2(b) of the CEQA Guidelines requires that the EIR describe any significant impacts, including those that can be mitigated but not reduced to less-than-significant levels. Potential environmental effects of the project and proposed mitigation measures are discussed in detail in Chapter 4 of this EIR. The environmental impacts summarized in Table 1-1, *Summary of Significant Impacts of the Project*, were determined to be significant and unavoidable impacts.

Table 1-1. Summary of Significant Impacts of the Proposed Project

Resources	Project Impacts		Cumulative Impacts	
	Option A	Option B	Option A	Option B
Aesthetics	Mitigation measures are not required for aesthetics. Impacts would be less than significant.	Mitigation measures would reduce impacts for aesthetics to a less than significant level.	Mitigation measures are not required for aesthetics. Cumulative impacts would be less than significant.	Option B would result in new cannabis facilities occupying both existing and new structures within the Valley, Mountain, and Desert regions of the County. In combination with past, present, and reasonably foreseeable projects, this would adversely alter the existing visual character of the area, introduce new sources of light and glare, and effect scenic resources. Therefore, Option B's cumulative contribution after implementation of mitigation measures would remain cumulatively significant and unavoidable.
Agriculture and Forest Resources	Mitigation measures are not required for agriculture and forest resources. No impacts would occur or impacts would be less than significant.	Implementation of Option B could affect areas that contain oak woodland, forest land, and Prime Farmland, Unique Farmland, and Farmland of Statewide Importance; Option B would result in the conversion of agriculture to non-agricultural land uses. With implementation of mitigation measure these impacts would remain significant and unavoidable.	Mitigation measures are not required for agriculture and forest resources. No cumulative impacts would occur or cumulative impacts would be less than significant.	Implementation of Option B could affect areas that contain oak woodland, forest land, and Prime Farmland, Unique Farmland, and Farmland of Statewide Importance, and could convert forest land to non-forest land and agriculture to non-agricultural land. In combination with past, present, and reasonably foreseeable projects, Option B would contribute to cumulative impacts. Even with implementation of mitigation measure impacts would remain cumulatively significant and unavoidable.
Air Quality	Option A would require customers to travel to other cities within Kern County or to travel outside of Kern County to purchase cannabis products. This would increase vehicle trips and vehicle miles traveled (VMT). The increased vehicle trips and VMT would result in exceedance of criteria air pollutant emissions thresholds, and operation-related criteria pollutant emissions	Option B would implement mitigation measures, including a Developer Mitigation Contract (DMC), to reduce emissions of ROG, NO _x , PM ₁₀ , and PM _{2.5} to below the thresholds in the San Joaquin Valley Air Pollution Control District (SJVAPCD) and the Eastern Kern Air Pollution Control District (EKAPCD). However, even with implementation of mitigation	Mitigation measures would reduce most cumulative impacts to less than significant level. Option A would generate substantial levels of criteria air pollutant emissions through increasing VMT and would have an adverse effect on obstruction of an air quality plan. This increase in emissions, when combined with past, present, or reasonably foreseeable	Implementation of Option B would incorporate mitigation measures to reduce impacts associated to ROG, NO _x , PM ₁₀ , and PM _{2.5} . In combination with past, present, and reasonably foreseeable projects, Option B would contribute to cumulative impacts. However, even with implementation of mitigation measures, emissions of nonattainment pollutants associated with ROG and NO _x would be

Table 1-1. Summary of Significant Impacts of the Proposed Project

Resources	Project Impacts		Cumulative Impacts	
	Option A	Option B	Option A	Option B
	thresholds, and could conflict with applicable air quality plans. Even with implementation of mitigation measure, these impacts would remain significant and unavoidable.	measures, emissions of nonattainment pollutants would be significant and unavoidable.	projects, would result in cumulatively substantial levels of criteria air pollutants and would thus contribute to the obstruction of an air quality plan. Therefore, even with implementation of mitigation measures, Option A would be cumulatively significant and unavoidable for criteria air pollutant emissions and obstruction of an air quality plan.	cumulatively significant and unavoidable.
Biological Resources	Mitigation measures are not required for biological resources. Impacts would be less than significant.	Implementation of Option B could affect areas that contain riparian areas, other sensitive habitats, and lands that may be occupied by special-status plant and animal species. Any future construction and operation activities associated with cannabis related facilities could introduce invasive species or degrade habitat through introducing weeds, dust, emissions, light, or through spills of hazardous materials, which would harm special-status species or habitat. Impacts to special-status species and their habitat would be significant and unavoidable	Mitigation measures are not required for biological resources. Impacts would be less than significant	Implementation of Option B could affect areas that contain riparian areas, other sensitive habitats, and lands that may be occupied by special-status plant and animal species. Any construction and operation of cannabis related facilities could introduce invasive species or degrade habitat through introducing weeds, dust, emissions, light, or through spills of hazardous materials, which would harm special status-species or habitat. In combination with past, present, and reasonably foreseeable projects, Option B would contribute to cumulative impacts. Even with mitigation measures, impacts would be cumulatively significant and unavoidable
Cultural and Tribal Cultural Resources	Mitigation measures are not required for cultural resources. Impacts would be less than significant.	Mitigation measures are not required for cultural resources. Impacts would be less than significant.	Mitigation measures are not required for cultural resources. Impacts would be less than significant.	Each cannabis related facility under Option B would be required to comply with all applicable State, federal, and County regulations concerning protection of cultural and tribal cultural resources, and would implement mitigation measures. However, each incremental development would have the potential to cause a considerable contribution in combination with impacts from past, present, or reasonably foreseeable projects.

Table 1-1. Summary of Significant Impacts of the Proposed Project				
Resources	Project Impacts		Cumulative Impacts	
	Option A	Option B	Option A	Option B
				Therefore, impacts would be considered cumulatively significant and unavoidable.
Greenhouse Gas Emissions	Option A would require customers to travel to other cities within Kern County or to travel outside of Kern County to purchase cannabis products. This would increase vehicle trips and VMT. The increase in travel would increase mobile source greenhouse gas (GHG) emissions. Even with implementation of mitigation measure, these impacts would be significant and unavoidable.	Option B would result in GHG emissions from construction and operation activities associated with future cannabis related facilities. The proposed project would generate GHG emissions, either directly or indirectly, that could have a potentially significant impact on the environment. Even with the implementation of mitigation measures impacts to GHG emissions would be significant and unavoidable.	Options A and B would not result in a 29 percent reduction from BAU. Kern County does not have the jurisdictional authority to control the various cumulative sources of GHGs in the County, or the GHG emissions from sources around the globe, which all contribute to climate change. Although the County and other agencies with the necessary jurisdiction are currently taking action to reduce GHG emissions, the County cannot assure that these measures would ultimately be implemented or sufficient to address climate change. Therefore, even with implementation of mitigation measures, GHG emissions for Option A and Option B would be considered cumulatively significant and unavoidable.	
Hydrology and Water Quality	Mitigation measures are not required for hydrology and water quality. Impacts would be less than significant.	The majority of water demand for future cannabis facilities under Option B would be from cannabis cultivation and processing and packaging activities. Based on their locations, future cannabis related facilities may be located in water districts without adequate water supply. Mitigation measures would be implemented. However, because the proposed project would potentially develop cannabis-related facilities and activities within areas that do not have sufficient water supply, impacts to groundwater supply would be significant and unavoidable.	Mitigation measures are not required for hydrology and water quality. Impacts would be less than significant.	The majority of water demand for future cannabis facilities under Option B would be from cultivation and processing and packaging activities. Impacts to groundwater supply, when combined with past, present, or reasonably foreseeable projects could result in groundwater demand that exceeds the groundwater supply, especially in areas where groundwater basins are identified as not having sufficient water supply or are considered in overdraft. Therefore, impacts to hydrology and water quality would be cumulatively significant and unavoidable.
Public Services	A total ban on commercial cannabis-related activities, that are legal under Proposition 64 State wide while allowing personal adult use, would result in the need for an enforcement task force to coordinate across County agencies and seek State and federal	Mitigation measures would reduce impacts to less than significant levels.	Option A would create an enforcement impact for law enforcement protection, County Counsel, and the District Attorney, as well as coordinating County Departments. Mitigation Measure MM 4.13-1 would provide mitigation for the enforcement	Mitigation measures would reduce impacts to less than significant levels.

Table 1-1. Summary of Significant Impacts of the Proposed Project

Resources	Project Impacts		Cumulative Impacts	
	Option A	Option B	Option A	Option B
	funding. Mitigation Measure MM 4.13-1 requires the formation of the Cannabis Activity Enforcement Task Force. However, the funding source for this task force, outside the County's General Fund, is not known with certainty. Therefore, impacts would be significant and unavoidable in this regard.		requirements however the funding is uncertain. Option A would contribute to cumulative impacts when combined with past, present, or reasonably foreseeable projects. Therefore, impacts to public services would be cumulatively significant and unavoidable.	
Transportation and Traffic	Option A would result in large VMT and potential consumers would be required to travel distances ranging from approximately 15 miles to more than 267 miles. The increase in VMT and distances traveled would increase traffic and thus increase use of the circulation system. Given the uncertain nature of which jurisdictions would allow sales of cannabis and cannabis project, Option A could conflict with applicable plans and ordinances related to the performance of the circulation system as well as conflict with applicable congestion management plans. No mitigation measures are feasible to reduce impacts. Therefore, impacts would be significant and unavoidable in this regard.	Mitigation measures would reduce impacts to less than significant levels.	The projected population increases within the County, both unincorporated and incorporated areas, and the uncertain nature of which jurisdictions would allow sales of cannabis and cannabis products, cumulative distances traveled and VMT would increase. This increase in use of the circulation system could cumulatively conflict with applicable plans and ordinances related to the performance of the circulation system as well as conflict with applicable congestion management plans. No mitigation measures are feasible to reduce impacts. Therefore, impacts would be cumulatively significant and unavoidable in this regard.	The projected population increases within the County, both unincorporated and incorporated areas, and the uncertain nature of which jurisdictions would allow sales of cannabis and cannabis products, cumulative distances traveled and VMT could increase. This increase in use of the circulation system could cumulatively conflict with applicable plans and ordinances related to the performance of the circulation system as well as conflict with applicable congestion management plans. No mitigation measures are feasible to reduce impacts. Therefore, impacts would be cumulatively significant and unavoidable in this regard.
Utilities and Service Systems	Mitigation measures are not required for utilities and service systems. Impacts would be less than significant.	The majority of water demand for future cannabis facilities under Option B would be from cultivation and processing and packaging activities. Based on their locations, future cannabis facilities may be located in water districts without adequate water supply. Similarly, indoor cultivation and processing and packaging	Mitigation measures are not required for utilities and service systems. Impacts would be less than significant.	The majority of water demand and energy consumption for future cannabis related activities and facilities under Option B would result from cultivation and processing and packaging activities. Option B when combined with past, present, or reasonably foreseeable projects could result in water demand and energy consumption that exceed the

Table 1-1. Summary of Significant Impacts of the Proposed Project

Resources	Project Impacts		Cumulative Impacts	
	Option A	Option B	Option A	Option B
		consume the most energy of the cannabis related activities. The energy demand from future cannabis-related activities could, depending on location within Kern County, could substantially exceed the energy supply. Even with the implementation of mitigation measures, impacts to utilities and service systems would be significant and unavoidable.		supply. Therefore, impacts to utilities and service systems would remain cumulatively significant and unavoidable.

1.6.3 Significant Irreversible Impacts

Section 15126.2(c) of the CEQA Guidelines defines an irreversible impact as an impact that uses nonrenewable resources during the initial and continued phases of the project. Irreversible impacts can also result from damage caused by environmental accidents associated with the project. Irrecoverable commitments of resources should be evaluated to ensure that such consumption is justified. Implementation of Option A of the proposed project would commit nonrenewable resources during any demolition activities and fuel consumption related to increased vehicle miles traveled (VMT) during Option A operations. Implementation of Option B of the proposed project would commit nonrenewable resources during any construction activities and future cannabis related facility operations. During Option B implementation, future cannabis related operations, oil, gas, and other nonrenewable resources would be consumed for the cultivation, processing and packaging, and sales of cannabis products. Therefore, an irreversible commitment of nonrenewable resources would occur as a result of either Option A or Option B. However, assuming that those commitments occur in accordance with the adopted goals, policies, and implementation measures of the Kern County General Plan (KCGP) and Metropolitan Bakersfield General Plan (MBGP), as a matter of public policy, those commitments have been determined to be acceptable. The KCGP and MBGP ensure that any irreversible environmental changes associated with those commitments will be minimized.

1.6.4 Significant Cumulative Impacts

According to Section 15355 of the CEQA Guidelines, the term *cumulative impacts* “refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.” Individual effects that may contribute to a cumulative impact may be from a single project or a number of separate projects. Individually, the impacts of a project may be relatively minor, but when considered along with impacts of other closely related or nearby projects, including newly proposed projects, the effects could be cumulatively considerable.

This EIR has considered the potential cumulative effects of the proposed project. Impacts for the following issue areas have been found to be cumulatively considerable:

- Aesthetics (Option B);
- Agriculture and Forest Resources (Option B);
- Air Quality (Options A and B);
- Biological Resources (Option B);
- Cultural and Tribal Cultural Resources (Option B);
- Greenhouse Gas Emissions (Options A and B);
- Hydrology and Water Quality (Option B);
- Public Services (Option A);
- Transportation and Traffic (Options A and B); and
- Utilities and Service Systems (Option B).

Each of these significant cumulative impacts is discussed in the applicable section of Chapter 4, *Environmental Analysis*, of this EIR.

1.6.5 Growth Inducement

The KCGP and MBGP recognize that certain forms of growth are beneficial, both economically and socially. Section 15126.2(d) of the CEQA Guidelines provides the following guidance on growth-inducing impacts: a project is identified as growth inducing if it “could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment.”

Growth inducement can be a result of new development that requires an increase in dwelling units or an increase in employment, removes barriers to development, or provides resources that lead to secondary growth.

Proposed Project Option A

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain medical dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Therefore, Option A would not directly or indirectly result in the physical construction of residential units or other structures within unincorporated Kern County. Development of properties within unincorporated Kern County would occur as shown in the KCGP land use designations and Zoning Ordinance; however, land uses related to medical and adult use cannabis related activities would not be allowed. No roadway improvements or extension of roads or other infrastructure would occur as a result of Option A.

Therefore, Option A would not induce substantial population growth in the County either directly, by proposing new homes or businesses, or remove barriers indirectly, through extension of roads or other infrastructure, and would not exceed existing community services capacities such that new facilities would be needed. Option A does not provide opportunities for commercial cannabis activities. As such, Option A would not lead to substantial or economic growth that would induce substantial population growth and this impact is less than significant.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, and retail cannabis stores with or without mobile delivery. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, retail cannabis stores that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without

mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

Future cannabis-related activities authorized under Option B are not anticipated to result in a population increase beyond what has been identified in the KCGP and the regional growth plan and projections included in the Kern COG Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). At this time, specific development related to cannabis-related activities is not proposed as part of Option B. Future development would be required to be consistent with the updated standards and conditions resulting from Option B, as well as consistent with other County land uses, development, and design programs, policies, standards, guidelines, and regulations contained in the KCGP, MBGP, and the Kern County Code of Ordinances. As future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis stores with or without mobile delivery facilities are proposed, the County would review projects on a case-by-case basis to determine if a future project is compliant with Option B and any other relevant Kern County planning documents.

Given the history of development within Kern County, including the oil and gas, wind, solar, and agricultural industries, as well as urban development including industrial, commercial, and residential, the general industries of farm, manufacturing (including food manufacturing), private service providing industries such as wholesale trade and retail trade (including food and beverage services as well as general merchandise), and other services, are expected to continue to sustain a substantial share of employment for Kern County residents. It is anticipated that the existing labor force residing in Kern County is sufficient to provide the industry workforce needed to accommodate the countywide maximums identified in Option B. Any increase in the workforce, including increases as a direct result of cannabis-related activities, would be consistent with the Kern COG's population and housing growth projects for the County as a whole. In addition, as discussed in Section 4.12, *Population and Housing*, unemployment in Kern County, as of December 2016, was approximately 9.9 percent; therefore, there would be an available labor pool to fill the anticipated nominal growth in employment.

A project could induce population growth in an area either directly or indirectly. More specifically, the development of new homes or businesses could induce population growth directly, whereas the extension of roads or other infrastructure could induce population growth indirectly. Option B would not construct new residential units nor would it result in the need for roadway improvements or expansions, therefore, Option B would not directly induce population growth in this regard. As outlined above, Option B would result in future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis stores with or without mobile delivery facilities which would result in new employment opportunities; however, Kern County has an available workforce to accommodate any increase in employment as a result of the cannabis-related industry. Therefore, Option B would not induce substantial population growth in the County.

1.7 Alternatives to the Proposed Project

Section 15126.6 of the CEQA Guidelines states that an EIR must address “a range of reasonable alternatives to the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives.” Option A of the proposed project has the potential to have

significant adverse effects, at either a project-level or cumulative-level, on air quality, greenhouse gas (GHG) emissions, public services, and transportation and traffic. Option B of the proposed project has the potential to have significant adverse effects, at either a project-level or cumulative-level, on aesthetics, agriculture and forest resources, air quality, biological resources, cultural and tribal cultural resources, GHG emissions, hydrology and water quality, transportation and traffic, and utilities and service systems. Even with the mitigation measures described in Chapter 4, *Environmental Analysis*, of this EIR, impacts in these issue areas would be significant and unavoidable. Based on these significant and unavoidable impacts for Option A and Option B, along with the proposed project objectives, several alternatives were considered as summarized below and discussed in detail in Chapter 6, *Alternatives*.

1.7.1 Alternatives Eliminated from Further Consideration

Alternate Site Alternative

This alternative would apply to the amendment of the Kern County Zoning Ordinance to direct future cannabis related facilities and activities to another area of unincorporated Kern County. In order to do this, future cannabis related facilities would need to be allowed in other zone districts beyond what was considered in Option B of the proposed project. These areas could be zone districts such as, but not limited to, estate, residential, open space, or natural resources zone districts. Placing agricultural production activities, manufacturing activities, or retail and distribution activities in other zones would be inconsistent with the Kern County General Plan (KCGP), the Metropolitan Bakersfield General Plan (MBGP) and the Kern County Zoning Ordinance for allowable uses. In addition, placing future commercial cannabis cultivation, processing and packaging, distribution, and retail cannabis stores within these zone districts could violate Proposition 64, with respect to setbacks pertaining to a school, day care center, or youth center while children are present. Cannabis activities are not allowed on public lands, such as State or federal forest land, or federal, State, or local park lands, as this would be a violation of Proposition 64 as well as a violation of federal law. For these reasons, the Alternative Site Alternative was dismissed from analysis in this EIR.

It should also be noted that, while CEQA requires an EIR to identify project alternatives, it does not require the EIR to identify alternative project locations. Per the CEQA Guidelines, an EIR must include a reasonable range of “alternatives to the project, *or* to the location of the project.” (14 California Code of Regulations Section 15126.6(a)(emphasis added)). Applicable case law recognizes that CEQA grants lead agencies flexibility to elect to analyze either onsite or offsite alternatives, or both (Mira Mar Mobile Community v. City of Oceanside (2004) 119 Cal.App.4th 447, 491). There is no requirement under CEQA that an EIR always explore an alternative site, or offsite, alternative (California Native Plant Society v. City of Santa Cruz (2009) 177 Cal.App.4th 957, 933). Thus, CEQA does not require this EIR to analyze the Alternative Site Alternative.

Cannabis Facilities in EKAPCD and Attainment Areas of SJVAPCD Only

In developing a reasonable range of alternatives, the County considered the potential to develop Option B within the EKAPCD and the attainment areas of SJVAPCD, the Mountain and Desert regions. This would result in the countywide maximums of 2,000,000 square feet (ft²) of indoor cultivation, 150 acres of outdoor cultivation, 500,000 ft² of processing, packaging, and distribution facilities, and up to 40 retail cannabis stores, located within the EKAPCD and the attainment areas of the SJVAPCD.

This alternative would not reduce any of the significant and unavoidable impacts that were identified for the proposed project. This alternative would not reduce the countywide maximums for cannabis related facilities; however, it would reduce the project site to the Mountain and Desert regions. Even with this reduction, the alternative would have similar impacts as the proposed project Option B and no impacts would be reduced from significant and unavoidable to less than significant. The alternate site alternative has been rejected from further consideration because it fails to avoid or substantially lessen any significant environmental effects (CEQA Guidelines, Section 15126.6[c]).

Unlimited Retail Stores, Limited Cultivation, Processing and Packaging, and Distribution

In developing a reasonable range of alternatives, the County considered the potential to develop Option B with no limit on the countywide number of retail cannabis stores. This would result in the countywide maximums of 2,000,000 ft² of indoor cultivation, 150 acres of outdoor cultivation, 500,000 ft² of processing, packaging and distribution, and unlimited retail cannabis stores. This alternative would potentially increase traffic on roadways and intersections, thus reducing roadway and intersection level of service (LOS) to below acceptable levels, and would increase the potential to conflict with congestion management plans or land use compatibility. This alternative would not reduce impacts associated with aesthetics, agriculture and forest resources, air quality, biological resources, cultural and tribal cultural resources, GHG emissions, hydrology and water quality, traffic and transportation, and utilities and service systems. Therefore, this alternate has been rejected from further consideration because it fails to avoid or substantially lessen any significant environmental effects (CEQA Guidelines, Section 15126.6[c]).

Cultivation, Processing and Packaging, and Distribution Only

In developing a reasonable range of alternatives, the County considered the potential to develop Option B of the proposed project at a reduced scope, allowing for future commercial cannabis activities and facilities related to cultivation (indoor and outdoor) and processing and packaging facilities only. The future commercial cannabis cultivation (indoor and outdoor) and processing and packaging facilities under this alternative would have the same zone classification restrictions, countywide maximums, and 0.5-mile setbacks as described in Option B of the proposed project.

This would increase VMT, which would in turn result in an increase in impacts associated with air quality, GHG emissions, and transportation and traffic. This alternative would not reduce impacts associated with aesthetics, agriculture and forest resources, air quality, biological resources, cultural and tribal cultural resources, GHG emissions, hydrology and water quality, traffic and transportation, and utilities and service systems. This alternative would increase all impacts as compared to both Options A and B of the proposed project. The cultivation and processing and packaging only alternative has been rejected from further consideration because it fails to avoid or substantially lessen any significant environmental effects (CEQA Guidelines, Section 15126.6[c]).

1.7.2 Alternatives Analyzed in this EIR

Alternatives that would avoid or substantially lessen any of the significant effects of either Option A or Option B of the proposed project and that would feasibly attain most of the basic project objectives are discussed below. Each alternative is discussed with respect to its relationship to the project objectives. Table 1-2, *Comparison of Alternatives*, provides a summary of the alternatives impact analysis. A more detailed alternatives analysis is provided in Chapter 6, *Alternatives*.

Table 1-2. Comparison of Alternatives

Environmental Resource	Proposed Project		Alternative A	Alternative B	Alternative C
	Option	Significance Level			
Aesthetics: Cumulative Effects	Option A	Less than Significant	N/A	N/A	N/A
	Option B	Significant / Unavoidable	Fewer	Fewer	Fewer
Agriculture and Forest Resources: Convert Prime Farmland	Option A	Less than Significant	N/A	N/A	N/A
	Option B	Significant / Unavoidable	Fewer	Fewer	Fewer
Agriculture and Forest Resources: Convert Forest Land	Option A	Less than Significant	N/A	N/A	N/A
	Option B	Significant / Unavoidable	Fewer	Fewer	Fewer
Agriculture and Forest Resources: Convert Agricultural Land to Non-Agricultural Land and Forest Land to Non-Forest Land	Option A	Less than Significant	N/A	N/A	N/A
	Option B	Significant / Unavoidable	Fewer	Fewer	Fewer
	Option A	Less than Significant	N/A	N/A	N/A
	Option B	Significant / Unavoidable	Fewer	Fewer	Fewer
Agriculture and Forest Resources: Cumulative Effects	Option A	Less than Significant	N/A	N/A	N/A
	Option B	Significant / Unavoidable	Fewer	Fewer	Fewer
Air Quality: Conflict with an Air Quality Plan	Option A	Significant/ Unavoidable	Fewer	Fewer	Fewer
	Option B	Less than Significant	N/A	N/A	N/A
Air Quality: Violate Air Quality Standards	Option A	Significant / Unavoidable	Fewer	Fewer	Fewer
	Option B	Less than Significant	N/A	N/A	N/A
Air Quality: Cumulative net increase of nonattainment pollutants	Option A	Significant / Unavoidable	Fewer	Fewer	Fewer
	Option B	Significant / Unavoidable	Greater	Fewer	Similar
Air Quality: Cumulative effects	Option A	Less than Significant	N/A	N/A	N/A
	Option B	Significant / Unavoidable	Greater	Fewer	Similar
Biological Resources: Habitat and Special-Status Species	Option A	Less than Significant	N/A	N/A	N/A
	Option B	Significant / Unavoidable	Fewer	Fewer	Fewer
Biological Resources: Riparian Habitat and Sensitive Natural Communities	Option A	Less than Significant	N/A	N/A	N/A
	Option B	Significant / Unavoidable	Fewer	Fewer	Fewer
Biological Resources: Cumulative effects	Option A	Less than Significant	N/A	N/A	N/A
	Option B	Significant / Unavoidable	Fewer	Fewer	Fewer
Cultural and Tribal Cultural Resources: Cumulative effects	Option A	Less than Significant	N/A	N/A	N/A
	Option B	Significant / Unavoidable	Fewer	Fewer	Fewer
Greenhouse Gas Emissions: Generate GHG emissions	Option A	Significant / Unavoidable	Fewer	Fewer	Fewer
	Option B	Significant / Unavoidable	Greater	Fewer	Similar
Greenhouse Gas Emission: Cumulative effects	Option A	Significant / Unavoidable	Fewer	Fewer	Fewer
	Option B	Significant / Unavoidable	Greater	Fewer	Similar
Hydrology and Water Quality: Deplete Groundwater Supplies	Option A	Less than Significant	N/A	N/A	N/A
	Option B	Significant / Unavoidable	Fewer	Fewer	Fewer
Hydrology and Watery Quality: Cumulative effects	Option A	Less than Significant	N/A	N/A	N/A
	Option B	Significant / Unavoidable	Fewer	Fewer	Fewer

Table 1-2. Comparison of Alternatives

Environmental Resource	Proposed Project		Alternative A	Alternative B	Alternative C
	Option	Significance Level			
Public Services: Law Enforcement Protection	Option A	Significant / Unavoidable	Fewer	Fewer	Fewer
	Option B	Less than Significant	N/A	N/A	N/A
Public Services: Other Public Services	Option A	Significant / Unavoidable	Fewer	Fewer	Fewer
	Option B	Less than Significant	N/A	N/A	N/A
Public Services: Cumulative effects	Option A	Significant / Unavoidable	Fewer	Fewer	Fewer
	Option B	Less than Significant	N/A	N/A	N/A
Transportation and Traffic: Impede the Performance of the Circulation System	Option A	Significant / Unavoidable	Fewer	Fewer	Fewer
	Option B	Less than Significant	N/A	N/A	N/A
Transportation and Traffic: Conflict with an Applicable Congestion Management Program	Option A	Significant / Unavoidable	Fewer	Fewer	Fewer
	Option B	Less than Significant	N/A	N/A	N/A
Transportation and Traffic: Cumulative Effects	Option A	Significant / Unavoidable	Fewer	Fewer	Fewer
	Option B	Significant / Unavoidable	Greater	Fewer	Greater
Utilities and Service Systems: Sufficient Water Supply	Option A	Less than Significant	N/A	N/A	N/A
	Option B	Significant / Unavoidable	Fewer	Fewer	Fewer
Utilities and Service Systems: Exceed Capacity of Energy Supplier	Option A	Less than Significant	N/A	N/A	N/A
	Option B	Significant / Unavoidable	Fewer	Fewer	Fewer
Utilities and Service Systems: Cumulative effects	Option A	Less than Significant	N/A	N/A	N/A
	Option B	Significant / Unavoidable	Fewer	Fewer	Fewer
Meet Project Objectives?	Option A	Yes	No	Yes	Yes
	Option B	Yes	No	Yes	Yes
Reduce Any Significant and Unavoidable Impacts to No Impact or Less than Significant?	Option A	—	Yes, most impacts	Yes, all impacts	Yes, most impacts
	Option B	—	Yes, most impacts	Yes, all impacts	Yes, most impacts

Alternative A: No Project Alternative

Under Alternative A, an amendment to Kern County Code of Ordinances Title 19 – Kern County Zoning Ordinance focused on Chapter 19.120 (Cannabis Land Use Regulation) for land use regulation for all activities related to cannabis would not occur. Because of the complex history of cannabis ordinances in Kern County, as detailed in Chapter 3, *Project Description*, Section 3.2.2, *Kern County Regulatory Background*, Alternative A would reinstate Ordinance No. G-7849 (2009 Ordinance) which was codified under the Kern County Code of Ordinances Title 5 – Business Licenses and Regulations, Chapter 5.84 – Medical Marijuana Cooperatives or Collectives. The only restrictions expressly place medical cannabis dispensaries are as follows:

- (a) A medical marijuana cooperative or collective may not be located within one thousand (1,000) feet of a school, recreation center, or youth center measured from the primary entrance to a cooperative or collective and the closest property line of the property of a school, recreation center, or youth center or on which a school, recreation center, or youth center is operated.
- (b) A medical marijuana cooperative or collective shall be treated as a pharmacy for zoning purposes.
- (c) “Medical marijuana cooperative” and “medical marijuana collective” are defined as set forth in section IV of the California Attorney General Guidelines for the Security and Non-diversion of Marijuana Grown for Medical Use issued in August 2008, as they read or as amended.
- (d) Any person who violates and provision in this section is guilty of a misdemeanor.

The 2009 Ordinance applies only to “Medical Marijuana Cooperatives of Collectives,” a term defined by the 2008 *Guidelines for the Security and Non-Diversion of Marijuana Grown for Medical Use* issued by the California Attorney General. The Kern County Zoning Ordinances identifies “pharmacy” under the chapter and section headings of Permitted Uses/Commercial Uses/General Retail Sales - Drugs and Pharmaceuticals and is listed under the following zone districts: C-1 (Neighborhood Commercial), C-2 (General Commercial), CH (Highway Commercial), M-1 (Light Industrial), M-2 (Medium Industrial), and M-3 (Heavy Industrial).

Alternative A Compared to Propose Project Option A

- Alternative A would reduce significant impacts associated with air quality, GHG emission, public services, and transportation and traffic.
- Alternative A would introduce construction impacts as compared to Option A; however, similar mitigation measures as required for proposed project Option B would be required for this alternative.
- Alternative A would increase impacts associated with land use and planning because Alternative A would result in a conflict between the Kern County Code of Ordinances and the State’s Proposition 64.
- Alternative A would fulfill some of the project’s objectives; however, Alternative A would not fulfill key objectives such as the following:
 - Alternative A would not provide County-specific land use and fiscal information to the Kern County Board of Supervisors;
 - Alternative A would not provide County-specific policy recommendations to the Kern County Board of Supervisors for compliance with Proposition 64; and

- Alternative A would not implement changes to the Kern County Code of Ordinances to reflect changes in laws and regulations by outside agencies.

Alternative A Compared to Propose Project Option B

- Alternative A would avoid impacts to agriculture and forest lands.
- Alternative A would reduce significant impacts associated with aesthetics, biological resources, cultural and tribal cultural resources, hydrology and water quality, and utilities and service systems.
- Alternative A would increase significant impacts associated with air quality, GHG emissions, and transportation and traffic.
- Alternative A would increase impacts associated with land use and planning because Alternative A would result in a conflict between the Kern County Code of Ordinances and the State's Proposition 64.
- Alternative A would fulfill some of the project's objectives; however, Alternative A would not fulfill key objectives such as the following:
 - Alternative A would not provide County-specific land use and fiscal information to the Kern County Board of Supervisors;
 - Alternative A would not provide County-specific policy recommendations to the Kern County Board of Supervisors for compliance with Proposition 64; and
 - Alternative A would not implement changes to the Kern County Code of Ordinances to reflect changes in laws and regulations by outside agencies.

Alternative B: Retail Cannabis Stores Only

Alternative B would consist of an amendment to the Kern County Code of Ordinances Title 19 and other related ordinances to include updated standards and conditions for future commercial medical and adult use cannabis activities and facilities related to retail cannabis stores with or without mobile delivery. Alternative B would amend the Kern County Zoning Ordinance similar to Option B of the proposed project, as it relates to retail cannabis stores. Alternative B would allow retail cannabis stores with or without mobile delivery in the following zone classifications: C-1 (Neighborhood Commercial); C-2 (General Commercial); CH (Highway Commercial); M-1 (Light Industrial); M-2 (Medium Industrial); and M-3 (Heavy Industrial). Under Alternative B, a countywide maximum of 40 retail cannabis stores with or without mobile delivery would be allowed within unincorporated portions of Kern County, and no more than 2 retail cannabis stores would be allowed in each unincorporated community identified in the KCGP or the Kern County Housing Element. Retail cannabis stores with or without mobile delivery would be required to meet all setbacks, including being 0.5 mile or more from a school, day care center, or youth center while children are present, as specified in Proposition 64.

Alternative B Compared to Propose Project Option A

- Alternative B would reduce significant impacts associated with air quality, GHG emission, public services, and transportation and traffic.
- Alternative B would introduce construction impacts as compared to Option A; however, similar mitigation measures as the proposed project Option B would be required for this alternative.
- Alternative B would fulfill the project's objectives.

Alternative B Compared to Propose Project Option B

- Alternative B would avoid impacts to agriculture and forest lands.
- Alternative B would reduce significant impacts associated with aesthetics, air quality, biological resources, cultural and tribal cultural resources, GHG emissions, hydrology and water quality, transportation and traffic, and utilities and service systems.
- Alternative B would fulfill the project's objectives.

Alternative C: Reduced Project

Alternative C would consist of an amendment to the Kern County Code of Ordinances Title 19 and other related ordinances to include updated standards and conditions for future commercial medical and adult use cannabis activities and facilities related to cultivation (indoor), processing and packaging facilities, distribution facility, and retail cannabis stores; no outdoor cultivation would be allowed under this alternative. Alternative C would amend the Kern County Zoning Ordinance similar to Option B of the proposed project, as it relates to future cannabis indoor cultivation, processing and packaging, and retail cannabis store facilities and activities. This alternative would allow for a countywide maximum of 500,000 ft² of indoor cultivation, 150,000 ft² of processing, packaging facilities, including one distribution facility, and 10 retail cannabis stores with or without mobile delivery. No outdoor cultivation would be allowed under this alternative.

Future cannabis cultivation, processing and packaging, and distribution facilities would be required to meet all setbacks, including being 0.5 mile or more from a school, day care center, youth center while children are present, or incorporated city limit boundary. Retail cannabis stores with or without mobile delivery would be required to meet all setbacks, including being 0.5 mile or more from a school, day care center, or youth center while children are present, as specified in Proposition 64.

Alternative C Compared to Propose Project Option A

- Alternative C would reduce significant impacts associated with air quality, GHG emission, public services, and transportsations and traffic.
- Alternative C would increase impacts associated with aesthetics, agriculture and forest resources, biological resources, cultural and tribal cultural resources, hydrology and water quality, and utilities and service systems.
- Alternative C would introduce construction impacts as compared to Option A; however, similar mitigation measures as the proposed project Option B would be required for this alternative.
- Alternative C would increase construction-related impacts for all resource areas.
- Alternative C would fulfill the project's objectives.

Alternative C Compared to Propose Project Option B

- Alternative C would reduce significant impacts associated with aesthetics, agriculture and forest resources, biological resources, cultural and tribal cultural resources, hydrology and water quality, and utilities and service systems.
- Alternative C would have similar impacts as Option B for air quality and GHG emissions.
- Alternative C would increase significant impacts associated with transportation and traffic.
- Alternative C would fulfill the project's objectives.

1.7.3 Environmentally Superior Alternative

An EIR must identify the environmentally superior alternative to the proposed project. Section 15126.6(e)(2) of the CEQA Guidelines states that if the no project alternative is found to be environmentally superior, “the EIR shall also identify an environmentally superior alternative among the other alternatives.” Alternative B: Retail Cannabis Store Only would be environmentally superior to the proposed project, when compared to both Options A and B, on the basis of the minimization or avoidance of physical environmental impacts. Alternative B would avoid agriculture and forest resources impacts and would reduce, but not avoid, impacts to aesthetics, air quality, biological resources, cultural and tribal cultural resources, GHG emissions, hydrology and water quality, transportation and traffic, and utilities and service systems. Alternative B reduces impacts when compared to both Option A and Option B of the proposed project. Accordingly, it is considered the environmentally superior alternative.

1.8 Areas of Controversy

Areas of controversy were identified through written agency and public comments received during the scoping period. Public comments received during scoping are provided in Appendix A of this EIR and summarized in Section 2.4 of Chapter 2, *Introduction*. In summary, the following issues were identified during scoping and are addressed in the appropriate sections of Chapter 4, *Environmental Analysis*:

- Air Quality
 - Criteria air pollutant emissions and health risks
 - Nuisance odors
 - Second hand smoke and health risks
- Cultural Resources
 - Protection of cultural resources
- Greenhouse Gas Emissions
 - Greenhouse gas emissions
- Hazards and Hazardous Materials
 - Use of hazardous materials during cannabis processing, including butane
 - Potential for unsafe oxygen levels at indoor cultivation facilities
 - Pesticide use
- Hydrology and Water Quality
 - Water quality concerns
 - Low impact development and recycled water use
- Population and Housing
 - Protection for disadvantaged populations, including lower income households and communities of color
- Public Services
 - Maintain sufficient law enforcement resources to ensure community safety
 - Maintain sufficient public health services
- Transportation and Traffic

- Increase traffic volumes and VMT
- Utilities and Service Systems
 - Water demand and supply
 - Energy demand and supply

1.9 Issues to Be Resolved

Section 15123(b) (3) of the CEQA Guidelines requires that an EIR contain issues to be resolved, which includes the choices among alternatives and whether or how to mitigate significant impacts. The major issues to be resolved regarding the project include decisions by the lead agency as to whether or not:

- The Draft EIR adequately describes the environmental impacts of the project;
- The recommended mitigation measures should be adopted or modified; or,
- Additional mitigation measures need to be applied.

1.10 Summary of Environmental Impacts and Mitigation

The following is a summary of the environmental impacts of the project, mitigation measures, and unavoidable significant impacts identified and analyzed in Chapter 4 of this EIR. Refer to the appropriate EIR section for additional mitigation.

Table 1-3. Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation			
Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
Aesthetics			
Impact 4.1-1: Have a Substantial Adverse Effect on a Scenic Vista			
Option A	No impact	No mitigation measures are required.	No impact
Option B	Less than significant	No mitigation measures are required.	Less than significant
Impact 4.1-2: Substantially Damage Scenic Resources, Including, but Not Limited to, Trees, Rock Outcroppings, and Historic Buildings within a State Scenic Highway			
Option A	Less than significant	No mitigation measures are required.	Less than significant
Option B	Potentially significant	<p>Implement Mitigation Measure MM 4.2-2, as described in Section 4.2, <i>Agriculture and Forest Resources</i>.</p> <p>MM 4.1-1 For any cannabis facility on property that contains rock outcroppings, prior to the issuance of any permit, such as grading permits or building permit, the project applicant shall provide evidence to the Kern County Planning and Natural Resources Department that rock outcroppings are avoided during any construction and operation activities. Any application for a Conditional Use Permit shall include details on the site plan that demonstrate compliance with the avoidance of rock outcroppings.</p> <p>MM 4.1-2 For any cannabis facility on property that contains historic buildings that are potentially eligible for listing in the National Register of Historic Places, the project applicant shall have the building evaluated by a qualified architectural historian or archaeologist and must meet the requirements of the National Historic Preservation Act of 1966 in order to qualify. Qualifying structures shall be fenced and preserved in open-space, removed and curated, treated using appropriate data recovery procedures, or treated using appropriate restoration procedures, as identified by the qualified archaeologist. Any application for a Conditional Use Permit shall include details on the site plan that demonstrate compliance.</p>	Less than significant
Impact 4.1-3: Substantially Degrade the Existing Visual Character or Quality of the Site and Its Surroundings			
Option A	Less than significant	No mitigation measures are required.	Less than significant
Option B	Potentially significant	<p>Implement Mitigation Measures MM 4.1-1 through MM 4.1-2, as described above, and Mitigation Measure MM 4.2-2, as described in Section 4.2, <i>Agriculture and Forest Resources</i>.</p> <p>MM 4.1-3: Prior to the approval of a site plan or issuance of a grading or building permit for a cultivation or processing and packaging facility, the project applicant shall submit a landscaped buffer plan, or other appropriate cannabis facility screening plan, to the Kern County Planning and Natural Resources Department for review and approval. The cannabis facility screening plan shall demonstrate that the screening method is adequate to screen any cannabis-related activities to the extent that they are not visible by normal unaided vision from a public space per California Health and Safety Code Section 11362.2. The screening plan shall be implemented and screens installed prior to the start of</p>	Less than significant

Table 1-3. Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation			
Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
		<p>operation at the cannabis facility. Screening can be integrated into the required security fencing requirements. Commercial outdoor growing shall incorporate screening that also provides for screening of odors from plants to the extent feasible.</p> <p>Personal use growing of six (6) plants outdoors shall conform to the requirements of any adopted Kern County ordinance.</p> <p>MM 4.1-4: The following aesthetic features shall be required in site plans and building permits for future cannabis facility buildings:</p> <ul style="list-style-type: none"> a. Rooftop screening features shall be installed to create a visual screen for rooftop mechanical equipment. b. Reflective metal exteriors shall not be used as exterior architectural elements in buildings immediately adjacent to any public roadway. 	
Impact 4.1-4: Create a New Source of Substantial Light or Glare Which Would Adversely Affect Day or Nighttime Views in the Area			
Option A	Less than significant	No mitigation measures are required.	Less than significant
Option B	Potentially significant	<p>Implement Mitigation Measures MM 4.1-1 through MM 4.1-4, as described above, and Mitigation Measure MM 4.2-2, as described in Section 4.2, <i>Agriculture and Forest Resources</i>.</p> <p>MM 4.1-5: Prior to the approval of a site plan or issuance of a grading or building permit, the project applicant shall demonstrate to the Kern County Planning and Natural Resources Department that the proposed cannabis facility complies with the County's Dark Sky Ordinance (Section 19.81 of the Kern County Zoning Ordinance) to reduce unnecessary night lighting and to minimize lighting impacts on surrounding properties.</p> <p>Any application for a Conditional Use Permit shall include details on the site plan that demonstrate compliance with the County's Dark Sky Ordinance (Section 19.81 of the Kern County Zoning Ordinance).</p>	Less than significant
Impact 4.1-5: Contribute to Cumulative Aesthetic Impacts			
Option A	Less than significant	No mitigation measures are required.	Less than significant
Option B	Potentially significant	Implement Mitigation Measures MM 4.1-1 through MM 4.1-5, as described above, and Mitigation Measure MM 4.2-2, as described in Section 4.2, <i>Agriculture and Forest Resources</i> .	Significant and unavoidable
Agricultural Resources			
Impact 4.2-1: Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to Non-Agricultural Use			
Option A	No impact	No mitigation measures are required.	No impact

Table 1-3. Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
Option B	Potentially significant	<p>MM 4.2-1: Prior to construction of any approved site plan, the project applicant shall provide written evidence of completion of one or more of the following measures to mitigate the loss of Prime Farmland, Farmland of Statewide Importance, and/or Unique Farmland, at a ratio of 1:1 for net acreage before conservation. New acreage is to be calculated by excluding existing roads and areas already developed with structures. A plot plan shall be submitted substantiating the net acreage calculation along with written evidence of compliance.</p> <ul style="list-style-type: none"> • Funding and purchase of agricultural conservation easements (will be managed and maintained by an appropriate entity); • Purchase of credits from an established agricultural farmland mitigation bank; • Participation in any agricultural land mitigation program adopted by Kern County that provides equal or more effective mitigation than the measures listed above. <p>Mitigation lands shall meet the definition of Prime Farmland, Farmland of Statewide Importance, and/or Unique Farmland, and be of similar agricultural quality or higher, as informed by definitions established by the California Department of Conservation. Completion of the selected measure or, with the Kern County Planning and Natural Resources Director's approval, a combination of measures can occur on qualifying land within the San Joaquin Valley (San Joaquin, Stanislaus, Merced, Fresno, Madera, Kings, Tulare, or Kern County) or outside the San Joaquin Valley with written evidence that the same or equivalent crops can be produced on the mitigation land.</p> <p>Any application for a conditional use permit shall include the above evidence and mitigation details and shall provide a plot plan substantiating the net acreage calculation along with written evidence of compliance.</p>	Significant and unavoidable
Impact 4.2-2: Conflict with Existing Agricultural Zoning or Williamson Act Contracts			
Option A	No impact	No mitigation measures are required.	No impact
Option B	Less than significant	No mitigation measures are required.	Less than significant
Impact 4.2-3: Conflict with Existing Zoning for, or Cause Rezoning of, Forest Land, Timberland, or Timberland Zoned Timberland Production			
Option A	No impact	No mitigation measures are required.	No impact
Option B	Less than significant	No mitigation measures are required.	Less than significant
Impact 4.2-4: The Project Would Result in the Loss of Forest Land or Conversion of Forest Land to Non-Forest Use			
Option A	No impact	No mitigation measures are required.	No impact
Option B	Potentially significant	MM 4.2-2 Prior to the establishment of any cannabis related facility on any property that contains oak woodlands that will be removed or disturbed by construction of the project, the project applicant	Less than significant

Table 1-3. Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
		<p>shall provide written evidence of completion of one or more of the following measures to mitigate the loss of oak woodland at a ratio of 1:1 for net acreage before conservation. Oak woodlands are defined as parcels having canopy cover by oak trees of at least ten percent (10%) or more of the parcel, as defined in the Kern County General Plan, Section 1.10.10, Oak Tree Conservation. Any occurrence of oak woodlands on the legal parcel proposed for the cannabis operations shall trigger this mitigation measure.</p> <p>Any new acreage is to be calculated by excluding existing roads and areas already developed with structures. A plan shall be submitted substantiating the net acreage calculation along with written evidence of compliance.</p> <ul style="list-style-type: none"> • Funding and purchase of oak woodland conservation easements (will be managed and maintained by an appropriate entity); • Purchase of credits from an established oak woodland mitigation bank; • Participation in any oak woodland mitigation program adopted by Kern County that provides equal or more effective mitigation than the measures listed above. <p>Mitigation lands shall meet the Kern County General Plan Section 1.10.10 definition of oak woodland and be of similar quality or higher, as established by the California Department of Conservation. Completion of the selected measure or, with the Kern County Planning and Natural Resources Director's approval, a combination of measures can occur on qualifying land within the Mountain Regions (Fresno, Madera, Kings, Tulare, Inyo or Kern County) or outside the Mountain Regions with written evidence that the same or equivalent crops can be produced on the mitigation land.</p> <p>Any application for a conditional use permit shall include the above evidence and mitigation details and shall provide a plot plan substantiating the net acreage calculation along with written evidence of compliance.</p>	
Impact 4.2-5: The Project Would Involve Other Changes in the Existing Environment Which, Due to Their Location or Nature, Could Result in Conversion of Farmland to Nonagricultural Use or Forest Land to Non-Forest Use			
Option A	No impact	No mitigation measures are required.	No impact
Option B	Potentially significant	Implement Mitigation Measures MM 4.2-1 and MM 4.2-2.	Significant and unavoidable
Impact 4.2-6: The Project Would Result in the Cancellation of an Open Space or Williamson Act Contract Made in Pursuant to the California Land Conservation Act of 1965 or Farmland Security Zone Contract for Any Parcel of 100 or More Acres			
Option A	No impact	No mitigation measures are required.	No impact

Table 1-3. Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation			
Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
Option B	Potentially significant	MM 4.2-3: No site plan or conditional use permit shall be approved on land under Williamson Act Contract or Farmland Security Zone Contract or Open Space Contract.	Less than significant
Impact 4.2-7: Contribute to Cumulative Agriculture and Forest Resource Impacts			
Option A	No impact	No mitigation measures are required.	No impact
Option B	Potentially significant	Implement Mitigation Measures MM 4.2-1 through MM 4.2-3.	Significant and unavoidable
Air Quality			
Impact 4.3-1: The Project would Conflict with or Obstruct Implementation of the Applicable Air Quality Plan			
Option A	Potentially significant	MM 4.3-1 Prior to the approval of a site plan, issuance of a grading or building permit as on site plans for applications for a conditional use permit, the project applicant shall comply with applicable State and federal air pollution control laws and regulations, and with applicable rules and regulations of the San Joaquin Valley Air Pollution Control District and/or Eastern Kern Air Pollution Control District, depending on the facility location, during any construction and during operations of cannabis facilities. Written documentation that the cannabis facility is in compliance with the appropriate air district shall be provided to the Kern County Planning and Natural Resources Department.	Significant and unavoidable
Option B	Potentially significant	MM 4.3-2 Prior to any ground disturbing activities, the project applicant shall submit a Fugitive Dust Control Plan to either the San Joaquin Valley Air Pollution Control District or Eastern Kern Air Pollution Control District, depending on the cannabis facility location, for review and approval. The Fugitive Dust Control Plan shall reduce emissions, during construction of particulate matter that is 10 microns or less and 2.5 microns or less in diameter (PM_{10} and $PM_{2.5}$). The Fugitive Dust Control Plan shall include: 1) Name(s), address(es), and phone number(s) of person(s) responsible for the preparation, submission and implementation of the plan. 2) Description and location of operation(s). 3) Listing of all fugitive dust emissions sources included in the operation. 4) The following dust control measures shall be implemented: a) All on-site unpaved roads shall be effectively stabilized use water or chemical soil stabilizers that can be determined to be as efficient as or more efficient for fugitive dust control than California Air Resources Board approved soil stabilizers, and that shall not increase any other environmental impacts included loss of vegetation.	Less than significant

Table 1-3. Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
	<p>MM 4.3-3</p> <p>MM 4.3-4</p>	<ul style="list-style-type: none"> b) All material excavated or graded will be sufficiently watered to prevent excessive dust. Watering will occur as needed with complete coverage of disturbed areas. The excavated soil piles will be watered as needed to limit dust emissions to less than 20 percent opacity or covered with temporary coverings. c) Construction activities that occur on unpaved surfaces will be discontinued during windy conditions when winds exceed 25 miles per hour and those activities cause visible dust plumes. Construction activities may continue if dust suppression measures are used to minimize visible dust plumes. d) Track-out debris onto public paved roads shall not extend 50 feet or more from an active operation and track-out shall be removed or isolated such as behind a locked gate at the conclusion of each workday. e) All hauling materials should be moist while being loaded into dump trucks. f) All haul trucks hauling soil, sand and other loos materials on public roads shall be covered (e.g., with tarps or other enclosures that would reduce fugitive dust emissions). g) Soil loads should be kept below 6 inches or the freeboard of the truck. h) Drop heights should be minimized when loaders dump soil into trucks. i) Gate seals should be tight on dump trucks. j) Traffic speeds on unpaved roads shall be limited to a maximum of 25 miles per hour. k) All grading activities shall be suspended when visible dust emissions exceed 20 percent. l) Other fugitive dust control measures as necessary to comply with San Joaquin valley Air Pollution Control District Rules and Regulations. m) Disturbed areas should be minimized. <p>For any off-road equipment with engines rated at 75 horsepower or greater, no construction equipment will be used that is less than Tier 3, less than Tier 4 Interim if construction starts after 2025, and Tier 4 Final is construction starts after 2030. An exemption from these requirements may be granted by Kern County in the event that the project applicant documents that (1) equipment with the required tier is not reasonably available (e.g., reasonability factors to be considered include those available within Kern County within the scheduled construction period), and (2) corresponding reductions in criteria pollutant emissions are achieved from other construction equipment.</p> <p>For projects within the boundaries of the San Joaquin Valley Air Pollution Control District the project proponent shall comply with the Indirect Source Rule. For any emissions of reactive</p>	

Table 1-3. Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
		<p>organic gases (ROGs), oxides of nitrogen (NO_x), and particulate matter with an aerodynamic diameter less than or equal to 10 microns (PM₁₀) to achieve emission reductions for projected construction and operational related emissions of ROG, NO_x and PM₁₀ to no net increase as determined by the SJVAPCD District. Evidence of compliance shall be provided to Kern County Planning and Natural Resources before issuance of building permits and all design requirements shall be shown on the site plan. Any application for a conditional use permit shall include details on the site plan that demonstrate compliance.</p> <p>MM 4.3-5 Prior to the approval of a site plan or issuance of a grading or building permit or for any application for a conditional use permit, the project applicant shall provide the Kern County Planning and Natural Resources Department with an Energy Plan documenting compliance with applicable energy conservation requirements of applicable Title 24 standards in the California Code of Regulations,</p> <p>The Energy Plan shall also confirm that a menu of energy efficiency design elements, along with other design considerations and options, has been made available by the project proponent to builders, developers, and property owners as part of the internal design review process. Installation of solar panels on commercial growing, processing and preparation shall be mandatory and included in combination with a plan to shift use of grow lights to evening hours.</p> <p>All provisions outlined in the approved Energy Plan shall be conditions of approval for any site plan.</p>	
Impact 4.3-2: The Project would Violate Any Air Quality Standards as Adopted in Kern County Environmental Checklist (c)i or (c)ii, or as established by the U.S. Environmental Protection Agency or an Air District or Contribute Substantially to an Existing or Projected Air Quality Violation			
Option A	Potentially significant	Implement Mitigation Measures MM 4.3-1 through MM 4.3-5.	Significant and unavoidable
Option B	Less than significant	Implement Mitigation Measures MM 4.3-1 through MM 4.3-5.	Less than significant
Impact 4.3-3: Result in a Cumulatively Considerable Net Increase of Any Criteria Pollutant for Which the Region is Nonattainment under an Applicable Federal or State Ambient Air Quality Standards			
Option A	Potentially significant	Implement Mitigation Measures MM 4.3-1 through MM 4.3-5.	Significant and unavoidable
Option B	Less than significant	Implement Mitigation Measures MM 4.3-1 through MM 4.3-5.	Significant and unavoidable
Impact 4.3-4: The Project Would Expose Sensitive Receptors to Substantial Pollutant Concentrations			
Option A	Less than significant	No mitigation measures are required.	Less than significant

Table 1-3. Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
Option B	Potentially significant	<p>Implement Mitigation Measures MM 4.3-1 through MM 4.3-5, as described above.</p> <p>MM 4.3-6 Prior to any ground disturbance activities, the project applicant shall implement the following, or equivalent, Valley Fever Provisions:</p> <ol style="list-style-type: none"> 1) Provide evidence to the Kern County Planning and Natural Resources Department that the project operator and/or construction manager has developed a "Valley Fever Training Handout", training, and schedule of sessions for education to be provided to all personnel. All evidence of the training session materials, handout(s) and schedule shall be submitted to the Kern County Planning and Natural Resources Department within 24 hours of the first training session. Multiple training sessions may be conducted if different work crews will come to the site for different stages of construction; however, all construction personnel shall be provided training prior to beginning work. The evidence submitted to the Kern County Planning and Natural Resources Department regarding the "Valley Fever Training Handout" and Session(s) shall include the following: <ol style="list-style-type: none"> a. A sign-in sheet (to include the printed employee names, signature, and date) for all employees who attended the training session. b. Distribution of a written flier or brochure that includes educational information regarding the health effects of exposure to criteria pollutant emissions and Valley Fever. c. Training on methods that may help prevent Valley Fever infection. d. A demonstration to employees on how to use personal protective equipment, such as respiratory equipment (masks), to reduce exposure to pollutants and facilitate recognition of symptoms and earlier treatment of Valley Fever. Where respirators are required, the equipment shall be readily available and shall be provided to employees for use during work. Proof that the demonstration is included in the training shall be submitted to the county. This proof can be via printed training materials/agenda, DVD, digital media files, or photographs. 2) The project applicant shall consult with the Kern County Health Services Department to develop a Valley Fever Dust Management Plan that addresses the potential presence of the <i>Coccidioides</i> spore and mitigates for the potential for <i>Coccidioidomycosis</i> (Valley Fever). Prior to issuance of permits, the project applicant shall submit the Plan to the Kern County Public Health Services Department for review and approval. The Plan shall include a program to evaluate the potential for exposure to Valley Fever from construction activities and to identify appropriate safety procedures that shall be implemented, as needed, to minimize 	Less than significant

Table 1-3. Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
		<p>personnel and public exposure to potential <i>Coccidioides</i> spores. Measures in the Plan shall include the following:</p> <ul style="list-style-type: none"> a. Provide High-Efficiency Particulate Air (HEPA) filters for heavy equipment equipped with factory enclosed cabs capable of accepting the filters. Require contractors utilizing applicable heavy equipment to furnish proof of worker training on proper use of applicable heavy equipment cabs, such as turning on air conditioning prior to using the equipment. b. Provide communication methods, such as two-way radios, for use in enclosed cabs. c. Require National Institute for Occupational Safety and Health (NIOSH)-approved half-face respirators equipped with minimum N-95 protection factor for use during worker collocation with surface disturbance activities, as required per the hazard assessment process. d. Cause employees to be medically evaluated, fit-tested, and properly trained on the use of the respirators, and implement a full respiratory protection program in accordance with the applicable California Occupational Safety and Health Administration Respiratory Protection Standard (8 CCR 5144). e. Provide separate, clean eating areas with hand-washing facilities. f. Install equipment inspection stations at each construction equipment access/egress point. Examine construction vehicles and equipment for excess soil material and clean, as necessary, before equipment is moved off-site. g. Train workers to recognize the symptoms of Valley Fever, and to promptly report suspected symptoms of work-related Valley Fever to a supervisor. h. Work with a medical professional to develop a protocol to medically evaluate employees who develop symptoms of Valley Fever. i. A one-time payment of \$3,200 for new construction or rehabilitation construction that involves any grade disturbing activities shall be made to the Kern County Public Health for Valley Fever Education. When possible, position workers upwind or crosswind when digging a trench or performing other soil-disturbing tasks. j. Prohibit smoking at the worksite outside of designated smoking areas; designated smoking areas will be equipped with handwashing facilities. k. Post warnings on-site and consider limiting access to visitors, especially those without adequate training and respiratory protection. 	

Table 1-3. Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
		I. Audit and enforce compliance with relevant California Occupational Safety and Health Administration health and safety standards on the jobsite.	
Impact 4.3-5: The Project Would Cause the Creation of Objectionable Odors, Affecting a Substantial Number of People.			
Option A	Less than significant	No mitigation measures are required.	Less than significant
Option B	Potentially significant	<p>MM 4.3-7 Prior to the approval of a site plan or issuance of a grading or building permit or as a condition of approval of a conditional use permit for a cannabis cultivation facility, the project applicant shall be required to provide documentation to the Kern County Planning and Natural Resources Department that the cannabis cultivation facility is located a minimum of 0.5 mile from any potential sensitive receptor (including but not limited to residence, hospital, public or private school (K-12) permitted large family day care, permitted senior care facility).</p> <p>MM 4.3-8 Prior to the approval of a site plan, issuance of a grading or building permit as shown on site plans for applications for a conditional use permit for an indoor cannabis cultivation facility, a cannabis processing and packaging facility, or a cannabis distribution facility, the project applicant shall be required to install air filtration equipment to reduce or eliminate odorous compounds to non-detectable levels.</p> <p>MM 4.3-9 Prior to the approval of a site plan or issuance of a grading or building permit or for any application for a conditional use permit, the project applicant shall be required to prepare an Odor Complaint Management Plan and submit to the Kern County Planning and Natural Resources Department. The Odor Complaint Management Plan shall include provisions necessary to reduce noxious odors generated from the proposed use. At a minimum, the Odor Complaint Management Plan shall include the following:</p> <ul style="list-style-type: none"> a. Name and telephone number of contact person(s) at the facility responsible for logging in and responding to odor complaints b. Policy and procedure describing the actions to be taken when an odor complaint is received, including the training provided to the staff on how to respond c. Description of potential odor sources at the facility d. Description of potential methods for reducing odors, including minimizing idling of delivery and service trucks and buses, process changes, facility modifications, and/or feasible add-on air pollution control equipment e. Contingency measures to curtail emissions in the event of a public nuisance complaint. 	Less than significant

Table 1-3. Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation			
Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
Impact 4.3-6: The Project Would Result in a Cumulatively Considerable Net Increase of Any Criteria Pollutant for Which the Project Region Is in Nonattainment under an Applicable National or State Ambient Air Quality Standard.			
Option A	Potentially significant	Implement Mitigation Measures MM 4.3-1 through MM 4.3-5.	Significant and unavoidable
Option B	Potentially significant	Implement Mitigation Measures MM 4.3-1 through MM 4.3-9.	Significant and unavoidable
Biological Resources			
Impact 4.4-1: Have a Substantial Adverse Effect, Either Directly or through Habitat Modifications, on any Species Identified as a Candidate, Sensitive, or Special Status Species in Local or Regional Plans, Policies, or Regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service			
Option A	No impact	No mitigation measures are required.	No impact
Option B	Potentially significant	<p>Implement Mitigation Measures MM 4.2-1 and MM 4.2-2, as described in Section 4.2, <i>Agriculture and Forest Resources</i>, Mitigation Measure MM 4.1-5, as described in Section 4.1, <i>Aesthetics</i>, Mitigation Measures MM 4.3-1 through MM 4.3-5, as described in Section 4.3, <i>Air Quality</i>, Mitigation Measures MM 4.8-1 through MM 4.8-6, as described in Section 4.8, <i>Hazards and Hazardous Materials</i>, Mitigation Measure MM 4.9-1 through MM 4.9-5, as described in Section 4.9, <i>Hydrology and Water Quality</i>, and Mitigation Measure MM 4.11-1, as described in Section 4.11, <i>Noise</i>.</p> <p>MM 4.4-1 Prior to site plan approval, or as part of any application for a conditional use permit, a summary biological report shall be prepared and submitted by a qualified biological consultant detailing the habitat on the site, the quality of the habitat, potential for threatened and endangered species and plants, and any applicable Habitat Conservation Plan or completed mitigation for the site. Special status wildlife surveys must be completed by a qualified biologist, as defined by United States Fish and Wildlife Service, within a 30-day period prior to commencement of new ground-disturbance construction activities for new cannabis related facilities. The purpose of the pre-disturbance surveys is to confirm the presence or absence of any species listed as threatened or endangered under the federal Endangered Species Act, threatened or endangered under the California Endangered Species Act, or designated as fully-protected in the California Fish and Game Code (collectively, "Protected Species"), and to confirm the presence or absence of any other species considered "sensitive" under California Environmental Quality Act ("Sensitive Species"), and to identify and implement feasible avoidance and minimization measures for such species. The surveys shall be conducted in accordance with all currently-applicable presence and absence survey and/or species protocols established by the United States Fish and Wildlife Service and the California Department of Fish and Wildlife ("Species Protocols"). In the absence of any approved protocols, the survey shall extend for a minimum of 250 feet from all areas where</p>	Significant and unavoidable

Table 1-3. Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
		<p>any ground disturbance activities would occur, provided that permission to access areas outside of the future cannabis property has been obtained. As an alternative to individual pre-disturbance surveys for each application, and after consultation with and concurrence by the California Department of Fish and Wildlife and the United States Fish and Wildlife Service, multiple parcels or areas of commercial cannabis lands (including lands which may have multiple ownership) may be consolidated for the purpose of more efficiently managing pre-disturbance surveys and determinations regarding the absence of protected species in areas of proposed new ground disturbance activities.</p> <p>MM 4.4-2 Pre-disturbance surveys for active bird nests must be conducted no more than 10 days prior to the commencement of disturbance. Surveys shall follow United States Fish and Wildlife and California Department of Fish and Wildlife guidance and/or protocols. If no active nests or nesting birds are identified, then project construction activities may proceed and no further mitigation measures for nesting birds are required. If active nest(s) are identified, the active nest(s) should be continuously surveyed for the first 24 hours after detection, to establish a behavioral baseline prior to any construction-related activities. Once construction commences, all nests shall be continuously monitored to detect any behavioral changes as a result of the project (i.e., nest avoidance or abandonment). If behavioral changes are observed, the work causing that change should cease and the California Department of Fish and Wildlife should be consulted for additional avoidance and minimization measures. If continuous monitoring of identified nests by a qualified wildlife biologist is not feasible, a minimum no-disturbance buffer of 250 feet will be established around active nests and a 500-foot no-disturbance buffer around the nests of raptors until the breeding season has ended, or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival, and any adult birds are no longer occupying the nest. Variance from these no-disturbance buffers may be implemented if a qualified biologist concludes that work within the buffer area would not cause nest avoidance or abandonment (e.g., when the disturbance area would be concealed from a nest site by topography). The California Department of Fish and Wildlife and the United States Fish and Wildlife must be notified in advance of implementing of a variance in the no-disturbance buffer.</p> <p>MM 4.4-3 With the exception of focused surveys that are seasonally restricted, special status wildlife species, other than nesting birds as discussed in Mitigation Measure MM 4.4-2, surveys must be completed by a qualified biologist, as defined by United States Fish and Wildlife Service, within a 30-day period prior to commencement of new ground-disturbance construction activities for new cannabis related facilities.</p>	

Table 1-3. Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
		<p>a. Any special status wildlife maternity dens identified during pre-disturbance surveys must be avoided to the maximum extent feasible. If a maternity den cannot feasibly be avoided, the California Department of Fish and Wildlife and/or the United States Fish and Wildlife Service must be contacted to identify appropriate impact minimization measures prior to initiating any disturbance that would affect the den, including potential passive relocation by excavation before or after the rearing season.</p> <p>b. If any potential special status wildlife dens are identified during pre-disturbance surveys, the dens shall be marked and a 50-foot avoidance buffer shall be delineated using stakes and flagging or similar materials to prevent inadvertent damage to the potential den. If a potential den cannot feasibly be avoided, then the California Department of Fish and Wildlife and/or the U.S. Fish and Wildlife Service shall be contacted to identify appropriate impact minimization measures prior to initiating any disturbance that would affect the den.</p> <p>MM 4.4-4 The pre-disturbance surveys shall determine whether active bat maternity roosts are located in or within 250 feet of any disturbance area. All active bat maternity roosts shall be avoided during breeding periods, including postponing disturbance activities if required, and to the maximum extent feasible at other times. If an active bat maternity roost location cannot feasibly be avoided by disturbance, the United States Fish and Wildlife Service and California Department of Fish and Wildlife must be contacted to identify appropriate impact minimization measures prior to initiating any disturbance that would affect the roost.</p> <p>MM 4.4-5 For any cannabis establishment on a land zoned A and A-1 in the Desert Region, if pre-disturbance surveys identified Joshua trees or Joshua tree woodlands on the property, the project proponent applicant submit a Joshua Tree Preservation Plan. The Joshua Tree Preservation Plan may either be a standalone document or it may be included as part of a Habitat Restoration and Revegetation Plan. The plan shall identify the following:</p> <ul style="list-style-type: none"> a. Specific efforts that will be made during construction activities to minimize vegetation removal and permanent loss at construction sites. If necessary, native vegetation should be flagged for protection. When non-native vegetation is removed or disturbed, then native vegetation shall be the replacement. The plan shall identify specific methods for avoiding Joshua tree woodlands and protected cactus. b. A Joshua tree woodland and cactus survey shall be conducted within areas proposed for disturbance as part of the overall Joshua Tree Preservation Plan. All Joshua tree woodlands and cactus within disturbance areas shall be mapped, and their condition recorded. Suitable candidates for translocation shall be identified and this strategy shall be employed over removal when feasible. The plan shall disclose the amount of acres of Joshua tree woodland to be 	

Table 1-3. Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
		<p>removed based on final construction and operation activities. This quantification shall be used for compensation purposes. To compensate for the loss of Joshua tree woodlands, one of the following options, or a combination of both options, as approved by the Director of Kern County Planning and Natural Resources Department shall be required:</p> <p><u>Option 1:</u></p> <p>On-site or off-site preservation of Joshua tree woodland habitat shall occur on parcels within Kern County that contain at minimum the number of individual Joshua trees impacted by the project. The project applicant may mitigate all or part of the project's impacts to Joshua trees on-site, as follows: Delineate and designate one or more parcels for dedication for permanent conservation management; establish a conservation easement on those parcels, the easement to be held and managed by a suitable management entity as determined by the Director of the Kern County Planning and Natural Resources Department; prepare and implement a Joshua Tree Management Plan to maintain habitat conditions on the site in perpetuity; and provide a non-wasting endowment sufficient to implement the plan in perpetuity. The mitigation lands shall provide habitat at a 1:1 ratio for impacted lands, comparable to habitat to be impacted by the project (i.e., similar abundance and size of Joshua trees, similar dominant vegetation community, and similar levels of disturbance or habitat degradation). Suitable mitigation lands provided for other species may be used for Joshua tree woodland mitigation, at a 1:1 ratio. The Management Plan shall specify maintenance and monitoring requirements for each parcel, which shall include but shall not be limited to fencing and access control; signage; security and enforcement; weed control; control measures for feral animals or pets; native habitat enhancement; fire prevention and management; and other long-term habitat considerations as appropriate.</p> <p><u>Option 2:</u></p> <p>In lieu monetary funding. The project applicant may mitigate all or part of the project's impacts to Joshua tree woodlands by funding the acquisition and management in perpetuity of Joshua tree woodland habitat or habitats similar to those that contain impacted Joshua trees on site. The in-lieu fee shall provide sufficient funds to acquire appropriate lands in the Antelope Valley in Kern or Los Angeles County to provide habitats containing Joshua trees at a 1:1 ratio for impacted lands, comparable to habitat to be impacted by the project (i.e., similar abundance and size of Joshua trees, similar dominant vegetation community, similar levels of disturbance or habitat degradation).</p> <p>MM 4.4-6 Exclusion barriers or buffers may be used, where effective and feasible in the opinion of the qualified biologist, to avoid any unauthorized incidental take of Protected Species, and to minimize</p>	

Table 1-3. Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
	MM 4.4-7	<p>any incidental take of Sensitive Species, by separating the planned disturbance area from any locations where pre-disturbance surveys or previously conducted focused surveys detected the presence of Protected Species or Sensitive Species. All buffers must extend for a minimum of 50 feet from the nearest point of disturbance to avoid unauthorized take of protected species, and the barriers must prevent the potential migration of wildlife into the construction area and unlawful incidental take of any Protected Species during ground disturbance activities. The minimum buffer distance shall be increased if required to avoid unauthorized incidental take of any Protected Species as determined by a qualified biologist. Exclusion barriers, buffer distances, and other avoidance measures that may be implemented to avoid impacts to Protected Species or Sensitive Species must be consistent with the U.S. Fish and Wildlife Service and/or the California Department of Fish and Wildlife, and shall be implemented and overseen by the qualified biologist.</p> <p>A Worker Environmental Awareness Program shall be developed and implemented for all personnel that could access the site prior to commencing any disturbance activities. The program shall consist of an on-site or center presentation that will describe the locations and types of sensitive plant, wildlife, and sensitive natural communities (collectively known as Biological Resources) on and near the site, an overview of the laws and regulations governing the protection of Biological Resources, the reasons for protecting the Biological Resources, the specific protection and avoidance measures that are applicable to the site, and the identity of designated points of contact should questions or issues arise, including the qualified biologist. The program shall provide training to recognize, avoid and report to applicable qualified biologists any Biological Resources on the site.</p> <p>a. The Worker Environmental Awareness Program shall emphasize the need to avoid contact with onsite wildlife, and avoid entry into areas where Biological Resources have been identified based on pre-disturbance field surveys and to implement the buffer avoidance or other protection measures established by the U.S. Fish and Wildlife Service shall be identified California Department of Fish and Wildlife or required by the Biological Resource mitigation measures. The training shall emphasize the importance of not feeding or domesticating wildlife and the need to avoid any trash, microtrash, or potential food disposal onsite except in animal-proof containers emptied daily to avoid attracting, or causing adverse impacts to special status wildlife.</p> <p>a. All on-site personnel must sign a statement verifying that they have completed the Worker Environmental Awareness Program, and that they understand and agree to implement the biological requirements for the worksite. If signed employee statements are not available, documentation may be provided by Worker Environmental Awareness Program training</p>	

Table 1-3. Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
	MM 4.4-8	<p>records, which shall be kept by the Applicant for a minimum of 5 years. Each Applicant shall maintain a list of all persons who have completed the training program, and shall provide the list to the County or to State and federal wildlife agency representatives upon request.</p> <p>During any facility construction or operation of a facility located adjacent to undeveloped A or A-1 zoned parcels, the project applicant shall continuously comply with the following provisions:</p> <ul style="list-style-type: none"> a. Construction Work Hours The project applicant, in consultation with the qualified biologist, shall ensure that construction activities within 50 feet of the outside edge of the project footprint will be prohibited between sunset and sunrise, and all construction-related lighting will be turned off during that period, with the exception of lighting for maintenance, security patrols, and emergency (defined by an imminent threat to life or significant property) activities. Lighting for maintenance within 50 feet of the outside edge of the project footprint will be directed away from natural areas. b. Flagging/Fencing/Demarcation The project applicant, in consultation with the qualified biologist, shall designate the construction area and any buffer zones using highly visible materials in the field and review with the contractor in accordance with the final grading plan. State-jurisdictional channels or wetland/ riparian areas, or other sensitive habitat within 50 feet of the construction area, but outside the project property, will also be demarcated in the field and avoided. c. Debris/Non-Native Vegetation/Pollution The project applicant, in consultation with a qualified biologist, shall monitor construction and operation of facilities to ensure: <ol style="list-style-type: none"> 1) Fully covered trash receptacles that are animal-proof will be installed and used to contain all food, food scraps, food wrappers, beverage containers, and other miscellaneous trash. Trash contained within the receptacles will be removed at least once a week from the construction site. 2) No litter, construction materials, or debris will be discharged into State-jurisdictional waters. 3) All uses of weed and pest control compounds shall comply with the application restrictions mandated by the U.S. Environmental Protection Agency and the California Department of Pesticide Regulation. 	

Table 1-3. Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
		<p>4) Construction work areas shall be kept clean of debris, such as cable, trash, and construction materials. All construction/contractor personnel shall collect all micro trash and litter (anything shiny, such as broken glass), vehicle fluid containers, and food waste from the project area on a daily basis.</p> <p>5) No construction material shall be stockpiled in the streambed, banks, or channels, except that native vegetation removed from the channel may be chipped and the chips used as mulch for disturbed sites in or near the work sites.</p> <p>6) All disturbed invasive plants, such as tamarisk, shall be removed from the work site and not used in mulching, composting, etc. If weed biomass must be removed from the site to a designated disposal area, propagules shall be secured in a tarp (without holes or rips) and then carried to a vehicle. Biomass shall be properly wrapped to prevent plant parts from blowing away in transit, and vehicles carrying weed biomass shall be inspected prior to leaving the site to ensure that no plant parts are resting on the bumpers, tailgates, or other exposed areas.</p> <p>d. Vehicle and Equipment Restrictions and Maintenance</p> <p>The project applicant, in consultation with the qualified biologist, shall monitor construction to ensure:</p> <p>1) Maximum construction vehicle speed will be 20 miles per hour (mph) within the project footprint. Nighttime construction should be minimized to the extent possible. However, if nighttime construction or construction-related activity (e.g., security patrols, equipment maintenance) is necessary, then the speed limit shall be 10 mph.</p> <p>2) Vehicle operation within State-jurisdictional waters when surface water is present will be prohibited. Any equipment or vehicles driven and/or operated within or adjacent to a State-jurisdictional channel will be checked and maintained by the operator daily to prevent leaks of oil or other petroleum products that could be deleterious to aquatic life if introduced to the watercourse.</p> <p>3) Vehicles and equipment access will be limited to the project footprint and ingress and egress on existing roads.</p> <p>4) Staging and storage areas for spoils, equipment, materials, fuels, lubricants, and solvents will be located outside the State-jurisdictional channels and within the designated project footprint. Stationary equipment, such as motors, pumps, generators, compressors, and welders, located within or adjacent to State-jurisdictional waters shall be positioned over drip-pans or other containment. Prior to refueling and lubrication,</p>	

Table 1-3. Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
		<p>vehicles and other equipment shall be moved away from the State-jurisdictional channels.</p> <p>e. Erosion/Silt</p> <p>The project applicant, in consultation with the qualified biologist shall monitor construction to ensure:</p> <ol style="list-style-type: none"> 1) During construction activities, temporary erosion control devices, such as straw bales, silt fencing, and sand bags, shall be used to prevent siltation in State-jurisdictional areas. Coir rolls, erosion control mats or blankets, straw or fiber wattles, or similar erosion control products shall be composed of natural-fiber, biodegradable materials; photodegradable or other plastic erosion control materials shall be prohibited. 2) Silt settling basins installed during the construction process will be located away from areas of ponded or flowing water to prevent discolored, silt-bearing water from reaching areas of ponded or flowing water during normal flow regimes. <p>f. Other Restrictions on Construction Activities and Personnel</p> <p>The project applicant, in consultation with the qualified biologist shall monitor construction to ensure:</p> <ol style="list-style-type: none"> 1) During construction, no pets, such as cats or dogs, should be permitted on the project's construction sites. 2) No commercial hunting will be authorized or permitted on a portion of the project site under construction. 3) Any contractor, employee, or agency personnel who are responsible for inadvertently killing, injuring, or trapping a listed species (e.g., San Joaquin kit fox, blunt-nosed leopard lizard, desert tortoise) shall immediately report the incident to the project Lead Biologist. The project Lead Biologist shall contact the U.S. Fish and Wildlife Service (USFWS) (for federal Endangered Species Act (FESA) species) and California Department of Fish and Wildlife (CDFW) (for California Endangered Species Act (CESA) species) immediately in the case of a dead, injured, or entrapped listed species. The Sacramento USFWS Office and CDFW or other office as determined by the wildlife agency, shall be notified in writing within 3 working days of the accidental death or injury to a listed species during project-related activities. Notification must include the date, time, and location of the incident or of the finding of a dead or injured animal and any other pertinent information. To prevent inadvertent entrapment of Protected and Sensitive species (e.g., San Joaquin kit fox) during construction, all excavated, steep- 	

Table 1-3. Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
	MM 4.4-9	<p>walled holes or trenches more than 2 feet deep shall be covered with plywood or similar materials at the close of each working day, or be provided with one or more escape ramps constructed of earth fill or wooden planks. Before such holes or trenches are filled, they shall be thoroughly inspected for trapped Protected and Sensitive species. If trapped Protected and Sensitive species are observed, escape ramps or structures shall be installed immediately to allow escape. If San Protected and Sensitive species are trapped, the USFWS and CDFW shall be contacted.</p> <p>4) All pipes, culverts, or similar structures with a diameter of 4 inches or more that are stored at a construction site for one or more overnight periods shall be thoroughly inspected for Protected and Sensitive species before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If Protected and Sensitive species is discovered inside a pipe, the project biologist shall flush the species from the pipe. If Protected and Sensitive species is discovered, that section of pipe shall not be moved until the USFWS and/or CDFW has been consulted. If necessary, under the direct supervision of the project biologist, the pipe may be moved once to remove it from the path of construction activity until the species has escaped.</p> <p>g. Biological Monitoring and Compliance Documentation</p> <p>The project applicant, in consultation with the qualified biologist shall be responsible for maintaining a database and/or tracking the following during construction:</p> <ol style="list-style-type: none"> 1) Document that required pre-construction surveys, avoidance, mitigation, and/or relocation efforts that have been implemented. 2) Document compliance with construction measures (b)-(f) above. 3) Document compliance with worker training. <p>Prior to issuance of a site plan approval and in conjunction with a building or grading permit, if grading is required on-site, the project applicant shall submit a grading plan. Any application for a conditional use permit shall include a grading plan, if required. The grading plan shall identify:</p> <ol style="list-style-type: none"> a. All areas where grading will result in permanent changes to the existing landscape. b. All areas where grading activities will be temporary during any construction activities. c. All fences installed on the project site will be a maximum of eight (8) feet in height, wire strand, and with a smooth bottom wire at least eighteen (18) inches from the ground to facilitate wildlife movement, except in the Desert Region for permanent exclusionary fencing for the desert tortoise. Fencing in conjunction with a retail cannabis store shall be as required under the 	

Table 1-3. Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
		<p>conditions of the conditional use permit. A block wall shall be required if adjacent to any residentially designated, zoned, or established property.</p> <p>MM 4.4-10 The following provisions shall appear as notes on any site development plans for cannabis establishments. Any application for a conditional use permit shall include the following provisions as notes on any site development plans:</p> <ol style="list-style-type: none"> 1) Intentional feeding of Protected and Sensitive Species, including, but not limited to, California condor, bald and golden eagle, and San Joaquin kit fox, is prohibited. 2) Use of anticoagulants (used for rodent control) at the site shall be prohibited. 3) Exterior lighting shall adhere to dark sky principles and be fully shielded and directed downward in a manner that will prevent light spillage or glare and still maintain adequate lighting for safety and security. 4) Property owners shall keep trash in covered containers that are fitted with animal- and weather-resistant lids. <p>MM 4.4-11 The following additional measures shall be implemented regarding Protected and Sensitive Species:</p> <ol style="list-style-type: none"> a. All vehicles shall observe a 20-mile-per-hour speed limit in all areas of disturbance and on unpaved roads unless otherwise posted. Off-road traffic outside of designated access routes is prohibited. Speed limit signs shall be posted in visible locations at the point of site entry and at regular intervals on all unpaved access roads. b. All disturbance activities, except emergency situations or drilling that may require continuous operations, shall only occur during daylight hours. Night time disturbance activity for drilling purposes shall use directed lighting, shielding methods, or reduced lumen intensity to avoid unnecessary visual disturbance to wildlife and to comply with applicable lighting mitigation measures. c. All food-related trash items and all forms of microtrash, such as wrappers, cans, bottles, bottle tops, and food scraps shall be disposed of in closed, animal proof containers and removed daily from the site. d. Excavations, spoils piles, access roadways, and parking and staging areas shall subject to dust control as set forth in the dust control mitigation measures. e. The use of herbicides, rodenticides, or fertilizers for vegetation control shall be restricted to those approved by the United States Fish and Wildlife Service and the California Department of Fish and Wildlife. No rodenticides shall be used on any site unless approved by the United 	

Table 1-3. Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
		<p>States Fish and Wildlife Service, and the California Department of Fish and Wildlife, and shall observe label and other restrictions mandated by the United States Environmental Protection Agency, California Department of Food and Agriculture, and State and federal laws and regulations.</p> <ul style="list-style-type: none"> f. No plants or wildlife shall be collected, taken, or removed from the site or any adjacent locations except as necessary for project-related vegetation removal or wildlife relocation by a qualified biologist and subject to all applicable permits and authorizations. g. All open trenches or excavations shall be covered at the end of each workday to prevent wildlife entrapment. If an excavation is too large to cover, escape ramps shall be installed at an incline ratio of no greater than 2:1 to. All trenches and pipes shall be inspected for the presence of wildlife each day prior to the commencement of work. h. All vertical tubes used in project construction and chain link fencing poles, shall be temporarily or permanently capped to avoid the entrapment and death of special-status wildlife and birds. i. If dead or injured special status wildlife are found on the project parcel, the animal shall be left in place and reported to the United States Fish and Wildlife Service and the California Department of Fish and Wildlife within 48 hours of discovery for rescue or salvage. Discovery of State or federal listed species that are injured or dead shall also be reported immediately via telephone and within 24 hours in writing, and with a copy to Kern County Planning and Natural Resources Department. j. Vehicle, equipment, and material storage must be limited to the project parcel. No construction or operational materials may be placed or stored outside of the planned disturbance area or stockpiled for future disposal. All concrete, asphalt, and building and equipment debris shall be removed from the site for recycling or proper disposal. k. No vehicles or construction equipment shall be parked within a wetland or waterbody/dry wash. l. Tracked vehicles and other construction equipment must be washed or maintained to be weed-free prior to entering and working within areas of new disturbance. m. All washing of trucks, paint, equipment, or similar activities should occur in areas where runoff is fully contained for collection and offsite disposal. Wash water may not be discharged from the site and shall be located at least 100 feet from any water body, or sensitive Biological Resources. n. Locate all extra work areas (such as staging areas and additional storage areas) at least 50 feet away from wetland boundaries or waterbody, except where the adjacent upland consists of cultivated or rotated cropland or other disturbed land. 	

Table 1-3. Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
		<ul style="list-style-type: none"> o. All areas that must be avoided as result of the pre-disturbance surveys, and areas where new disturbance will occur, shall be clearly delineated by fencing or staking and flagging and/or rope or cord. p. No firearms shall be allowed on any site. q. No pets shall be allowed on any site. r. No smoking may occur except in designated areas. 	
Impact 4.4-2: Have a Substantial Adverse Effect on Any Riparian Habitat or Other Sensitive Natural Community Identified in Local or Regional Plans, Policies, Regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service			
Option A	No impact	No mitigation measures are required.	No impact
Option B	Potentially significant	<p>Implement Mitigation Measure MM 4.4-1 through MM 4.4-11, as described above, Mitigation Measure MM 4.1-5, as described in Section 4.1, <i>Aesthetics</i>, Mitigation Measures MM 4.2-1 and MM 4.2-2, as described in <i>Agriculture and Forest Resources</i>. Implement Mitigation Measures MM 4.3-1 through MM 4.3-5, as described in Section 4.3, <i>Air Quality</i>, Mitigation Measures MM 4.8-1 through MM 4.8-6, as described in Section 4.8, <i>Hazards and Hazardous Materials</i>, Mitigation Measure MM 4.9-1 through MM 4.9-5, as described in Section 4.9, <i>Hydrology and Water Quality</i>, and Mitigation Measure MM 4.11-1, as described in Section 4.11, <i>Noise</i>.</p> <p>MM 4.4-12 No land disturbance activity in State or federally regulated wetlands and waters, shall occur unless the activity is specifically authorized by the issuance of permits or approvals as required by State and federal law. This provision is not intended to restrict survey activities.</p>	Significant and unavoidable
Impact 4.4-3: Have a Substantial Adverse Effect on Federally Protected Wetlands as Defined by Section 404 of the Clean Water Act (Including, but not Limited to, Marsh, Vernal Pool, Coastal, etc.) Through Direct Removal, Filling, Hydrological interruption, or Other Means			
Option A	No impact	No mitigation measures are required.	No impact
Option B	Less than significant	Implement Mitigation Measures MM 4.4-1 through 4.4-12, as described above, and Mitigation Measures 4.9-1 through 4.9-5, as described in Section 4.9, <i>Hydrology and Water Quality</i> .	Less than significant
Impact 4.4-4: Interfere Substantially with the Movement of any Native Resident or Migratory Fish or Wildlife Species or with Established Native Resident or Migratory Wildlife Corridors, or Impede the Use of Native Wildlife Nursery Sites			
Option A	No impact	No mitigation measures are required.	No impact
Option B	Potentially significant	Implement Mitigation Measures MM 4.4-1 though MM 4.4-12.	Less than significant
Impact 4.4-5: Conflict with Any Local Policies or Ordinances Protecting Biological Resources, Such as a Tree Preservation Policy or Ordinance			
Option A	No impact	No mitigation measures are required.	No impact

Table 1-3. Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation			
Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
Option B	Potentially significant	Implement Mitigation Measures MM 4.4-1 through MM 4.4-12, as described above, and Mitigation Measure MM 4.2-2, as described in Section 4.2, <i>Agriculture and Forest Resources</i> .	Less than significant
Impact 4.4-6: Conflict with the Provisions of an Adopted Habitat Conservation Plan, Natural Communities Conservation Plan, or other Approved Local, Regional, or State Habitat Conservation Plan			
Option A	No impact	No mitigation measures are required.	No impact
Option B	Potentially significant	MM 4.4-13 Prior to the issuance of any permit for a site plan, building or grading permit, or a site plan subject to a conditional use permit, the project applicant shall provide evidence to the Kern County Community and Natural Resources Department if applicable on private land that the project is in compliance with any applicable adopted Habitat Conservation Plans, or Natural Community Conservation Plans, applicable to the specific site and any specific requirements shall be incorporated into the site plan.	Less than significant
Impact 4.4-7: Contribute to Cumulative Biological Resources Impacts			
Option A	No impact	No mitigation measures are required.	No impact
Option B	Potentially significant	Implement Mitigation Measures MM 4.4-1 through MM 4.4-13, as described above, Mitigation Measure MM 4.1-5, as described in Section 4.1, <i>Aesthetics</i> , Mitigation Measures MM 4.2-1 and MM 4.2-2, as described in Section 4.2, <i>Agriculture and Forest Resources</i> , Mitigation Measures MM 4.3-1 through MM 4.3-5, as described in Section 4.3, <i>Air Quality</i> , Mitigation Measures MM 4.8-1 through MM 4.8-6, as described in Section 4.8, <i>Hazards and Hazardous Materials</i> , Mitigation Measure MM 4.9-1 through MM 4.9-5, as described in Section 4.9, <i>Hydrology and Water Quality</i> , and Mitigation Measure MM 4.11-1, as described in Section 4.11, <i>Noise</i> .	Significant and unavoidable
Cultural and Tribal Cultural Resources			
Impact 4.5-1: Cause a Substantial Adverse Change in the Significance of a Historical or Archaeological Resource as Defined in Section 15064.5			
Option A	Less than significant	No mitigation measures are required.	Less than significant
Option B	Potentially significant	MM 4.5-1 Applications for site plan review for any cannabis related establishment, including but not limited to cultivation, processing and packaging, distribution, and testing, or application for a conditional use permit shall require the following materials: a. Have an archival records search completed by a qualified archaeologist. This record search shall include an examination of the California Historical Resources Information Files at the Southern San Joaquin Valley Information Center, California State University, Bakersfield, and a search of the Native American Heritage Commission Sacred Lands Files, Sacramento. The project applicant may rely on a previously performed records search for subsequent ground disturbing activities, if available.	Less than significant

Table 1-3. Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
	MM 4.5-2	<p>b. Consult with Kern County Planning and Natural Resources Department Staff to conduct tribal consultation to identify any tribal cultural resources within or adjacent to the project site.</p> <p>c. Implement either of the following options:</p> <ol style="list-style-type: none"> 1. If an application site plan is within a section that has experienced 100 percent previous ground-surface disturbance, as indicated by agricultural, industrial or urban uses, and the records searches indicate that the parcel has been previously surveyed and no cultural or tribal cultural resources are known on it, no further cultural resources studies shall be required. All other application locations shall be subject to intensive (100 percent) pedestrian ground-surface survey (Phase I survey/Class III inventory) by qualified archaeologists. The project applicant may rely on a previously performed ground surface survey for subsequent ground disturbing activities; or 2. If an application location has not been previously surveyed based on the records search information, an intensive (100 percent) pedestrian ground-surface survey (Phase I survey/Class III inventory) by qualified archaeologists shall be required. <p>d. All prehistoric/Native American archaeological sites, whether identified during the records searches or during the intensive survey, shall be demarcated by a qualified archaeologist, fenced by the project applicant, and preserved in place.</p> <p>e. Historical archaeological sites that are potentially eligible for listing in the National Register of Historic Places shall be evaluated by a qualified archaeologist and must meet the requirements of the National Historic Preservation Act of 1966 in order to qualify. Qualifying sites, structures and equipment that are identified during the records search or field survey shall be fenced and preserved in open-space, removed and curated, or treated using appropriate data recovery procedures.</p> <p>Prior to the issuance of grading or building permits or as part of any application for a conditional use permit, and for the duration of construction activities, a Construction Worker Environmental and Cultural Awareness Training Program shall be provided to all construction personnel prior to commencing work at the project site. The training shall be prepared and conducted by the qualified archaeologist, defined as an archaeologist meeting the Secretary of the Interior's Standards for professional archaeology. The training may be in the form of a video. The training may be discontinued when ground disturbance is completed or suspended, but must resume when ground-disturbing activities resume. A sticker shall be placed on hard hats indicating that the worker has completed the cultural training program. Construction personnel shall not be permitted to operate equipment within the construction area unless they have attended the training and are wearing hard hats with the required sticker. A copy of the training</p>	

Table 1-3. Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
	MM 4.5-3	<p>transcript and/or training video, as well as a list of the names of all personnel who attended the training and copies of the signed acknowledgement forms shall be submitted to the Kern County Planning and Natural Resources Department. The purpose of the Cultural Awareness Training Program shall be to inform construction personnel of the types of cultural resources that may be encountered during construction, and to bring awareness to personnel of actions to be taken in the event of a cultural resources discovery. This may include: a discussion of applicable cultural resources statutes, regulations and related enforcement provisions; an overview of the prehistoric and historic environmental setting and context, as well as current cultural information regarding local tribal groups; samples or visuals of artifacts that might be found in the project area; and a discussion of what prehistoric and historic archaeological deposits look like at the surface and when exposed during construction. The cultural training program shall include instruction that in the event cultural resources are unearthed during ground-disturbing activities, the project operator shall cease any ground disturbing activities within 100 feet of the find until it can be evaluated by a qualified archaeologist. The cultural training program shall also indicate that the qualified archaeologist shall be empowered to halt or redirect ground-disturbing activities away from the vicinity of the find until the qualified archaeologist has evaluated the find, determined whether the find is culturally sensitive, and designed an appropriate short-term and long term treatment plan.</p> <p>The project proponent shall continuously comply with the following: In the event that unanticipated cultural or tribal cultural resources are encountered during the course of grading or construction, the project operator/contractor shall cease any ground disturbing activities within 50 feet of the find. Cultural and/or tribal cultural resources may include prehistoric archaeological materials such as flaked and ground stone tools and debris, shell, bone, ceramics, and fire-affected rock, as well as historic materials such as glass, metal, wood, brick, or structural remnants. A qualified archaeologist shall evaluate the resource and recommend appropriate treatment measures, as appropriate.</p> <p>Per California Environmental Quality Act Guidelines Section 15126.4(b)(3), project redesign and preservation in place shall be the preferred means to avoid impacts to significant historical resources. Consistent with CEQA Guidelines Section 15126.4(b)(3)(C), if resources cannot be avoided, additional treatment measures shall be developed in consultation with Kern County, and may include testing and evaluation or data recovery excavation. Kern County shall consult with appropriate Native American representatives in determining appropriate treatment for unearthed cultural resources if the resources are prehistoric or Native American in nature. The qualified archaeologist shall prepare a report documenting evaluation and/or additional treatment of the resource. A copy of the report shall be provided to the Kern County Planning and Natural Resources Department and to the Southern San Joaquin Valley Information Center.</p>	

Table 1-3. Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
Impact 4.5-2: Directly or Indirectly Destroy a Unique Paleontological Resource or Site or Unique Geologic Feature			
Option A	Less than significant	No mitigation measures are required.	Less than significant
Option B	Potentially significant	<p>MM 4.5-4 Prior to the issuance of grading permits, the project applicant shall retain a qualified paleontologist to carry out all mitigation measures related to paleontological resources. Prior to the start of any ground disturbing activities, the qualified paleontologist shall conduct a Paleontological Resources Awareness Training program for all construction personnel working on the project. This may be conducted in conjunction with the required archaeological resources training. The training shall include an overview of potential paleontological resources that could be encountered during ground disturbing activities to facilitate worker recognition, avoidance, and subsequent immediate notification to the qualified paleontologist for further evaluation and action, as appropriate; and penalties for unauthorized artifact collecting or intentional disturbance of paleontological resources.</p> <p>MM 4.5-5 Prior to initiating ground disturbance activities for an activity for which a conformity review is required, a project applicant shall:</p> <ul style="list-style-type: none"> a. Have a paleontological records search completed by a qualified paleontologist. This record search shall include an examination of the Natural History Museum of Los Angeles County and the University of California Museum of Paleontology. The project applicant may rely on a previously performed records search for subsequent ground disturbing activities, if available. b. Implement either: <ul style="list-style-type: none"> 1. If an application site plan is within a section that has experienced 100 percent previous ground-surface disturbance, as indicated by agricultural, industrial or urban uses, and the records searches indicate that the parcel has been previously surveyed and no paleontological resources or unique geological features are known on it, no further paleontological resources studies shall be required. All other application locations shall be subject to intensive (100 percent) pedestrian ground-surface survey by qualified paleontologist. The project applicant may rely on a previously performed ground surface survey for subsequent ground disturbing activities; or 2. If an application location has not been previously surveyed based on the records search information, an intensive (100 percent) pedestrian ground-surface survey by qualified paleontologists shall be required. c. All paleontological sites, whether identified during the records searches or during the intensive survey, shall be demarcated by a qualified paleontologist, fenced by the project applicant, and preserved in place. 	Less than significant

Table 1-3. Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
		<p>MM 4.5-6 Prior to the issuance of grading permits, the project applicant shall retain a qualified paleontologist to prepare a Worker Environmental and Paleontological Awareness Program training, all construction personnel shall be trained regarding the recognition of possible buried paleontological resources and protection of paleontological resources during construction, prior to the initiation of construction or ground-disturbing activities. Training shall inform construction personnel of the procedures to be followed upon the discovery of paleontological materials. All personnel shall be instructed that unauthorized collection or disturbance of fossils is unlawful.</p> <p>MM 4.5-7 If, during the paleontological resources survey, the project applicant's paleontologist identifies paleontological resources, then a Paleontological Resource Monitoring and Mitigation Plan shall be prepared for implementation during construction and operations. The Plan shall be submitted to the Kern County Planning and Natural Resources Department for review prior to the start of grading or construction and shall include the following:</p> <ul style="list-style-type: none"> a. Procedures for the discovery, recovery, and salvage of paleontological resources encountered during construction, if any, in accordance with standards for recovery established by the Society of Vertebrate Paleontology; b. Identification and mapping of specific areas of high and undetermined paleontological potential that will be monitored during construction; c. Verification that the project proponent has an agreement with a recognized museum repository (e.g., the San Diego Natural History Museum or the University of California Museum of Paleontology), for the disposition of recovered fossils and that the fossils shall be processed (e.g., cleaned, repaired, identified, catalogued) prior to submittal to the repository as required by the repository; and d. Field activities shall be documented in a complete set of the daily monitoring logs that shall be kept on-site throughout the earthmoving activities. The logs shall be made available for inspection and shall be keyed to a location map to indicate the area monitored, the date, the assigned personnel, and the results of the monitoring activities, including rock unit encountered, fossil specimens recovered, and associated specimen data, as well as corresponding geologic and geographic site data. Within 90 days of the completion of the paleontological monitoring, a monitoring report, with an appended, itemized inventory of specimens, shall be submitted to Kern County. <p>MM 4.5-8 If, during the paleontological resources survey, the project applicant's paleontologist identifies paleontological resources and a Paleontological Resource Monitoring and Mitigation Plan is prepared, then prior to the commencement of construction activities, the project applicant shall retain</p>	

Table 1-3. Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
		<p>a qualified paleontologist to implement the approved Paleontological Resource Monitoring and Mitigation Plan as follows:</p> <ul style="list-style-type: none"> a. Monitoring shall occur during ground-disturbing activities in areas identified as having deposits with a high or undetermined paleontological potential rating, either at the surface or at depth (greater than 3 to 5 feet below natural ground surface). Monitoring shall consist of inspection of sedimentary exposures for contained fossil remains, and appropriate documentation of observed geologic and stratigraphic features in field notes and photographs. b. In the event fossils are discovered, fossils determined to be significant shall be salvaged using appropriate methods. If salvage of a large or unusually productive fossil discovery is warranted, earthmoving activities shall be diverted temporarily around the fossil site, and a recovery crew shall be mobilized to remove the material as quickly as possible. The paleontological monitor shall photograph and draw stratigraphic profiles of relevant cut surfaces, and if appropriate take samples for analysis of microfossils, dating, or other specified purposes, in accordance with the research design. Once the fossil discovery or an appropriate representative sample (as determined by the Project Paleontologist) of the fossil discovery has been salvaged, earthmoving activities may resume in the discovery area. c. All recovered specimens deemed significant shall undergo preparation and curation into a museum repository, in accordance with the standards of the repository. All preparation and curation tasks may be carried out by a qualified paleontologist, or submitted to a laboratory acceptable to the selected museum. Preparation shall include repair and cleaning of specimens to a point of identification, including, if appropriate, screenwashing of sediments to recover smaller fossil remains. Specimens shall be sorted into species lots, and identified to the lowest reasonable taxonomic level. Specimens shall then be curated into a museum repository. In accordance with museum repository standards, curation may involve cataloguing of species lots, painting of species lot numbers on individual specimens, and organizational tasks. If appropriate and in agreement with the research design, samples shall be submitted to a laboratory, acceptable to the selected museum, for dating, microfossil analysis, pollen analysis, and/or other suitable analyses. 	
Impact 4.5-3: Disturb any Human Remains, including those Interred outside of Formal Cemeteries			
Option A	Less than significant	No mitigation measures are required.	Less than significant
Option B	Potentially significant	<p>Implement Mitigation Measures MM 4.5-1 and MM 4.5-8, as described above.</p> <p>MM 4.5-9 The project proponent shall continuously comply with the following: If human remains are uncovered during ground disturbing activities, the project proponent shall immediately halt work</p>	Less than significant

Table 1-3. Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
		and contact the Kern County Coroner to evaluate the remains, and follow the procedures and protocols set forth in Section 15064.5 (e)(1) of the CEQA Guidelines. The Kern County Planning and Natural Resources shall be contacted immediately after the Kern County Coroner. All construction activities onsite shall cease. If the County coroner determines that the remains are Native American, the Native American Heritage Commission shall be notified, in accordance with Health and Safety Code Section 7050.5, subdivision (c), and Public Resources Code 5097.98 (as amended by AB 2641). No further construction activity shall occur until consultation is complete with the most likely descendent, the Coroner and the Kern County Planning and Natural Resources staff. Authorization to resume construction shall only be given by the County after concurrence with the most likely descendent and shall include implementation of all appropriate measures to protect any possible burial sites or human remains.	
Impact 4.5-4: Cause a Substantial Adverse Change in the Significance of a Tribal Cultural Resource, Defined in PRC Section 21074, that is Listed or Eligible for Listing in the California Register of Historical Resources, or in a Local Register of Historical Resources as Defined in PRC Section 5020.1(k)			
Option A	Less than significant	No mitigation measures are required.	Less than significant
Option B	Potentially significant	Implement Mitigation Measures MM 4.5-1 through MM 4.5-3.	Less than significant
Impact 4.5-5: Cause a Substantial Adverse Change in the Significance of a Tribal Cultural Resource, defined in PRC Section 21074, that is a Resource Determined by Kern County to be Significant Pursuant to Criteria Set Forth in PRC Section 5024.1(c)			
Option A	Less than significant	No mitigation measures are required.	Less than significant
Option B	Potentially significant	Implement Mitigation Measures MM 4.5-1 through MM 4.5-3.	Less than significant
Impact 4.5-6: Contribute to Cumulative Cultural Resources Impacts			
Option A	Less than significant	No mitigation measures are required.	Less than significant
Option B	Potentially significant	Implement Mitigation Measures MM 4.5-1 through MM 4.5-9.	Significant and unavoidable
Geology and Soils			
Impact 4.6-1: Expose People or Structures to Substantial Adverse Effects, Including the Risk of Loss, Injury, or Death Involving the Rupture of a Known Earthquake Fault			
Option A	No impact	No mitigation measures are required.	No impact
Option B	Potentially significant	MM 4.6-1 Prior to the issuance of any permit, such as grading permits or as a condition of approval on a conditional use permit, the project applicant shall comply with the following regulations (as applicable) and confirm compliance in its Site Plan Conformity Review application documentation:	Less than significant

Table 1-3. Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
		<p>a. Alquist-Priolo Earthquake Fault Zoning Act.</p> <p>b. California Building Code.</p> <p>c. Uniform Building Code.</p> <p>d. Additionally, the project applicant shall:</p> <ol style="list-style-type: none"> 1. Avoid placement of structures intended for human occupancy on or within 50 feet of any active faults designated and mapped pursuant to the Alquist-Priolo Earthquake Fault Zoning Act where the fault breaks the surface. 2. Have a professional geologist prepare a fault rupture hazard evaluation according to guidelines in California Geological Survey Special Publication 42, 2007 for new developments with structures that are intended for human occupancy. 3. Ensure that active fault trace placement restrictions are in place for all permanent tanks and storage reservoirs used to store, treat, or transport hazardous materials or materials that are considered pollutants to surface water and groundwater, located in an Earthquake Fault Zone. <p>MM 4.6-2 Prior to the issuance of any permit, such as grading permits or as a condition of approval on a conditional use permit, for structures, the project applicant shall:</p> <ol style="list-style-type: none"> a. For existing structures, the project applicant shall comply with applicable seismic risk protection measures in the California Building Code, as confirmed with building permit plans submitted to the Kern County Public Works Department for review and approval. b. For new structures, the project applicant shall provide site plans that confirm that all structures designed for human occupancy shall be designed to withstand substantial ground shaking in accordance with applicable California Building Code seismic design standards and Kern County Building Code. <p>MM 4.6-3 The project applicant shall include in all approved new commercial building development plans, a soils and geology review to determine if a geologic hazard report will be required for the project by Kern County Public Works. Such a required report shall include:</p> <ul style="list-style-type: none"> • Seismic Report to identify any necessary additional seismic safety design improvements for infrastructure and habitable structures; • Landslide Hazards Report, in the Mountain Region, to define the extent of the landslide hazards and specific appropriate geotechnical improvements required; 	

Table 1-3. Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
		<ul style="list-style-type: none"> • Debris Flow Report to define the extent of the debris flow hazards and specify appropriate geotechnical improvements; and • Liquefaction-Collapsible Soil Report to define the extent potential for localized liquefaction, collapsible or expansive soils hazards, and shall specify appropriate geotechnical improvements. 	
Impact 4.6-2: Expose People or Structures to Substantial Adverse Effects, Including the Risk of Loss, Injury, or Death Involving Strong Seismic Ground Shaking			
Option A	No impact	No mitigation measures are required.	No impact
Option B	Potentially significant	Implement Mitigation Measures MM 4.6-1 through MM 4.6-3.	Less than significant
Impact 4.6-3: Expose People or Structures to Substantial Adverse Effects, Including the Risk of Loss, Injury, or Death Involving Seismic-Related Ground Failure, Including Liquefaction			
Option A	No impact	No mitigation measures are required.	No impact
Option B	Potentially significant	<p>Implement Mitigation Measures MM 4.6-1 through MM 4.6-3, as described above.</p> <p>MM 4.6-4 Prior to a site plan approval for new structures in an area of landslide hazards, specifically within the Mountain Region, the project applicant shall retain a qualified geologic/geotechnical consultant to perform focused geotechnical studies (Landslide Hazards Report) to define the extent of the landslide hazards and specify appropriate geotechnical improvements to be made, such as but not limited to landslide repairs, buttresses or other site specific designs necessary to avoid the hazards.</p> <p>MM 4.6-5 Prior to a site plan approval for new structures in an area subject to landslide and debris flow hazards, the project applicant shall retain a qualified geologic/geotechnical consultant to perform focused geotechnical studies (Debris Flow Report) to define the extent of the debris flow hazards and specify appropriate geotechnical improvements to be made, such as but not limited to a combination of avoidance of high hazard areas, construction of earthen berms designed to deflect flows to open space areas or to impound debris, or by construction of appropriately-sized debris retention basins that will intercept debris flows at the edges of proposed development.</p> <p>MM 4.6-6 Prior to a site plan approval for new structures in an area subject to collapsible soils, the project applicant shall retain a qualified geologic/geotechnical consultant to perform focused geotechnical studies (Liquefaction-Collapsible Soil Report) to define the extent potential for localized liquefaction, collapsible or expansive soils hazards, and shall specify appropriate geotechnical improvements to be made, such as but not limited to a combination of avoidance of high hazard areas, removal and replacement of susceptible soils with engineered fill, or by presoaking and/or surcharge preloading of collapsible soils to induce densification prior to construction of improvements.</p>	Less than significant

Table 1-3. Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
Impact 4.6-4: Expose People or Structures to Substantial Adverse Effects, Including the Risk of Loss, Injury, or Death Involving Landslides			
Option A	No impact	No mitigation measures are required.	No impact
Option B	Potentially significant	Implement Mitigation Measure MM 4.6-1 through MM 4.6-6.	Less than significant
Impact 4.6-5: Result in Substantial Soil Erosion or Loss of Topsoil			
Option A	No impact	No mitigation measures are required.	No impact
Option B	Potentially significant	Implement Mitigation Measures MM 4.6-1 through MM 4.6-6, as described above, and Mitigation Measures MM 4.9-1 through MM 4.9-5, as described in Section 4.9, <i>Hydrology and Water Quality</i> . MM 4.6-7 All site plans and applications for a Conditional Use Permit shall submit a preliminary drainage plan and, if required, a flood study, to the Kern County Public Works that complies with all requirements of the Kern County Code.	Less than significant
Impact 4.6-6: Be Located on a Geologic Unit or Soil That Is Unstable, or That Would Become Unstable as a Result of the Project, and Potentially Result in On- or Off-site Landslide, Lateral Spreading, Subsidence, Liquefaction, or Collapse			
Option A	No impact	No mitigation measures are required.	No impact
Option B	Potentially significant	Implement Mitigation Measures MM 4.6-1 through MM 4.6-7, as described above, and Mitigation Measures MM 4.9-1 through MM 4.9-5, as described in Section 4.9, <i>Hydrology and Water Quality</i> .	Less than significant
Impact 4.6-7: Be Located on Expansive Soil, as Defined in Table 18-1-B of the Uniform Building Code (1994), Creating Substantial Risks to Life or Property			
Option A	No impact	No mitigation measures are required.	No impact
Option B	Potentially significant	Implement Mitigation Measures MM 4.6-1 through MM 4.6-7.	Less than significant
Impact 4.6-8: Have Soils Incapable of Adequately Supporting the Use of Septic Tanks or Alternative Wastewater Disposal Systems Where Sewers Are Not Available for the Disposal of Wastewater			
Option A	No impact	No mitigation measures are required.	No impact
Option B	Potentially significant	Implement Mitigation Measures MM 4.6-1 through MM 4.6-7.	Less than significant
Impact 4.6-9: Contribute to Cumulative Geologic and Soils Impacts			
Option A	Less than significant	No mitigation measures are required.	Less than significant
Option B	Potentially significant	Implement Mitigation Measure MM 4.6-1 through MM 4.6-7, as described above, and Mitigation Measures MM 4.9-1 through MM 4.9-5, as described in Section 4.9, <i>Hydrology and Water Quality</i> .	Less than significant

Table 1-3. Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
Greenhouse Gas Emissions			
Impact 4.7-1: Generate Greenhouse Gas Emissions, Either Directly or Indirectly, That May Have a Significant Impact on the Environment			
Option A	Potentially significant	<p>MM 4.7-1 The project applicant would be required to comply with all applicable State and San Joaquin Valley Air Pollution Control District (SJVAPCD) Rules and Regulations or East Kern Air Pollution Control District regulations including, but not limited to:</p> <ul style="list-style-type: none"> a) Pavley Motor Vehicle Standards (AB 1493) b) Low Carbon Fuel Standard (California Code of Regulations, Title 17, Division 3, Chapter 1, Subchapter 10, Article 4, Subarticle 7, Section 95480 et seq.) c) Title 24 (part 6 [Energy Code] and part 11 [CALGreen Code]) of the California Code of Regulations d) Renewable Portfolio Standard (SB X1 2 and SB 350) e) Solid Waste Diversion (AB 341) and statewide reduction in potable urban water usage of 25 percent relative to water use in 2013 (Executive Order B-29-15) f) Model Water Efficient Landscape Ordinance (MWELO) (California Code of Regulations, Title 23, Division 2, Chapter 2.7) g) Kern County Code of Ordinances – Landscaping Requirements and Water Efficient Landscaping (Kern County Code of Ordinances, Title 19, Chapter 19.86, Sections 19.86.050 and 19.86.060) h) California Water Code (California Code of Regulations, Division 6, Part 2.10, Sections 10910–10915) i) U.S. EPA and NHTSA GHG and CAFE standards for passenger cars, light-duty trucks, and medium-duty passenger vehicles (75 FR 25324–25728 and 77 FR 62624–63200) and for medium- and heavy-duty vehicles (76 FR 57106–57513) j) Advanced Clean Cars Program (California Code of Regulations, Title 13, Division 3, Chapter 1, Articles 1, 2, 6 (parts); Chapter 2, Articles 1, 2.1, 2.3, 2.4 (parts); Chapter 4.4 (parts); Chapter 8 (parts). k) Under Inflated Vehicle Tires (California Code of Regulations, Title 17, Division 3, Chapter 1, Subchapter 10, Article 4, Subarticle 8, Section 95550 et seq.) l) Heavy-Duty Vehicle Greenhouse Gas Emission Reduction Regulation (California Code of Regulations, Title 17, Division 3, Chapter 1, Subchapter 10, Article 4, Subarticle 1, Section 95300 et seq.) 	Significant and unavoidable

Table 1-3. Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
		<ul style="list-style-type: none"> m) Management of High Global Warming Potential Refrigerants for Stationary Sources (California Code of Regulations, Title 17, Division 3, Chapter 1, Subchapter 10, Article 4, Subarticle 5.1, Section 95380 et seq.) n) Small Containers of Automotive Refrigerant (California Code of Regulations, Title 17, Division 3, Chapter 1, Subchapter 10, Article 4, Subarticle 5, Section 95360 et seq.) o) High-Global Warming Potential Greenhouse Gases in Consumer Products (California Code of Regulations, Title 17, Division 3, Chapter 1, Subchapter 8.5, Article 2). 	
Option B	Potentially significant	<p>Implement Mitigation Measure MM 4.7-1, as described above and Mitigation Measure 4.3-5, as described in Section 4.3, <i>Air Quality</i>.</p> <p>MM-4.7-2 Prior to the approval of a site plan, issuance of a grading or building permit, or as on site plans for applications for a conditional use permit, the project applicant shall provide details to the Kern County Planning and Natural Resources Department that the following menu of greenhouse gas emissions reduction measures are being implemented in conformance with the Kern County Cannabis Land Use Ordinance. Building design standards shall be made conditions of approval of any commercial/industrial site plan.</p> <ul style="list-style-type: none"> 1) Designate at least two locations with adequate pedestrian, bicycle, and parking facilities for off-site transit connection service. 2) Implement energy-efficient design practices such as high-performance glazing, Energy Star compliant systems and appliances, radiant heat roof barriers, insulation on all pipes, programmable thermostats, solar access, and sealed ducts. 3) Prohibit use of chlorofluorocarbon refrigerants in commercial buildings. 4) Ensure recycling of construction debris and waste through administration by an on-site recycling coordinator and presence of recycling/separation area. 5) Implement a water wise program that includes all feasible measures to reduce indoor water use and associated energy use (e.g., for interior fixtures, require tankless water heaters and low-flow plumbing and fixtures). <p>MM 4.7-3 The site plan for any cultivation, processing and packaging facility, testing, or retail cannabis operation applying for a conditional use permit shall demonstrate that the parking areas for cannabis facilities are equipped with electric vehicle charging stations that provide charging opportunities to 7.5 percent of the total number of required parking spaces.</p>	Significant and unavoidable

Table 1-3. Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation			
Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
Impact 4.7-2: Conflict with an Applicable Plan, Policy or Regulation Adopted for the Purpose of Reducing the Emissions of Greenhouse Gases			
Option A	Less than significant	No mitigation measures are required.	Less than significant
Option B	Less than significant	No mitigation measures are required.	Less than significant
Impact 4.7-3: Cumulative Greenhouse Gas Emissions Impacts			
Option A	Potentially significant	Implement Mitigation Measures MM 4.7-1.	Significant and unavoidable
Option B	Potentially significant	Implement Mitigation Measures MM 4.7-1 through MM 4.7-3.	Significant and unavoidable
Hazards and Hazardous Materials			
Impact 4.8-1: Create a Significant Hazard to the Public or the Environment through the Routine Transport, Use, or Disposal of Hazardous Materials			
Option A	Less than significant	No mitigation measures are required.	Less than significant
Option B	Potentially significant	<p>Implement Mitigation Measure MM 4.4-11, as described in Section 4.4, <i>Biological Resources</i>, Mitigation Measures MM 4.9-2 through MM 4.9-5, as described in Section 4.9, <i>Hydrology and Water Quality</i>.</p> <p>MM 4.8-1 Prior to the issuance of grading or building permits or the approval of a site plan for a cannabis facility and operation that would involve the use of hazardous materials, the project applicant shall prepare a Hazardous Materials Business Plan in accordance with the California Health and Safety Code and Kern County regulations and shall submit the plan to the Kern County Health Services Department for review and approval.</p> <p>The Hazardous Materials Business Plan shall delineate storage areas for hazardous material and hazardous waste; describe proper handling, storage, and disposal techniques; describe methods to be used to avoid spills and minimize impacts in the event of a spill; describe procedures for handling and disposing of unanticipated hazardous materials encountered during construction; and establish public and agency notification procedures for spills and other emergencies, including fires. The project applicant shall provide the Hazardous Materials Business Plan to all contractors working on the project and shall ensure that one copy is available on the site at all times.</p> <p>MM 4.8-2 For cannabis processing operations with systems that use solvents that are potentially flammable or toxic, the project applicant shall provide written verification to the Kern County Health Services Department and the Kern County Planning and Natural Resources Department that the cannabis operations meet the following requirements:</p> <ul style="list-style-type: none"> • Use a closed-loop system that will prevent off-gassing. 	Less than significant

Table 1-3. Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
	MM 4.8-3	<ul style="list-style-type: none"> • Use solvents that are recognized as safe pursuant to the federal Food, Drug and Cosmetic Act. • Have a licensed engineer certify that the system was commercially manufactured, is safe for its intended use, and was built to codes of recognized and generally accepted good engineering practices, including, but not limited to, the American Society of Mechanical Engineers, the American National Standards Institute, Underwriters Laboratories, the American Society for Testing and Materials, or Occupational Safety and Health Administration Nationally Recognized Testing Laboratories. • Have a certification document that includes the unit's serial number and is signed by a professional engineer. • Receive and maintain approval from local fire officials for the closed-loop system, other equipment, the extraction operation and the facility. • Adhere to State and national fire protection standards. <p>The following measures shall be implemented regarding pesticide, herbicide, rodenticide, and fertilizer applications:</p> <ul style="list-style-type: none"> • All uses of weed and pest control compounds shall comply with the application restrictions mandated by the U.S. Environmental Protection Agency and the California Department of Pesticide Regulation. • The application of herbicides, rodenticides, or fertilizers shall be in compliance with all State and federal laws and regulations and implemented by a Licensed Qualified Applicator. Herbicides, rodenticides, or fertilizers shall not be applied during or within 72 hours of a scheduled rain event. In riparian areas only water-safe herbicides shall be used. Herbicides, rodenticides, or fertilizers shall not be applied when wind velocities exceed six miles per hour. • The use of herbicides, rodenticides, or fertilizers for vegetation control shall be restricted to those approved by the United States Fish and Wildlife Service and the California Department of Fish and Wildlife. No rodenticides shall be used on any site unless approved by the United States Fish and Wildlife Service, and the California Department of Fish and Wildlife, and shall observe label and other restrictions mandated by the United States Environmental Protection Agency, California Department of Food and Agriculture, and State and federal laws and regulations. • If herbicides, pesticides or rodenticides are to be utilized at a cannabis facility, the project applicant or personnel applying herbicides, pesticides or rodenticides must have the appropriate State and local applicator licenses and comply with all State and local 	

Table 1-3. Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
		regulations regarding use. Herbicides, pesticides or rodenticides shall be mixed and applied in conformance with the product manufacturer's directions. The applicator shall be equipped with splash protection clothing and gear, chemical-resistant gloves, chemical spill/splash wash supplies, and material safety data sheets for all hazardous materials to be used. To minimize harm to wildlife, vegetation, and waterbodies, herbicides, pesticides, or rodenticides shall not be applied directly to wildlife, products identified as non-toxic to birds and small mammals shall be used if nests or dens are observed, and herbicides shall not be applied within 50 feet of any surface waterbody when water is present. Herbicides, pesticides, or rodenticides shall not be applied if it is raining at the site, rain is imminent, or the target area has puddles or standing water. Herbicides, pesticides, or rodenticides shall not be applied when wind velocity exceeds 10 miles per hour. If spray is observed to be drifting to a non-target location, spraying shall be discontinued until conditions causing the drift have abated.	
Impact 4.8-2: Create a Significant Hazard to the Public or the Environment through Reasonably Foreseeable Upset and Accident Conditions Involving the Release of Hazardous Materials into the Environment			
Option A	Less than significant	No mitigation measures are required.	Less than significant
Option B	Potentially significant	<p>Implement Mitigation Measures MM 4.8-1 through MM 4.8-3, as described above, Mitigation Measure MM 4.4-11, as described in Section 4.4, <i>Biological Resources</i>, and Mitigation Measures MM 4.9-1 through MM 4.9-5, as described in Section 4.9, <i>Hydrology and Water Quality</i>.</p> <p>MM 4.8-4 For any cannabis facility on property located in the Valley area, the project applicant shall contact the California Department of Conservation, Division of Oil, Gas, and Geothermal Resources for record searches to determine the location of any active, exploratory, or closed oil-related wells within the property boundaries, or to confirm absence of oil-related wells. If active, exploratory, or closed oil-related wells are identified on the property, the project applicant shall include in any ground disturbing activity application, the location and descriptions of any oil and gas equipment on the parcel</p> <p>a. Prior to the approval of a site plan or issuance of a grading or building permit, for lands that include abandoned oil and gas wells, or abandoned oil and ancillary equipment, such wells shall be decommissioned and ancillary equipment removed, as required by applicable law, including but not limited to the regulatory requirements of the California Department of Conservation, Division of Oil, Gas, and Geothermal Resources. If soil contamination conditions exist in the oil and gas equipment areas, testing and remediation shall be required. Any application for a conditional use permit shall include details that demonstrate compliance.</p> <p>b. Any grading permits approved for a cannabis facility that involves ground disturbing activities shall require the permittee to report to the County any previously-unknown oil and gas</p>	Less than significant

Table 1-3. Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
		<p>equipment that is discovered during site grading or construction activities, and to comply with (a), above, prior to obtaining any building permit for the construction of a structure at the location of the newly-discovered oil and gas equipment.</p> <p>c. Construction and operation activities area required to avoid oil and gas equipment, including wells and ancillary equipment such as pipelines and storage tanks, with a 50-foot setbacks.</p> <p>MM 4.8-5 If previously unknown soil contamination conditions are discovered during construction activities, the project applicant will (a) report these conditions to the County and, as applicable, other environmental oversight agencies; (b) prepare and implement a Soil Management Plan (SMP) addressing the newly discovered environmental conditions under the oversight of the County or alternate environmental oversight agency.</p> <p>MM 4.8-6 If construction activities result in demolition or renovation of an existing structure, the project applicant shall complete an asbestos survey. The asbestos survey shall be conducted by an Asbestos Hazard Emergency Response Act and California Occupational Safety and Health Administration certified building inspector to determine the levels of asbestos in the structure, prior to demolition or renovation,</p> <ol style="list-style-type: none"> 1. For projects within the San Joaquin Valley Air Pollution Control District - pursuant to the Asbestos Program. Compliance with Valley Air District Rule 4002 shall be required for any demolition or renovation work involving asbestos containing materials. 2. For projects within the Eastern Kern Air Pollution Control District, the asbestos survey shall be pursuant to the asbestos program. Compliance with District Rule 423 shall be required for any demolition or renovation work involving asbestos containing materials. 	
Impact 4.8-3: Emit Hazardous Emissions or Handle Hazardous or Acutely Hazardous Materials, Substances, or Waste within One-Quarter Mile of an Existing or Proposed School			
Option A	Less than significant	No mitigation measures are required.	Less than significant
Option B	Potentially significant	Implement Mitigation Measures MM 4.8-1 through MM 4.8-6.	Less than significant
Impact 4.8-4: Create a Hazard to Public or the Environment as a Result of Being Located on a Site that is Included on a List of Hazardous Material Sites Compiled Pursuant to Government Code Section 65962.5			
Option A	No impact	No mitigation measures are required.	No impact
Option B	Potentially significant	<p>Implement Mitigation Measures MM 4.8-1 through MM 4.8-6, as described above.</p> <p>MM 4.8-7 Prior to the approval of a site plan or issuance of a grading or building permit or for any application for a conditional use permit, the project applicant shall review the hazardous materials list pursuant to Government Code Section 65962.5. If the property is listed the applicant shall submit a Phase I</p>	Less than significant

Table 1-3. Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
		<p>ASTM report that determines the current State of the hazardous materials, and any management restrictions on the use of the site. The report and any recommendations shall be reviewed by Kern County Public Health Services and Kern County Planning and Natural Resources to determine if a Phase II ASTM is warranted.</p> <p>Appropriate subsurface testing and recommended remediation, with regulatory agency oversight, shall be undertaken if considered warranted by Kern County Public Health in consultation with the Kern County Planning and Natural Resources Department. Potential remediation options could include excavation and off-site disposal of contaminated soil, in-place treatment, and/or the installation of protective barriers.</p>	
Impact 4.8-5: For a Project Located within the Adopted Kern County Airport Land Use Compatibility Plan or within Two Miles of a Public Airport, Would the Project Result in a Safety Hazard for People Residing or Working in the Project Area			
Option A	Less than significant	No mitigation measures are required.	Less than significant
Option B	Potentially significant	<p>MM 4.8-8 Establishment of any cannabis facility on property that is within the adopted Kern County Airport Land Use Compatibility Plan shall require the project applicant to comply with all applicable policies within the Kern County Airport Land Use Compatibility Plan. The project applicant shall provide evidence of compliance to the Kern County Planning and Natural Resources Department.</p> <p>MM 4.8-9 The project applicant shall provide the Kern County Planning and Natural Resources Department with written documentation of the distance between the cannabis facility and the nearest public airport, private airport, or private airstrip. If the establishment a cannabis facility is on property that is within two miles of a public airport, within the Kern County Airport Land Use Compatibility Plan, or within the vicinity of a private airstrip, then any new structures shall be no more than 200 feet in height.</p> <p>MM 4.8-10 The project applicant shall provide the Kern County Planning and Natural Resources Department with written documentation of the location of the cannabis facility within the Special Use Airspace of the Joint Service Restricted R-2508 Complex (Military Review Requirements) and that the cannabis facility structure will not exceed the maximum allowable heights specified in Figure 19.08.160 of the Kern County Zoning Ordinance as follows:</p> <ul style="list-style-type: none"> • A structure located within the red zone with diagonal lines cannot exceed 100 feet in height. • A structure located within the red zone cannot exceed 200 feet in height. • A structure located in the yellow zone cannot exceed 500 feet in height. 	Less than significant
Impact 4.8-6: For a Project Located within the Vicinity of a Private Airstrip, Would the Project Result in a Safety Hazard for People Residing or Working in the Project Area			
Option A	Less than significant	No mitigation measures are required.	Less than significant

Table 1-3. Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
Option B	Potentially significant	Implement Mitigation Measures MM 4.8-8 through MM 4.8-10	Less than significant
Impact 4.8-7: Impair Implementation of, or Physically Interfere with, an Adopted Emergency Response Plan or Emergency Evacuation Plan			
Option A	No impact	No mitigation measures are required.	No impact
Option B	Less than significant	No mitigation measures are required.	Less than significant
Impact 4.8-8: Expose People or Structures to a Significant Risk of Loss, Injury, or Death Involving Wildland Fires, Including Where Wildlands are Adjacent to Urbanized Areas or Where Residences are Intermixed with Wildlands			
Option A	No impact	No mitigation measures are required.	No impact
Option B	Potentially significant	<p>MM 4.8-11 The project applicant is required to implement the following measures:</p> <ul style="list-style-type: none"> a. Comply with Kern County Fire Codes. b. Maintain firefighting apparatus and supplies required by the Kern County Fire Department. c. Maintain of a list of all relevant fire-fighting authorities for the property. d. For properties abutting wildlands, have available equipment to extinguish incipient fires and or construction of a fire break, such as: chemical fire extinguishers, shovels, axes, chain saws, etc. e. For cannabis cultivation activities, carry water or fire extinguishers and shovels in non-passenger vehicles in the field. f. Have and maintain an adequate supply of fire extinguishers for the cannabis facility. g. Protect individual safety to contain any fire that occurs and notify local emergency response personnel. h. Remove any flammable wastes generated during cannabis cultivation and processing activities regularly. i. Store all flammable materials away from ignition sources and in approved containers. j. Allow smoking only in designated smoking areas. k. Prohibit smoking where flammable products are present and when the fire hazard is high. Train personnel regarding potential fire hazards and their prevention. l. All internal combustion engines, stationary and mobile, shall be equipped with spark arresters. Spark arresters shall be in good working order. m. Light trucks and cars with factory-installed (type) mufflers shall be used only on roads where the roadway is cleared of vegetation. Said vehicle types shall maintain their factory-installed (type) muffler in good condition. 	Less than significant

Table 1-3. Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
		<ul style="list-style-type: none"> n. Fire rules shall be posted on the Project bulletin board at the contractor's field office and areas visible to employees. o. Equipment parking areas and small stationary engine sites shall be cleared of all extraneous flammable materials. p. Personnel shall be trained in the practices of the Fire Safety Plan relevant to their duties. Construction and maintenance personnel shall be trained and equipped to extinguish small fires in order to prevent them from growing into more serious threats. <p>MM 4.8-12 For cannabis cultivation and processing operations, the project applicant shall restrict the use of chainsaws, chippers, vegetation masticators, grinders, tractors, torches, and other flammable material uses at its locations, and ensure the facility where this equipment is used are equipped with portable or fixed fire extinguishers and/or a water tank, with hoses, fire rakes, and other tools to extinguish and or control incipient stage fires. The Hazardous Material Business Plan shall include fire prevention and response training for workers using these tools.</p> <p>MM 4.8-13 Prior to the approval of a site plan or issuance of a grading or building permit, the project applicant shall provide a site plan designed to meet all applicable State and local fire codes consistent with the requirements of the Kern County Fire Department and California Department of Forestry and Fire Protection. Any application for a conditional use permit shall include details on the site plan that demonstrate compliance.</p>	
Impact 4.8-9: Would Implementation of the Project Generate Vectors or Have a Component That Includes Agricultural Waste Exceeding Adopted Qualitative Thresholds			
Option A	Less than significant	No mitigation measures are required.	Less than significant
Option B	Potentially significant	<p>Implement Mitigation Measures MM 4.8-1 through MM 4.8-6, as described above, Mitigation Measures MM 4.3-2, MM 4.3-3, MM 4.3-4, and MM 4.3-6, as described in Section 4.3, <i>Air Quality</i>, and Mitigation Measures MM 4.16-2 through MM 4.16-4, as described in Section 4.16, <i>Utilities and Service Systems</i>.</p> <p>MM 4.8-14 The project applicant shall continuously comply with the following: In order to eliminate the risk of generating disease vectors at the cannabis facility, the project applicant shall ensure that trash is stored in closed containers and removed from the site at regular intervals. Open containers shall be inverted and any ditches, other than agricultural water ditches, shall not be allowed to accumulate water. Activities other than watering plants for cultivation shall not generate standing water. Project compliance shall be verified by the Kern County Department of Agriculture during the course of that agency's performance of any on-site inspections. Naturally occurring depressions, drainages, or pools at the site shall not be drained or filled without consulting with the appropriate resource agency</p>	Less than significant

Table 1-3. Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
		(Kern County, United States Army Corps of Engineers, United States Fish and Wildlife Service, California Department of Fish and Wildlife) as applicable, and obtaining the appropriate permits. Even though cannabis is "decriminalized" under State law, and even with the U.S. Department of Justice issuance of memoranda guiding federal law enforcement related to cannabis activities within jurisdictions that have legalized cannabis, cannabis activities continue to be illegal at the federal level and subject to the prosecutorial discretion of the federal government. Therefore, any cannabis operation that is located on a parcel requiring a federal permit will be prohibited.	
Impact 4.8-10: Cumulative Hazards and Hazardous Materials Impacts			
Option A	Less than significant	No mitigation measures are required.	Less than significant
Option B	Potentially significant	Implement Mitigation Measures MM 4.8-1 through MM 4.8-14, as described above, Mitigation Measures MM 4.3-2, MM 4.3-4, MM 4.3-4, and MM 4.3-6, as described in Section 4.3, <i>Air Quality</i> , Mitigation Measures MM 4.4-11, as described in Section 4.4, <i>Biological Resources</i> , Mitigation Measures MM 4.9-1 through MM 4.9-5, as described in Section 4.9, <i>Hydrology and Water Quality</i> , Mitigation Measures MM 4.16-2 through MM 4.16-4, as described in Section 4.16, <i>Utilities and Service Systems</i> .	Less than significant
Hydrology and Water Quality			
Impact 4.9-1: Violate Any Water Quality Standards or Waste Discharge Requirements			
Option A	Less than significant	No mitigation measures are required.	Less than significant
Option B	Potentially significant	Implement Mitigation Measure MM 4.3-2, as described in Section 4.3, <i>Air Quality</i> , Mitigation Measures MM 4.4-8 and MM 4.4-12, as described in Section 4.4, <i>Biological Resources</i> , Mitigation Measures MM 4.8-2 through MM 4.8-7, as described in the Section 4.8, <i>Hazards and Hazardous Materials</i> . MM 4.9-1 Prior to the issuance of grading permits, the project applicant shall comply with the National Pollutant Discharge Elimination System General Construction Storm Water Permit from the State Water Resources Control Board. The project applicant shall comply with applicable permit coverage and notice requirements and construction-period management requirements, including the preparation and implementation of a stormwater pollution prevention plan and the identification of erosion and sediment control options that meet applicable best available technology economically achievable and best conventional pollutant control technology (BAT/BCT) standards.	Less than significant
Impact 4.9-2: Substantially Deplete Groundwater Supplies or Interfere Substantially with Groundwater Recharge Such That There Would be a Net Deficit in Aquifer Volume or a Lowering of the Local Groundwater Table Level			
Option A	Less than significant	No mitigation measures are required.	Less than significant

Table 1-3. Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
Option B	Potentially significant	<p>Implement Mitigation Measure MM 4.9-1, as described above.</p> <p>MM 4.9-2 Prior to issuance of any site development plan or other building permits, the project applicant will provide written verification to the Kern County Planning and Natural Resources Department of compliance with applicable water efficiency design standards required by the California Uniform Building Code.</p> <p>MM 4.9-3 Prior to issuance of any site development plan or other building permits, the applicant will provide written verification to the Kern County Planning and Natural Resources Department of indoor water use compliance with the Kern County Code of Building Regulations, which specify the maximum allowable flowrates for indoor fittings and fixtures consistent with the California Health and Safety Code, California Plumbing Code, and the California Energy Commission's proposed Appliance Efficiency Regulations.</p> <p>MM 4.9-4 For any cannabis cultivation operations, prior to issuance of any site development plan or other building permits, the applicant will provide written verification to the Kern County Planning and Natural Resources Department that cultivation facility is designed to use water efficient methods such as hydroponics, the use of recycled water, or equivalent technology to reduce the demand on water.</p> <p>MM 4.9-5 In conjunction with the application for a site plan or conditional use permit for all proposed cannabis-related facilities, a water use report shall be submitted that details the amount and source of water needed for the dust control during construction and operation of the facility.</p> <ol style="list-style-type: none"> 1. The project applicant shall provide one of the following: <ul style="list-style-type: none"> A. Will-serve letter for continuous water service from the appropriate water district, community service district, community service area, or public utilities district that confirms the availability of water for the facility site in sufficient quantities for the construction and operation or B. Written evidence from the designated water-master in an adjudicated basin of the continuous allocated quantity of water necessary for the construction and operation of the facility or C. If the project is located in an area with an established Groundwater Sustainability Agency, and a Groundwater Sustainability Plan has been adopted, then written evidence shall be provided from the GSA of the allocation to the project for the necessary quantity of water for construction and operation. 2. If the proposed cannabis processing and preparation facility is more than 40 acres in size or the indoor cultivation is more than 500,000 square feet, in addition to compliance with the requirements to provide evidence of a sufficient supply of water, then a Water Supply Assessment 	Significant and unavoidable

Table 1-3. Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation			
Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
		shall be prepared that complies with the Water Code. If there is a public water district that includes the proposed property, then the Water Supply Assessment shall be reviewed and approved by the Water District.	
Impact 4.9-3: Substantially Alter the Existing Drainage Pattern of the Site or Area, Including through the Alteration of the Course of a Stream or River, or Substantially Increase the Rate or Amount of Surface Runoff in a Manner Which Would Result in Substantial Erosion or Siltation On-site or Off-site			
Option A	Less than significant	No mitigation measures are required.	Less than significant
Option B	Potentially significant	Implement Mitigation Measures MM 4.9-1 through MM 4.9-5, as described above, Mitigation Measures MM 4.4-2 and MM 4.4-12, as described in Section 4.4, <i>Biological Resources</i> , and Mitigation Measure MM 4.16-1, as described in the Section 4.16, <i>Utilities and Service Systems</i> .	Less than significant
Impact 4.9-4: Substantially Alter the Existing Drainage Pattern of the Site or Area, Including through the Alteration of the Course of a Stream or River, or Substantially Increase the Rate or Amount of Surface Runoff in a Manner Which Would Result in Substantial Flooding On-site or Off-site			
Option A	Less than significant	No mitigation measures are required.	Less than significant
Option B	Potentially significant	Implement Mitigation Measures MM 4.9-1 through MM 4.9-5, as described above, Mitigation Measures MM 4.4-8 and MM 4.4-12, as described in Section 4.4, <i>Biological Resources</i> , and Mitigation Measure MM 4.16-1, as described in the Section 4.16, <i>Utilities and Service Systems</i> .	Less than significant
Impact 4.9-5: Create or Contribute Runoff Water Which Would Exceed the Capacity of Existing or Planned Stormwater Drainage Systems or Provide Substantial Additional Sources of Polluted Runoff			
Option A	Less than significant	No mitigation measures are required.	Less than significant
Option B	Potentially significant	Implement Mitigation Measures MM 4.9-1 through MM 4.9-5, as described above, Mitigation Measures MM 4.4-8 and MM 4.4-12, as described in Section 4.4, <i>Biological Resources</i> , Mitigation Measures MM 4.8-2 through MM 4.8-7, as described in the Section 4.8, <i>Hazards and Hazardous Materials</i> .	Less than significant
Impact 4.9-6: Otherwise Substantially Degrade Water Quality			
Option A	Less than significant	No mitigation measures are required.	Less than significant
Option B	Potentially significant	Implement Mitigation Measures MM 4.9-1 through MM 4.9-5, as described above, Mitigation Measures MM 4.4-8 and MM 4.4-12, as described in Section 4.4, <i>Biological Resources</i> , Mitigation Measures MM 4.8-2 through MM 4.8-7, as described in the Section 4.8, <i>Hazards and Hazardous Materials</i> .	Less than significant
Impact 4.9-7: Place Structures within a 100-year Flood Hazard Area Which Would Impede or Redirect Flood Flows			
Option A	Less than significant	No mitigation measures are required.	Less than significant
Option B	Potentially significant	Implement Mitigation Measures MM 4.9-1 through MM 4.9-5, as described above, and Mitigation Measure MM 4.16-1, as described in the Section 4.16, <i>Utilities and Service Systems</i> .	Less than significant

Table 1-3. Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
		<p>MM 4.9-6 Prior to issuance of any site development plan or other building permits, the project applicant will provide written verification to the Kern County Planning and Natural Resources Department of compliance with applicable design standards required by the California Uniform Building Code and the Kern County Code of Ordinances, including but not limited to, Grading and Development Standards, Grading Ordinance, Floodplain Management Ordinance, and Zoning Ordinance.</p> <p>MM 4.9-7 For any cannabis facility on property that contains special flood hazards zones, particularly within the 100-year flood hazard zone, as delineated on the Federal Emergency Management Agency Flood Insurance Rate Maps, the project applicant shall ensure that all facilities are protected from the maximum potential elevation of flooding during a 100-year flood by elevating structures or by implementing containment berms or other protective measures in compliance with the standards in the Kern County Floodplain Management Code and Chapters 19.50 and 19.70 of the Kern County Zoning Code.</p>	
Impact 4.9-8: Expose People or Structures to a significant risk of Loss, Injury, or Death Involving Flooding, Including Flooding as a Result of the Failure of a Levee or Dam			
Option A	No impact	No mitigation measures are required.	No impact
Option B	Potentially significant	Implement Mitigation Measures MM 4.9-1 through MM 4.9-7, as described above, and Mitigation Measure MM 4.16-1, as described in the Section 4.16, <i>Utilities and Service Systems</i> .	Less than significant
Impact 4.9-9: Result in Inundation by Seiche, Tsunami, or Mudflow			
Option A	Less than significant	No mitigation measures are required.	Less than significant
Option B	Potentially significant	Implement Mitigation Measures MM 4.9-1 through MM 4.9-7, as described above, and Mitigation Measures MM 4.6-1 through MM 4.6-7, as described in the Section 4.6, <i>Geology and Soils</i> .	Less than significant
Impact 4.9-10: Contribute to Cumulative Hydrology and Water Quality Impacts			
Option A	Less than significant	No mitigation measures are required.	Less than significant
Option B	Potentially significant	Implement Mitigation Measures MM 4.9-1 through MM 4.9-7, as described above, Mitigation Measures MM 4.4-8 and MM 4.4-12, as described in Section 4.4, <i>Biological Resources</i> , Mitigation Measures MM 4.6-1 through MM 4.6-7, as described in Section 4.6, <i>Geology and Soils</i> , Mitigation Measures MM 4.8-2 through MM 4.8-7, as described in the Section 4.8, <i>Hazards and Hazardous Materials</i> , and Mitigation Measure MM 4.16-1, as described in Section 4.16, <i>Utilities and Service Systems</i> .	Significant and unavoidable

Table 1-3. Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation			
Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
Land Use and Planning			
Impact 4.10-1: Conflict with Any Applicable Land Use Plan, Policy, or Regulation of an Agency with Jurisdiction over the Project Adopted for the Purpose of Avoiding or Mitigating an Environmental Effect			
Option A	No impact	No mitigation measures are required.	No impact
Option B	Less than significant	MM 4.10-1 To address mineral resources ownership, a title report or other deed information shall be provided that details the ownership of the minerals. If the minerals and surface ownership have not been severed, then evidence of a consultation and an accommodation with the mineral owner for extraction of oil and gas shall be required.	Less than significant
Impact 4.10-2: Conflict with Any Applicable Habitat Conservation Plan or Natural Community Conservation Plan			
Option A	No impact	No mitigation measures are required.	No impact
Option B	Less than significant	Implement Mitigation Measure MM 4.4-13, as described in Section 4.4, <i>Biological Resources</i> .	Less than significant
Impact 4.10-3: Contribute to Cumulative Land Use Impacts			
Option A	No impact	No mitigation measures are required.	No impact
Option B	Less than significant	Implement Mitigation Measure MM 4.10-1, as described above, and Mitigation Measure MM 4.4-13, as described in Section 4.4, <i>Biological Resources</i> .	Less than significant
Noise			
Impact 4.11-1: Exposure of Persons to, or Generate, Noise Levels in Excess of Standards Established in the Local General Plan or Noise Ordinance or Applicable Standards of Other Agencies			
Option A	No impact	No mitigation measures are required.	No impact
Option B	Potentially significant	MM 4.11-1 The following shall be implemented by the project proponent during construction of any cannabis related facility: 1) Project construction hours shall comply with Kern County Noise Ordinance. 2) The construction contractor shall place all stationary construction equipment so that emitted noise is directed away from residential sensitive receptors. 3) The construction contractor shall locate machinery capable of causing strong vibrations or load noises, such as pile drivers or similar, such that the rear of the vibratory pile driver or machinery faces toward the noise sensitive receptor when the machine is being utilized. 4) The construction contractor shall locate equipment staging in areas that will create the greatest possible distance between construction -related noise sources and noise sensitive receptors nearest the project site during all project construction to the extent practical.	Less than significant

Table 1-3. Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
		<p>5) The construction contractor shall ensure proper maintenance and working order of equipment and vehicles, and that all construction equipment is equipped with manufacturer's approved mufflers and baffles.</p> <p>6) The construction contractor shall install sound-control devices in all construction and impact equipment, no less effective than those provided ion the original equipment.</p> <p>7) The construction contractor shall establish a noise disturbance coordinator for the project during construction. The disturbance coordinator shall be responsible for responding to any complaints about construction noise. The disturbance coordinator shall determine the cause of the complaint and shall be required to implement reasonable measures to resolve the complaint.</p> <p>MM 4.11-2 The project applicant shall submit evidence of the following, if applicable: Construction contracts shall specify that notices shall be sent out to all residences located within 1,000 feet from the project site at least 15 days prior to commencements of construction. The notices shall include the construction schedule and a telephone number where complaints can be registered with the noise disturbance coordinator. A sign, legible at a distance of 50 feet, shall also be posted at the construction sites throughout construction which includes the same details as the notices.</p> <p>Any application for a conditional use permit shall include details on the site plan that demonstrate compliance.</p> <p>MM 4.11-3 Prior to the submittal of any site development plan or modification to an approved site development plan, the project applicant shall demonstrate that a distance of not less than 0.5 mile will be established between schools (K -12) public park, large family day care, public youth center, city limit line for a cannabis cultivation, processing and packaging, or distribution and transport facility. project applicant shall demonstrate that a distance of not less than 0.5 mile will be established between school (K-12), public park, large family day care, public youth center, city limit line for a retail cannabis store.</p> <p>Any application for a conditional use permit shall include details on the site plan that demonstrate compliance.</p>	
Impact 4.11-2: Exposure of Persons to, or Generate, Excessive Ground Borne Vibration or Ground Borne Noise Levels			
Option A	No impact	No mitigation measures are required.	No impact
Option B	Potentially significant	Implement Mitigation Measures MM 4.11-1 through MM 4.11-3.	Less than significant
Impact 4.11-3: Substantial Permanent Increase in Ambient Noise Levels in the Vicinity of Projects above Levels Existing without the Project			
Option A	No impact	No mitigation measures are required.	No impact
Option B	Potentially significant	Implement Mitigation Measures MM 4.11-1 through MM 4.11-3.	Less than significant

Table 1-3. Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation			
Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
Impact 4.11-4: Substantial Temporary or Periodic Increase in Ambient Noise Levels in Project Vicinities above Levels Existing without the Project			
Option A	No impact	No mitigation measures are required.	No impact
Option B	Potentially significant	Implement Mitigation Measures MM 4.11-1 through MM 4.11-3.	Less than significant
Impact 4.11-5: For a project located within the Kern County Airport Land Use Compatibility Plan, would the project expose people residing or working in the project area to excessive noise levels			
Option A	No impact	No mitigation measures are required.	No impact
Option B	Potentially significant	No mitigation measures are required.	Less than significant
Impact 4.11-6: For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels.			
Option A	No impact	No mitigation measures are required.	No impact
Option B	Potentially significant	No mitigation measures are required.	Less than significant
Impact 4.11-7: Contribute to Cumulative Noise Impacts			
Option A	No impact	No mitigation measures are required.	No impact
Option B	Potentially significant	Implement Mitigation Measures MM 4.11-1 through MM 4.11-3.	Less than significant
Population and Housing			
Impact 4.12-1: Induce Substantial Population Growth in an Area, Either Directly or Indirectly			
Option A	No impact	No mitigation measures are required.	No impact
Option B	Less than significant	No mitigation measures are required.	Less than significant
Impact 4.12-2: Contribute to Cumulative Population and Housing Impacts			
Option A	No impact	No mitigation measures are required.	No impact
Option B	Less than significant	No mitigation measures are required.	Less than significant
Public Services			
Impact 4.13-1: Result in Substantial Adverse Physical Impacts Associated with the Provision of New or Physically Altered Governmental Facilities, Need for New or Physically Altered Governmental Facilities, the Construction of Which Could Cause Significant Environmental Impacts in order to Maintain Acceptable Service Ratios, Response Times, or Other Performance Objectives for Fire Protection, Law Enforcement Protection, Schools, Parks or Other Public Facilities			
Option A	Potentially significant	MM 4.13-1 A Cannabis Activity Enforcement Task Force shall be established comprised of Kern County Sheriff, Kern County District Attorney, Kern County Counsel Code Compliance, and Kern County Planning and Natural Resources staff with necessary equipment and clerical and paralegal support. The size and composition of the task force shall be based on available funding sources, illegal cannabis activity and coordination with State and federal agencies. The Task Force shall	Significant and unavoidable

Table 1-3. Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
		coordinate with Kern County Public Health Services Department, Kern County Agricultural Commissioner, and Kern County Fire Department, as needed.	
Option B	Potentially significant	<p>MM 4.13-2 The applicant will develop and implement a fire safety plan for use during construction and operation. The applicant will submit the plan at the time of submitting the site development plan or the conditional use permit application to the Kern County Fire Department for review and approval prior to the approval of the site development plan or a conditional use permit. The fire safety plan will contain notification procedures and emergency fire precautions including, but not limited to, the following:</p> <ul style="list-style-type: none"> a. All internal combustion engines, stationary and mobile, will be equipped with spark arresters. Spark arresters will be in good working order. b. Light trucks and cars with factory-installed (type) mufflers will be used only on roads where the roadway is cleared of vegetation. These vehicle types will maintain their factory-installed (type) muffler in good condition. c. Fire rules will be posted on the project bulletin board at the contractor's field office and areas visible to employees. d. Equipment parking areas and small stationary engine sites will be cleared of all extraneous flammable materials. e. Personnel will be trained in the practices of the fire safety plan relevant to their duties. Construction and maintenance personnel will be trained and equipped to extinguish small fires in order to prevent them from growing into more serious threats. f. The applicant will make an effort to restrict use of chainsaws, vegetation masticators, grinders, tractors, torches, and explosives to outside of the official fire season. When the above tools are used, water tanks equipped with hoses, fire rakes, and axes will be easily accessible to personnel. <p>MM 4.13-3 Permits issued for cannabis sale, cultivation, processing and preparation, testing, transport or testing shall pay an annual payment for public services impacts. The payment shall be based on the square footage of the building used for cannabis activities or for outdoor cultivation the area covered by plants including any rows in between. The annual payment shall be 45 cents a square foot allocated as follows by the County Administrative Office:</p> <ul style="list-style-type: none"> • Kern County Treasurer–Tax Collector: One-time allocation up to \$300,000. • Kern County Public Health Services: \$200,000 • County Counsel: \$200,000 	Less than significant

Table 1-3. Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
		<ul style="list-style-type: none"> • Kern County Sheriff: \$200,000 • County Administrative Office: up to \$50,000 • Community Benefit Fund: up to \$508,000 a year shall be provided through a grant program to community groups that provide alcohol and drug education support to children, teens and adults up to age 20. The program may be extended to adults (21 years of age or older) by direction of the Board of Supervisors. The program shall be administered by the CAO or other designated County department. <p>The County Administrative Office may shift allocations between the Kern County Sheriff, County Counsel, and Kern County Public Health service areas based on demonstrated need or lack of use for the funding.</p>	
Impact 4.13-2: Contribute to Cumulative Public Service Impacts			
Option A	Potentially significant	Implement Mitigation Measure MM 4.13-1	Significant and unavoidable
Option B	Potentially significant	Implement Mitigation Measures MM 4.13-2 and MM 4.13-3.	Less than significant
Recreation			
Impact 4.14-1: Result in Increased Use of Existing Neighborhood and Regional Parks or Other Recreational Facilities Such That Substantial Physical Deterioration Would Occur or Be Accelerated			
Option A	No impact	No mitigation measures are required.	No impact
Option B	Less than significant	No mitigation measures are required.	Less than significant
Impact 4.14-2: Include Recreational Facilities or Require Construction or Expansion of Recreational Facilities That Might Have an Adverse Physical Effect on the Environment			
Option A	No impact	No mitigation measures are required.	No impact
Option B	Less than significant	No mitigation measures are required.	Less than significant
Impact 4.14-3: Contribute to Cumulative Recreation Impacts			
Option A	No impact	No mitigation measures are required.	No impact
Option B	Less than significant	No mitigation measures are required.	Less than significant

Table 1-3. Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
Transportation and Traffic			
Impact 4.15-1: Conflict with an Applicable Plan, Ordinance, or Policy Establishing Measures of Effectiveness for the Performance of the Circulation System			
Option A	Potentially significant	There are no feasible mitigation measures at this time that would reduce the anticipated VMT and increased use of the circulation system.	Significant and unavoidable
Option B	Potentially significant	<p>MM 4.15-1 If the project applicant's facility requires construction, and construction traffic is using an arterial or collector, or Caltrans route, for access to a construction site, then the project applicant shall consult with the Kern County Public Works Department – Roads Division to determine if a Construction Traffic Control Plan is required based on the timing and volume of larger vehicle rigs and the volume of traffic to address public safety and congestion management. If a Plan is required, the Applicant shall prepare and submit a Construction Traffic Control Plan to the Kern County Roads Department and to the appropriate California Department of Transportation (District 6 office) for approval. The Construction Traffic Control Plan must be prepared in accordance with both the California Department of Transportation Manual on Uniform Traffic Control Devices and Work Area Traffic Control Handbook and shall include, but not be limited to, the following issues:</p> <ul style="list-style-type: none"> a. Timing of deliveries of heavy equipment and building materials. b. Placing temporary signing, lighting, and traffic control devices as necessary to indicate the presence of heavy vehicles and construction traffic. c. Determining the need for construction work hours and arrival/departure times outside peak traffic periods. d. Ensuring access for emergency vehicles to the Project site. e. Any temporary closure of travel lanes or disruptions to street segments and intersections during well development. f. Maintaining access to adjacent property. <p>MM 4.15-2 Cultivation, processing and packaging, and distribution facilities shall submit a traffic study/analysis to the Kern County Public Works –Road Division for review and approval. The study/analysis while identifying all trips shall focus on the heavy truck annual average daily trips (ADT) generated by the proposed development on County-maintained roads for the purposes of determining the adequacy of the existing structural capacity and turning movements of the facility's related roadways and may require the applicant to provide structural improvements or road expansions. All development is subject to the applicable adopted Transportation Impact Fee Programs. Improvements to State Highways shall be as required by the California Department of Transportation in consultation with the Kern County Public Works.</p>	Less than significant

Table 1-3. Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation			
Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
Impact 4.15-2: Conflict with an Applicable Congestion Management Program, Including, but Not Limited to Level of Service Standards and Travel Demand Measures, or Other Standards Established by the County Congestion Management Agency or Adopted County Threshold for Designated Roads or Highways			
Option A	Potentially significant	There are no feasible mitigation measures at this time that would reduce the anticipated VMT and increased use of the circulation systems.	Significant and unavoidable
Option B	Potentially significant	Implement Mitigation Measures MM 4.15-1 and MM 4.15-2.	Less than significant
Impact 4.15-3: Change in Air Traffic Patterns That Result in Substantial Safety Risks			
Option A	Less than significant	No mitigation measures are required.	Less than significant
Option B	Potentially significant	Implement Mitigation Measure MM 4.8-8 through MM 4.8-10, as described in Section 4.8, <i>Hazards and Hazardous Materials</i> .	Less than significant
Impact 4.15-4: Substantially Increase Hazards Due to a Design Feature or Incompatible Uses			
Option A	Less than significant	No mitigation measures are required.	Less than significant
Option B	Potentially significant	Implement Mitigation Measures MM 4.15-1 and MM 4.15-2.	Less than significant
Impact 4.15-5: Result in Inadequate Emergency Access			
Option A	No impact	No mitigation measures are required.	No impact
Option B	Potentially significant	Implement Mitigation Measure MM 4.15-1.	Less than significant
Impact 4.15-6: Conflict with Adopted Policies, Plans, or Programs Supporting Alternative Transportation			
Option A	Less than significant	No mitigation measures are required.	Less than significant
Option B	Potentially significant	Implement Mitigation Measures MM 4.15-1 and MM 4.15-2.	Less than significant
Impact 4.15-7: Contribute to Cumulative Transportation and Traffic Impacts			
Option A	Potentially significant	There are no feasible mitigation measures at this time that would reduce the anticipated VMT and increased roadway use pursuant to Option A.	Significant and unavoidable
Option B	Potentially significant	Implement Mitigation Measures MM 4.15-1 and MM 4.15-2, as described above, and Mitigation Measure MM 4.8-8 through MM 4.8-10, as described in Section 4.8, <i>Hazards and Hazardous Materials</i> .	Significant and unavoidable
Utilities and Service Systems			
Impact 4.16-1: Exceed Wastewater Treatment Requirements of the Applicable Regional Water Quality Control Board			
Option A	Less than significant	No mitigation measures are required.	Less than significant
Option B	Potentially significant	No mitigation measures are required.	Less than significant

Table 1-3. Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation			
Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
Impact 4.16-2: Require or Result in the Construction of New Water or Wastewater Treatment Facilities or Expansion of Existing Facilities, the Construction of Which Could Cause Significant Environmental Effects			
Option A	No impact	No mitigation measures are required.	No impact
Option B	Potentially significant	MM 4.16-1 As part of the submittal application for a site plan or conditional use permit, the applicant shall provide a will-service letter for connection to a public sewer or provisions for an onsite septic system. Cannabis processing and packaging facilities shall comply with all requirements for the disposal of wastewater and waste materials as reviewed and approved by applicable Regional Water Quality Control Board and Kern County Public Health Environmental Services Division.	Less than significant
Impact 4.16-3: Require or Result in the Construction of New Stormwater Drainage Facilities or Expansion of Existing Facilities, the Construction of Which Could Cause Significant Environmental Effects			
Option A	No impact	No mitigation measures are required.	No impact
Option B	Potentially significant	Implement Mitigation Measure MM 4.16-1, as described above, and Mitigation Measure MM 4.9-1, as described in Section 4.9, <i>Hydrology and Water Quality</i> .	Less than significant
Impact 4.16-4: Have Sufficient Water Supplies Available to Serve the Project from Existing Entitlements and Resources, or Are New or Expanded Entitlements Needed			
Option A	No impact	No mitigation measures are required.	No impact
Option B	Potentially significant	Implement Mitigation Measures MM 4.9-2 through MM 4.9-5, as described in Section 4.9, <i>Hydrology and Water Quality</i> .	Significant and unavoidable
Impact 4.16-5: Be Served by a Landfill with Sufficient Permitted Capacity to Accommodate the Project's Solid Waste Disposal Needs			
Option A	Less than significant	No mitigation measures are required.	Less than significant
Option B	Potentially significant	MM 4.16-2 During construction of future cannabis-related facilities, the project applicant shall not store construction waste on-site for longer than the duration of the construction activity, or transport any waste to any unpermitted facilities. The project applicant shall also reduce construction waste transported to landfills by recycling solid waste construction materials, such as taking materials to recycling and reuse locations listed in the brochure on recycling construction and demolition materials available on the Kern County Waste Management Department Website. MM 4.16-3 In order to reduce the amount of waste generated from cannabis-related operations being taken to the landfill, the following shall be incorporated into the conditions of approval for each project applicant: Businesses generating four cubic yards or more of commercial solid waste per week are required to recycle and take one, or any combination, of the following actions:	Less than significant

Table 1-3. Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
		<p>1) Subscribe to source separated recycling service with a regional franchise hauler authorized to provide service for the area in which the business is located;</p> <p>2) Subscribe to a mixed solid waste recycling service with a regional franchise hauler authorized to provide service for the areas in which the business is located; and</p> <p>3) Self-recycle and certify compliance with Kern County Ordinance No. G-8337</p> <p>4) Undertake a combination of such measures, or such alternate measures as may be approved by the County to reduce the amount of waste from the commercial sector being taken to a landfill.</p> <p>MM 4.16-4 Prior to issuance of grading or building permits, or as detailed on a site plan submittal for a conditional use permit, or the approval of a site plan, the project applicant shall construct, subject to the review and approval of the Building Inspection Division of the Kern County Public Works Department and the Kern County Planning and Natural Resources Department, adequate, segregated, onsite screened storage for collection of commercial solid waste and source separated recyclable materials if constructing new facilities or if existing facilities do not provide such areas. The area shall be designed to be architecturally compatible with the development and shall not prevent security of the recyclables. Recycling areas of the bins or containers must provide for the preclusion of vectors and offer protection against adverse environmental conditions, such as rain or snow, which might render the collected materials unmarketable. Driveways and/or travel aisles shall provide, at a minimum, unobstructed access for collection vehicles and personnel. A sign clearly identifying all recycling/solid waste collection and loading areas and the materials accepted shall be posted adjacent to all points of direct access to the area.</p>	
Impact 4.16-6: Comply with Federal, State, and Local Statutes and Regulations Related to Solid Waste			
Option A	Less than significant	No mitigation measures are required.	Less than significant
Option B	Potentially significant	Implement Mitigation Measures 4.16-2 through MM 4.16-4.	Less than significant
Impact 4.16-7: Exceed Capacity of an Energy Supplier to Meet the Project's Need			
Option A	Less than significant	No mitigation measures are required.	Less than significant
Option B	Potentially significant	Implement Mitigation Measures MM 4.16-2 through MM 4.16-4, as described above, and Mitigation Measures 4.7-2 and MM 4.7-3, as described in Section 4.7, <i>Greenhouse Gas Emissions</i> .	Significant and unavoidable

Table 1-3. Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
Impact 4.16-8: Contribute to Cumulative Impacts to Utilities and Service Systems			
Option A	Less than significant	No mitigation measures are required.	Less than significant
Option B	Potentially significant	Implement Mitigation Measures MMs 4.16-1 through MM 4.16-4, as described above, as well as Mitigation Measures MM 4.7-2 and MM 4.7-3, as described in Section 4.7, <i>Greenhouse Gas Emissions</i> , and Mitigation Measures MM 4.9-1 through MM 4.9-5, as described in Section 4.9, <i>Hydrology and Water Quality</i> .	Significant and unavoidable

Chapter 2

Introduction

Chapter 2 Introduction

2.1 Overview

The Kern County Planning and Natural Resources Department, as lead agency, has determined that based upon preliminary analysis in an Initial Study, a Program Environmental Impact Report (EIR) is the appropriate environmental analysis document pursuant to the California Environmental Quality Act (CEQA) Guidelines Section 15168 for the proposed amendment to Title 19 - Kern County Zoning Ordinance focused on Chapter 19.120 (Cannabis Land Use Regulation) of the Kern County Zoning Ordinance, and any other related County ordinances, known as the Kern County Cannabis Land Use Ordinance (proposed project). The proposed project is described in detail in Chapter 3, *Project Description*.

The proposed project site encompasses all of Kern County, approximately 8,202 square miles, and is divided into three geographic regions in order to facilitate detailed analysis: Valley Region (San Joaquin Valley), Mountain Region (Tehachapi Mountains, Sierra Nevada Mountains, San Emigdio Mountains, and Coast Ranges), and Desert Region (Mojave Desert, Indian Wells Valley, Antelope Valley). The project site is based on information regarding areas within the County's jurisdiction.

The proposed project consists of an amendment to Kern County Code of Ordinances Title 19 and other related ordinances to either: (A) ban all medical and adult use cannabis related activities other than what is allowed under Proposition 64, or (B) include updated standards and conditions for future commercial medical and adult use cannabis facilities associated with cultivation, processing and packaging, distribution and transport, testing, and retail cannabis stores with or without mobile delivery. Table 2-1, *Project Statistics*, provides a summary of the proposed project elements.

Table 2-1. Project Statistics

Program EIR	Cultivation		Processing, Packaging, and Distribution	Retail Cannabis Stores with or without Mobile Delivery
	Indoor	Outdoor		
Option A ^a				
Maximum State Licenses Allowed by Kern County	Not allowed	Not allowed	Not allowed	Not allowed
Countywide Maximum	Not allowed	Not allowed	Not allowed	Not allowed ^a
Potential State License Required	Not allowed	Not allowed	Not allowed	Not allowed
Option B ^a				
Maximum State Licenses Allowed by Kern County	No limit	No limit	No limit	No limit
Countywide Maximum	2,000,000 ft ²	150 acres	500,000 ft ²	40 stores; 2 per unincorporated community ^b
Potential State License Types Required	1A, 1B, 2A, 2B, 3A, 3B, 4, 5A, 5B	1, 2, 3, 4	6, 7, 8, 11, 12 (transport only)	10

^a Under both Option A and Option B, the allowance of cultivation and possession as defined in Proposition 64 for medical and adult use cannabis would be allowed and would remain unchanged. Individuals would continue to be allowed to grow up to six plants on private property and possess up to one ounce of flower or up to eight grams of concentrates. The County would not allow the use of cannabis and cannabis products in public areas, or areas where tobacco use is not allowed.

^b Under Option A, existing medical marijuana dispensaries would be required to cease operation in unincorporated Kern County within a one- to two-year timeframe to allow for amortization of the business investment.

^c Under Option B, existing medical marijuana dispensaries that do not obtain the required potential State licenses, or that submit applications after the countywide maximum is reached, would be required to cease operation in unincorporated Kern County within a one- to two-year timeframe to allow for amortization of the business investment.

As explained in Section 3.2, *Regulatory History and Background*, even though cannabis is “decriminalized” under California State law, and even with the U.S. Department of Justice (USDOJ) issuance of memoranda guiding federal law enforcement related to cannabis activities within jurisdictions that have legalized cannabis, cannabis activities continue to be illegal at the federal level and subject to the prosecutorial discretion of the federal government.

2.2 Intent of the California Environmental Quality Act

As mentioned above, the Kern County Planning and Natural Resources Department, as lead agency, has determined that based upon preliminary analysis in an Initial Study, a Program EIR is the appropriate environmental analysis document pursuant to the CEQA Guidelines Section 15168 for the proposed project. The proposed project is described in detail in Chapter 3, *Project Description*.

This Program EIR has been prepared pursuant to the following relevant State and County statutes and guidelines:

- CEQA (Public Resources Code, Section 21000 et seq.);
- CEQA Guidelines (California Code of Regulations, Title 14, Chapter 3, Section 15000 et seq.); and
- The Kern County CEQA Implementation Document.

The overall purposes of the CEQA process are to:

- Identify the significant effects to the environment of a project, identify alternatives, and to indicate the manner in which those significant effects can be avoided or mitigated;
- Provide for full disclosure of the project’s environmental effects to the public, the agency decision-makers who will approve or deny the project, and responsible and trustee agencies charged with managing resources (e.g., wildlife, air quality) that may be affected by the project; and
- Provide a forum for public participation in the decision-making process with respect to environmental effects.

2.3 Purpose of This Environmental Impact Report

An EIR is a public informational document used in the planning and decision-making process. This project-level EIR will analyze the environmental impacts of the project. The Kern County Planning Commission and Board of Supervisors will consider the information in the EIR, including the public comments and staff response to those comments, during the public hearing process. Because amending the Zoning Ordinance is a legislative action, the final decision is made by the Board of Supervisors, who may approve, conditionally approve, or deny the proposed project. The purpose of an EIR is to identify:

- The significant potential impacts of the proposed project on the environment and indicate the manner in which those significant impacts can be avoided or mitigated;
- Any unavoidable adverse impacts that cannot be mitigated; and
- Reasonable and feasible alternatives to the proposed project that would eliminate any significant adverse environmental impacts or reduce the impacts to a less-than-significant level.

An EIR also discloses growth-inducing impacts; impacts found not to be significant; and significant cumulative impacts of the proposed project when taken into consideration with past, present, and reasonably anticipated future projects.

CEQA requires an EIR that reflects the independent judgment of the lead agency regarding the impacts, the level of significance of the impacts both before and after mitigation, and mitigation measures proposed to reduce the impacts. A Draft EIR is circulated to responsible agencies, trustee agencies with resources affected by the project, and interested agencies and individuals. The purposes of public and agency review of a Draft EIR include sharing expertise, disclosing agency analyses, checking for accuracy, detecting omissions, discovering public concerns, and soliciting mitigation measures and alternatives capable of avoiding or reducing the significant effects of the proposed project, while still attaining most of the basic objectives of the proposed project.

Reviewers of a Draft EIR are requested to focus on the sufficiency of the document in identifying and analyzing the possible impacts on the environment and ways in which the significant effects of the proposed project might be avoided or mitigated. Comments are most helpful when they suggest additional specific alternatives or mitigation measures that would provide better ways to avoid or mitigate significant environmental effects.

Issues to Be Resolved

Section 15123(b)(3) of the CEQA Guidelines requires that an EIR contain issues to be resolved, which includes the choices among alternatives and whether or how to mitigate significant impacts. The major issues to be resolved regarding the proposed project include decisions by the lead agency as to whether or not:

- The Draft EIR adequately describes the environmental impacts of the proposed project,
- The recommended mitigation measures should be adopted or modified,
- The alternatives evaluated should be adopted or rejected, or
- Additional mitigation measures need to be applied or required.

2.4 Terminology

To assist reviewers in understanding this EIR, the following terms are defined:

- *Project* means the whole of an action that has the potential for resulting in a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment.
- *Environment* means the physical conditions that exist in the area and which will be affected by the proposed project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historical or aesthetic significance. The area involved is where significant direct or indirect impacts would occur as a result of the proposed project. The environment includes both natural and man-made (artificial) conditions.
- *Impacts* analyzed under CEQA must be related to a physical change. Impacts are:
 - Direct or primary impacts that would be caused by the proposed project and would occur at the same time and place; or
 - Indirect or secondary impacts that would be caused by the proposed project and would be later in time or farther removed in distance but would still be reasonably foreseeable.

Indirect or secondary impacts may include growth-inducing impacts and other effects related to induced changes in the pattern of land use; population density or growth rate; and related effects on air and water and other natural systems, including ecosystems.

- *Significant impact on the environment* means a substantial, or potentially substantial, adverse change in any of the physical conditions in the area affected by the proposed project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historical or aesthetic significance. An economic or social change by itself is not considered a significant impact on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant.
 - The California Supreme Court ruled that the environment's impact on a project fall outside the scope of CEQA except to the extent that impacts from a project exacerbate such impacts. This EIR includes the environment's impacts on a project for informational purposes, and to address the exacerbation component of the Court's decision.
- *Mitigation* consists of measures that avoid or substantially reduce the proposed project's significant environmental impacts by:
 - Avoiding the impact altogether by not taking a certain action or parts of an action;
 - Minimizing impacts by limiting the degree or magnitude of the action and its implementation;
 - Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;
 - Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; or
 - Compensating for the impact by replacing or providing substitute resources or environments.
- *Cumulative impacts* are two or more individual impacts that, when considered together, are considerable or that compound or increase other environmental impacts. The following statements also apply when considering cumulative impacts:
 - The individual impacts may be changes resulting from a single project or separate projects.
 - The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over time.

This EIR uses a variety of terms to describe the level of significance of adverse impacts. These terms are defined as follows:

- *Less than significant*. An impact that is adverse but that does not exceed the defined thresholds of significance. Less than significant impacts do not require mitigation.
- *Significant*. An impact that exceeds the defined thresholds of significance and would or could cause a substantial adverse change in the environment. Mitigation measures are recommended to eliminate the impact or reduce it to a less-than-significant level.
- *Significant and unavoidable*. An impact that exceeds the defined thresholds of significance and cannot be eliminated or reduced to a less-than-significant level through the implementation of mitigation measures.

2.5 Decision-Making Process

CEQA requires lead agencies to solicit and consider input from other interested agencies, citizen groups, and individual members of the public. CEQA also requires a project to be monitored after it has been permitted to ensure that mitigation measures are carried out.

CEQA requires the lead agency to provide the public with a full disclosure of the expected environmental consequences of a proposed project and with an opportunity to provide comments. In accordance with CEQA, the following is the process for public participation in the decision-making process:

- **Initial Study/Notice of Preparation.** Kern County prepared and circulated an Initial Study/Notice of Preparation (IS/NOP) to responsible, trustee, and local agencies for review and comment on January 24, 2017. The IS/NOP and responses to the IS/NOP are included in Appendix A of this EIR. In conjunction with this public notice, a scoping meeting was held by Kern County on February 10, 2017, to provide a forum for public comments on the scope of the EIR.
- **Draft EIR/Notice of Completion (NOC) Preparation.** A Draft EIR is prepared, incorporating public and agency responses to the IS/NOP and scoping process. The Draft EIR is circulated for review and comment to appropriate agencies and additional individuals and interest groups who have requested to be notified of EIR projects. Per Section 15105 of the CEQA Guidelines, Kern County will provide for a 45-day public review period on the Draft EIR. The Notice of Completion (NOC) will be prepared with the Draft EIR in accordance with Section 15085 of the CEQA Guidelines. The purpose of the NOC is to notify reviewing agencies and the public that a Draft EIR has been prepared and completed for public review.
- **Preparation of Final EIR.** In accordance with Section 15088 of the CEQA Guidelines, following the completion of the 45-day public review period, Kern County will respond to each comment on the Draft EIR received in writing through a Response to Comments Chapter in the Final EIR. The Response to Comments will be provided to each agency or person who provided written comments on the Draft EIR a minimum of ten business days before the scheduled Planning Commission hearing.
- **Certification of Final EIR.** The Kern County Planning Commission will consider the Final EIR and the proposed project, acting in an advisory capacity to the Kern County Board of Supervisors. Upon receipt of the Planning Commission's recommendation, the Board of Supervisors will also consider the Final EIR, all public comments, and the proposed project before taking final action on the proposed project. At least one public hearing will be held by both the Planning Commission and Board of Supervisors to consider the Final EIR, take public testimony, and then approve, conditionally approve, or deny the proposed project.

Initial Study (IS)/Notice of Preparation (NOP)

Pursuant to Section 15082 of the CEQA Guidelines, as amended, the Kern County Planning and Natural Resources Department circulated an IS/NOP to the State Clearinghouse, public agencies, special districts, and members of the public for a public review period beginning January 24, 2017 and ending February 24, 2017. The purpose of the IS/NOP is to formally convey that the County, as the lead agency, solicited input regarding the scope and proposed content of the EIR. The IS/NOP, scoping meeting summary, and all comment letters are provided in Appendix A of this EIR.

Scoping Meeting

Pursuant to Sections 15082 and 15206 of the CEQA Guidelines, the lead agency is required to conduct at least one scoping meeting for all projects of statewide, regional, or area-wide significance. The scoping meeting is for jurisdictional agencies and interested persons or groups to provide comments regarding, but not limited to, the range of actions, alternatives, mitigation measures, and environmental effects to be analyzed. Kern County hosted a scoping meeting at 1:30 PM. on February 10, 2017, at the Kern County Public Services Building, 2700 "M" Street, Conference Room 1A, Bakersfield, California.

IS/NOP and Scoping Meeting Results

Fourteen (14) comment letters were submitted during the scoping process regarding the IS/NOP and one (1) comment letter was submitted in response to tribal consultation under Assembly Bill (AB) 52. Fifty (50) oral comments were received during the February 10, 2017 scoping meeting. Specific environmental concerns raised in written and oral comments received during the IS/NOP public review period are discussed below. The IS/NOP and all comments received are included in Appendix A of this EIR, along with the Summary of Proceedings from the Scoping Meeting.

IS/NOP Written Comments

The County received 14 letters with substantive comments in response to the IS/NOP, and one (1) letter with comments in response to tribal consultation under AB 52. The comments are summarized in Table 2-2, *Summary of Written Comments on Notice of Preparation/Initial Study*.

Table 2-2. Summary of Written Comments on Notice of Preparation/Initial Study

Commenter	Summary of Comment
Federal Agencies	No federal agencies submitted comments in response to the IS/NOP.
Native American Tribes	No Native American Tribes submitted comments in response to the IS/NOP. One letter, summarized below, was received with respect to consultation under AB 52.
Twenty-Nine Palms Band of Mission Indians <i>Consultation under AB 52</i> (letter dated June 19, 2017)	Requested a copy of this EIR. In addition, the letter stated that physical impacts could occur during future development of the ordinance. The Tribe expressed concerns regarding the potential of impacts to tribal resources, depending on specific development locations, as the proposed project area is adjacent to the Chemehuevi Traditional Use Area.
State Agencies	
California Governor's Office of Planning and Research, State Clearinghouse and Planning Unit (letter dated January 24, 2017)	Provided a copy of the letter sent to reviewing agencies providing a courtesy letter requesting the responsible agencies to transmit any comments in a timely manner.
Native American Heritage Commission (letter dated January 26, 2016) (Note: this letter was received January 2017)	Requests early consultation with Native American tribes, provides an outline of requirements for Assembly Bill (AB) 52 and Senate Bill (SB) 18, and requests that additional archeological activities be conducted with the NAHC. In addition, the NAHC reminds the County of how to adequately assess the existence of tribal cultural resources and provides recommended steps to analyze impacts and identify avoidance, preservation, or mitigation measures regarding resources if they are identified during project construction.
California Water Boards – Lahontan Regional Water Quality Control Board (letter dated February 24, 2017)	The Lahontan Regional Water Quality Control Board (RWQCB) recommends that the County incorporate into the Project elements that promote watershed management, support low impact development (LID), reduce the effects of hydromodification, and encourage recycled water uses. The Lahontan RWQCB requests that the EIR evaluate impacts to both surface

Table 2-2. Summary of Written Comments on Notice of Preparation/Initial Study

Commenter	Summary of Comment
	water and groundwater quality, especially as related to future commercial-scale cannabis cultivation. The Lahontan RWQCB recommends that the EIR analyze all activities within and adjacent to surface waters, loss of instream flows from diversion, discharges of waste into surface waters, chemical uses and their potential impacts to hazardous materials, irrigation runoff, and siting development in groundwater recharge areas. In addition, the Lahontan RWQCB recommends that the EIR identify and list the beneficial uses of all water resources within the project area, provide the water quality objectives and standards for all waters of the State within the Lahontan Region, implement strategies within the water management plans, establish guidelines for implementing specific storm water control measures, establish guidelines to maintain natural drainage patterns, and consider the use of recycled water as an implementation strategy to reduce the demand on groundwater. The Lahontan RWQCB also recommends identifying regional and project-specific mitigation measures that will reduce cumulative impacts to a less than significant level. The Lahontan RWQCB acknowledges that this EIR is a program level EIR and notes that the environmental document should clearly state the purpose and scope of the document and specify that subsequent, more focused, project-level environmental review will occur as individual projects are proposed under the ordinance amendments. The Lahontan RWQCB also notes that implementing individual projects have the potential to impact waters of the State and therefore, may require permits under Section 401 of the Clean Water Act (CWA), Section 402 of the CWA, including NPDES NPDES General Construction Storm Water Permit, Water Quality Order (WQO) 2009-0009-DWQ, Conditional Waiver of Waste Discharge Requirements for Waste Discharges Resulting from Timber Harvest and Vegetation Management Activities, Board Order No R6T-2014-0030, and Recycled water use under General WQO 2009-006-DWQ (for landscape irrigation uses) or WQO 2014-0090-DWQ (for all other authorized uses).
<i>Local Agencies</i>	
San Joaquin Valley Air Pollution Control District (Letter dated February 8, 2017)	The San Joaquin Valley Air Pollution Control District (SJVAPCD) notes that at the federal level, the SJVAPCD is currently designated as extreme nonattainment for eight-hour ozone and nonattainment for PM _{2.5} . The SJVAPCD notes that at the State level, they are in nonattainment for eight-hour ozone, PM ₁₀ and PM _{2.5} . Therefore, the SJVAPCD recommends that the Air Quality section of the EIR include a discussion of the following impacts: a) Criteria Pollutants (operational and construction); b) Nuisance Odors; c) Health Impacts. The SJVAPCD recommends the use of the California Emission Estimator Model (CalEEMod) and measures to reduce both construction and operational emissions of the project. The SJVAPCD notes several Rules and Regulations the project may be subject to including, Regulation VIII (Fugitive PM10 Prohibitions), Rule 2010 (Permits Required), Rule 2201 (New and Modified Stationary Source Review), Rule 4002 (National Emissions Standards for Hazardous Air Pollutants), Rule 4102 (Nuisance), Rule 4601 (Architectural Coatings), Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations), and Rule 9510 (Indirect Source Review).

Table 2-2. Summary of Written Comments on Notice of Preparation/Initial Study

Commenter	Summary of Comment
Kern County Sheriff's Office (letter dated February 24, 2017)	The Kern County Sheriff's Office states that Butane Honey Oil manufacturing is illegal and recommends strictly prohibiting any Butane Honey Oil type labs when issuing permits for dispensaries, commercial grow sites, and agricultural grow sites. The Kern County Sheriff's Office also recommends that persons obtaining permits to grow marijuana indoors or in a greenhouse, be required to install oxygen and carbon dioxide (CO ₂) sensors on the premises due to the risk of creating unsafe oxygen levels which can be fatal.
Rosamond Municipal Advisory Council (Letter dated December 1, 2016)	The Rosamond Municipal Advisory Council (RMAC) opposes any and all cannabis businesses and activities not only within Rosamond, but countywide and strongly encourages Option A, to ban cannabis related activities and facilities county wide. The RMAC states that the current 12 medical marijuana businesses in Rosamond have a severe impact on crime levels, Rosamond businesses, and property values. The RMAC also voices concerns that workers at Edwards Air Force Base are reluctant to show at Rosamond businesses because of concerns regarding secondhand smoke from dispensaries. RMAC also mentions that 54.69 percent of the Kern County voters voted "no" on Proposition 64 in the 2016 election.
Interested Parties	
Sacred Mountain Properties (letter not dated)	Provided a letter stating that the illegal operations in the County have gone overboard and there are too many dispensaries in the County. States that the reduction of the carbon footprint should be the foremost of any new venture in the County whether its water conservation, oil drilling and fracking, pesticide reduction in our local food supplies, or cannabis farming. They feel that cannabis in suburban and industrial areas should be regulated to allow only indoor growing operations in permanent structures. The letter also states that the energy demand for cannabis facilities will add to the burden of the power grid and will result in local black outs. Sacred Mountain Properties also provides recommendations such as minimum lot sizes to eliminate cross pollination, water supply sources so as not to overburden public water supply, residence requirements on each parcel, and the parcel ownership requirements. Sacred Mountain Properties feel that if the County regulates future cannabis facilities, the indoor operations will not be able to supply the volume of raw material needed to supply the local consumers.
Renee Westa-Lusk (letter not dated)	Provided a letter stating that the EIR should analyze the following environmental issues: hydrology and water quality of the Indian Wells Valley water basin; air quality within the East Kern Air Basin and the Indian Wells Valley; impacts to the current rezoning of count land that was changed to curtail agricultural development in the Indian Wells Valley; impacts to cultural resources; impacts to federal employees exposed to second-hand smoke; impacts resulting from odors, including changes to population and housing. In addition, the letter asks if existing agricultural operations would be allowed to change their crops to cannabis or would be allowed to sell their land within the intent to grow cannabis crops.
Mona Twocats-Romero (letter dated February 7, 2017)	Opposes a countywide ban of future cannabis facilities and activities. Opposes any type of ban or restrictions on the use of cannabis that are more restrictive than the State regulations.
Kyle Hanson – Managing Partner of Green Mojave Farms & Laboratories (GMFL Inc) (letter dated February 14, 2017)	Feels that the proposed zone classifications are excellent for proposed cannabis cultivation and processing and packaging areas. The letter states that the GMFL Inc would like to put a headquarters in the County and that they want to work with the County. They feel the County values of nondescript signage and low-impact aesthetics is in alignment with their values. GMFL Inc looks forward to being a part of further discussions with the County and offering services to the County if input is needed from the community.

Table 2-2. Summary of Written Comments on Notice of Preparation/Initial Study

Commenter	Summary of Comment
David Fluhart (letter dated February 23, 2017)	The letter provides questions regarding the IS/NOP, including: will individuals be contacted to further explain comments, what is the format of further “input” on the proposed project; how are conflicts resolved between the CEQA process with the County and the cannabis industry; how will the EIR consider the report’s “skew” considering many voices are “hiding” for fear of discrimination, prejudice, harassment, and retaliation of speaking out?
Anonymous (letter not dated; letter received February 24, 2017)	Letter has two parts. The first part requests that the county including foreseeable problems and suggested mitigations for government regulations that could create increases in product prices as well as create a stronger black market. The commenter asks if the State and local governments have financial resources for law enforcement, public health, and human services. The letter provides numbers and calculations for costs related to the cost for the cannabis facility operator as well as costs that the County may incur. The second part of the letter asks that the EIR and financial study consider the UCE\$ plan to “hijack” cannabis from its current trajectory of failure. This portion of the letter also requests the County consider allowing 300 acres of outdoor cultivation, 4,000,000 square feet of construction, and created tourist routes from State Route (SR) 58 to Bodfish, CA.
Anonymous (letter not dated; letter received February 24, 2017)	This letter is titled “10 Game Changers.” The list includes reverse pricing scale; minimum living standard at \$18,000 per year; programs focusing on “marginalized” liabilities; program for labor focused on more workers resulting in less work; subsidized by “internet frenzy;” “Karma Good” motivation; public trust of public goods and resources; Mexico/U.S. relations; advocation of commercialization; and reverse production of cannabis. The letter then lists projects such as regulations resulting in black markets, higher costs, stronger drugs, and liabilities. The commenter foresees severe shortcomings in the mitigation of damages caused for widespread consumption of cannabis, such as increased crime and the need for more law enforcement.
Leadership Counsel for Justice and Accountability; Greenfield Walking Group; Center for Race, Poverty & the Environment (letter dated March 2, 2017)	The letter indicates that the three commenting groups work closely with communities in South Kern County and that the Rexland Acres unincorporated community raised concerns with respect to cannabis operations and concerns of feeling unsafe due to the increase in the number of dispensaries in the community. The community supports prohibiting all retail cannabis stores and cannabis operation facilities in the Rexland Acres community. The community requests that the County ensure that the proposed project’s benefits and burdens on residents in the region are equitably distributed and that identified burdens are fully mitigated. The commenters state that the EIR must analyze the impacts to disadvantaged communities, low-income residents, and communities of color. The letter states that the EIR must assess the impacts to disadvantaged communities, lower income households, and communities of color. The commenters also state that the EIR should consider potential impacts on community safety, vehicle miles traveled, traffic congestion, impacts to roadways, public health, groundwater quality, water supply, impacts to infrastructure and housing, as well as impacts on community services and facilities. The commenters recommend that the County establish a robust public process through which community residents can learn where facilities are operating, ask questions, and file complaints.

IS/NOP Oral Comments

The County received 50 oral comments in response to the IS/NOP at the scoping meeting. The comments are summarized in Table 2-3, *Summary of Oral Comments on Notice of Preparation/Initial Study*; where multiple comments covered the same topic, they are combined in the table; however, all comments are provided in a summary.

Table 2-3. Summary of Oral Comments on Notice of Preparation/Initial Study

Commenter	Summary of Comment
Federal Agencies	No federal agencies commented in response to the IS/NOP during the scoping meeting.
Native American Tribes	No Native American Tribes commented in response to the IS/NOP during the scoping meeting.
State Agencies	No State agencies commented in response to the IS/NOP during the scoping meeting.
Local Agencies	No local agencies commented in response to the IS/NOP during the scoping meeting.
Interested Parties	<p>Regarding indoor/outdoor cultivation under Proposition 64, what is allowed?</p> <p>Will Option A include medical dispensaries?</p> <p>Can the County ban medical dispensaries?</p> <p>How did the County determine the countywide maximums for dispensaries?</p> <p>Why only one (1) dispensary per unincorporated community? That would grant a monopoly. Dispensaries need competition to be beneficial to the business and the consumer.</p> <p>How will the County determine which dispensaries get licenses?</p> <p>Figure 3 in the IS/NOP is wrong and does not show all the dispensaries in the County. It is missing dispensaries in Bodfish and Ridgecrest.</p> <p>The County's current moratorium is illegal.</p> <p>Will the dispensaries identified on Figure 3 be allowed to say?</p> <p>Do you need a State license to operate?</p> <p>How many State licenses/permits will be available? What if they issue 100 per community? Does a State license require a County license?</p> <p>Will there be a limit on the number of County licenses/permits?</p> <p>Do the proposed ordinances need to go to the voters?</p> <p>Can I grow more than six plants on my property with a permit?</p> <p>Will there be requirements for greenhouses to be certified green?</p> <p>Will pesticides be regulated?</p> <p>Will the November election outcomes be considered in the outcome of the project?</p> <p>How will the proposed project affect water consumption in Indian Wells Valley? Will this affect the analysis for the eastern side of the County?</p> <p>How will mitigation work throughout the County? Will it be area/geographic specific or "one size fits all?"</p> <p>Can we get copies of the options of the proposed project?</p> <p>Do we need a permit to build new greenhouses?</p> <p>Would greenhouses have to go through the same process as other agricultural greenhouses?</p> <p>Will greenhouses fall under the same building standards for snow loads and wind loads?</p> <p>Which County department do we speak to about building standards?</p> <p>Would facilities need to blend with surrounding buildings?</p> <p>What kind of security will be required?</p> <p>Can the County give local permits before the State issues permits?</p>

Table 2-3. Summary of Oral Comments on Notice of Preparation/Initial Study

Commenter	Summary of Comment
	Air quality in the Eastern Kern Air Pollution Control District (EKAPCD) is different than the SJVAPCD. Will there be different rules and mitigation measures specific to each APCD?
	When is the next public hearing or meeting?
	How will the project factor in the incorporated cities within the County?
	Will the EIR consider water shortage and water imbalance?
	What if the property owner/business has access to their own water and has their own water rights?
	Do you have to be a resident of Kern County to operate a business?
	Does the County make the information regarding regulations and impact analyses public as the information is available?
	Will outdoor and indoor cultivation be looked at differently?
	Will the County recognize greenhouses as indoor cultivation?
	Will there be a minimum or maximum land/lot size required to have a greenhouse with appropriate security?
	Where do I find a zoning map of the County?
	Will the proposed project include personal use on personal properties (i.e., residential)?
	Indian Wells Valley residents use evaporated coolers where second hand smoke and odors from personal use could be an issue.
	Will the County measure the distance from sensitive areas (i.e., schools) from property line to property line or from doorstep to doorstep? What does the State say about these distances and how to measure them?
	What is the setback for cultivation from a residence?

2.6 Availability of the Draft EIR

This Draft EIR is being distributed directly to agencies, organizations, and interested groups and persons for comment during a 45-day formal review period in accordance with Section 15087 of the CEQA Guidelines. This Draft EIR and the full administrative record for the project, including all studies, is available for review during normal business hours Monday through Friday at the Kern County Planning and Natural Resources Department, located at:

Kern County Planning and Natural Resources Department

2700 "M" Street, Suite 100
Bakersfield, CA 93301-2370
Phone: (661) 862-8600, Fax: (661) 862-8601

2.7 Format and Content

This Draft EIR addresses the potential environmental effects of the project and was prepared following input from the public and the responsible and affected agencies, through the EIR scoping process, as discussed previously. The contents of this Draft EIR were established based on the findings in the IS/NOP and public and agency input. Based on the findings of the IS/NOP, a determination was made that an EIR was required to address potentially significant environmental effects on the following resources:

- Aesthetics
- Agriculture and Forest Resources
- Air Quality
- Land Use and Planning
- Noise
- Population and Housing

- Biological Resources
- Cultural and Tribal Cultural Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Public Services
- Recreation
- Transportation and Traffic
- Utilities and Service Systems

Required EIR Content and Organization

The content and organization of this Draft EIR are designed to meet the requirements of CEQA, the CEQA Guidelines, and the Kern County CEQA Implementation Document, as well as to present issues, analysis, mitigation, and other information in a logical and understandable way. This Draft EIR is organized into the following sections:

- Chapter 1, “*Executive Summary*,” provides a project description and a summary of the environmental impacts and mitigation measures.
- Chapter 2, “*Introduction*,” provides CEQA compliance information, an overview of the decision-making process, organization of the EIR, and a responsible and trustee agency list.
- Chapter 3, “*Project Description*,” provides a description of the location, characteristics, objectives, and the relationship of the proposed project to other plans and policies.
- Chapter 4, “*Environmental Setting, Impacts, and Mitigation Measures*,” contains a detailed environmental analysis of the existing conditions, project impacts, mitigation measures, and unavoidable adverse impacts.
- Chapter 5, “*Consequences of Project Implementation (Mandatory CEQA Sections)*,” presents an analysis of the proposed project’s cumulative and growth-inducing impacts and other CEQA requirements, including significant and unavoidable impacts and irreversible commitment of resources.
- Chapter 6, “*Alternatives*,” describes a reasonable range of alternatives to the proposed project that could reduce the significant environmental effects that cannot be avoided.
- Chapter 7, “*Responses to Comments*,” is reserved for responses to comments on this Draft EIR.
- Chapter 8, “*Organizations and Persons Consulted*,” lists the organizations and persons contacted during preparation of this Draft EIR.
- Chapter 9, “*Preparers*,” identifies persons involved in the preparation of the Draft EIR.
- Chapter 10, “*Bibliography*,” identifies reference sources for the Draft EIR.
- “*Appendices*” provide information and technical studies that support the environmental analysis contained within the Draft EIR.

The analysis of each environmental category in Chapter 4 is organized as follows:

- “*Introduction*” provides a brief overview on the purpose of the section being analyzed with regard to the proposed project.
- “*Environmental Setting*” describes the physical conditions that exist at this time and that may influence or affect the topic being analyzed.

- “*Regulatory Setting*” provides State and federal laws, the Kern County General Plan (KCGP) and Metropolitan Bakersfield General Plan (MBGP) goals, policies, and implementation measures, and other local policies and regulations that apply to the topic being analyzed.
- “*Impacts and Mitigation Measures*” discusses the impacts of the proposed project in each category, including direct, indirect, and cumulative impacts, presents the determination of the level of significance, and provides a discussion of feasible mitigation measures to reduce any impacts.

2.8 Responsible and Trustee Agencies

Projects or actions undertaken by the lead agency, in this case the County of Kern, specifically the Kern County Planning and Natural Resources Department, may require subsequent oversight, approvals, or permits from other public agencies in order to be implemented. Other such agencies are referred to as “*responsible agencies*” and “*trustee agencies*. ” Pursuant to Sections 15381 and 15386 of the CEQA Guidelines, as amended, responsible agencies and trustee agencies are defined as follows:

- A “*responsible agency*” is a public agency that proposes to carry out or approve a project, for which a lead agency is preparing or has prepared an EIR or Negative Declaration. For the purposes of CEQA, the term “*responsible agency*” includes all public agencies other than the lead agency that have discretionary approval power over the project (Section 15381).
- A “*trustee agency*” is a State agency having jurisdiction by law over natural resources affected by a project that are held in trust for the people of the State of California (Section 15386).

The various public, private, and political agencies and jurisdictions with a particular interest in the proposed project include, but are not limited to, the following:

Local Agencies

- Eastern Kern Air Pollution Control District
 - Fugitive Dust Control Plan
 - Authority to Construct
 - Permit to Operate
- San Joaquin Valley Air Pollution Control District
 - Fugitive Dust Control Plan

State Agencies

- California Department of Fish and Wildlife (CDFW)
 - Section 1600 et seq. permits (Streambed Alteration Agreements)
 - Section 2081 Permit (State-listed endangered species)
- Lahontan Regional Water Quality Control Board (Lahontan RWQCB) and Central Valley Regional Water Quality Control Board (Central Valley RWQCB)
 - National Pollutant Discharge Elimination System (NPDES) Construction General Permit

- General Construction Stormwater Permit (Preparation of a SWPPP)
- Regional Water Quality Certification (401 Permit)
- California Department of Transportation (Caltrans)
 - Right-of-Way Encroachment Permit
 - Oversized Loads Permit
- California Department of Consumer Affairs
 - Bureau of Medical Cannabis Regulation
- California Department of Food and Agriculture
- California Department of Pesticide Regulation
- Board of Equalization
- Franchise Tax Board
- California Department of Justice
- California Department of Public Health
- Industrial Welfare Commission
- State Board of Forestry
- California Division of Occupational Safety and Health
- California Environmental Protection Agency

Federal Agencies

No federal agencies are anticipated to be a responsible or trustee agency for the proposed project. Even though cannabis is “decriminalized” under California State law, and even with the U.S. Department of Justice (USDOJ) issuance of memoranda guiding federal law enforcement related to cannabis activities within jurisdictions that have legalized cannabis, cannabis activities continue to be illegal at the federal level and subject to the prosecutorial discretion of the federal government.

2.9 Incorporation by Reference

In accordance with Section 15150 of the CEQA Guidelines to reduce the size of the report, the following documents are hereby incorporated by reference into this Draft EIR and are available for public review at the Kern County Planning and Natural Resources Department. A brief synopsis of the scope and content of these documents is provided below.

Kern County General Plan (KCGP)

The project site lies within the boundaries of the KCGP. The KCGP is a policy document with planned land use maps and related information that are designed to give long-range guidance to those County officials making decisions affecting the growth and resources of the unincorporated Kern County jurisdiction, excluding the metropolitan Bakersfield planning area. This document, adopted on June 14, 2004, and last amended on September 22, 2009, helps to ensure that day-to-day decisions conform to the long-range program designed to protect and further the public interest as related to Kern County’s growth and development and mitigate environmental impacts. The KCGP also serves as a guide to the private sector of the economy in relating its development initiatives to the public plans, objectives, and policies of the County.

Kern County Zoning Ordinance

According to Chapter 19.02.020, Purposes, Title 19 was adopted to promote and protect the public health, safety, and welfare through the orderly regulation of land uses throughout the unincorporated area of Kern County. Further, the purposes of this title are to:

- Provide the economic and social advantages resulting from an orderly planned use of land resources;
- Encourage and guide development consistent with the KCGP;
- Divide Kern County into zoning districts of a number, size, and location deemed necessary to carry out the purposes of the KCGP and this title;
- Regulate the size and use of lots, yards, and other open spaces;
- Regulate the use, location, height, bulk, and size of buildings and structures;
- Regulate the intensity of land use;
- Regulate the density of population in residential areas;
- Establish requirements for off-street parking;
- Regulate signs and billboards; and
- Provide for the enforcement of the regulations of Chapter 19.02.

Destination 2030: Regional Transportation Plan

The latest Regional Transportation Plan (RTP) was adopted in 2014. The 2014 RTP/Sustainable Communities Strategy (SCS) establishes a set of regional transportation goals, objectives, policies, and actions intended to guide development of the planned multimodal transportation systems in Kern County. It was developed through a continuing, comprehensive, and cooperative planning process, and provides for effective coordination between local, regional, State, and federal agencies. This RTP/SCS provides transportation and air quality goals, policies and actions for now and into the future, and includes programs and projects for congestion management, transit, airports, bicycles and pedestrians, roadways, and freight. The 2014 RTP/SCS implements of California's Sustainable Communities and Climate Protection Act (Senate Bill [SB] 375) which requires the inclusion of a Sustainable Communities Strategy that reduces greenhouse gas emissions from passenger vehicles and light duty trucks by 5 percent per capita by 2020 and 10 percent per capita by 2035. In addition, it provides a discussion of all mechanisms used to finance transportation and air quality (including greenhouse gas) program implementation (Kern Council of Governments [COG], 2014a).

County of Kern Housing Element 2015-2023

The development and preservation of adequate and affordable housing is important to the well-being of the residents and the economic prosperity of the County. To plan for the development of adequate housing for all income segments, a Housing Element was prepared as a part of the KCGP. This document specifically addresses housing needs and resources in the County's unincorporated areas. The Housing Element must maintain consistency with the other elements of the KCGP.

Kern County Airport Land Use Compatibility Plan (ALUCP)

The ALUCP was originally adopted in 1996 and has since been amended to comply with Aeronautics Law, Public Utilities Code (Chapter 4, Article 3.5) regarding public airports and surrounding land use planning. As required by that law, proposals for public or private land use developments that occur within defined airport influence areas are subject to compatibility review. The principle airport land use compatibility concerns addressed by the plan are (1) exposure to aircraft noise, (2) land use safety

with respect to both people and property on the ground and the occupants of aircraft, (3) protection of airport air space, and (4) general concerns related to aircraft overflights.

The ALUCP identifies policies and compatibility criteria for influence zones or planning area boundaries. The ALUCP maps and labels these zones as A, B1, B2, C, D, and E, ranging from the most restrictive (A – airport property-runway protection zone) to the least restrictive (D – disclosure to property owners only) while the E is intended to address special land use development. As required by law, the following affected cities have adopted the ALUCP for their respective airports: Bakersfield, California City, Delano, Shafter, Taft, Tehachapi, and Wasco.

Kern County Specific Plans

Kern County has adopted 39 Specific Plans, 10 Rural Community Plans, and 14 Interim Rural Community Plan Maps. The Specific Plans and Rural Community Plans are intended to be an amplification of the goals and policies of the KCGP and are, therefore, consistent therewith. Interim Rural Community Plan Maps are areas where a specific plan has not been formally adopted, thus the goals and policies of the KCGP govern these areas. Future commercial cannabis cultivation, processing/packaging, and sales activities that would be authorized under the proposed project that would be located within the boundary of an adopted Specific Plan would be regulated according to County zoning.

Habitat Conservation Plans, Natural Community Conservation Plans, and Recovery Plans

As discussed in greater detail in Section 4.4, *Biological Resources*, 4.4.3, *Regulatory Setting*, there are multiple conservation programs and recovery programs that cover unincorporated Kern County. The Habitat Conservation Plans (HCPs) and Natural Community Conservation Plans (NCCPs) listed below have been approved within Kern County and are incorporated by reference. They are discussed in greater detail in Section 4.4, *Biological Resources*.

- Valley HCPs:
 - Draft Valley Floor HCP (currently under development)
 - Chevron North American Exploration and Production Lokern HCP
 - California Resources Corporation Elk Hills HCP
 - Freeport-McMoRan Oil & Gas (formerly Nuevo-Torch then Plains Exploration and Production Company) HCP
 - CRC Non-Unity HCP (formerly Occidental of Elk Hills, Inc. HCP)
 - Aera Coles Levee Ecosystem Preserve HCP (previously Arco Western Energy HCP)
 - Chevron Pipeline HCP
 - Kern County Waste Facilities HCP
 - Kern Water Bank HCP/NCCP
 - Pacific Gas and Electric (PG&E) San Joaquin Valley Operations and Maintenance Program HCP
 - Metropolitan Bakersfield HCP
 - San Joaquin Field Division Aqueduct HCP
- Mountain HCPs:
 - Tejon Ranch Comprehensive Land Use and Conservation Agreement
 - Tehachapi Uplands Multiple Species HCP
- Desert HCPs/NCCPs:
 - West Mojave Plan and West Mojave HCP on BLM land only

- Desert Renewable Energy Conservation Plan a joint State and Federal NCCP (within BLM's California Desert Conservation Area)

Kern County is also covered by the following recovery plans:

- Recovery Plan for Upland Species of the San Joaquin Valley, California
- Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon
- California Condor Recovery Plan
- Pacific Bald Eagle Recovery Plan

Metropolitan Bakersfield General Plan (MBGP)

The MBGP a joint effort between the Kern County Planning Department and the City of Bakersfield Planning Division, was last adopted on December 11, 2007. It is a policy document designed to give long-range guidance for decision-making affecting the future character of the Metropolitan Bakersfield planning area, including the both City and unincorporated County lands. It represents the official statement of the community's physical development as well as its economic, social and environmental goals. The MBGP has the following elements: Land Use, Circulation, Housing, Conservation, Open Space, Noise, Safety, Public Services and Facilities, and Parks. An additional element includes the Kern River Plan, which helps to define goals and policies for issues unique to the Metropolitan Bakersfield area. The MBGP serves as a guide to the private sector of the economy in relating its development initiatives to the public plans, objectives, and policies of the City and County in the Metropolitan Bakersfield planning area.

2.10 Sources

This Draft EIR is dependent upon information from many sources. Some sources are studies or reports that have been prepared specifically for this document. Other sources provide background information related to one or more issue areas that are discussed in this document. The sources and references used in the preparation of this Draft EIR are listed in Chapter 10, *Bibliography*, and are available for review during normal business hours at the:

Kern County Planning and Natural Resources Department
2700 "M" Street, Suite 100
Bakersfield, California 93301-2370

Chapter 3

Project Description

Chapter 3

Project Description

3.1 Project Overview

This Environmental Impact Report (EIR) has been prepared to identify and evaluate potential environmental impacts associated with an amendment to Title 19 – Kern County Zoning Ordinance focused on Chapter 19.120 (Cannabis Land Use Regulation) of the Kern County Zoning Ordinance, and any other related County ordinances, known as the Kern County Cannabis Land Use Ordinance (proposed project). The Zoning Ordinance and other related ordinances are proposed to be revised to either: (A) ban all medical and adult use cannabis related activities other than what is allowed under California Proposition 64, Adult Use of Marijuana Act (Proposition 64 or AUMA); or (B) include updated standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, testing, and retail cannabis stores with or without mobile delivery. For the purposes of the California Environmental Quality Act (CEQA), the proposed project includes future activities expected to be undertaken pursuant to the proposed Kern County Cannabis Land Use Ordinance. The project site is defined as the unincorporated areas of Kern County (the project site or project area) have been separated into three geographic regions: Valley, Mountain, and Desert.

Kern County has determined that consideration of the amendment to the Zoning Ordinance requires a program-level EIR under CEQA, with Kern County as the Lead Agency, to cover implementation of the proposed project for the future Kern County cannabis-related activities described below.

During the circulation of the Notice of Preparation (NOP) in February 2017, industry information and public comment resulted in changes to the proposed project. The changes between the NOP and this Program EIR are shown in Table 3-1, *Project Statistics*. The countywide maximums for future cannabis-related indoor cultivation, processing and packaging, and distribution facilities and number of stores per unincorporated area were increased; however, the zone classifications that would allow for future cannabis-related facilities did not change. In addition, the project site, unincorporated Kern County, did not change.

Table 3-1. Project Statistics

		Cultivation		Processing, Packaging, and Distribution	Retail Cannabis Stores with or without Mobile Delivery
		Indoor	Outdoor		
Previous (NOP)	Option A	Not Allowed	Not Allowed	Not Allowed	Not Allowed
	Option B: Maximum State Licenses Allowed by Kern County	35 Licenses	No Limit	No Limit	No Limit
	Option B: Countywide Maximum	650,000 square feet (ft ²)	150 acres	300,000 ft ²	20 stores; 1 per unincorporated community
Current (DEIR)	Option A	Not Allowed	Not Allowed	Not Allowed	Not Allowed
	Option B: Maximum State Licenses Allowed by Kern County	No Limit	No Limit	No Limit	No Limit
	Option B: Countywide Maximum	2,000,000 ft ²	150 acres	500,000 ft ²	40 stores; 2 per unincorporated community

Table 3-1. Project Statistics

		Cultivation		Processing, Packaging, and Distribution	Retail Cannabis Stores with or without Mobile Delivery
		Indoor	Outdoor		
Change	Option A	Not Allowed	Not Allowed	Not Allowed	Not Allowed
	Option B: Maximum State Licenses Allowed by Kern County	The number of State licenses are no longer limited by the County.	No Change	No Change	No Change
	Option B: Countywide Maximum	+1,350,000 ft ²	No Change	+200,000 ft ²	+20 stores; +1 per unincorporated community

As described in Chapter 2, *Introduction*, the Kern County Planning Commission and Board of Supervisors (Board of Supervisors) will consider the information in this Program EIR, including public comments and County staff responses to those comments, during the public hearing process. As approval of amended ordinances is a legislative action, the final decision will be made at the Board of Supervisors' public hearing, where the proposed project may be approved, conditionally approved, or denied.

As explained in Section 3.2, *Regulatory History and Background*, even though cannabis is “decriminalized” under California State law, and even with the U.S. Department of Justice (USDOJ) issuance of memoranda guiding federal law enforcement related to cannabis activities within jurisdictions that have legalized cannabis, cannabis activities continue to be illegal at the federal level and subject to the prosecutorial discretion of the federal government.

3.2 Regulatory History and Background

3.2.1 Federal vs. State Regulatory Background

Challenges arise from the contradiction between State and federal law related to cannabis (also known as marijuana). At the State level, California voters approved Proposition 215, the Compassionate Use Act (CUA), in 1996. The CUA allows a qualified patient and primary caregiver to possess and cultivate as much cannabis as is needed for personal medical use so long as they have a doctor’s recommendation. Seven years later, in 2003, the California Legislature enacted the Medical Marijuana Program (MMP) which refined the CUA. Then on November 8, 2016, California voters approved Proposition 64, also known as the AUMA. Proposition 64 legalized adult use cannabis for persons age 21 or older; legalized the cultivation of up to six plants for personal use for persons age 21 or older; legalized person possession of up to one ounce of flower or up to eight grams of concentrates for persons age 21 or older; established sale and cultivation taxes; established packaging, labeling, advertising, and marketing standards and restrictions; and prohibited marketing and advertising directly to minors. Under Proposition 64, retail sales of cannabis by State-licensed establishments are scheduled to begin on January 1, 2018; however, large-scale corporate entities are restricted until 2023. Proposition 64 makes it illegal to consume cannabis in any public place except for specifically licensed premises; continues to let local governments ban medical and adult use cannabis cultivation and sales; bans vaporization in non-smoking areas; and imposes a 15 percent or greater tax increase on medical and adult use cannabis. Proposition 64 did not affect the CUA.

At the federal level, the Controlled Substances Act (CSA) of 1970 makes it a federal crime for the unauthorized manufacturing, distributing, dispensing, and possessing of controlled substances (21

United States Code [USC] Sections 841 and 844). Cannabis is considered a controlled substance under Schedule 1 of the CSA. Medicinal use is not recognized for cannabis (21 USC Section 812) at the federal level. In 2010, the Attorney General initiated the 2010 Indian Country Initiative related to evaluating cannabis enforcement activities in Indian County and government-to-government consultation. By 2014, the USDOJ further defined guidance and enforcement for tribes and tribal land in a memorandum dated October 28, 2014, *Policy Statement Regarding Marijuana Issues in Indian Country*.

In response to recent State laws legalizing medicinal and/or adult use cannabis use, the USDOJ has issued memoranda regarding guidance for federal law enforcement as it relates to cannabis activities. A memorandum dated August 29, 2013, *Guidance Regarding Marijuana Enforcement*, acknowledged that while the USDOJ is committed to enforcing the CSA, it is also committed to using its limited investigative and prosecutorial resources to address the most significant threats in the most effective, consistent, and rational way. The August 2013 memorandum directed federal law enforcement to focus on eight priorities, stating that federal law enforcement “[i]n jurisdictions that have enacted laws legalizing cannabis in some form and that have also implemented strong and effective regulatory and enforcement systems to control the cultivation, distribution, sale, and possession of cannabis, conduct in compliance with those laws and regulations is less likely to threaten the federal priorities set forth...” (U.S. Department of Justice [USDOJ], 2013). The guidance memo further stated that “[t]he Department’s guidance in this memorandum rests on its expectation that states and local governments that have enacted laws authorizing marijuana-related conduct will implement strong and effective regulatory and enforcement systems that will address the threat those State laws could pose to public safety, public health, and other law enforcement interests” (USDOJ, 2013).

The USDOJ issued a follow-up memorandum dated February 14, 2014, *Guidance Regarding Marijuana Related Financial Crimes*, addresses federal law enforcement regarding financial transactions involving proceeds generated by cannabis-related activities, or conduct (18 USC Sections 1956, 1957, and 1960; Bank Security Act [BSA]). The 2014 memorandum further stated that “prosecutors should apply the eight enforcement priorities described in the August 29 guidance” when determining whether to charge individuals or institutions (USDOJ, 2014). The 2014 memorandum further stated that the guidance rests on the expectation that states that have enacted laws authorizing cannabis-related conduct will implement clear, strong and effective regulatory and enforcement systems in order to minimize the threat posed to federal enforcement priorities (USDOJ, 2014).

Even though cannabis is “decriminalized” under California State law, and even with the guidance issued through memoranda by the USDOJ, cannabis activities continue to be illegal and subject to the prosecutorial discretion of the federal government.

3.2.2 Kern County Regulatory Background

On July 25, 2006, the Board of Supervisors passed the County’s first medical cannabis ordinance (2006 Ordinance) to amended Title 5 – Business Licenses and Regulations of the Kern County Code of Ordinances, which added Chapter 5.84 – Medical Marijuana Cooperatives and Collectives. The hallmark of the 2006 Ordinance stated that all medical cannabis dispensaries operating in the unincorporated areas of Kern County were required to obtain a license issued by the Kern County Sheriff. The 2006 Ordinance had a significant number of restrictions, including, but not limited to:

(1) hours of operation; (2) registration of employee names; (3) record maintenance requirements; (4) unlimited access by law enforcement; (5) security requirements; and (6) setbacks from schools. Only six dispensaries were provided a license under the 2006 Ordinance.

On March 31, 2009, the Board of Supervisors passed Ordinance No. G-7849 (2009 Ordinance). The 2009 Ordinance repealed the licensing system set forth in the 2006 Ordinance, and removed the majority of the prior restrictions imposed on medical cannabis dispensaries. As with the 2006 Ordinance, the 2009 Ordinance was codified under Title 5 – Business Licenses and Regulations, Chapter 5.84 – Medical Marijuana Cooperatives or Collectives of the Kern County Code of Ordinances. The only restrictions expressly placed on medical cannabis dispensaries under the 2009 Ordinance were:

- (a) A medical marijuana cooperative or collective may not be located within one thousand (1,000) feet of a school, recreation center, or youth center measured from the primary entrance to a cooperative or collective and the closest property line of the property of a school, recreation center, or youth center or on which a school, recreation center, or youth center is operated.
- (b) A medical marijuana cooperative or collective shall be treated as a pharmacy for zoning purposes.
- (c) “Medical marijuana cooperative” and “medical marijuana collective” are defined as set forth in section IV of the California Attorney General *Guidelines for the Security and Non-diversion of Marijuana Grown for Medical Use* issued in August 2008, as they read or as amended.
- (d) Any person who violates any provision in this section is guilty of a misdemeanor.

Title 19 – Kern County Zoning Ordinance, identifies “Pharmacy” under the chapter and section headings of Permitted Uses/Commercial Uses/General Retail Sales - Drugs and Pharmaceuticals and is listed under the following zone districts: C-1 (Neighborhood Commercial), C-2 (General Commercial), CH (Highway Commercial), M-1 (Light Industrial), M-2 (Medium Industrial), and M-3 (Heavy Industrial). To open a new “pharmacy” in any of the listed zone district would require an applicant to apply for and receive approval through one of two types of land use review application processes listed in the Kern County Zoning Ordinance: 1) Chapter 19.56 Precise Development (PD) Combining District; or 2) Chapter 19.80 Special Development Standards. All commercial and industrial zone districts that do not include the PD Combining District are subject to the provisions called out in Kern County Zoning Ordinance Section 19.80.030 Development and Performance Standards and may be subject to Kern County Zoning Ordinance Section 19.80.040 Plot Plan Review and Approval if the proposed project requires a building permit.

Per the 2007 California Building Code, Section 108.41 Permits, “A written construction permit shall be obtained from the enforcing agency prior to the erection, construction, reconstruction, installation, moving or alteration of any building or structure except: 1) Work exempt from permits as specified in Appendix Chapter 1, Section 105.2; or 2) Changes, alterations or repairs of a minor nature not affecting structural features, egress, sanitation, safety or accessibility as determined by the enforcing agency.” If an applicant is required to obtain a building permit, the enforcing agency would then notify the Kern County Planning and Natural Resources Department that an application has been made. Planning staff would then conduct a site plan review to see if the project meets the necessary land use requirements; such as, is the proposed land use allowed in that particular zone district and if

so, will the project be subject to further review of development standards or a zoning land use permit processed per Kern County Zoning Ordinance Section 19.80.040, as previously stated. All ministerial permit applications are subject to the provisions of Kern County Zoning Ordinance Section 19.102.050 Application – Approval or Denial.

All zone districts that also have a PD Combining District are subject to the provisions of Kern County Zoning Ordinance Section 19.56.130 Site Development Plan Review, which establishes reasonable and necessary development standards for the single-family, multifamily, commercial, and industrial, institutional, and other similar uses to ensure the development subject to this chapter includes appropriate public improvements and is compatible with surrounding uses. The development standards specified in this chapter shall apply to all multifamily development in the R-2 (Medium-density Residential), R-3 (High-density Residential), and all development in the CO (Commercial Office), C-1 (Neighborhood Commercial), C-2 (General Commercial), CH (Highway Commercial), M-1 (Light Industrial), M-2 (Medium Industrial), and M-3 (Heavy Industrial) Districts, excepts as provided in this chapter, and shall apply to those uses in the A (Exclusive Agriculture) and NR (Natural Resource) districts as required by those chapters. The discretionary permits specified in this Section may be issued by the Planning Director following a submission of a completed application and approval at a properly noticed public hearing.

Any proposed projects that are being considered on project sites that already have an approved PD plan, would be subject to the review and approval of either a ministerial “minor” PD Plan modification application process with following the guidelines called out in Section 19.102.040.E. Minor Plan Modifications of the Kern County Zoning Ordinance or a discretionary “major” PD Plan modification application process which would be evaluated by the Planning Director to determine whether the requested modification(s) constitute a substantial change in the previously approved project. If that determination is made, the application process for a “major” modification would follow the same provisions of the original application process for a publicly noticed hearing.

On August 24, 2010, the Board of Supervisors adopted a one-year moratorium prohibiting any new medical cannabis dispensaries from opening in the County and prohibiting established dispensaries from moving. On August 2, 2011, the moratorium was extended for another year or until such time as the Board of Supervisors enacted another ordinance specifically regulating medical cannabis dispensaries. Then, on August 9, 2011 the Board of Supervisors passed an ordinance which expressly banned all medical cannabis dispensaries in the County (Dispensary Ban). The Dispensary Ban was set to replace the 2009 Ordinance under the Kern County Code of Ordinances Title 5 – Business Licenses and Regulations, Chapter 5.84. The Dispensary Ban was scheduled to take effect on September 9, 2011; however, prior to September 9, 2011, a protest petition was filed and the Dispensary Ban never took effect.

On February 28, 2012, in response to the protest petition, the Board of Supervisors passed the Repeal Ordinance. The Repeal Ordinance, which went into effect on March 30, 2012, repealed Chapter 5.84 of the Kern County Code of Ordinances in its entirety, including the 2009 Ordinance.

Measure G was approved by 69 percent of the voters in Kern County in June 2012. In contrast to all prior medical cannabis dispensary ordinances, Measure G was codified under the Kern County Zoning Ordinance, as opposed to the Health and Safety Ordinance. Measure G permitted medical cannabis dispensaries to operate in areas of the County with zoning classifications of M-2 PD (Medium Industrial Precise Development Combining District) and M-3 PD (Heavy Industrial Precise Development Combining District). Medical cannabis dispensaries were prohibited under Measure G

from operating in any other zone district. In addition, Measure G placed significant restrictions on medical cannabis dispensaries, similar to those imposed under the 2006 Ordinance. For example, Measure G imposed restrictions regarding: (1) hours of operation; (2) a site development application requirement; and (3) setbacks from other dispensaries, schools, churches, parks, and daycare centers. However, on February 14, 2014, the Kern County Superior Court ruled that Measure G was invalid and must be set aside because Kern County did not comply with CEQA prior to the Board of Supervisors placing the ordinance on the June 5, 2012 ballot for the voters to adopt.

As a result of the enactment of the Repeal Ordinance and the invalidation of Measure G, there were no provision in the Kern County Zoning Ordinance that permitted the use of land, buildings, or premises for the operation of a medical cannabis dispensaries in the unincorporated portion of Kern County from February 14, 2014 until April of 2016. On April 5, 2016, the Fifth District Court of Appeals ruled in the matter of County of Kern et. al. v. T.C.E.F. et. al., that the County's Repeal Ordinance violated Government Code Section 9145 because, in response to the referendum, the County repealed the 2009 Ordinance and the Dispensary Ban, rather than only the Dispensary Ban. Thus, the Court of Appeals held that the 2009 Ordinance was in full force and effect.

On May 10, 2016, the Board of Supervisors passed Ordinance No. G-8630, which amended Title 5 – Business Licenses and Regulations which added Chapter 5.86 – Moratorium on Establishment of New Medical Marijuana Dispensaries to the Kern County Code of Ordinances which imposed a moratorium on the establishment of new medical cannabis dispensaries in the County (2016 Moratorium). Pursuant to the 2016 Moratorium, “no Medical Marijuana Dispensary(ies) other than those in existence and operating on the effective date of this ordinance, is permitted within the unincorporated areas of Kern County during the period of time this ordinance is in effect.” The 2016 Moratorium was extended on June 21, 2016 for ten months and 15 days, pursuant to Government Code section 65858(a). On April 4, 2017, the Kern County Board of Supervisors extended the 2016 Moratorium for a period of one (1) year from May 10, 2017. Therefore, as of the publication of this Program EIR, the 2016 Moratorium remains in effect and no new medical cannabis dispensaries are permitted within the unincorporated areas of Kern County. Those medical cannabis dispensaries that were in operation prior to the 2016 Moratorium must comply with the provisions of the 2009 Ordinance (Ordinance No. G-7849).

3.3 Project Location and Environmental Setting

3.3.1 Regional Location

Kern County is California’s third largest county in land area and encompasses approximately 8,202 square miles, with a width of approximately 67 miles and a length of approximately 120 miles. Located at the southern end of the Central Valley, Kern County serves as the gateway to southern California, the San Joaquin Valley, and California’s high desert. The geography of Kern County is diverse, containing mountainous areas, agricultural lands, and desert areas. The County’s dominant land use is agriculture. As of January 1, 2016, the total population in Kern County was 886,507 people, with 309,425 people living in unincorporated Kern County and 557,082 people living within incorporated areas (Department of Finance [DOF], 2016a and 2016b).

Kern County is bound by Kings, Tulare, and Inyo counties on the north; San Bernardino County on the east; Los Angeles and Ventura counties on the south; and Santa Barbara and San Luis Obispo counties on the west (Figure 3-1, *Regional Vicinity*; Figure 3-2, *Project Location*). Kern County

includes 11 incorporated cities with Arvin, Bakersfield, Delano, Maricopa, McFarland, Shafter, Taft, and Wasco located within the Valley Region; Tehachapi located in the Mountain Region; and California City and Ridgecrest located in the Desert Region.

The County contains Intestates (I), U.S. Routes (US), and State Routes (SR). SR-99 is a major freeway servicing the large Central Valley urban areas, including the Metropolitan Bakersfield area, from Kern County north to Sacramento. I-5 enters the County in the southwest and carries traffic on a north-south alignment from Southern California through the Central Valley north to Sacramento, on the west side of the Valley, against the coast range. In eastern Kern County, SR-14 provides linkages to Southern California as well as north to Inyokern, Indian Wells, and Ridgecrest. SR-58 provides east-west connections between the Desert and Valley regions, connecting Mojave to Bakersfield through Tehachapi and continuing to Buttonwillow and McKittrick. Overall, the major regional routes within the County include, but are not limited to, I-5, US-395, SR-14, SR-33, SR-41, SR-43, SR-46, SR-58, SR-65, SR-99, SR-119, SR-138, SR-155, SR-166, SR-178, SR-184, SR-204, SR-202, and SR-223.

3.3.2 Project Area

The project site encompasses all of Kern County, approximately 8,202 square miles, and contains mountainous areas (Tehachapi Mountains, Sierra Nevada Mountains, San Emigdio Mountains, and Coast Ranges), valley areas (San Joaquin Valley), and desert areas (Mojave Desert, Indian Wells Valley, Antelope Valley). The project boundary includes: west side – the San Luis Obispo and Santa Barbara county lines; north side – the Kings, Tulare, and Inyo county lines; east side – San Bernardino County line; and south side – Los Angeles and Ventura county lines. The project site is based on information regarding areas within the County's jurisdiction.

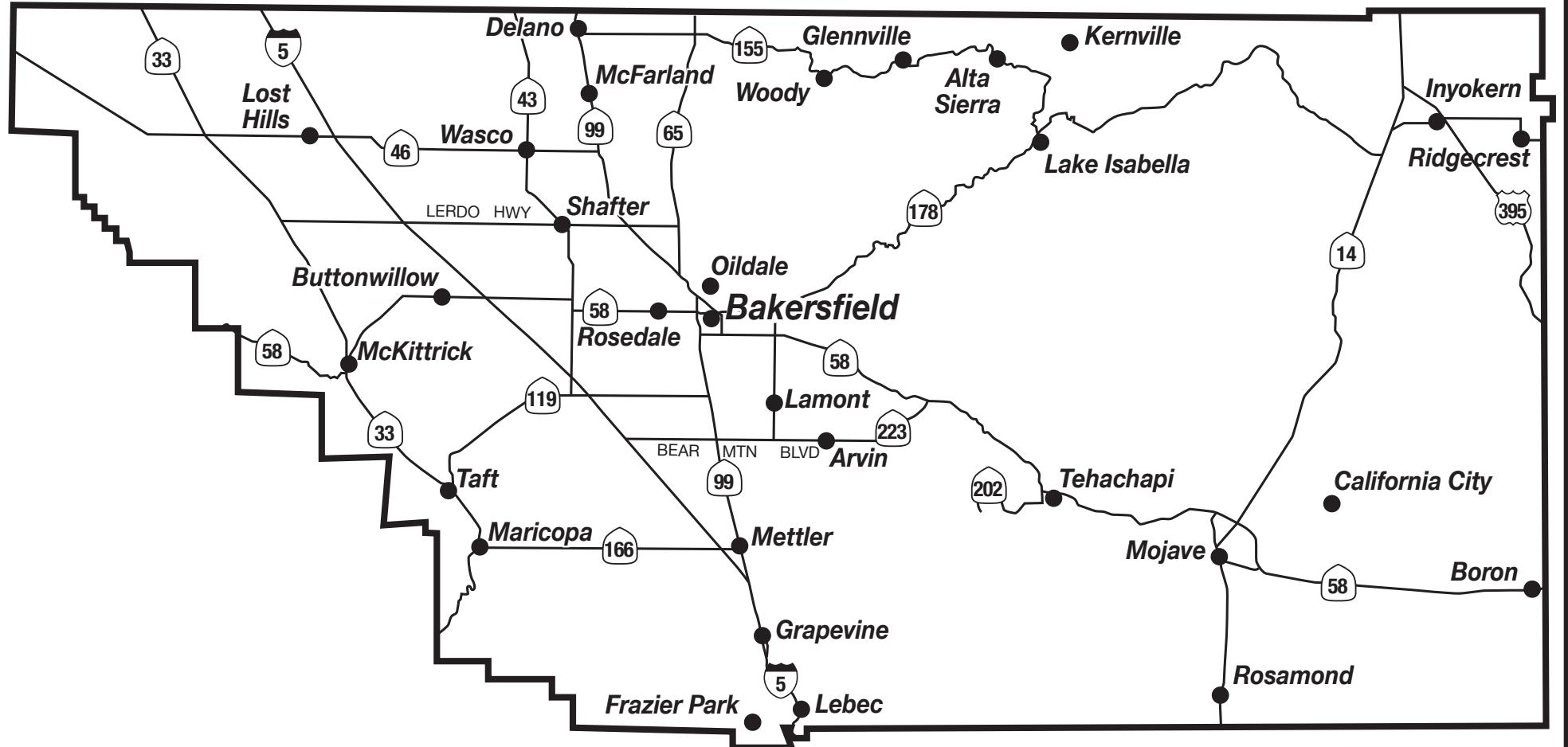
Although the project site encompasses the entire approximately 8,202 square miles, the EIR impact analysis includes only unincorporated County land. Therefore, the analysis includes unincorporated County land within the 409-square-mile Metropolitan Bakersfield Planning Area (a joint planning area containing both County and City land), but excludes all adjacent City of Bakersfield land. The EIR analysis also excludes all other city jurisdictions. Lands under the jurisdiction of various State and federal agencies, including the U.S. Bureau of Land Management (BLM), U.S. Fish and Wildlife Service (USFWS), U.S. Forest Service, U.S. Department of Defense (China Lake Naval Air Weapons Station [NAWS] and the Edwards Air Force Base [AFB]), California Department of Parks and Recreation, and the California State Lands Commission, are also included within the project site but are excluded from the EIR impact analysis. By conservatively assuming all new cannabis-related activities in Kern County would occur in the project site of the County's jurisdictional lands, this EIR presents a conservative analysis of likely impacts in the project site.

The project site is divided into three geographic regions in order to facilitate detailed analysis: Valley Region, Mountain Region, and Desert Region. In general, the subareas are defined by location within the County as well as elevation.



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Regional Vicinity



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Project Location

Valley Region

The Valley Region, made up of the San Joaquin Valley, is located in the central portion of the County. The Valley Region is bound by several mountain ranges which intersect forming a horseshoe shaped valley. The Kern County General Plan (KCGP) describes the Valley Region as “the southern San Joaquin Valley below an elevation of 1,000 feet mean sea level” within Kern County. The lowest point in the County is located in the Valley Region and is 206 feet above mean sea level (AMSL). The Valley Region is characterized by relatively low rainfall, averaging less than 10 inches per year. Summers are relatively cloudless, hot, and dry. Winter is generally mild, but an occasional freeze does occur and may cause substantial agricultural damage.

Mountain Region

The Mountain Region is defined by the KCGP as “[t]he westernmost and central portions of the County above the 1,000-foot [mean sea level] contour in the valley and western region of the County and west of the primary alignment of the Los Angeles Aqueduct in the eastern County, including the southernmost portion of the County.” The Mountain Region, from east to west, includes the Sierra Nevada Mountains, Tehachapi Mountains, San Emigdio Range, Temblor Range, and parts of the Coast Range. The highest point in the County is 8,831 feet AMSL at the summit of Mount Pinos. The average rainfall is approximately 15 inches, but can be as high as 35 or more inches. Snow accounts for much of the precipitation above 6,000 feet AMSL.

Desert Region

The Desert Region, including the Mojave Desert with Indian Wells Valley and Antelope Valley, is located in the eastern portion of Kern County, east of the Sierra Nevada and Tehachapi ranges and south of the short transverse range that connects the southernmost Sierra Nevada Mountains with the San Emigdio Mountains. The KCGP defines the Desert Region as “[t]he eastern section of the County east of the primary alignment of the Los Angeles Aqueduct.” The Desert Region is characterized by less than 10 inches of annual rainfall, and an evaporation rate that exceed precipitation.

3.3.3 Surrounding Land Uses

The project site is bordered on the west by San Luis Obispo and Santa Barbara counties. The border between the counties approximates the San Andreas Fault line. The Temblor Range forms a general barrier between the counties. Carizo Plain National Monument is located along the western boundary of Kern County between Kern and San Luis Obispo counties.

To the north, the project site is bordered by Kings, Tulare, and Inyo counties. The bordering areas of these three counties contain agriculture and oil and gas operations, as well as dispersed rural residences. The incorporated City of Delano is located on the northern border of Kern County and adjacent land uses in Tulare County consist of large lot residential, agriculture, and industrial uses. Sequoia National Forest is located in the northeastern portion of the project site, within Kern and Tulare counties. Owens Lake and Owens Valley are located within Inyo County, approximately 40 miles north of the project site, while Death Valley National Park is located approximately 30 miles north and east of the project site, in Inyo and San Bernardino counties. China Lake NAWS is in the northeastern corner of Kern County and extends north in Inyo County.

To the east, the project site is bordered by San Bernardino County, and generally parallels US-395. Ridgecrest and Boron are within Kern County, on the eastern border. This area is within the Mojave Desert and includes rural desert lands, as well as solar energy facilities. Barstow, within San Bernardino County, is located approximately 35 miles east of Boron and the Project site.

Los Padres National Forest is located along the southwestern and southern project site, within the Santa Barbara, Ventura, Los Angeles, and Kern counties. In general, the southwestern boundary generally follows the San Emigdio Mountains and the Tehachapi Mountains. The southeastern boundary is within the Mojave Desert and follows the Kern/Los Angeles County line, which generally parallels, and is to the north of, SR-138. The City of Lancaster is located within Los Angeles County, approximately six miles south of the project site. Edwards AFB is located within the southeastern corner of Kern County.

3.3.4 Areas Not Subject to Kern County Land Use Jurisdiction Located Within Project Site

As discussed above, there are 11 incorporated cities and State- and federally-owned lands, and other resources, that fall within the project site. The proposed project does not directly affect these areas outside the County's land use jurisdiction. This EIR assumes that cannabis-related activities that occur within the incorporated cities will continue to occur in the future; this is considered within the cumulative analysis. Cannabis-related activities on State public lands are not allowed per Proposition 64. Similarly, regarding federally-owned lands, per 21 USC Sections 812, 841 and 844, cannabis-related activities are illegal at the federal level and cannabis-related activities are subject to the prosecutorial discretion of the federal government. Therefore, This Program EIR assumes no activities on these lands and no contribution to the cumulative impact analysis.

In the event that future changes to municipal boundaries result in the removal of a portion of the project site from Kern County's jurisdiction, municipal zoning would apply rather than the County's proposed amendments to the Zoning Ordinance and other related ordinances. As noted above, cities and other local agencies within the project site may use the information included in this Program EIR for local planning and other activities. Conversely, in the event that future changes to municipal boundaries result in a transfer of current municipal lands to the County's jurisdiction, the proposed amendments to the Zoning Ordinance and other related ordinances would apply to those lands.

3.3.5 Existing Kern County Code of Ordinances

As discussed above, on March 31, 2009, the Board of Supervisors passed Ordinance No. G-7849 (the 2009 Ordinance). The 2009 Ordinance repealed the licensing scheme set forth in the 2006 Ordinance, and removed the majority of prior restrictions imposed on medical cannabis dispensaries. As with the 2006 Ordinance, the 2009 Ordinance was codified under Title 5 – Business Licenses and Regulations, Chapter 5.84 – Medical Marijuana Cooperatives or Collectives of the Kern County Code of Ordinances. The only restrictions expressly placed on dispensaries under the 2009 Ordinance were: (a) A medical marijuana cooperative or collective may not be located within one thousand (1,000) feet of a school, recreation center, or youth center measured from the primary entrance to a cooperative or collective and the closest property line of the property of a school, recreation center, or youth center or on which a school, recreation center, or youth center is operated; (b) A medical marijuana cooperative or collective shall be treated as a pharmacy for zoning purposes; (c) “Medical marijuana cooperative” and “medical marijuana collective” are defined as set forth in section IV of

the California Attorney General *Guidelines for the Security and Non-diversion of Marijuana Grown for Medical Use* issued in August, 2008, as they read or as amended; and (d) Any person who violates and provision in this section is guilty of a misdemeanor. The 2009 Ordinance applied only to “Medical Marijuana Cooperatives or Collectives,” as that term is defined under an Attorney General’s Guideline related to dispensaries.

On May 10, 2016, the Board of Supervisors passed Ordinance No. G-8630, which added Chapter 5.86 – Moratorium on Establishment of New Medical Marijuana Dispensaries to the Kern County Code of Ordinances and imposed a moratorium on the establishment of new medical cannabis dispensaries in the County (2016 Moratorium). Pursuant to the 2016 Moratorium, “no Medical Marijuana Dispensaries other than those in existence and operating on the effective date of this ordinance, is permitted within the unincorporated areas of Kern County during the period of time this ordinance is in effect.” As of the publication of this EIR, the 2016 Moratorium remains in effect and no new dispensaries are permitted within the unincorporated areas of the County. Those dispensaries that were in operation prior to the 2016 Moratorium must comply with the provisions of the 2009 Ordinance. On April 4, 2017, the Kern County Board of Supervisors extended the 2016 Moratorium for a period of one year from May 10, 2017. Thus, Chapter 5.84 (Medical Marijuana Cooperatives or Collectives) of the Kern County Code of Ordinances is the underlying existing ordinance and uses the term marijuana instead of cannabis. Therefore, when referring to cannabis as it relates to the existing 2009 Ordinance (Ordinance No. G-7859), this EIR will use the term marijuana.

The Kern County Zoning Ordinance identifies “Pharmacy” under the following zone districts: C-1 (Neighborhood Commercial), C-2 (General Commercial), CH (Highway Commercial), M-1 (Light Industrial), M-2 (Medium Industrial), and M-3 (Heavy Industrial). In order for an applicant to open a new “pharmacy” in any of these zone districts, an applicant would be required to apply for, and receive approval through, one of two types of land use review application processes listed in the Kern County Zoning Ordinance: 1) Chapter 19.56 Precise Development (PD) Combining District; or 2) Chapter 19.80 Special Development Standards. All commercial and industrial zone districts that *do not* include the PD Combining District are subject to the provisions called out in Kern County Zoning Ordinance Section 19.80.030 Development and Performance Standards and may be subject to Section 19.80.040 Plot Plan Review and Approval if a proposed project requires a building permit. All zone districts that have a PD Combining District are subject to the provisions of Kern County Zoning Ordinance Section 19.56.130 Site Development Plan Review, which establishes reasonable and necessary development standards for the single-family, multifamily, commercial, and industrial, institutional, and other similar uses to ensure the development subject to this chapter includes appropriate public improvements and is compatible with surrounding uses.

Any proposed projects that are being considered on project sites that already have an approved PD plan, would be subject to the review and approval of either a ministerial “minor” PD Plan modification application process with following the guidelines called out in Section 19.102.040.E. Minor Plan Modifications of the Kern County Zoning Ordinance or a discretionary “major” PD Plan modification application process which would be evaluated by the Planning Director to determine whether the requested modification(s) constitute a substantial change in the previously approved project. If that determination is made, the application process for a “major” modification would follow the same provisions of the original application process for a publicly noticed hearing.

If an applicant is required to obtain a building permit, the enforcing agency would then notify the Kern County Planning and Natural Resources Department that an application has been made. Kern

County Planning staff would then conduct a site plan review to see if the project meets the necessary land use requirements; such as, is the proposed land use allowed in that particular zone district and if so, will the project be subject to further review of development standards or a zoning land use permit processed per Kern County Ordinance Section 19.80.040, as previously stated. All ministerial permit applications are subject to the provisions of Kern County Ordinance Section 19.102.050 Application – Approval or Denial.

3.3.6 Existing Medical Marijuana Dispensaries

A total of 29 medical marijuana dispensaries were in operation within unincorporated Kern County as of November 18, 2016. Of these 29 dispensaries, 7 are in violation of the 2016 Moratorium. The remaining 22 opened before, or illegally after, the 2016 Moratorium and are being reviewed for compliance and are depicted on Figure 3-3, *Existing Dispensary Locations Permitted Prior to the 2016 Moratorium*. As mentioned above, as of the publication of this EIR, the 2016 Moratorium is still in effect. Any medical cannabis dispensaries that have opened between the 2016 Moratorium and the time of this EIR publication are in violation of the 2016 Moratorium and do not appear on Figure 3-3.

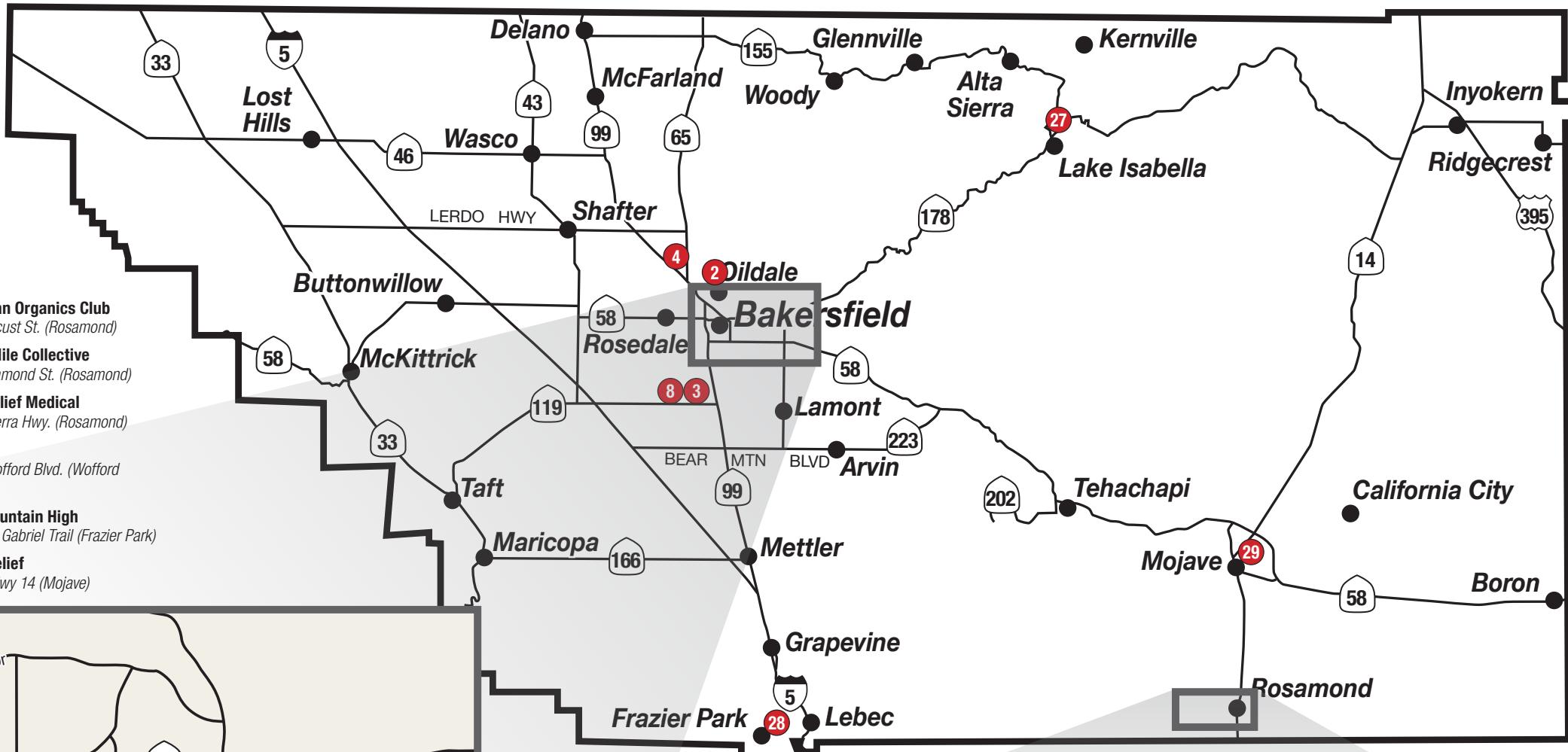
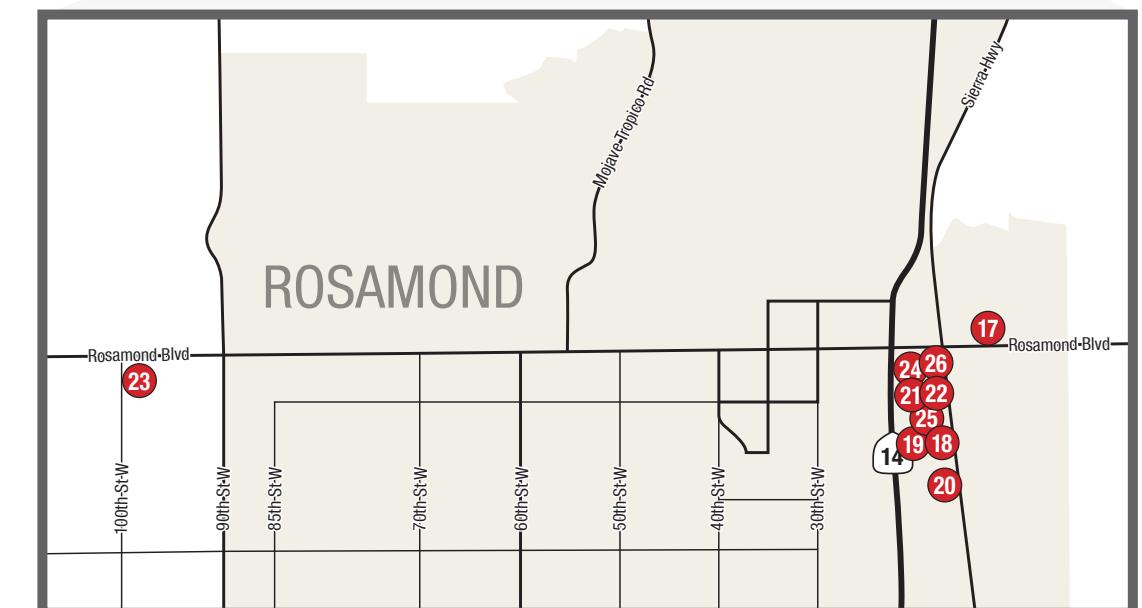
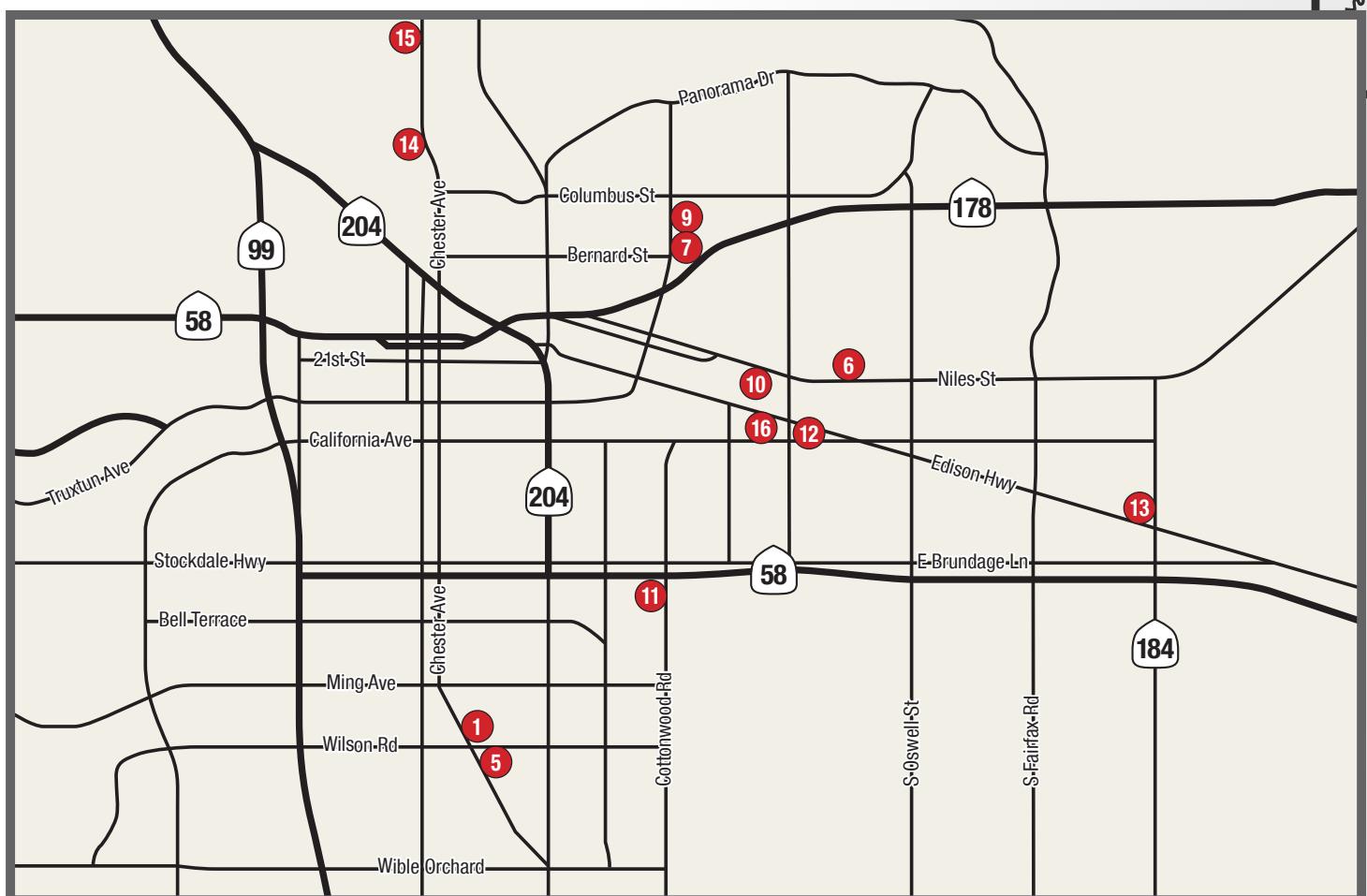
3.4 Project Objectives

The County has defined the following objectives for the proposed project:

- Provide county-specific land use and fiscal information and policy recommendations to the Kern County Board of Supervisors for compliance with Proposition 64 (The California Marijuana Legalization Initiative 2016, also known as the Adult Use of Marijuana Act [AUMA]) and permitting by the State of California for Medical and Adult Use Cannabis.
- Implement changes to Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on commercial cannabis-related activities within its boundaries and changes in laws and regulations by outside agencies for the purposes of reducing or eliminating potential significant environmental impacts, to the extent feasible, by ensuring that current County regulation reflects the County's interest in protecting the health, safety, and general welfare of residents and visitors.
- Continue Kern County's ongoing commitment to consult and cooperate with federal, State, regional and local agencies by periodically reviewing adopted regulations to ensure the long-term viability of Kern County's resources, and Kern County Board of Supervisors policy direction
- Encourage appropriate economic development that creates jobs and promotes capital investment in Kern County to enable the County to invest in capital improvement projects and social programs, which benefit County residents, retail businesses, and capital industries which ensures the County's fiscal stability.

- Legend** ●
1. Tiger Vitality Collective
2222 S. Chester Ave., Suite B
 2. Life's Healing Solutions
11812 N. Chester Ave.
 3. Taft Highway Collective
3024 Highway 119
 4. Highway 99 Collective
2980 Saco Rd.
 5. Peace and Medicine
2500 S. Chester Ave.
 6. Peace and Medicine
23444 Niles St.
 7. Knotts Street Collective
902 Knotts St.
 8. West Coast Healing
3030 Taft Hwy.
 9. Backyard Organics
2111 River Blvd.
 10. Sweet Leaf Organic
2011 Niles Street
 11. OCC
608 Cottonwood Road
 12. Green Flower
2532 Edison Hwy.

13. Cannibal's Medibles
110 Morning Drive
14. Therapeutic Health Center
141 N. Chester Ave.
15. The Giving Tree
1631 N. Chester Ave.
16. Sticky Icky
2125 Edison Hwy.
17. Organic Health Solutions
1315 W. Rosamond Blvd., Suite 1A
(Rosamond)
18. Vape n. Bake
2689 Sierra Hwy. (Rosamond)
19. Tanner Vest Collective
2753 Diamond Street (Rosamond)
20. DASA
1733 Sierra Highway (Rosamond)
21. Lights Out Wellness
1739 Poplar Street (Rosamond)
22. The Plum Tree Collective
2873 Sierra Hwy. (Rosamond)
23. Prime Spot Wellness
2722 100th Street (Rosamond)
24. American Organics Club
1737 Locust St. (Rosamond)
25. Green Mile Collective
2613 Diamond St. (Rosamond)
26. Hwy. Relief Medical
2939 Sierra Hwy. (Rosamond)
27. ASHES
6629 Wofford Blvd. (Wofford Heights)
28. Pine Mountain High
633 San Gabriel Trail (Frazier Park)
29. Big O Relief
16940 Hwy 14 (Mojave)



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Existing Dispensary Locations Permitted Prior to the 2016 Moratorium

3.5 Proposed Project

The proposed project consists of an amendment to Kern County Code of Ordinances Title 19 and other related ordinances to either: (A) ban all medical and adult use cannabis related activities other than what is allowed under Proposition 64, or (B) include updated standards and conditions for future commercial medical and adult use cannabis cultivation, cannabis processing and packaging, distribution, testing, and retail cannabis stores with or without mobile delivery.

3.5.1 Propose Project Option A

Under Option A, if banned, no cannabis activities and facilities for either medical or adult use would be allowed to occur within unincorporated Kern County. Only the allowance of cultivation and possession as defined in Proposition 64 for medical or adult use would be allowed. Option A would require existing medical cannabis dispensaries to cease operation within the County over a one- to two-year period to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the 2016 Moratorium would be required to cease operation immediately. The proposed amendment to the Kern County Code of Ordinances for Option A can be reviewed in full in Appendix B of this EIR.

3.5.2 Proposed Project Option B

If updated standards and conditions are approved, Option B would provide clarification for the appropriate zone classifications where: (1) commercial cannabis cultivation, processing and packaging, distribution, testing facilities would be an allowable use when full compliance with development standards are achieved; and (2) where dispensaries for either medical and/or adult use cannabis retail sales with or without mobile deliveries would be allowed under an approved conditional use permit (CUP). Option B would require existing medical cannabis dispensaries that do not obtain a CUP from the County to cease operation within the County over a one- to two-year period to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the 2016 Moratorium would be required to cease operation immediately. The draft regulatory structure for the proposed amendment to the Kern County Code of Ordinances Title 19 for Option B is depicted in Figures 3-4 through 3-7 (provided at the end of Section 3.5.2) while the amended language is provided in Appendix C of this EIR.

Potential State Licenses Required Under Option B

Future commercial medical and adult use cannabis-related activities would be subject to obtaining all required State permits and appropriate license types, depending on the cannabis-related activity. Option B would require an applicant to obtain one or more of the following State licenses (California Department of Food and Agriculture [CDFA], 2017); however, if the State refines these licenses and definitions, then the licenses that best fit the below descriptions would be required.

- Type 1, or “specialty outdoor,” for outdoor cultivation using no artificial lighting of less than or equal to 5,000 square feet of total canopy size on one premises, or up to 50 mature plants on noncontiguous plots.
- Type 1A, or “specialty indoor,” for indoor cultivation using exclusively artificial lighting of less than or equal to 5,000 square feet of total canopy size on one premises.

- Type 1B, or “specialty mixed-light,” for cultivation using a combination of natural and supplemental artificial lighting at a maximum threshold to be determined by the Department of Food and Agriculture, of less than or equal to 5,000 square feet of total canopy size on one premises.
- Type 2, or “small outdoor,” for outdoor cultivation using no artificial lighting between 5,001 and 10,000 square feet, inclusive, of total canopy size on one premises.
- Type 2A, or “small indoor,” for indoor cultivation using exclusively artificial lighting between 5,001 and 10,000 square feet, inclusive, of total canopy size on one premises.
- Type 2B, or “small mixed-light.” For cultivation using a combination of natural and supplemental artificial lighting at a maximum threshold to be determined by CDFA, between 5,001 and 10,000 square feet, inclusive, of total canopy size on one premises.
- Type 3, or “outdoor,” for outdoor cultivation using no artificial lighting from 10,001 square feet to one acre, inclusive, of total canopy size on one premises. The California Department of Food and Agriculture (CDFA) shall limit the number of licenses allowed of this type.
- Type 3A, or “indoor,” for indoor cultivation using exclusively artificial lighting between 10,0001 and 22,000 square feet, inclusive, of total canopy size on one premises. The CDFA shall limit the number of licenses allowed of this type.
- Type 3B, or “mixed-light,” for cultivation using a combination of natural and supplemental artificial lighting at a maximum threshold to be determined by the CDFA, between 10,001 and 22,000 square feet, inclusive, of total canopy size on one premises. The CDFA shall limit the number of licenses allowed of this type.
- Type 4, or “nursery,” for cultivation of cannabis solely as a nursery. Type 4 licensees may transport live plants.
- Type 5A, or “large indoor,” for indoor cultivation using exclusively artificial lighting 22,001 square feet or larger, inclusive, of total canopy size on one premises. This license type is not available prior to January 1, 2023; CDFA does not currently list this license.
- Type 5B, or “large mixed-light,” for cultivation using a combination of natural and supplemental artificial lighting at a maximum threshold to be determined by the CDFA, 22,001 square feet or larger, inclusive, of total canopy size on one premises. This license type is not available prior to January 1, 2023; CDFA does not currently list this license.
- Type 6, or “manufacturing level 1,” for manufacturing facilities that produce cannabis products using nonvolatile solvents.
- Type 7, or “manufacturing level 2,” for manufacturing sites that produce cannabis products using volatile solvents. The California Department of Public Health (CDPH) shall limit the number of licenses of this type.
- Type 8, or “testing,” for testing of cannabis and cannabis products. Testing licensees shall have their facilities licensed according to regulations set forth by CDPH.

- Type 10, or “retailer,” for a facility where cannabis, cannabis products, or devices for the use of cannabis or cannabis products are offered, either individually or in any combination, for retail sale, including an establishment that delivers, pursuant to express authorization by local ordinance, cannabis and cannabis products as part of a retail sale. This is for a single location.
- Type 11, or “distribution,” for the procurement, sale, and transport of cannabis and cannabis products between entities licensed. “Distributor” means a person licensed to engage in the business of purchasing cannabis from a licensed cultivator, or cannabis products from a licensed manufacturer, for sale to a licensed dispensary.
- Type 12, or microbusiness, for transporting cannabis products. “Transport” means the transfer of cannabis or cannabis products from the permitted business location of one licensee to the permitted business location of another licensee, for the purposes of conducting commercial cannabis activity.

Proposed Elements of Option B

Maximum total square footage limits would be proposed countywide for cultivation (indoor) and processing, packaging, and distribution facilities. A maximum acreage would be proposed countywide for outdoor cultivation. A maximum number of retail cannabis stores would be proposed countywide, including limits on overconcentration in unincorporated communities. The proposed amendments to the Kern County Code of Ordinances Title 19 and other related ordinances would contain the following elements.

- **Cultivation**
 - Indoor Cultivation (refer to Figure 3-4, *Indoor Cultivation Draft Regulatory Structure*)
 - State Licenses Required for indoor cultivation: State License Type 1A, 1B, 2A, 2B, 3A, 3B, 4, 5A, and 5B
 - Greenhouses would be allowed in the following zone classifications: A (Exclusive Agriculture) and A-1 (Limited Agriculture).
 - Greenhouses would be an allowable use in the above zone classifications when full compliance with development standards is achieved.
 - Greenhouses that cannot fully comply with the development standards would require a CUP.
 - Indoor Cultivation (i.e., warehouses or other structures) would be allowed in the following zone classifications: A (Exclusive Agriculture), A-1 (Limited Agriculture), M-1 (Light Industrial), M-2 (Medium Industrial), and M-3 (Heavy Industrial).
 - Indoor Cultivation (i.e., warehouses or other structures) would be an allowable use in the above zone classifications when full compliance with development standards is achieved.
 - Indoor cultivation that cannot fully comply with the development standards, regardless of zone classification, would require a CUP.
 - Indoor cultivation in an existing structure or existing building would be allowed in zone classifications C-2 (General Commercial) and CH (Highway Commercial) with a CUP.

- A countywide maximum of 2,000,000 square feet (ft^2) of indoor cultivation would be allowed in unincorporated portions of the County with the required State licenses, and, if applicable, CUPs. This total would be split between facility sizes as follows
- Indoor cultivation would be required to be 0.5 mile from any school, day care center, youth center while children are present, or incorporated city limit boundary. Appendices D, E, and F provide maps outlining areas within each zone district that have the potential for future cannabis indoor cultivation facilities using a conservative one-mile radius.
- Outdoor Cultivation (refer to Figure 3-5, *Outdoor Cultivation Draft Regulatory Structure*)
 - State Licenses Required for outdoor cultivation: State License Type 1, 2, 3, and 4.
 - Outdoor cultivation would be allowed in zone classification A (Exclusive Agriculture).
 - Outdoor cultivation would be an allowable use in the above zone classification when full compliance with development standards is achieved.
 - Outdoor cultivation that cannot fully comply with the development standards would require a CUP.
 - Outdoor cultivation would not be allowed on lands that are under Williamson Act contracts.
 - A countywide maximum of 150 acres of outdoor cultivation would be allowed in unincorporated portions of the County with the required State licenses and, if applicable, CUPs.
 - Each individual outdoor cultivation operation would be a maximum of one acre in size.
 - Outdoor cultivation would be required to be 0.5 mile from any school, day care center, youth center while children are present, or incorporated city limit boundary. Appendices D, E, and F provide maps outlining areas within each zone district that have the potential for future cannabis outdoor cultivation facilities using a conservative one-mile radius.
- **Processing, Packaging, and Distribution** (refer to Figure 3-6, *Processing and Packaging and Distribution Draft Regulatory Structure*)
 - State Licenses Required for processing and packaging facilities (manufacturing) and distribution and transport facilities (distribution, transport, and laboratory testing): State License Type 6, 7, 8, 11, and 12 (Transport only, no microbusinesses allowed).
 - Processing and packaging and distribution and transport facilities would be required to obtain the appropriate State license from the CDHP (manufacturing licenses) and the Bureau of Medical Cannabis Regulation within the Department of Consumer Affairs (distribution, transportation, laboratory testing).
 - Processing and packaging facilities and distribution facilities would be allowed in the following zone classifications: A (Exclusive Agriculture), M-2 (Medium Industrial), and M-3 (Heavy Industrial).
 - Processing and packaging facilities and distribution facilities would be an allowable use in the above zone classifications when full compliance with development standards is achieved.

- Processing and packaging facilities and distribution facilities that cannot fully comply with the development standards, regardless of zone classification, would require a CUP.
- A countywide maximum of 500,000 ft² of extraction/production for active ingredient, production of edibles, infused drinks and solid application, as well as storage of cannabis products in distribution centers, would be allowed in unincorporated areas of the County with the required State licenses and, if applicable, CUPs.
- For distribution facilities only, a countywide maximum of three (3) facilities would be allowed in unincorporated areas of the County with the required State licenses and, if applicable, CUPs.
- Processing and packaging and distribution facilities would be required to be 0.5 mile from any school, day care center, youth center while children are present, or incorporated city limit boundary. Appendices D, E, and F provide maps outlining areas within each zone district that have the potential for future cannabis processing and packaging and distribution facilities using a conservative one-mile radius.
- **Retail Cannabis Store with or without Mobile Delivery** (refer to Figure 3-7, *Retail Cannabis Stores with or without Mobile Delivery Draft Regulatory Structure*)
 - State Licenses Required for retail cannabis store facilities (retail and sales only): State License Type 10.
 - Retail cannabis stores with or without mobile delivery would be required to obtain the appropriate State license from the Department of Medical Cannabis Regulation within the Department of Consumer Affairs (distribution, transportation, dispensary [sale]).
 - Retail cannabis stores with or without mobile delivery would be allowed in the following zone classifications: C-1 (Neighborhood Commercial); C-2 (General Commercial); CH (Highway Commercial); M-1 (Light Industrial); M-2 (Medium Industrial); and M-3 (Heavy Industrial).
 - Retail cannabis stores with or without mobile delivery would require a County issued CUP.
 - A countywide maximum of 40 retail cannabis stores with or without mobile delivery would be allowed within unincorporated portions of Kern County with the required State licenses, and CUPs.
 - No more than two (2) retail cannabis stores with or without mobile delivery would be allowed in each unincorporated community identified in the KCGP or Kern County Housing Element.
 - Retail cannabis stores with or without mobile delivery would be required to meet all setbacks, including being 0.5 mile or more from a school, day care center, or youth center while children are present; 1,000 feet is specified in Proposition 64. Appendices D, E, and F provide maps outlining areas within each zone district that have the potential for future retail cannabis store facilities using the conservative 1,000 feet radius.
- **Personal Adult Use of Cannabis**
 - The County would allow for the personal cultivation and use of cannabis and cannabis products as outlined in Proposition 64.
 - The County would not allow the use of cannabis and cannabis products in parks, recreation areas, public areas, or areas where tobacco use is not allowed, similar to Proposition 64.

Indoor Cultivation

Mandatory State Licenses: Types 1A, 1B, 1C, 2A, 2B, 3A, 3B, 4, 5A, 5B

The State requires proof that a County Permit has been obtained prior to issuing a state license.

Countywide Maximum: 2,000,000 ft²

The combination of greenhouses, warehouses, and other structures cannot exceed a combined total of 2,000,000 ft² within unincorporated areas of Kern County.

Greenhouses

Warehouses and Other Structures

Zone Classifications A & A-1

Consistent with Development Standards

Permit can be issued over the counter

Not Consistent with Development Standards

Requires Processing of a Conditional Use Permit & Review Under the California Environmental Quality Act

Public Hearing

Permit can be issued if approved

Zone Classifications A, A-1, M-1, M-2, & M-3

Consistent with Development Standards

Permit can be issued over the counter

Warehouses and Other Structures

Zone Classifications C-2 & CH

Requires Processing of a Conditional Use Permit & Review Under the California Environmental Quality Act

Public Hearing

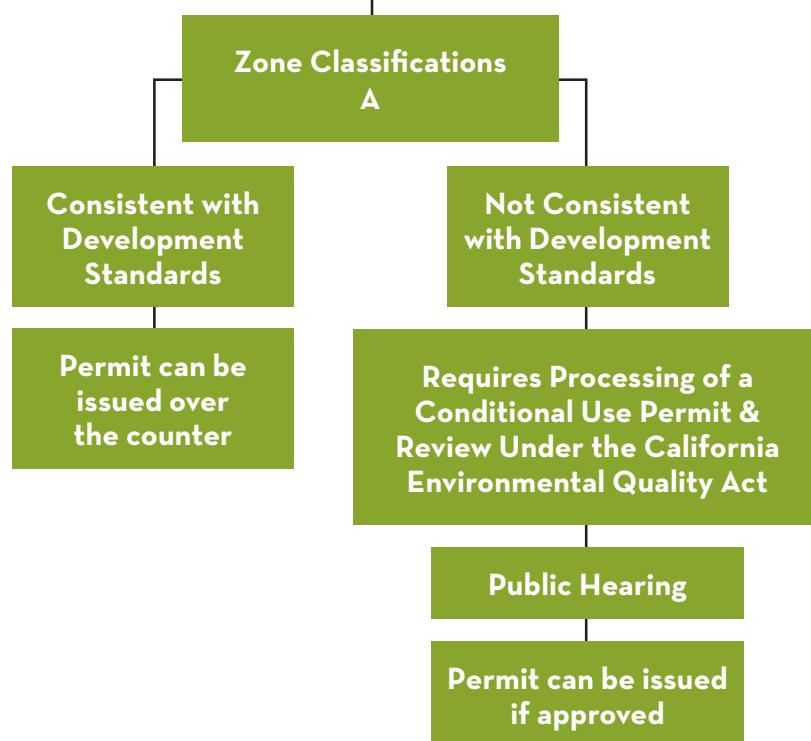
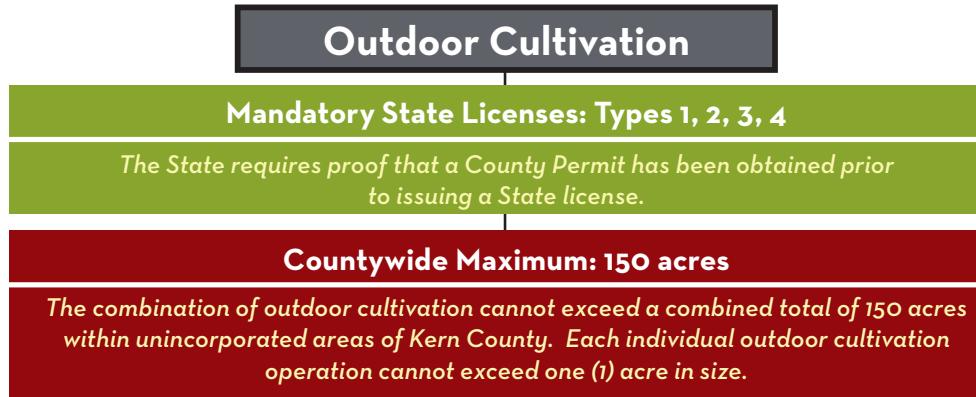
Permit can be issued if approved

Notes:

1. If zone classification is not listed above, indoor cultivation is not allowed.
2. Must be one mile from any school, parks, daycares, or youth centers.
3. No operations can commence until County permit and State license are obtained.
4. "Countywide" refers to only unincorporated County lands. It excludes all incorporated city jurisdictions.

KERN COUNTY CANNABIS LAND USE ORDINANCE PROJECT EIR
AMENDMENT TO TITLE 19 – KERN COUNTY ZONING
ORDINANCE FOCUSED ON CHAPTER 19.120 (CANNABIS LAND USE REGULATION)

Indoor Cultivation Draft Regulatory Structure



Notes:

1. If zone classification is not listed above, outdoor cultivation is not allowed.
2. Must be one mile from any school, parks, daycares, or youth centers.
3. No operations can commence until County permit and State license are obtained.
4. "Countywide" refers to only unincorporated County lands. It excludes all incorporated city jurisdictions.

Processing and Packaging and Distribution

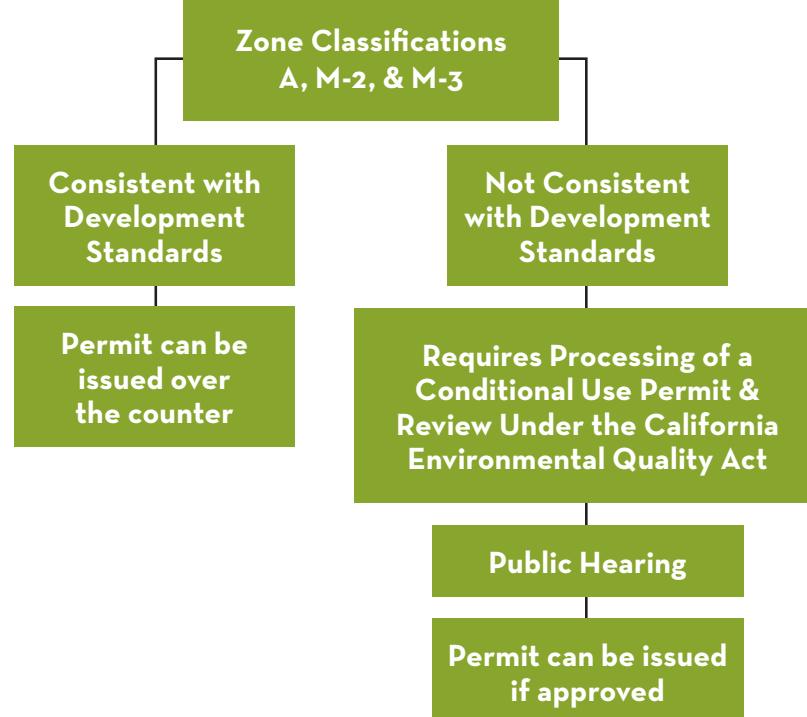
Mandatory State Licenses: Types 6, 7, 8, 11, 12 (transportation only)

The State requires proof that a County Permit has been obtained prior to issuing a State license.

Countywide Maximum: 500,000 ft²

Countywide Maximum: 3 distribution facilities

The combination of processing and packaging operations (extraction/production and distribution facilities for active ingredients, production of edibles, infused drinks and solid application) cannot exceed a combined total of 500,000 ft² within unincorporated areas of Kern County. No more than three (3) distribution facilities are allowed within unincorporated areas of Kern County.



Notes:

1. If zone classification is not listed above, processing and packaging and distribution facilities are not allowed.
2. Must be one mile from any school, parks, daycares, or youth centers.
3. No operations can commence until County permit and State license are obtained.
4. "Countywide" refers to only unincorporated County lands. It excludes all incorporated city jurisdictions.

KERN COUNTY CANNABIS LAND USE ORDINANCE PROJECT EIR
AMENDMENT TO TITLE 19 – KERN COUNTY ZONING
ORDINANCE FOCUSED ON CHAPTER 19.120 (CANNABIS LAND USE REGULATION)

Processing and Packaging and Distribution Draft Regulatory Structure

Retail Cannabis Stores with or without Mobile Delivery

Mandatory State Licenses: Types 10

The State requires proof that a County Permit has been obtained prior to issuing a State license.

Countywide Maximum: 40 retail cannabis stores

The total number of retail cannabis stores cannot exceed a combined total of 40 within unincorporated areas of Kern County. No more than two (2) retail cannabis stores are allowed in each unincorporated community.

Zone Classifications

C-1, C-2, CH,
M-1, M-2, and M-3

Requires Processing of a
Conditional Use Permit &
Review Under the California
Environmental Quality Act

Public Hearing

Permit can be issued
if approved

Notes:

1. If zone classification is not listed above, a dispensary is not allowed.
2. Must be 1,000 feet from any school, parks, daycares, or youth centers.
3. No operations can commence until County permit and State license are obtained.
4. "Unincorporated community" refers to communities identified within the Kern County General Plan and the Kern County Housing Element
5. "Countywide" refers to only unincorporated County lands. It excludes all incorporated city jurisdictions.

KERN COUNTY CANNABIS LAND USE ORDINANCE PROJECT EIR
AMENDMENT TO TITLE 19 – KERN COUNTY ZONING
ORDINANCE FOCUSED ON CHAPTER 19.120 (CANNABIS LAND USE REGULATION)

Retail Cannabis Stores with or without Mobile Delivery Draft Regulatory Structure

Proposed Development Standards Under Option B

The following discussion summarizes the proposed development standards under Option B. For detailed for specific wording of the proposed ordinance under Option B, refer to Appendix C of this EIR.

All retail cannabis store development shall be consistent with the goals and policies of the KCGP and with the KCGP land use category applicable to the area in which the property is located. All development in the C-1 (Neighborhood Commercial); C-2 (General Commercial); CH (Highway Commercial); M-1 (Light Industrial); M-2 (Medium Industrial); and M-3 (Heavy Industrial) Districts shall comply with the minimum standards set out in Chapter 19.80 of the Kern County Zoning Ordinance. All retail cannabis store development shall comply with any additional conditions deemed necessary or appropriate by the Planning Director or the Board of Supervisors to promote the public health, safety, and welfare. All retail cannabis store development in the C-1 (Neighborhood Commercial); C-2 (General Commercial); CH (Highway Commercial); M-1 (Light Industrial); M-2 (Medium Industrial); and M-3 (Heavy Industrial) Districts, and retail cannabis stores permitted, subject to securing a CUP and State license, shall comply with development and performance standards A through O, as provided in the proposed Section 19.120.050, Development and Performance Standards – Retail Cannabis Stores (Medical and Adult Use) with or without Mobile Delivery; refer to Appendix C of this EIR for specific wording of the proposed ordinance under Option B.

All indoor cultivation development shall be consistent with the goals and policies of the KCGP and with the KCGP land use category applicable to the area in which the property is located. All indoor cultivation development in the A (Exclusive Agriculture), A-1 (Limited Agriculture), M-1 (Light Industrial), M-2 (Medium Industrial), and M-3 (Heavy Industrial) Districts shall comply with the minimum standards set out in Chapter 19.80 of this title. Greenhouses are permitted only in the A (Exclusive Agriculture) and A-1 (Limited Agriculture) District. Warehouses and other structures are only permitted in the A (Exclusive Agriculture), A-1 (Limited Agriculture), M-1 (Light Industrial), M-2 (Medium Industrial), and M-3 (Heavy Industrial). All development shall comply with any additional conditions deemed necessary or appropriate by the Planning Director or the Board of Supervisors to promote the public health, safety, and welfare. All development in the A (Exclusive Agriculture), A-1 (Limited Agriculture), M-1 (Light Industrial), M-2 (Medium Industrial), and M-3 (Heavy Industrial) Districts, and greenhouses, warehouses and other structures permitted, subject to obtaining an approved site plan and State licenses, shall comply with development and performance standards A through S, as proposed in Section 19.120.060, Development and Performance Standards – Indoor Cultivation – Greenhouses, warehouses and Other Structures; refer to Appendix C of this EIR for specific wording of the proposed ordinance under Option B.

All processing and packaging development shall be consistent with the goals and policies of the KCGP and with the KCGP land use category applicable to the area in which the property is located. All processing and packaging development in the A (Exclusive Agriculture), M-2 (Medium Industrial), and M-3 (Heavy Industrial) Districts shall comply with the minimum standards set out in Chapter 19.80 of this title. All processing and packaging development shall comply with any additional conditions deemed necessary or appropriate by the Planning Director or the Board of Supervisors to promote the public health, safety, and welfare. All development in the A (Exclusive Agriculture), M-2 (Medium Industrial), and M-3 (Heavy Industrial) Districts, and greenhouses, warehouses and other structures permitted, subject to obtaining an approved site plan and State

licenses, shall comply with the development and performance standards A through S, as provided in the proposed Section 19.120.070, Development and Performance Standards – Processing and Packaging; refer to Appendix C of this EIR for specific wording of the proposed ordinance under Option B.

All outdoor cultivation development shall be consistent with the goals and policies of the KCGP and with the KCGP land use category applicable to the area in which the property is located. All outdoor cultivation development in the A (Exclusive Agriculture) District shall comply with the minimum standards set out in Chapter 19.80 of this title. All outdoor cultivation development shall comply with any additional conditions deemed necessary or appropriate by the Planning Director or the Board of Supervisors to promote the public health, safety, and welfare. All outdoor cultivation development in the A (Exclusive Agriculture) District subject to obtaining an approved site plan and State licenses, shall comply with the development and performance standards A through Q, as provided in the proposed Section 19.120.080, Development and Performance Standards – Outdoor Cultivation; refer to Appendix C of this EIR for specific wording of the proposed ordinance under Option B.

All cannabis testing facilities development shall be consistent with the goals and policies of the County General Plan and with the General Plan land use category applicable to the area in which the property is located. All cannabis testing facilities development for facilities with 5 or fewer employees and no larger than 1,000 square feet in the A (Exclusive Agriculture), A-1 (Limited Agriculture), CO (Office Commercial), C-1 (Neighborhood Commercial), C-2 (General Commercial), M-1 (Light Industrial), M-2 (Medium Industrial), M-3 (Heavy Industrial), and NR (Natural Resource) Districts shall comply with the minimum standards set out in Chapter 19.80 of this title. All cannabis testing facilities development for facilities with 6 or more employees and larger than 1,000 square feet in the A (Exclusive Agriculture), A-1 (Limited Agriculture), CO (Office Commercial), C-1 (Neighborhood Commercial), C-2 (General Commercial), M-1 (Light Industrial), M-2 (Medium Industrial), M-3 (Heavy Industrial), and NR (Natural Resource) Districts shall comply with the minimum standards set out in Chapter 19.80 of this title. All cannabis testing facilities development shall comply with any additional conditions deemed necessary or appropriate by the Planning Director or the Board of Supervisors to promote the public health, safety, and welfare. All cannabis testing facilities development in the A (Exclusive Agriculture), A-1 (Limited Agriculture), CO (Office Commercial), C-1 (Neighborhood Commercial), C-2 (General Commercial), M-1 (Light Industrial), M-2 (Medium Industrial), M-3 (Heavy Industrial), and NR (Natural Resource) Districts, and cannabis testing facilities permitted, subject to securing a CUP and State license, shall comply with the development and performance standards A through P, as provided in the proposed Section 19.120.090, Development and Performance Standards – Cannabis Testing Facilities – Laboratory, Cannabis Testing, Classifying or Experimental; refer to Appendix C of this EIR for specific wording of the proposed ordinance under Option B.

All distribution facility development shall be consistent with the goals and policies of the KCGP and with the KCGP land use category applicable to the area in which the property is located. All distribution development in the A (Exclusive Agriculture), M-2 (Medium Industrial), and M-3 (Heavy Industrial) Districts shall comply with the minimum standards set out in Chapter 19.80 of this title. All distribution development shall comply with any additional conditions deemed necessary or appropriate by the Planning Director or the Board of Supervisors to promote the public health, safety, and welfare. All development in the A (Exclusive Agriculture), M-2 (Medium Industrial), and M-3 (Heavy Industrial) Districts, and greenhouses, warehouses and other structures permitted, subject to

obtaining an approved site plan and State licenses, shall comply with the development and performance standards A through S, as provided in the proposed Section 19.120.100, Development and Performance Standards – Distribution and Transport; refer to Appendix C of this EIR for specific wording of the proposed ordinance under Option B.

3.6 Entitlements Required

3.6.1 Program EIR Discretionary Actions

The Kern County Planning and Natural Resources Department, as lead agency for the proposed project, has discretionary authority. Consideration and implementation of the proposed project will require certain discretionary actions and approvals including, but not limited to, the following:

Option A

- Revoke Kern County Code of Ordinances Title 19, *Zoning*, Chapter 19.120, *Medical Marijuana Dispensaries*.
- Revoke Kern County Code of Ordinances Title 5, *Business Licenses and Regulations*, Sections 5.84, *Medical Marijuana Cooperatives or Collectives*, 5.85, *Medical Marijuana Cultivation*, and 5.86, *Moratorium on Establishment of New Medical Marijuana Dispensaries*.
- Amend Title 13, *Parks, Recreation Areas, and Public Spaces* to ban the use of cannabis and cannabis products in any County park and any public places in Kern County, as required by Proposition 64.
- Amend Title 19, *Zoning*, Chapter 19.08, *Interpretation and General Standards*, to include Section 19.08.490, *Cannabis-Related Facilities, Cultivation and Activities*.
- Consider and certify a final Environmental Impact Report (FEIR) with appropriate findings (815091 and 15093), the mitigation monitoring reporting program, and a Statement of Overriding Considerations by the Kern County Planning Commission and Kern County Board of Supervisors.
- Consider and approve at a duly noticed public hearing by the Kern County Board of Supervisors of the proposed project, including the amendments of text and exhibits for Title 19 of the Kern County Zoning Ordinance and other related ordinances.

Option B

- Revoke Kern County Code of Ordinances Title 19, *Zoning*, Chapter 19.120, *Medical Marijuana Dispensaries*.
- Revoke Kern County Code of Ordinances Title 5, *Business Licenses and Regulations*, Sections 5.84, *Medical Marijuana Cooperatives or Collectives*, 5.85, *Medical Marijuana Cultivation*, and 5.86, *Moratorium on Establishment of New Medical Marijuana Dispensaries*.
- Amend Title 13, *Parks, Recreation Areas, and Public Spaces* to ban the use of cannabis and cannabis products in any County park and any public places in Kern County, as required by Proposition 64.
- Amend the Williamson Act uniform rules to exclude cannabis crops from an allowed use to obtain a Williamson Act or Farmland Security Zone Contract, per Proposition 64.
- Adopt Chapter 19.120, *Cannabis Land Use Ordinance*.

- Adopt changes to chapters and sections within Kern County Code of Ordinances Title 19, *Zoning*, to amend language as needed to reflect the adopted Chapter 19.120, *Cannabis Land Use Ordinance*.
- Consider and certify a final Environmental Impact Report (FEIR) with appropriate findings (815091 and 15093), the mitigation monitoring reporting program, and a Statement of Overriding Considerations by the Kern County Planning Commission and Kern County Board of Supervisors.
- Consider and approve at a duly noticed public hearing by the Kern County Board of Supervisors of the proposed project, including the amendments of text and exhibits for Title 19 of the Kern County Zoning Ordinance and other related ordinances.

3.6.2 Future Entitlements

Future activities related to commercial medical and adult use cannabis cultivation, processing and packaging, distribution, testing, and retail sales may require consideration and approval from a variety of agencies, who will be CEQA responsible or trustee agencies in this environmental process. The specific responsible agencies may vary, depending upon the nature of the planned activity, location and the resources impacted by cultivation, processing, and sale activities. A preliminary list of potentially responsible and trustee agencies is provided below. These agencies would oversee future commercial cannabis activities at a project-level.

Local

- Eastern Kern County Air Pollution Control District
 - Fugitive Dust Control Plan
 - Authority to Construct
 - Permit to Operate
- San Joaquin Valley Air Pollution Control District
 - Fugitive Dust Control Plan
 - Authority to Construct
 - Permit to Operate

State

- California Department of Fish and Wildlife (CDFW)
 - Section 1600 et seq. permits (Streambed Alteration Agreements)
 - Section 2081 Permit (State-listed endangered species)
- Lahontan Regional Water Quality Control Board (Lahontan RWQCB) and Central Valley Regional Water Quality Control Board (Central Valley RWQCB)
 - National Pollutant Discharge Elimination System (NPDES) Construction General Permit
 - General Construction Stormwater Permit (Preparation of a SWPPP)
 - Regional Water Quality Certification (401 Permit)
- California Department of Transportation (Caltrans)
 - Right-of-Way Encroachment Permit
 - Oversized Loads Permit
- California Bureau of Medical Marijuana Regulation
- California Department of Consumer Affairs

- California Department of Food and Agriculture
- California Department of Pesticide Regulation
- California Board of Equalization
- California Franchise Tax Board
- California Department of Justice
- California Department of Public Health
- Industrial Welfare Commission
- California State Board of Forestry
- California Division of Occupational Safety and Health
- California Environmental Protection Agency

Other additional permits or approvals from California responsible agencies may be required for the individual project-level.

3.7 Cumulative Projects

CEQA requires that an EIR evaluate a project's cumulative impacts. Cumulative impacts are the project's impacts combined with the impacts of other related past, present and reasonably foreseeable future projects. As set forth in the CEQA Guidelines, the discussion of cumulative impacts must reflect the severity of the impacts, as well as the likelihood of their occurrence; however, the discussion need not be as detailed as the discussion of environmental impacts attributable to the project alone. As stated in CEQA, Public Resources Code, Section 21083(b) (2), "a project may have a significant effect on the environment if the possible effects of a project are individually limited but cumulatively considerable."

According to the CEQA Guidelines:

Cumulative impacts refer to two or more individual effects, which, when considered together, are considerable and which compound or increase other environmental impacts.

- (a) The individual effects may be changes resulting from a single project or a number of separate projects.
- (b) The cumulative impact from several projects is the change in the environment, which results from the incremental impact of the project when added to other closely related past, present, and reasonable foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time (California Code of Regulations [CCR], Title 14, Division 6, Chapter 3, §15355).

In addition, as stated in the CEQA Guidelines, it should be noted that:

The mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the proposed project's incremental effects are cumulatively considerable (CCR, Title 14, Division 6, Chapter 3, Section 15064[I][5]).

Cumulative impact discussions for each environmental topic area are provided at the end of each technical analysis contained within Chapter 4, under "*Impacts and Mitigation Measures*." As previously stated, and as set forth in the CEQA Guidelines, related projects consist of "closely related past, present, and reasonable foreseeable probable future projects that would likely result in similar

impacts and are located in the same geographic area” (CCR, Title 14, Division 6, Chapter 3, Section 15355).

An adequate discussion of significant cumulative impacts must include either a list of past, present, and probable future projects producing related or cumulative effects, or a summary of projections from an adopted local, regional, or statewide plan, related planning document, or related environmental document that describes conditions contributing to the cumulative effect (CEQA Guidelines Section 15130(b)(1)). The cumulative analysis in this Program EIR uses the plan/projection approach, and includes both the KCGP and the regional growth plan and projections included in the Kern Council of Governments (COG) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) approved in 2014.

Section 4.1

Aesthetics

Section 4.1 Aesthetics

4.1.1 Introduction

This section of the Draft Environmental Impact Report (EIR) discusses impacts associated with the implementation of the Kern County Cannabis Land Use Ordinance Project (proposed project) to potentially degrade the existing visual character or quality of Kern County (County) and its surroundings through changes in the existing landscape. Potential effects are evaluated relative to important visual features (e.g., scenic highways, scenic features) and the existing visual landscape and its users.

Aesthetics, as addressed in the California Environmental Quality Act (CEQA), refers to visual considerations in the physical environment. Because a person's reaction and attachment to a given viewshed are subjective, visual changes inherently affect viewers differently. Accordingly, aesthetics analysis, or visual resource analysis, is a systematic process to logically assess visible change in the physical environment and the anticipated viewer response to that change. Degradation of the visual character of a site is typically addressed through a qualitative evaluation of the changes to the aesthetic characteristics of the existing environment, and the project-related modifications that would alter the visual setting.

Visual Resource Terminology and Concepts

When viewing the same landscape, people may have different responses to that landscape and any proposed visual changes, based upon their values, familiarity, concern, or expectations for that landscape and its scenic quality. Because each person's attachment to and value for a particular landscape is unique, visual changes to that landscape inherently affect viewers differently. However, generalizations can be made about viewer sensitivity to scenic quality and visual changes. Recreational users (e.g., hikers, equestrians, tourists, and people driving for pleasure) are expected to have high concern for scenery and landscape character. People who are commuting daily through the same landscape generally have a moderate concern for scenery, while people working at industrial sites generally have a lower concern for scenic quality or changes to existing landscape character. The visual sensitivity of a landscape is affected by the viewing distances at which it is seen, such as close-up or far away. The visual sensitivity of a landscape also is affected by the travel speed at which a person is viewing the landscape (high speeds on a highway, low speeds on a hiking trail, or stationary at a residence).

The same feature of a project can be perceived differently by people depending on the distance between the observer and the viewed object. When a viewer is closer to a viewed object in the landscape, more detail can be seen, and there is greater potential influence of the object on visual quality because of its form or scale (relative size of the object in relation to the viewer). When the same object is viewed at background distances, details may be imperceptible but overall forms of terrain and vegetation are evident, and the horizon and skyline are dominant. In the middleground, some detail is evident (e.g., the foreground), and landscape elements are seen in context with landforms and vegetation patterns (e.g., the background).

The following terms and concepts are used in the discussion below to describe and assess the aesthetic setting and impacts from the proposed project.

Scenic Vista

An area that is designated, signed, and accessible to the public for the express purposes of viewing and sightseeing. This includes any such areas designated by a federal, State, or local agency.

Scenic Highway

Any stretch of public roadway that is designated as a scenic corridor by a federal, State, or local agency.

Sensitive Receptors

Viewer responses to visual settings are inferred from a variety of factors, including distance and viewing angle, types of viewers, number of viewers, duration of view, and viewer activities. The viewer type and associated viewer sensitivity are distinguished among project viewers in recreational, residential, commercial, military, and industrial areas. Viewer activities can range from a circumstance that encourages a viewer to observe the surroundings more closely (such as recreational activities) to one that discourages close observation (such as commuting in heavy traffic). Viewers in recreational areas are considered to have high sensitivity to visual resources. Residential viewers generally have moderate sensitivity but extended viewing periods. Viewers in commercial, military, and industrial areas are considered to have low sensitivity.

Viewshed

The viewshed for a project is defined as the surrounding geographic area from which the project is likely to be seen, based on topography, atmospheric conditions, land use patterns, and roadway orientations. “Project viewshed” is used to describe the area surrounding a project site where a person standing on the ground or driving a vehicle can view the project site.

The following terms and concepts are typically used in the discussion below to describe and assess the aesthetics setting for the proposed project. Because this is a program EIR, viewsheds are discussed within the context of Countywide or region-wide, and there are no Key Observation Points (KOPs).

- **Color:** The hue (e.g., red, brown,) and value (e.g., light, dark) of the light reflected by objects in the visual landscape.
- **Contrast:** The opposition or unlikeness of different forms, lines, colors, or textures in a landscape.
- **Form:** The visual mass, bulk, or shape of an object or objects in the visual landscape that appear unified. This element of visual character is usually the strongest.
- **Line:** The well-defined edges of shapes or masses created in the visual landscape by horizons, silhouettes, or human-made features. This element of visual character is usually the second strongest.
- **Texture:** The apparent surface coarseness of the visual landscape caused by the aggregation or density of surface features and vegetation (e.g., fine, medium, coarse). This element of visual character is usually the least dominant.
- **Viewshed:** The landscape that can be directly seen under favorable atmospheric conditions, from a viewpoint or along a transportation corridor.

- **View Corridor:** A view corridor is typically defined as the line of sight of an observer from a public viewpoint, looking toward an object of significance to the community (e.g., ridgeline, river, historic building) or as the route that directs the viewer's attention.
- **Visual (Sensitive) Receptor:** Any scenic vista, designated scenic highway, residence, or public recreational area located within the project viewshed that provide people with views of a site.

Visual character typically consists of the landforms, vegetation, water features, and cultural modifications that impart an overall visual impression of an area's landscape. Scenic areas typically include open space, landscaped corridors, and viewsheds. Visual character is influenced by many different landscape attributes including color contrasts, landform prominence, repetition of geometric forms, and uniqueness of textures among other characteristics.

4.1.2 Environmental Setting

Regional Character

Kern County is bounded by Kings, Tulare, and Inyo counties on the north, San Bernardino County on the east, Los Angeles and Ventura counties on the south, and Santa Barbara and San Luis Obispo counties on the west (refer to Figure 3-1, *Regional Vicinity*, and Figure 3-2, *Project Location*). Kern County is California's third largest county in land area, encompassing 8,202 square miles, with a width of approximately 67 miles and a length of approximately 120 miles. The geography of Kern County is diverse and consists of three general areas or regions – Valley Region, Mountain Region, and Desert Region.

Valley Region

The San Joaquin Valley is located in the central portion of the County and is bounded by several mountain ranges which intersect forming a horseshoe shaped valley. The Kern County General Plan (KCGP) describes the San Joaquin Valley region as “the southern San Joaquin Valley below an elevation of 1,000 feet mean sea level” within Kern County. The elevations of the valley range from 206 feet above mean sea level (amsl) to 1,000 feet amsl; the lowest point in the County is 206 feet amsl.

The Valley region includes the Bakersfield metropolitan area, the dominant urban area in Kern County, as well as the cities of Taft, Delano, Shafter, Arvin, McFarland, Maricopa, and Wasco. Within unincorporated Kern County, other major land uses in the region include agriculture, oil extraction and production, and undeveloped land.

The landscape of the Valley Region is mostly flat, lacking significant topographic relief, and tends to be visually monotonous because of the repetitive expanse of agricultural and extractive land uses. There is little variety of vegetative covers (i.e., grazing grasses, croplands, solitary trees, and residential landscaping) and few panoramic views.

There are viewsheds, however, that do afford visual receptors minor topographic relief in the form of mountainous terrain along the eastern, western, and southern edges of the San Joaquin Valley. These topographical elements are physiographically separated from the flat Valley floor; their summits and ridgelines are important focal points throughout Kern County and are an excellent example of how adjacent scenery can enhance the visual quality of a landscape devoid of topographic relief and contribute positively to the area's scenic quality. From certain vantage points, as one nears the edges

of the Valley floor, mountainous topographic features rise abruptly from the ground plane, adding visual variety and dramatic focal points; this is considered high quality adjacent scenery.

Over the years, Kern County has experienced a great deal of urbanization, resource extraction, and renewable energy development. Urbanization has resulted in the introduction of numerous man-made modifications into the viewshed, including residential, commercial, and industrial uses; roadways and highways; and utilities to support development. In addition, mineral, oil, and natural gas extraction and agricultural activities are common to the region. Common visual elements include oil wells, storage tank batteries, access roads, utility infrastructure, barns and other agricultural-related buildings tend to dominate the visual landscape in the western Valley region. In general, the aesthetic features of the regional visual environment are relatively uniform, with broad, flat landscapes leading to distant mountains and interspersed with urban, rural, and industrial development in varying densities and intensities.

Mountain Region

The mountain areas, from east to west, include the Sierra Nevada Mountains, Tehachapi Mountains, San Emigdio Range, Temblor Range, and parts of the Coast Range. The elevation of these mountain ranges average between 4,000 and more than 8,000 feet amsl; the highest point in the County is 8,831 feet amsl at the summit of Mount Pinos.

In the middle of this rugged high desert and mountainous terrain of the region are the valleys of Tehachapi, Cummings, Brite, and Bear. The higher elevations of the region support a variety of forests which contain predominantly evergreen tree species. Lower elevations support dense brush and Pinyon pines on lower slopes, as well as oak trees, willows, grasses and shrubs in flatter areas and on canyon bottoms. The easterly portion of the region fronts the Mojave Desert and is sparsely forested at higher elevations while lower elevations support chaparral, pinyon pine, and juniper tree species.

Existing development in the area consists largely of rural and semi-rural communities spread throughout the region. Population densities are generally low, with most housing consisting of single-family homes. The largest community in the region is the city of Tehachapi.

Desert Region

The western Mojave Desert, including Indian Wells Valley and Antelope Valley, is located in the eastern portion of Kern County, east of the Sierra Nevada and Tehachapi ranges and south of the Tehachapi ranges.

Antelope Valley encompasses approximately 2,400 square miles in northern Los Angeles County, southern Kern County, and western San Bernardino County. Antelope Valley is on the south side of the Tehachapi Mountains, and is dominated by desert vegetation. Topography is relatively flat, but elevations gradually rise towards the northwest. The topographic characteristics of the region allow for open, expansive views of hills and mountains to the north and south of the valley. These include the Tehachapi Mountain Range to the north, Fairmont Butte and Antelope Butte to the south-southeast, and the Transverse Ranges to south. Portions of the Antelope Valley close to the cities of Lancaster and Palmdale have seen substantial urban development in recent decades; however, this urbanization has not affected the more northerly areas of the desert region within Kern County.

Indian Wells Valley is located along U.S. Route (US) 395 in northeastern Kern County, adjacent to the China Lake Naval Air Weapons Station (NAWS). The Indian Wells Valley is surrounded by four

mountain ranges; the Sierra Nevada on the west, the Cosos on the north, the Argus Range on the east, and the El Paso Mountains on the south. It is approximately 82 miles from the Lancaster/Palmdale area and approximately 145 miles from both Bakersfield and San Bernardino, the three nearest major urban centers.

Land uses in the Desert Region include a mix of vacant land, agriculture, low-density residential uses, recreational and public facilities, and nature preserves. The region has experienced significant growth of man-made features, particularly powerlines. High-tension transmission corridors are found in several areas, and additional similar uses are underway or planned. A major regional Southern California Edison (SCE) transmission corridor containing multiple 500-kV and 220-kV lines with lattice towers traverses the desert region. Several existing wind farm developments are located in the Desert Region. These structures, which typically rise over 100 feet in height, dominate views from some viewpoints in the area and limit or interrupt the visibility of hills located in the distance. These windmills also impact the night sky, with flashing lights scattered throughout the wind farms, which total more than 65,000 acres. Due to the area's predominant low-lying desert vegetation, scattered farm areas and overall limited topography in the area's landscape and visual character lacks distinct qualities, and no unique aesthetic features or scenic resources have been identified in the region.

Developed Recreational Facilities

County Parks

The Kern County Parks and Recreation Department manages an extensive system of regional parks designed to serve the Countywide population and small neighborhood and community parks primarily intended to meet the recreational needs of nearby residents in unincorporated communities. According to the Kern County Parks and Recreation Department, these facilities include eight regional parks, 40 neighborhood parks, 25 public buildings, and three golf courses. Including incorporated areas, Kern County contains 4,726 acres of park land with 4,282 acres of regional parks and 389 acres of local neighborhood parks, both leased and owned by the County.

State Parks

The California Department of Parks and Recreation owns, maintains, and operates one State park (Red Rock Canyon) two State historic parks (Fort Tejon and Tomo-Kahni), and one State reserve (Tule Elk) within Kern County.

National Parks, Forests, Trails and Monuments

National parks and trails within Kern County include but are not limited to the following.

Pacific Crest National Scenic Trail

This hiking trail stretches north-south through the Pacific States and traverses Kern County along the desert side of the Sierra Nevada and Tehachapi Mountains. It provides a variety of scenic experiences for the hiker.

Carrizo Plain National Monument

The Carrizo Plain National Monument (CPNM) is located in California's southern Coast Range, in western Kern County. The CPNM is managed by the Bureau of Land Management (BLM), the Nature Conservancy, and the California Department of Fish and Wildlife. The 250,000-acre facility was established by presidential proclamation in 2001 to preserve unique San Joaquin Valley saline and fault zone habitats and related biological and geological resources.

Kern National Wildlife Refuge

This site is located about 18 miles west of Delano and preserves a small portion of the San Joaquin Valley wetlands as a refuge primarily for waterfowl, although the area also preserves habitat for other forms of wildlife. While the area is limited in unique visual value, it does provide a look at the past not evident in many other Valley sites.

Bittercreek National Wildlife Refuge

The Bitter Creek National Wildlife Refuge is located in the southwestern San Joaquin Valley foothills. Purchased to protect the California condor, the Bitter Creek Refuge also provides habitat for a number of Federally-listed endangered species.

Sequoia National Forest

This is one of 18 National Forests in California located northeast of Bakersfield. Being at the southern end of the Sierra Nevada Mountains, this reserve affords visitors scenic mountain vistas.

Los Padres National Forest

The Forest was established in 1898 as a forest reserve for the purpose of protecting vital watersheds and ensuring a continuous flow of water for developing communities. The mountains of the Transverse and Coast Ranges provide scenic views in Los Padres National Forest.

Scenic Highways

There are no officially designated national byways within Kern County (U.S. Department of Transportation Federal Highway Administration [FHWA], 2017). There are no officially designated State Scenic Highways within Kern County (California Department of Transportation [Caltrans], 2016). The California Scenic Highway Program identifies State Route (SR) 14 north of Mojave, SR-58 east of Mojave, and SR-41 in the northwest corner of the County, as Eligible State Scenic Highways.

Kern County has the discretion to designate local scenic routes if circumstances warrant such designation. The KCGP EIR identifies several scenic routes within Kern County. The following discusses the County-identified scenic routes.

State Route 14/U.S. Route 395

The scenic route runs from north of Mojave to the Inyo County line. This route passes through the Desert Region of Kern County with the Sierra Nevada on the west side and the Mojave Desert along the east. Of particular interest is Red Rock Canyon State Park.

State Route 58

SR-58 is identified within the KCGP as a scenic route and is described in two sections: (1) from the Valley Region east, through the Mountain Region, to Mojave; and (2) from Mojave east to the County line. The first portion of the scenic route runs from Comanche Drive east of Bakersfield to SR-14 at Mojave. This route begins in the agricultural area of the Valley Region, passes through grassland foothills of the Sierra Nevada and Tehachapi Mountains, past the City of Tehachapi in the Mountain Region, the wind farms east of the City of Tehachapi and onto the Desert Region, north of Mojave. The second portion of the scenic route runs on east side of Mojave to San Bernardino County line. This portion of the route is entirely within the Desert Region and passes through areas of broad vistas marked by an occasional desert butte.

State Route 41

The scenic route is located at the northwest corner of County between Kings County and San Luis Obispo County Lines. This is a relatively short route, reached only from outside the County, and passes through an oak woodland canyon within the County portion.

Bakersfield-Glennville Road, Granite Road, State Route 155

The scenic route is north of Bakersfield at James Road, through Glennville and Alta Sierra to Wofford Heights. This route is characterized by the rolling Sierra Nevada foothills, oak trees in a park-like setting, distinctive granite outcroppings, spring wildflower displays, tall conifers set at elevations of 6,000'+ and Lake Isabella.

State Route 223

The scenic route is located between the east side of Arvin and State Highway 58 at Caliente. This relatively short route passes from the agricultural lands east of Arvin and through the Tehachapi Mountain foothills. Spring wildflower displays are among the best in the State. Bear Mountain provides a dramatic backdrop to the route.

State Route 178

The scenic route runs from Alfred Harrell Highway east of Bakersfield to State Highway 14. This route begins in the foothills east of Bakersfield, passes through the dramatic Kern River Canyon up to Lake Isabella, skirts the south side of the Lake, proceeds through Weldon and Onyx to Walker's Pass at an elevation of about one-mile and then descends rapidly into the high desert.

Alfred Harrell Highway-Comanche Drive

The scenic route runs along Alfred Harrell Highway at Panorama Drive in Bakersfield, past State Highway 178 and along Comanche Drive to State Highway 58. This suburban route is located along the south side of the Kern River and passes the most active large recreation area in the Valley portion of the County.

Interstate 5, Frazier Mountain Park Road, Cuddy Valley Road, Mil Potrero Road, Cerro Noroeste Road, State Route 33

The scenic route runs between Grapevine on I-5 to Maricopa on State Highway 33. A wide variety of visual experiences are passed on this route beginning at the south end of the San Joaquin Valley, up through Grapevine Canyon and through Lebec, Frazier Park, Cuddy Valley, Pine Mountain Club and the Bitter Creek National Wildlife Refuge before descending Grocer Grade to Maricopa.

Bena Road, Bealeville Road, Caliente-Bodfish Road

The scenic route runs from Comanche Road through Caliente to State Highway 58. This route passes through the lower Sierra Nevada foothills, along Caliente Creek and, by slight detour, to the town of Caliente. It passes through some of the best spring wildflower hills in the southern Valley.

Caliente-Bodfish Road, Caliente Creek Road, Walker Basin Road, Johns Road, Williams Road, Daily Road, Walser Road, Caliente-Bodfish Road to Bodfish

By following the portion of the Caliente-Bodfish Road between Walker Basin and Caliente this route becomes a loop trip. It passes through steep canyons of sycamore and pine, out onto a high plateau with juniper and oak, and through the historic County seat at Havilah.

Light and Glare

Lighting effects are associated with the use of artificial light during the evening and nighttime hours. There are two primary sources of light: light emanating from building interiors passing through windows and light from exterior sources (i.e., street lighting, building illumination, security lighting, parking lot lighting, landscape lighting, and signage). Light introduction can be a nuisance to adjacent residential areas, diminish the view of the clear night sky, and if uncontrolled, can cause disturbances. Uses such as residences and hotels are considered light sensitive, since occupants have expectations of privacy during evening hours and may be subject to disturbance by bright light sources. Light spill is typically defined as the presence of unwanted light on properties adjacent to the property being illuminated. With respect to lighting, the degree of illumination may vary widely depending on the amount of light generated, height of the light source, presence of barriers or obstructions, type of light source, and weather conditions.

Glare is primarily a daytime occurrence caused by the reflection of sunlight or artificial light on highly polished surfaces such as window glass or reflective materials and, to a lesser degree, from broad expanses of light-colored surfaces. Perceived glare is the unwanted and potentially objectionable sensation as observed by a person as they look directly into the light source of a luminaire. Daytime glare generation is common in urban areas and is typically associated with buildings with exterior facades largely or entirely comprised of highly reflective glass. Glare can also be produced during evening and nighttime hours by the reflection of artificial light sources such as automobile headlights. Glare generation is typically related to either moving vehicles or sun angles, although glare resulting from reflected sunlight can occur regularly at certain times of the year. Glare-sensitive uses include residences, hotels, transportation corridors, and aircraft landing corridors.

Valley Region

Light sources in the Valley region are primarily in urbanized areas, where domestic lighting and street lighting are common. Major facilities in rural areas, such as airports and water treatment facilities, are also significant lighting sources. In areas away from such facilities, lighting in rural areas is generally limited to passing vehicular traffic on area roadways and fixtures at scattered residences.

Mountain Region

Light sources in the Mountain region are limited and primarily come from rural and semi-rural communities spread throughout the region. The largest concentration of lighting in the region comes from the city of Tehachapi. Lighting in rural areas is generally limited to passing vehicular traffic on area roadways.

Desert Region

There are very few light sources in the desert region due to a lack of development in the region. Lighting is generally limited to passing vehicular traffic on area roadways and fixtures at the scattered

residences in the area. Because of limited development in the region, many roadways in desert region are unpaved and none have improvements such as street lights or sidewalks. There are substantial wind and solar energy projects, more than 65,000 acres, in place or planned in the region that generate nighttime lighting. Nighttime lighting in oil and gas production areas also occurs, as does the use of a limited number of flares (which are more visible at night).

4.1.3 Regulatory Setting

This regulatory framework identifies the federal, State, regional, and local statutes, ordinances, or policies that govern the light, glare, viewshed, and scenic character that must be considered by Kern County during the decision-making process for projects that have the potential to affect aesthetics.

Federal

As explained in Section 3.2, *Regulatory History and Background*, even though cannabis is “decriminalized” under State law, and even with the U.S. Department of Justice (USDOJ) issuance of memoranda guiding federal law enforcement related to cannabis activities within jurisdictions that have legalized cannabis, cannabis activities continue to be illegal at the federal level and subject to the prosecutorial discretion of the federal government.

National Scenic Byways Program

The National Scenic Byways program is part of the U.S. Department of Transportation, Federal Highway Administration (FHWA). The program was established under the Intermodal Surface Transportation Efficiency Act of 1991 and was reauthorized in 1998 under the Transportation Equity Act for the 21st Century. Under the program, the U.S. Secretary of Transportation recognizes certain roads as National Scenic Byways or All-American Roads based on their archaeological, cultural, historic, natural, recreational, or scenic qualities. There are no National Scenic Byways or All-American Roads located within Kern County.

U.S. Department of Agriculture, Forest Service

The National Trails System Act (NTSA) of 1969 seeks to preserve scenic and natural qualities along trails and recognizes the rights of private landowners and provides that “full consideration shall be given to minimizing the adverse effects upon the adjacent landowner or user and his operation” in the development and use of a trail (National Park Service [NPS], 2009).

The NTSA assigns management responsibility for trails to various federal resource agencies, depending on which agency holds jurisdiction over the public lands on which the trail is located in a given area (U.S. Forest Service, U.S. Park Service, or BLM). The Pacific Crest Trail was created under the NTSA to provide for outdoor recreation opportunities and the conservation of significant scenic, historic, natural, or cultural qualities. The PCT stretches 2,650 miles from Mexico to Canada through California, Oregon, and Washington and is designated in the KCGP as a scenic feature. The U.S. Forest Service (USFS) administers the PCT within the County.

State

California Environmental Quality Act (CEQA)

CEQA Guidelines define a “significant effect” on the environment to mean a “substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by

the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance" (California Code of Regulations [CCR], Title 14, § 15382, 2010).

California Department of Transportation (Caltrans)

The California Department of Transportation (Caltrans) manages the California Scenic Highway Program, which was created in 1963 by the California legislature to preserve and protect scenic highway corridors from changes that would diminish the aesthetic value of lands adjacent to highways. The program includes a list of highways that are eligible for designation as scenic highways or have been designated as such. A highway may be designated as scenic based on certain criteria, including how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes on the traveler's enjoyment of the view. State laws governing the Scenic Highway Program are found in the Streets and Highways Code, Sections 260 through 263.

The County does not contain Designated State Scenic Highways or scenic resources. However, the County does include segments of three Eligible State Scenic Highways consisting of SR-14 north of Mojave, SR-58 east of Mojave, and an approximately 5-mile-long segment of SR-41, which crosses through the extreme northwest corner of the project site.

Local

Kern County General Plan (KCGP)

The Land Use, Open Space, and Conservation Element of the KCGP evaluates the visual and aesthetic setting of Kern County and assesses the potential for visual impacts. The KCGP Circulation Element provides guidelines for development near Scenic Routes. A Scenic Route is defined in the KCGP as any freeway, highway, road, or other public right-of-way which traverses an area of exceptional scenic quality. A roadway can only be designated as a Scenic Route by direct action of the Kern County Board of Supervisors or the State of California. A route may not be selected as scenic until a visual assessment has been conducted to determine if the route meets the current scenic highway criteria as mentioned above, and to what extent development has encroached on the scenic views. In addition, the County must prepare and adopt a plan and program for the protection and enhancement of adjacent roadside viewshed land.

The project would be subject to applicable policies and measures of the KCGP. The KCGP contains additional policies, goals, and implementation measures that are more general in nature. Therefore, they are not listed below, but, as stated in Chapter 2, Introduction, all policies, goals, and implementation measures in the KCGP are incorporated by reference. The Land Use, Open Space, and Conservation Element of the KCGP include the following policies and implementation measures related to aesthetics and visual resources that would apply to the project:

Chapter 1. Land Use, Open Space, and Conservation Element

Section 1.4 Public Facilities and Services

Implementation Measures

- **Implementation Measure E.** Continue to establish coordinated efforts between government entities and private enterprise to identify and preserve unique scenic qualities of existing natural resources and to enhance the image of the County as a whole.

*Section 1.7 Commercial*Implementation Measures

- **Implementation Measure F.** Proposed commercial developments shall demonstrate compatibility with adjacent residential development through:
 - i. Attention to noise impacts
 - ii. Reduction or minimization of light and glare
 - iii. Buffering of residential from the commercial development through use of walls, landscaping, etc.
 - iv. Placing loading/unloading areas as far as practicable from residences.

*Section 1.8 Industrial*Policies

- **Policy 7.** Require that industrial uses provide design features such as screen walls, landscaping, increased height and/or setbacks, and lighting restrictions between the boundaries of adjacent residential land use designations so as to reduce impacts on residences due to light, noise, sound, and vibration.

*Section 1.9 Resource*Policies

- **Policy 24.** Urban residential or commercial development on property contiguous to property designated Map Code 8.1 (Intensive Agriculture) should employ landscaping, lot size, open space buffering, increased building setbacks, or other techniques to reduce the potential for land use conflicts when it can be demonstrated that such measures will provide for public welfare and benefit and promote continued agricultural uses.

*Section 1.10.7 Light and Glare*Policies

- **Policy 47.** Ensure that light and glare from discretionary new development projects are minimized in rural as well as urban areas.
- **Policy 48.** Encourage the use of low-glare lighting to minimize nighttime glare effects on neighboring properties.

Implementation Measures

- **Implementation Measure AA.** The County shall utilize CEQA Guidelines and the provisions of the Zoning Ordinance to minimize the impacts of light and glare on adjacent properties and in rural undeveloped areas.

*Section 1.10.8 Smart Growth*Policies

- **Policy 49.** Discretionary development projects should be encouraged to incorporate innovative or “smart growth” land use planning techniques as design features, as follows:
 - a. Higher Density development, where compatible, to maximize the efficient use of land.

- b. Mixed use developments that promote reduced vehicle trips by having residential, commercial, and public uses proximate to each other.
- c. Variety of housing types, including those using energy efficient design, and densities to address Kern County's housing needs.
- d. Master planned communities that feature interconnected roads, transit stops, sidewalks, landscaping, and trails to encourage efficient vehicle and pedestrian movement.
- e. Compact development that conserves open space, agricultural land, flood prone areas, creeks, hillsides, ridge tops, wetlands, and other natural features.
- f. Adequate infrastructure (i.e. roads, sewer, water, parks, etc.) is provided as a condition of development approval by the project proponent.
- g. Aesthetically pleasing and unifying design features that promote a visually pleasing environment.

Section 1.10.10 Oak Tree Conservation

Policies

- **Policy 66.** Promote the conservation of oak tree woodlands for their environmental value and scenic beauty.

Implementation Measures

- **Implementation Measure LL.** The following applies to development of parcels having oak tree canopy cover of less than ten percent (10%), but containing individual oak trees equal to or greater than a 12-inch diameter trunk at 4.5 feet breast height.
 - a. Such trees shall be identified on plot plans.
 - b. Discretionary development shall avoid the area beneath and within the trees unaltered drip line unless approved by a licensed or certified arborist or botanist.
 - c. Specified tree removal related to the discretionary action may be granted by the decision-making body upon showing that a hardship exists based on substantial evidence in the record.

Chapter 2. Circulation Element

Section 2.3.9 Scenic Route Corridors

Goals

- To Safeguard values while improving the County's image.
- To preserve a network of scenic routes interconnection much of the scenic land in the County. Benefits from the establishment of scenic corridor protection measures will accrue to the County as a whole.

Implementation Measure

- **Implementation Measure D.** The County has adopted a Scenic Corridor (SC) Combining District to designate areas which contain unique visual and scenic resources as viewed from a major highway or freeway and for the regulation of off-site advertising signs, where the siting of such signs need to be reviewed on a case-by-case basis to safeguard the scenic

qualities of the natural environment and the visual qualities of primary entranceways into the County.

Kern County Specific Plans

Kern County has adopted 39 Specific Plans, 10 Rural Community Plans, and 14 Interim Rural Community Plan Maps. The Specific Plans and Rural Community Plans are intended to be an amplification of the goals and policies of the KCGP and are, therefore, consistent therewith. Interim Rural Community Plan Maps are areas where a specific plan has not been formally adopted, thus the goals and policies of the KCGP govern these areas. Future commercial cannabis cultivation, processing/packaging, and sales activities that would be authorized under the proposed project that would be located within the boundary of an adopted Specific Plan would be regulated according to County zoning.

Kern County Zoning Ordinance (Title 19 of the Kern County Code of Ordinances)

Chapter 19.74, Scenic Corridor (SC) Combining District

Chapter 19.74 of the Zoning Ordinance establishes a Scenic Corridor (SC) Combining District. This zoning district is intended to protect areas with unique visual and scenic resources from intrusion by excessive or inappropriate forms of signage by requiring additional review by the Planning and Natural Resources Department.

Chapter 19.81, Dark Skies Ordinance (Outdoor Lighting)

Kern County approved a Dark Skies Ordinance in November 2011. The purpose of this ordinance is to maintain the existing character of Kern County by requiring a minimal approach to outdoor lighting, recognizing that excessive illumination can create a glow that may obscure the night sky and excessive illumination or glare may constitute a nuisance. The ordinance provides requirements for outdoor lighting within specified unincorporated areas of Kern County to accomplish the following objectives:

- **Objective 1:** Encourage a safe, secure, and less light-oriented nighttime environment for residents, businesses, and visitors.
- **Objective 2:** Promote a reduction in unnecessary light intensity and glare and reduce light spillover onto adjacent properties.
- **Objective 3:** Protect the ability to view the night sky by restricting unnecessary upward projections of light.
- **Objective 4:** Promote a reduction in the generation of greenhouse gases by reducing wasted electricity that can result from excessive or unwanted outdoor lighting.

Metropolitan Bakersfield General Plan (MBGP)

The MBGP, a joint effort between the Kern County Planning Department and the City of Bakersfield Planning Division, was last adopted on December 11, 2007. The MBGP includes both city and unincorporated County lands. The MBGP describes the community's physical development as well as its economic, social and environmental goals and is currently undergoing an update. Project-related development on unincorporated lands within the MBGP Planning Area would be subject to the following applicable policies and implementation measures of the MBGP, with respect to aesthetics.

Chapter II. Land Use Element

Goals

- **Goal 3.** Accommodate new development which is compatible with and complements existing land uses.
- **Goal 7.** Establish a built environment which achieves a compatible functional and visual relationship among individual buildings and sites.

Policies

- **Policy 21.** Encourage a separation of at least one-half mile between new commercial designations.
- **Policy 26.** Encourage adjacent commercial land uses to be of compatible height, setback, color and materials.
- **Policy 28.** Require that commercial development provide design features such as screen walls, landscaping and height, setback and lighting restrictions between the boundaries of adjacent residential land use designations so as to reduce impacts on residences due to noise, traffic, parking, and differences in scale.
- **Policy 30.** Street frontages along all new commercial development shall be landscaped.
- **Policy 35.** Encourage upgrading of visual character of heavy manufacturing industrial areas through the use of landscaping or screening-of visually unattractive buildings and storage areas.
- **Policy 36.** Require that industrial uses provide design features, such as screen walls, landscaping and height, setback and lighting restrictions between the boundaries of adjacent residential land use designations so as to reduce impacts on residences due to light, noise, sound and vibration.
- **Policy 37.** Street frontages along all new industrial development shall be landscaped.
- **Policy 73.** Encourage the establishment of design programs which may include signage, street furniture, landscape, lighting, pavement treatments, public art, and architectural design.
- **Policy 85.** Encourage the revitalization of deteriorated land uses and buildings.

Implementation Measures

- **Implementation Measure 7.** Environmental Review. Local guidelines for project processing shall reflect California Environmental Quality Act (CEQA) Guidelines which state that the environmental effects of a project must be taken into account as part of project consideration.
- **Implementation Measure 8.** Design Review. The goals, objectives, policies, and standards contained in the Land Use Element encourage architectural and site compatibility in designated areas. Procedures of the respective jurisdictions will provide the vehicle by which the concept is implemented. These procedures should encourage the use of various water elements, private courtyards, and landscaped spaces to provide enhanced opportunities for formal and informal leisure use and activities.

4.1.4 Impacts and Mitigation Measures

This section describes the impact analysis relating to aesthetics for the proposed project. It describes the methods used to determine the impacts of the proposed project and lists the thresholds used to conclude whether an impact would be significant. Measures to mitigate (i.e., avoid, minimize, rectify, reduce, eliminate, or compensate for) significant impacts accompany each impact discussion, where applicable.

Methodology

In general, the potential aesthetic character, quality, light, and glare impacts associate with projects are evaluated on a qualitative basis. The potential impacts from the proposed project to visual resources were qualitatively evaluated at the program level, based on the following criteria: (1) existing visual quality and scenic attributes of the regional landscape (i.e., Valley, Mountain, Desert regions); (2) assumptions about receptors' concern for scenery and sensitivity to changes in the regional landscape; (3) the magnitude of visual changes in the regional landscape that would occur as a result of the proposed project; (4) compliance with State, County, and local policies for visual resources; and (5) the significance threshold questions in relation to aesthetics contained in Kern County's CEQA Implementation Document and Environmental Checklist.

Sensitive Viewers

Visual sensitivity can be described as viewer awareness of visual changes in the environment and is based on the viewers' perspective while engaging in activities from public areas near a particular site. Viewer sensitivity or concern is based on the visibility of resources in the landscape, the proximity of viewers to visual resources, the elevational position of viewers relative to visual resources, the frequency (e.g., daily or seasonally) and duration of views (e.g., how long a scene is viewed), the number of viewers, and the type of expectations of individuals and viewer groups. Viewer sensitivity is often higher for views seen by people who are driving for pleasure; people engaging in recreational activities, such as hiking, biking, or camping; and homeowners. Viewer sensitivity tends to be lower for views seen by people driving to and from work or as part of their work (USFS, 1995; FHWA, 2015). Views from recreation trails and areas, scenic highways, and scenic overlooks are generally assessed as having high viewer sensitivity.

Various types of users can currently view the project site. Generally, the closer a resource is to the viewer, the more dominant it is and the greater its importance to the viewer. Also, resources that are higher in elevation than the viewer tend generally to take on greater visual importance than resources located at a lower elevation than the viewer.

Viewers within unincorporated Kern County include residents; recreational users (most notably users of the various federal, State, and local parks, forests, and trails); and travelers and commuters that are moving within and through the County. In many areas of the County, development activities would be visible to sensitive viewer groups with moderately high to high concern for aesthetic impacts because it would be visible from residences, parks, and open space areas. In other more remote and less populated areas of the County where there is little public access, the proposed project would have little or no effect on sensitive viewers because the volume, frequency, and duration of views of the proposed project would be low and viewers primarily would be people driving to and from work or as part of their work.

Development Standards Related to Aesthetics

Option A

Option A of the proposed project would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Therefore, no development standards are identified in the proposed Zoning Ordinance; refer to Appendix B for specific wording of the proposed ordinance under Option A.

Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, cannabis testing, and retail cannabis stores with or without mobile delivery facilities. Development standards provided in the proposed Zoning Ordinance, that pertain to aesthetics include, but are not limited to, the following (refer to Appendix C for specific working of the proposed ordinance under Option B):

- All cannabis facilities must be 0.5 mile from any school, park, day care center or youth center.
- The applicant must demonstrate compliance with all applicable mitigation measures prior to the issuance of a grading or building permit for any future cannabis related facility.
- No cannabis related facility shall have a private patio or café seating.
- The entire property, including the parking and landscaped areas, shall be lighted such that all areas are clearly visible at all times during business hours and shall comply with the Dark Skies Ordinance.
- All entrances to the future cannabis facility shall be clearly marked and legibly posted. No minors or adults below the age of 21 years old will be allowed on the premises.
- Signs attached to a building or wall must not protrude more than 18 inches from the wall of the building, must not exceed 10 feet in height, and must not produce a glare on other properties.
- Screening and fencing, as well as razor wire, shall be finished in a muted earth tone that blends with the surrounding natural landscape and shall not be constructed of temporary materials.
- Trash dumpsters shall be enclosed by a screening enclosure.

Thresholds of Significance

The Kern County CEQA Implementation Document and Kern County Environmental Checklist identify the following criteria, as established in Appendix G of the CEQA Guidelines, to determine if a project could potentially have a significant impact if it would:

- Have a substantial adverse effect on a scenic vista;
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway;
- Substantially degrade the existing visual character or quality of the site and its surroundings; or

- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

Project Impacts

Impact 4.1-1: Have a Substantial Adverse Effect on a Scenic Vista

There are no National or State-designated scenic highways or byways within Kern County; however, SR-14 north of Mojave, SR-58 east of Mojave, and SR-41 in the northwest corner of the County are identified as Eligible State Scenic Highways (Caltrans, 2016). The KCGP identifies 12 scenic routes within the County, most of which traverse multiple regions within the County; refer to Section 4.1.2, *Environmental Setting*, for complete descriptions of these routes. General programmatic impacts to scenic routes are evaluated under Impact 4.1-2.

Scenic vistas may generally be described in two ways: panoramic views (visual access to a large geographic area, for which the field of view can be wide and extend into the distance) and focal views (visual access to a particular object, scene, setting, or feature of interest). Panoramic views are typically associated with vantage points that provide a sweeping geographic orientation not commonly available. Examples of panoramic views include valleys, mountain ranges, or large bodies of water. Focal views include views of proximate natural landforms (e.g., rock formation or creek), public art/signs, and visually important structures, such as historic buildings. Numerous panoramic and focal rural, small-town, mountainous, and agricultural views can be found throughout the County, primarily from areas within the Mountain Region that afford views of the Valley or Desert regions; however, panoramic views within the Valley and Desert regions also occur within the less-developed portions of the County. Although not formally recognized or designated as scenic vistas or view corridors, these viewsheds and views are prominent throughout the County.

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A does not provide opportunities for commercial cannabis activities and thus would not result in an increase in the need of land for the cultivation, processing and packaging, and distribution and sale of cannabis. Therefore, Option A would not have a substantial adverse effect on a scenic vista. No impact would occur in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 square feet (ft^2) of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft^2 of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

As noted above, there are no federal or State designated scenic highways within the County. The County identifies 12 scenic routes within the County between the Valley, Mountain, and Desert regions. Panoramic and focal views, although not formally recognized or designated as scenic vistas or view corridors, are found throughout the County. In addition, recreational facilities, such as the trails, including the Pacific Crest Trail, may also have point that are considered viewing opportunities of scenic vistas.

Retail cannabis stores that would be allowed through the implementation of the proposed project would be allowed in the following zone classifications: C-1 (Neighborhood Commercial); C-2 (General Commercial); CH (Highway Commercial); M-1 (Light Industrial); M-2 (Medium Industrial); and M-3 (Heavy Industrial). These zones generally contain existing development and structures. Therefore, the introduction of retail cannabis stores with or without mobile delivery are not anticipated to substantially affect scenic vistas. However, as described in Chapter 3, *Project Description*, and in Appendix C of this EIR, all future retail cannabis stores with or without mobile delivery would be required to process a Conditional Use Permit (CUP) and additional site-specific review under CEQA.

Future commercial cannabis cultivation would be limited to a maximum of 2,000,000 ft^2 of indoor cultivation, including greenhouses, warehouses and other structures. This 2,000,000 ft^2 -area is approximately the size of the existing Tejon outlets located at the I-5/Wheeler Ridge Road interchange; however, it would be distributed throughout unincorporated Kern County. Future cannabis indoor cultivation facilities would be allowed within zone classifications A (Exclusive Agriculture); A-1 (Limited Agriculture); M-1 (Light Industrial); M-2 (Medium Industrial); and M-3 (Heavy Industrial); C-2 (General Commercial); and CH (Highway Commercial). Existing agricultural related structures are dispersed throughout the County. Industrial and commercial zones generally contain existing development and structures. Future cannabis indoor cultivation facilities would occupy both existing and new structures; these structures would not be concentrated in any one area, but rather scattered between the Valley, Mountain, and Desert regions of the County between three zoning classifications. In addition, future cannabis indoor cultivation facilities proposed in zones C-2 (General Commercial) and CH (Highway Commercial) would be required to process a CUP and additional site-specific review under CEQA. From viewing areas throughout the

County that afford scenic vistas, the introduction of future cannabis indoor cultivation facilities would appear consistent with the existing development within the agricultural, industrial, and commercial areas. Impacts are considered less than significant in this regard.

Future commercial cannabis cultivation would be limited to 150 acres of outdoor cultivation countywide within zone classification A (Exclusive Agriculture) only. Future outdoor cannabis cultivation would be distributed between the Valley, Mountain, and Desert regions. Future cannabis outdoor cultivation would appear similar to other row crops (such as hops or tomatoes) in the County from viewing areas that afford scenic vistas. Impacts are considered less than significant in this regard.

Processing and packaging and distribution facilities would be allowed under agricultural and industrial zone classifications: A (Exclusive Agriculture); M-2 (Medium Industrial); and M-3 (Heavy Industrial). These facilities would appear similar to existing agricultural processing facilities, distribution facilities, and existing industrial buildings within the County. Existing agricultural related structures are dispersed throughout the County. Industrial and commercial zones generally contain existing development and structures. Future cannabis processing and packaging facilities would occupy both existing and new structures; these structures would not be concentrated in any one area, but rather scattered between the Valley, Mountain, and Desert regions of the County between three zoning classifications. From viewing areas throughout the County that afford scenic vistas, the introduction of future cannabis processing and packaging facilities would appear consistent with the existing development within the agricultural and industrial areas. Impacts are considered less than significant in this regard.

The evaluation of impacts to views of localized focal features or specific scenic panoramic vistas in the County is beyond the scope of this EIR. This EIR is programmatic in nature and intended to provide an overall review of potential impacts of Option B. All future cannabis-related facilities would be required to comply with federal, State, and local regulations related to aesthetics, as well as the development standards, summarized above (also see Appendix C of this EIR for more detail). Impacts would be less than significant with respect to Option B impacts on scenic vistas.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing before the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to the direct or indirect impacts to scenic vistas would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Scenic Vistas

1. The National Trails System Act assigned the USFS administration over the Pacific Crest Trail.
2. CEQA provides the definition of a “significant effect” in terms of aesthetics.

3. KCGP Land Use, Open Space, and Conservation Element Section 1.4, Public Facilities and Services, Implementation Measure E related to the preservation and enhancement of scenic qualities of natural resources for the County.
4. KCGP Land Use, Open Space, and Conservation Element Section 1.10.8, Smart Growth, Policy 49 related to the conservation of natural resources and the implementing design features to incorporate aesthetically pleasing and unifying designs.
5. KCGP Land Use, Open Space, and Conservation Element Section 1.10.10, Oak Tree Conservation, Policy 66 and Implementation Measure LL related oak tree preservation and scenic beauty.
6. MBGP Chapter II Land Use Element, Goal 3; Policies 21, 34, and 73; and implementation Measures 7 and 8 related to new development and visual relationships.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

No mitigation measures are required.

Level of Significance

No impact would occur with respect to Option A. Impacts regarding Option B would be less than significant.

Impact 4.1-2: Substantially Damage Scenic Resources, Including, but Not Limited to, Trees, Rock Outcroppings, and Historic Buildings within a State Scenic Highway

There are currently no National or State-designated scenic highways or byways within Kern County; however, SR-14 north of Mojave, SR-58 east of Mojave, and SR-41 in the northwest corner of the County are identified as Eligible State Scenic Highways (Caltrans, 2016). The KCGP identifies 12 scenic routes within the County, most of which traverse multiple regions within the County; refer to Section 4.1.2, *Environmental Setting*, for complete descriptions of these routes. In addition, unincorporated Kern County contains zone classification SC (Scenic Corridor Combining District) along county scenic routes. The SC zone classification (Kern County Code of Ordinances Title 19 Chapter 19.74) establishes regulations regarding commercial and industrial zones and permitted advertising signs along scenic routes, outside of public right-of-way.

The KCGP defines a scenic route as any freeway, highway, road, or other public right-of-way, which traverses an area of exceptional scenic quality. A scenic route must be officially set as a scenic route by the Kern County Board of Supervisors or the State. A route may not be selected as scenic until a plan and program for the protection and enhancement of adjacent roadside viewshed land is available for implementation.

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A does not provide opportunities for commercial cannabis activities and thus would not result in an increase in development that could damage scenic resources. Residents would be allowed to cultivate up to six plants on private residential property; however, this cultivation would be done inside the home or within a garden area of a backyard, that is not visible by normal unaided vision from a public space (California Health and Safety Code Section 11362.2). Therefore, Option A would not substantially damage scenic resources.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

As noted above, there are no federal or State designated scenic highways within the County. The County identifies 12 scenic routes between the Valley, Mountain, and Desert regions. Panoramic and focal views, although not formally recognized or designated as scenic vistas or view corridors, are found throughout the County. In addition, unincorporated Kern County contains zone classification SC (Scenic Corridor Combining District) along county scenic routes. The SC zone classification (Kern County Code of Ordinances Title 19 Chapter 19.74) establishes regulations regarding commercial and industrial zones and permitted advertising signs along scenic routes, outside of public right-of-way.

Retail cannabis stores that would be allowed through the implementation of the proposed project would be allowed in the following zone classifications: C-1 (Neighborhood Commercial); C-2 (General Commercial); CH (Highway Commercial); M-1 (Light Industrial); M-2 (Medium Industrial); and M-3 (Heavy Industrial). These zones generally contain existing development and structures. Therefore, the introduction of retail cannabis stores with or without mobile delivery are not anticipated to substantially affect scenic resources. However, as described in Chapter 3, *Project Description*, and in Appendix C of this EIR, all future retail cannabis stores with or without mobile delivery would be required to process a CUP and additional site-specific review under CEQA.

Future cannabis indoor cultivation facilities would be allowed within zone classifications A (Exclusive Agriculture); A-1 (Limited Agriculture); M-1 (Light Industrial); M-2 (Medium Industrial); and M-3 (Heavy Industrial); C-2 (General Commercial); and CH (Highway Commercial); refer to Appendices D, E, and F for graphical representation of potential areas within unincorporated Kern County that could facilitate future cannabis-related facilities. Existing agricultural related structures are dispersed throughout the County. Industrial and commercial zones generally contain existing development and structures. Future cannabis indoor cultivation facilities would occupy both existing and new structures; these structures would not be concentrated in any one area, but rather scattered between the Valley, Mountain, and Desert regions of the County between three zoning classifications. In addition, future cannabis indoor cultivation facilities proposed in zones C-2 (General Commercial) and CH (Highway Commercial) would be required to process a CUP and additional site-specific review under CEQA. From viewing areas along County scenic routes or the Eligible State Scenic Highways within unincorporated Kern County, the introduction of future cannabis indoor cultivation facilities would appear consistent with the existing development within the agricultural, industrial, and commercial areas.

Future commercial cannabis cultivation would be limited to 150 acres of outdoor cultivation countywide within zone classification A (Exclusive Agriculture) only; refer to Appendices D, E, and F for graphical representation of potential areas within unincorporated Kern County that could facilitate future cannabis-related facilities. Future outdoor cannabis cultivation would be distributed between the Valley, Mountain, and Desert regions. Per Proposition 64, cultivation of plants cannot be visible by normal unaided vision from a public space (California Health and Safety Code Section 11362.2), which would include roadways, and thus scenic corridors and Eligible State Scenic Highways.

Processing, packaging, and distribution facilities would be allowed under agricultural and industrial zone classifications: A (Exclusive Agriculture); M-2 (Medium Industrial); and M-3 (Heavy Industrial); refer to Appendices D, E, and F for graphical representation of potential areas within unincorporated Kern County that could facilitate future cannabis-related facilities. These facilities would appear similar to existing agricultural processing facilities, distribution facilities, and existing industrial buildings within the County. Existing agricultural related structures are dispersed throughout the County. Industrial and commercial zones generally contain existing development and structures. Future cannabis processing and packaging facilities would occupy both existing and new structures; these structures would not be concentrated in any one area, but rather scattered between the Valley, Mountain, and Desert regions of the County between three zoning classifications. From viewing areas along County scenic routes or the Eligible State Scenic Highways within unincorporated Kern County, the introduction of future cannabis processing and packaging facilities would appear consistent with the existing development within the agricultural and industrial areas.

Any new development or a change in use of an existing facility resulting from Option B would be required to adhere to federal, State, and local regulations, including Proposition 64, KCGP, MBGP, applicable Kern County specific plans, and Kern County Code of Ordinances, as well as all development standards provided as part of Option B of the proposed project, as outlined above and in Appendix C of this EIR. In addition, the County contains trees, rock outcrops, and historic buildings that could be affected by the implementation of Option B. Therefore, implementation of mitigation measures would be required. Mitigation Measures MM 4.1-1 and MM 4.1-2 would require the project applicant to provide evidence that rock outcroppings are avoided and would require building evaluations by a qualified architectural historian or archaeologist if potentially historic buildings are identified on-site. Mitigation Measure MM 4.2-2, as described in Section 4.2, *Agriculture and Forest Resources*, would require a replacement plantings at a 1:1 ratio for oak woodlands.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing before the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to the direct or indirect impacts to scenic resources within a scenic highway would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Scenic Resources within a Scenic Highway

Refer to Impact 4.1-1, above, for a summary of applicable existing regulations and policies related to scenic resources. In addition, the following are also applicable.

1. The National Trails System Act assigned the USFS administration over the Pacific Crest Trail.
2. Caltrans manages the California Scenic Highway Program. If a highway is designated as scenic, then these State laws are applicable to the surrounding land uses.
3. KCGP Land Use, Open Space, and Conservation Element, Section 1.7, Commercial, Implementation Measure F related to the screening of commercial development from sensitive viewers.
4. KCGP Land Use, Open Space, and Conservation Element, Section 1.8, Industrial, Policy 7 related to screening industrial development from sensitive viewers.
5. KCGP Circulation Element Section 2.3.9, Scenic Route Corridors, Goals and Implementation Measure D related preserving the scenic landscape of the County.
6. Kern County Zoning Ordinance Chapter 19.74, Scenic Corridor Combining District established to protect areas with unique visual and scenic resources from intrusion of development and signs.

7. MBGP Chapter II Land Use Element, Goal 7; Policies 26, 28, 30, 35, 36, 37, and 85 related to design features and visual relationships with surrounding land uses.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

Implement Mitigation Measure MM 4.2-2, as described in Section 4.2, *Agriculture and Forest Resources*.

- MM 4.1-1** For any cannabis facility on property that contains rock outcroppings, prior to the issuance of any permit, such as grading permits or building permit, the project applicant shall provide evidence to the Kern County Planning and Natural Resources Department that rock outcroppings are avoided during any construction and operation activities. Any application for a Conditional Use Permit shall include details on the site plan that demonstrate compliance with the avoidance of rock outcroppings.
- MM 4.1-2** For any cannabis facility on property that contains historic buildings that are potentially eligible for listing in the National Register of Historic Places, the project applicant shall have the building evaluated by a qualified architectural historian or archaeologist and must meet the requirements of the National Historic Preservation Act of 1966 in order to qualify. Qualifying structures shall be fenced and preserved in open-space, removed and curated, treated using appropriate data recovery procedures, or treated using appropriate restoration procedures, as identified by the qualified archaeologist. Any application for a Conditional Use Permit shall include details on the site plan that demonstrate compliance.

Level of Significance after Mitigation

Impact would be less than significant with respect to Option A. Impacts regarding Option B would be less than significant.

Impact 4.1-3: Substantially Degrade the Existing Visual Character or Quality of the Site and Its Surroundings

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A does not provide opportunities for commercial cannabis activities and thus would not result in an increase in development that could degrade the visual character or quality of a site and its surroundings. Residents would be allowed to cultivate up to six plants on private residential property; however, this cultivation would be done inside the home or within a garden area of a backyard, that is not visible by normal unaided vision from a public space (California Health and Safety Code Section 11362.2). Therefore, Option A would not substantially degrade the visual character or quality of a site and its surroundings and impacts would be less than significant.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

Refer to the discussions under Impact 4.1-1 and 4.1-2, above. Existing agricultural related structures are dispersed throughout the County. Industrial and commercial zones generally contain existing development and structures. Future cannabis facilities would occupy both existing and new structures; these structures would not be concentrated in any one area, but rather scattered between the Valley, Mountain, and Desert regions of the County between three zoning classifications. the introduction of future cannabis facilities would appear consistent with the existing development within the agricultural, industrial, and commercial areas. With respect to future cannabis cultivation (indoor and outdoor), per Proposition 64, cultivation of cannabis plants would not be visible by normal unaided vision from a public space (California Health and Safety Code Section 11362.2).

Any new development or a change in use of an existing facility resulting from Option B would be required to adhere to federal, State, and local regulations, including Proposition 64, KCGP, MBGP, applicable Kern County specific plans, and Kern County Code of Ordinances, as well as all development standards provided as part of Option B of the proposed project, as outlined above and in Appendix C of this EIR. In addition, implementation of mitigation measures would be required. Mitigation Measures MM 4.1-1 and MM 4.1-2 would require the project applicant to provide evidence that rock outcroppings are avoided and would require building evaluations by a qualified architectural historian or archaeologist if potentially historic buildings are identified on-site. Mitigation Measure MM 4.2-2, as described in Section 4.2, *Agriculture and Forest Resources*, would

require a replacement plantings at a 1:1 ratio for oak woodlands. In addition, Mitigation Measure MM 4.1-3 and MM 4.1-4 would require visual screening of cannabis related activities and facilities.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing before the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to the direct or indirect impacts to the visual character or quality of a site and its surroundings would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Visual Character and Quality

Refer to Impacts 4.1-1 and 4.1-2, above, for a summary of applicable existing regulations and policies related to visual character and quality. In addition, the following is also applicable.

1. Applicable specific plan, depending on future site locations, which include additional development standards related to visual character and quality of specific areas within the County.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

Implement Mitigation Measures MM 4.1-1 through MM 4.1-2, as described above, and Mitigation Measure MM 4.2-2, as described in Section 4.2, *Agriculture and Forest Resources*.

MM 4.1-3: Prior to the approval of a site plan or issuance of a grading or building permit for a cultivation or processing and packaging facility, the project applicant shall submit a landscaped buffer plan, or other appropriate cannabis facility screening plan, to the Kern County Planning and Natural Resources Department for review and approval. The cannabis facility screening plan shall demonstrate that the screening method is adequate to screen any cannabis-related activities to the extent that they are not visible by normal unaided vision from a public space per California Health and Safety Code Section 11362.2. The screening plan shall be implemented and screens installed prior to the start of operation at the cannabis facility. Screening can be integrated into the required security fencing requirements. Commercial outdoor growing shall incorporate screening that also provides for screening of odors from plants to the extent feasible.

Personal use growing of six (6) plants outdoors shall conform to the requirements of any adopted Kern County ordinance.

MM 4.1-4: The following aesthetic features shall be required in site plans and building permits for future cannabis facility buildings:

- a. Rooftop screening features shall be installed to create a visual screen for rooftop mechanical equipment.
- b. Reflective metal exteriors shall not be used as exterior architectural elements in buildings immediately adjacent to any public roadway.

Level of Significance after Mitigation

Impact would be less than significant with respect to Option A. Impacts regarding Option B would be less than significant.

Impact 4.1-4: Create a New Source of Substantial Light or Glare Which Would Adversely Affect Day or Nighttime Views in the Area

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A does not provide opportunities for commercial cannabis activities and thus would not result in an increase in development that could create a new source of light and glare. Residents would be allowed to cultivate up to six plants on private residential property; however, this cultivation would be done inside the home or within a garden area of a backyard, that is not visible by normal unaided vision from a public space (California Health and Safety Code Section 11362.2). Therefore, Option A would not create new sources of substantial light and glare and impacts would be less than significant.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the

moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

Future Cannabis Facility Construction

Any new construction required for a future cannabis facility would generally occur during daytime hours, typically from 6 AM to 6 PM; however, the Kern County Noise Control Ordinance (Title 8 of the Kern County Code of Ordinances) limits all construction activities to take place between 6 AM and 9 PM, Monday through Friday, and between 8 AM and 9 PM on Saturdays and Sundays. In the event that construction work is performed between dusk and 9 PM or dawn and sunrise (approximately 6 AM), construction crews would use minimal illumination to perform the work safely. All lighting would be required to be directed downward and shielded to focus illumination on the desired work areas only and prevent light spillage onto adjacent properties. As a result, construction associated with the implementation of Option B of the proposed project would not result in a substantial new source of light, and impacts on nighttime views would be less than significant.

Most of the future construction activities resulting from the implementation of Option B would occur during daylight hours. Any increased traffic and the transport of construction materials to a future cannabis facility project site could temporarily increase glare conditions during construction. However, this increase in glare would be minimal; the impact from glare is anticipated to be less than significant. Any sources of glare resulting from construction activities would not be stationary for a prolonged period of time. Therefore, construction activities resulting from the implementation of Option B of the proposed project would not create a new substantial source of glare that would affect daytime views in the area. Impacts would be considered less than significant.

Future Cannabis Facility Operations

Although there are many areas within unincorporated Kern County that have minimal or no light sources, there are many existing sources of light and glare throughout each region: Valley, Mountain, and Desert. During the nighttime, these include street lights, headlights from vehicles, security lighting (particularly for commercial and industrial areas), commercial signage, lighted commercial and recreational facilities, and light emitted from the interiors of buildings. Buildings and structures with glass, metal, or polished exterior or roofing materials, and parked and traveling vehicles contribute to localized sources of daytime glare. The general ambient light is greater within the Valley Region, especially near the Bakersfield Metropolitan Area, as well as other cities and communities. The ambient light is lower within the Mountain and Desert Regions; however, ambient light is greater near the cities and communities, even within the Mountain and Desert Regions. The farther from a populated area the less ambient light is present and the night sky is generally visible with little light intrusion when viewed away from these light sources.

As mentioned in the discussions in Impacts 4.1-1 and 4.1-2, existing agricultural related structures are dispersed throughout the County. Most of the industrial and commercial zones generally contain existing development and structures. Future cannabis facilities would occupy both existing and new structures; these structures would not be concentrated in any one area, but rather scattered between the Valley, Mountain, and Desert regions of the County between three zoning classifications. the introduction of future cannabis facilities would appear consistent with the existing development

within the agricultural, industrial, and commercial areas. With respect to future cannabis cultivation (indoor and outdoor), per Proposition 64, cultivation of cannabis plants would not be visible by normal unaided vision from a public space (California Health and Safety Code Section 11362.2).

Security surrounding future cannabis facilities would require lighting which could result in an increase in light and glare. Any development resulting from the implementation of Option B would be required to comply with all development standards within the proposed Kern County Cannabis Land Use Ordinance includes requirements that address light pollution, including the protection of dark skies; refer to Appendix C for the complete text of the proposed ordinance under Option B. Any new development or a change in use of an existing facility resulting from the implementation of Option B would be required to adhere to federal, State, and local regulations, including Proposition 64, KCGP, MBGP, applicable Kern County specific plans, and Kern County Code of Ordinances, including the Outdoor Lighting “Dark Skies Ordinance” (Chapter 19.81). Implementation of mitigation measures would reduce impacts resulting from the implementation of Option B to a less than significant level.

The reflection of sunlight off the glass surfaces is the primary potential producer of glare from future cannabis facilities, which could include windows or greenhouses. The proposed structures associated with the implementation of Option B would include windows and glass fronts on many of the new structures. Typically, larger industrial land use facilities contain minimal glass; however, glare can be associated with the structures if lighter or reflective material is used. These structures have the potential to produce glare impacts to travelers on nearby roadways, as well as viewers from surrounding areas. The proposed Kern County Cannabis Land Use Ordinance includes development standards pertaining to light and glare that would help to reduce the impacts. In addition, per Mitigation Measures MM 4.1-1 through MM 4.1-5, the development would ensure the implementation of Option B minimizes the contrast of structures with their backdrops throughout the County.

Summary of Applicable Existing Regulations and Policies Related to Light and Glare

Refer to Impacts 4.1-1 through 4.1-3, above, for a summary of applicable existing regulations and policies related to light and glare as it is reduced by buffers and screening. In addition, the following are also applicable.

1. KCGP Land Use, Open Space, and Conservation Element, Section 1.10.7, Light and Glare, Policies 47 and 48, and Implementation Measure AA related to creating light and glare effects on surrounding land uses.
2. Kern County Zoning Ordinance Chapter 19.81, Dark Skies Ordinance (Outdoor Lighting) related to minimizing excessive illumination and glare that obscures the night sky and may constitute a nuisance for surrounding land uses.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

Implement Mitigation Measures MM 4.1-1 through MM 4.1-4, as described above, and Mitigation Measure MM 4.2-2, as described in Section 4.2, *Agriculture and Forest Resources*.

MM 4.1-5: Prior to the approval of a site plan or issuance of a grading or building permit, the project applicant shall demonstrate to the Kern County Planning and Natural Resources Department that the proposed cannabis facility complies with the County's Dark Sky Ordinance (Section 19.81 of the Kern County Zoning Ordinance) to reduce unnecessary night lighting and to minimize lighting impacts on surrounding properties.

Any application for a Conditional Use Permit shall include details on the site plan that demonstrate compliance with the County's Dark Sky Ordinance (Section 19.81 of the Kern County Zoning Ordinance).

Level of Significance after Mitigation

Impact would be less than significant with respect to Option A. Impacts regarding Option B would be less than significant.

Cumulative Setting Impacts and Mitigation Measures

Cumulative Setting

The geographic scope for cumulative impacts on utilities and service systems includes both the KCGP and the regional growth plan and projections included in the Kern COG Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) approved in 2014, as defined in Section 3.7, *Cumulative Projects*. This is a large enough area to encompass any effects of the proposed project on aesthetics that may combine with similar effects caused by other projects, and provides a reasonable context wherein cumulative actions could affect these resources. The cumulative analyses consider whether the proposed project, Option A or Option B, in combination with the past, present, and reasonably foreseeable projects, could cumulatively affect aesthetics and visual resources.

Cumulative Impacts and Mitigation Measures

Impact 4.1-5: Contribute to Cumulative Aesthetic Impacts

Proposed Project Option A

Option A of the proposed project would ban all commercial medical and adult use cannabis-related activities other than what is allowed for personal use under Proposition 64. Option A would not result in an increase in residents or employees within the County. As discussed above, Option A would not provide opportunities for commercial cannabis activities and thus would not result in an increase in development that would have a substantial adverse effect of a scenic vista (Impact 4.1-1), substantially degrade visual resources within a State scenic highway (Impact 4.1-2), substantially degrade the County's visual character and quality (Impact 4.1-3), and create a new source of light and glare (Impact 4.1-4). Therefore, Option A would not contribute to cumulative impacts when combined with past, present, or reasonably foreseeable projects. Less than significant impacts would occur in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B). The County currently allows medical cannabis dispensaries. Option B would result in closing, or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County.

With regard to creating substantial adverse effects on a scenic vista (Impact 4.1-1), the implementation of Option B would not create any significant impacts at the program level. Future cannabis-related facilities would occupy both existing and new structures; these structures would not be concentrated in any one area, but rather scattered between the Valley, Mountain, and Desert regions of the County between the three identified zone classifications. From viewing areas throughout the County that afford scenic vistas, the introduction of future cannabis-related facilities and activities would appear consistent with the existing development within the agricultural, industrial, and commercial areas. The alteration of the visual character of the area resulting from the other past, present, and reasonably foreseeable projects in combination with Option B could alter select views in certain areas. Therefore, impacts of the project would combine with impacts of past, present, and reasonably foreseeable projects to create a substantial adverse effect on a scenic vista, and would result in a significant cumulative aesthetic impact.

With regard to damaging scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State Scenic Highway (Impact 4.1-2), there are no federal or State designated scenic highways within the County; however, there are three Eligible State Scenic Highways. The County identifies 12 scenic routes between the Valley, Mountain, and Desert regions. In addition, Kern County has a zone classification related specifically to commercial and industrial zones within a scenic corridor: SC (Scenic Corridor Combining District). With respect to future cannabis cultivation (indoor and outdoor), per Proposition 64, cultivation of cannabis would not be visible by normal unaided vision from a public space. Mitigation measures would be required to reduce impacts of the implementation of Option B. Even with mitigation measures, Option B would combine with impacts of past, present, and reasonably foreseeable projects to create a substantial adverse effect on a scenic resource, and would result in a significant cumulative impact.

With regard to substantially degrading the existing visual character or quality of the site and its surroundings (Impact 4.1-3), as described above, future cannabis-related facilities would occupy both existing and new structures; these structures would not be concentrated in any one area, but rather scattered between the Valley, Mountain, and Desert regions of the County between the three identified zone classifications. The introduction of future cannabis-related facilities and activities would appear consistent with the existing development within the agricultural, industrial, and commercial areas. With respect to future cannabis cultivation (indoor and outdoor), per Proposition 64, cultivation of cannabis would not be visible by normal unaided vision from a public space. Mitigation measures would be required to reduce impacts of the implementation of Option B. past, present and reasonably foreseeable projects would all have incremental effects on the County's

overall visual character and quality. Therefore, even with mitigation measures, Option B would combine with impacts of past, present, and reasonably foreseeable projects to create a substantial adverse effect on the County's visual character and quality, and would result in a significant cumulative impact.

With regard to creating a new source of substantial light or glare which would adversely affect day or nighttime views in the area (Impact 4.1-4), the implementation of the project would include the installation of new lighting, including security lights and interior building lighting. As the existing character of the night sky of the County varies from an urban environmental with ambient light to less developed areas of the Valley, Mountain, and Desert regions with no light pollution, the new lighting would alter the existing character of the night sky within the less developed areas of the County. This introduction of new light sources could potentially cause an annoyance to those on surrounding land. In addition, new structures would have the potential to increase glare depending on the color and type of materials used. Thus, the proposed project's impacts to light and glare have the potential to combine with impacts of other past, present, and reasonably foreseeable projects to result in a cumulative visual impact. This would create new sources of nighttime light and potentially trespass light and/or glare. Implementation of the development standards from the proposed Kern County Cannabis Land Use Ordinance, as well as compliance with the Kern County Dark Skies Ordinance, and other federal, State, and local regulations, in addition to mitigation measures would reduce impacts; however, the combination of Option B with cumulative projects would introduce new light and glare sources that would create a significant visual impact. Therefore, impacts of the project would make a cumulatively considerable contribution in combination with impacts of past, present, and reasonably foreseeable projects to result in a significant and unavoidable cumulative impact for light and glare.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

Implement Mitigation Measures MM 4.1-1 through MM 4.1-5, as described above, and Mitigation Measure MM 4.2-2, as described in Section 4.2, *Agriculture and Forest Resources*.

Level of Significance after Mitigation

With respect to Option A, cumulative impacts would be less than significant. Cumulative impacts resulting from Option B would be significant and unavoidable.

Section 4.2

Agriculture and Forest Resources

Section 4.2

Agriculture and Forest Resources

4.2.1 Introduction

This section of the Draft Environmental Impact Report (EIR) addresses potential impacts of the Kern County Cannabis Land Use Ordinance Project (proposed project) on agriculture and forest resources within Kern County (County). This section also provides the environmental and regulatory settings and discusses mitigation measures to reduce impacts, where applicable.

A description of the environmental setting (affected environment) for agriculture and forest resources is presented below in Section 4.2.2, *Environmental Setting*, including discussions of existing Prime Farmland and current Williamson Act Contracts. The regulatory setting applicable to agriculture and forest resources is presented in Section 4.2.3, *Regulatory Setting*, while impacts and associated mitigation measures, where applicable, are analyzed in Section 4.2.4, *Impacts and Mitigation Measures*.

4.2.2 Environmental Setting

Agricultural Lands

Kern County is California's third largest county, encompassing 8,202 square miles at the southern end of the Central Valley, including approximately 1,373 square miles of harvested agricultural land and approximately 2,317 square miles of rangeland. The most recent California Department of Food and Agriculture (CDFA) report from 2016, which provides 2015 numbers, shows that Kern County is the second top agricultural county in the State (California Department of Food and Agriculture [CDFA], 2016). The 2015 total gross value of agricultural commodities produced in Kern County was \$6,878,823,690, which is an increase of approximately 10 percent over the 2014 crop value (Kern County Department of Agriculture, 2016). The top five commodities for 2015 were grapes, almonds, citrus, milk, and cattle, which make up more than \$4.6 billion, 67 percent, of the total crop value (Kern County Department of Agriculture, 2016). Table 4.2-1, *Agricultural Land Uses in Kern County 2014*, shows agricultural land uses and their acreages in Kern County.

Table 4.2-1. Agricultural Land Uses in Kern County 2014	
Land Use Category	Total Acreage Inventoried
Prime Farmland	585,035
Farmland of Statewide Importance	209,563
Unique Farmland	90,107
Farmland of Local Importance	0
Important Farmland Subtotal	884,705
Grazing Land	1,847,615
Agricultural Land Total	2,732,320

Source: California Department of Conservation (DOC), 2012-2014 Land Use Conversion Tables, 2016a.

Note: The 2012-2014 Land Use Conversion information from the DOC are the most recent numbers, being published in 2015. To date, the DOC has not released numbers for 2015 or 2016.

Kern County is growing rapidly and other non-agricultural uses are encroaching on agricultural lands. The California Department of Conservation (DOC) 2012–2014 Land Use Conversion table

shows that the total agricultural acres lost, including farmland and grazing land in Kern County, was 45,221 acres. However, from 2012 to 2014 the County gained 33,568 acres of agricultural land, resulting in a net loss of 11,653 acres of agricultural land, including all of the categories of important farmland and grazing land (California Department of Conservation [DOC], 2016a).

Agricultural Preserves and Williamson Act Land Use Contracts

An agriculture preserve defines the physical boundary of an area within which Kern County could enter into agricultural contracts with landowners to ensure agricultural lands remain used for agricultural purposes. The boundary of an agricultural preserve is designated by resolution of a county's Board of Supervisors. Agriculture preserves are generally a minimum of 100 acres in size. Kern County includes a total of 24 agricultural preserves.

The California Land Conservation Act of 1965, commonly known as the Williamson Act, provides property tax relief to owners of farmland and open-space land in exchange for a ten-year agreement that preserves the land and prevent it from being converted to another use. The contracts are automatically renewed each year unless a notice of non-renewal is filed by the landowner with the County Clerk. The most recent California Land Conservation Act Status Report presents statewide statistics for Williamson Act and Farmland Security Zone contracts for 2012 and 2013, broken down by county (DOC, 2015). Kern County was fifth in the State in new Williamson Act enrollments in 2012 with 1,089 acres, and first in the State with 9,823 acres in 2013. Kern County was ranked third in the State in Nonrenewal Initiations in 2012, and sixth in 2013, totaling 2,343 acres for those two years. There were 1,703,364 acres of land within the County that were within Williamson Act or Farmland Security Zone Act renewal parcels (DOC, 2015).

Forest Lands and Timberlands

Public Resources Code Section 12220 (g) defines "forest land" as "land that can support 10% native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits."

Public Resources Code Section 12220 (l) defines "woodlands" as "forest lands composed mostly of hardwood species such as oak."

Government Code Section 51104 (f) defines "timberland" as "privately owned land, or land acquired for State forest purposes, which is devoted to and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses, and which is capable of growing an average annual volume of wood fiber of at least 15 cubic feet per acre."

Within Kern County, significant areas of forested and woodland habitats include the Bitter Creek National Wildlife Refuge and Los Padres National Forest in the southwestern portion of the project site and the Sequoia National Forest located in the northern portion of the project site. Forestlands, woodlands and timberlands can predominately be found in the Mountain Region, with a scattering of oak tree woodlands in the Valley Region (Kern County Fire Department [KCFD], 2012).

The project site does not contain Timberland Production Zones as identified by the California Department of Forestry and Fire Protection (CAL FIRE) *California's Forests and Rangelands: 2010 Assessment*, the most recent assessment prepared by CAL FIRE. However, there were an average of 149,044 acres of private timberland in Kern County from 2000 to 2009 (California

Department of Forestry and Fire Protection [CALFIRE], 2010). Timber makes up a small portion of Kern County's crops (Kern County Department of Agriculture, 2016).

4.2.3 Regulatory Setting

Federal

As explained in Section 3.2, *Regulatory History and Background*, even though cannabis is “decriminalized” under State law, and even with the U.S. Department of Justice (USDOJ) issuance of memoranda guiding federal law enforcement related to cannabis activities within jurisdictions that have legalized cannabis, cannabis activities continue to be illegal at the federal level and subject to the prosecutorial discretion of the federal government.

Farmland Protection Policy Act (7 U.S.C. Section 4201)

The purpose of the Farmland Protection Policy Act (FPPA) is to minimize the extent to which federal programs contribute to the unnecessary and irreversible conversion of farmland to non-agricultural uses. It additionally directs federal programs to be compatible with State and local policies for the protection of farmlands. Congress passed the Agriculture and Food Act of 1981 (Public Law 97-98) containing the FPPA—Subtitle I of Title XV, Section 1539-1549. The final rules and regulations were published in the Federal Register on June 17, 1994.

The FPPA is intended to minimize the impact federal programs have on the unnecessary and irreversible conversion of farmland to non-agricultural uses. It ensures that, to the extent possible, federal programs are administered to be compatible with State, local units of government, and private programs and policies to protect farmland. Federal agencies are required to develop and review their policies and procedures to implement the FPPA every two years. The FPPA does not authorize the Federal Government to regulate the use of private or non-federal land or, in any way, affect the property rights of owners.

For the purpose of FPPA, farmland includes Prime Farmland, Unique Farmland, and Land of Statewide or Local Importance. Farmland subject to FPPA requirements does not have to be currently used for cropland. It can be forest land, pastureland, cropland, or other land, but not water or urban built-up land.

Projects are subject to FPPA requirements if they may irreversibly convert farmland (directly or indirectly) to non-agricultural use and are completed by a federal agency or with assistance from a federal agency (Natural Resources Conservation Service [NRCS], 2016).

State

California Department of Conservation (DOC), Division of Land Resource Protection

The DOC applies the Natural Resources Conservation Service (NRCS) soil classifications to identify agricultural lands, and these agricultural designations are used in planning for the present and future of California's agricultural land resources. The DOC has a minimum mapping unit of 10 acres, with parcels that are smaller than 10 acres being absorbed into the surrounding classifications.

Farmland Mapping and Monitoring Program

The list below provides a comprehensive description of all the categories mapped by the DOC. Collectively, lands classified as Prime Farmland, Farmland of Statewide Importance, and Unique Farmland are referred to as Farmland (DOC, 2004).

- **Prime Farmland.** Farmland that has the best combination of physical and chemical features able to sustain long-term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.
- **Farmland of Statewide Importance.** Farmland similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.
- **Unique Farmland.** Farmland of lesser quality soils used for the production of the State's leading agricultural crops. This land is usually irrigated, but may include non-irrigated orchards or vineyards as found in some climatic zones in California. Land must have been cropped at some time during the four years prior to the mapping date.
- **Farmland of Local Importance.** Land of importance to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee.
- **Grazing Land.** Land on which the existing vegetation is suited to the grazing of livestock. This category was developed in cooperation with the California Cattlemen's Association, University of California Cooperative Extension, and other groups interested in the extent of grazing activities. The minimum mapping unit for Grazing Land is 40 acres.
- **Urban and Built-up Land.** Land occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel. This land is used for residential, industrial, commercial, institutional, public administrative purposes, railroad and other transportation yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, water control structures, and other developed purposes.
- **Other Land.** Land not included in any other mapping category. Common examples include low density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry or aquaculture facilities; strip mines and borrow pits; and water bodies smaller than 40 acres. Vacant and non-agricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land.

California Land Conservation Act (Williamson Act)

The California Land Conservation Act of 1965, commonly referred to as the Williamson Act, is promulgated in California Government Code Section 51200-51297.4, and therefore is applicable only to specific land parcels within the State of California. The Williamson Act enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space uses in return for reduced property tax assessments. Private land within locally designated agricultural preserve areas is eligible for enrollment under Williamson Act contracts. The Williamson Act program is administered by the DOC, in conjunction with local governments, which administer the individual contract arrangements with landowners. The landowner commits the parcel to a 10-year period wherein no conversion out of agricultural use is

permitted. Each year the contract automatically renews unless a notice of non-renewal or cancellation is filed. In return, the land is taxed at a rate based on the actual use of the land for agricultural purposes, as opposed to its unrestricted market value. An application for immediate cancellation can also be requested by the landowner, provided that the proposed immediate cancellation application is consistent with the cancellation criteria stated in the California Land Conservation Act and those adopted by the affected county or city. Non-renewal or immediate cancellation does not change the zoning of the property. Participation in the Williamson Act program is dependent on county adoption and implementation of the program and is voluntary for landowners.

The Williamson Act states that a board or council by resolution shall adopt rules governing the administration of agricultural preserves. The rules of each agricultural preserve specify the uses allowed. Generally, any commercial agricultural use will be permitted within any agricultural preserve. In addition, local governments may identify compatible uses permitted with a use permit (DOC, 2016b).

California Government Code Section 51238 states that, unless otherwise decided by a local board or council, the erection, construction, alteration, or maintenance of electric and communication facilities, as well as other facilities, are determined to be compatible uses within any agricultural preserve. Also Section 51238 states that board of supervisors may impose conditions on lands or land uses to be placed within preserves to permit and encourage compatible uses in conformity with Section 51238.1.

Further, California Government Code Section 51238.1 allows a board or council to allow as compatible any use that without conditions or mitigations would otherwise be considered incompatible. However, this may occur only if that use meets the following conditions:

- The use will not significantly compromise the long-term productive agricultural capability of the subject contracted parcel or parcels on other contracted lands in agricultural preserves.
- The use will not significantly displace or impair current or reasonably foreseeable agricultural operations on the subject contracted parcel or parcels or on other contracted lands in agricultural preserves. Uses that significantly displace agricultural operations on the subject contracted parcel or parcels may be deemed compatible if they relate directly to the production of commercial agricultural products on the subject contracted parcel or parcels or neighboring lands, including activities such as harvesting, processing, or shipping.
- The use will not result in the significant removal of adjacent contracted land from agricultural or open-space use.

Farmland Security Zone Act

The Farmland Security Zone Act is similar to the Williamson Act and was passed by the California State Legislature in 1999 to ensure that long-term farmland preservation is part of public policy. Farmland Security Zone Act contracts are sometimes referred to as “Super Williamson Act Contracts.” Under the provisions of this act, a landowner already under a Williamson Act contract can apply for Farmland Security Zone status by entering into a contract with the county. Farmland Security Zone classification automatically renews each year for an additional 20 years. In return for a further 35 percent reduction in the taxable value of land and growing improvements (in addition to Williamson Act tax benefits), the owner of the property promises not to develop the property into non-agricultural uses. Farmland Security Zone Act contracts may be canceled, but only upon a finding that cancellation would both serve the purposes of the Williamson Act and be in the public interest (California Government Code Section 51297).

California Timberland Productivity Act

The California Timberland Productivity Act (Government Code Section 51100) recognizes that forest resources and timberlands of this State, together with the forest products industry, contribute substantially to the health and stability of the State's economy and environment by providing high quality timber, employment opportunities, regional economic vitality, resource protection, and aesthetic enjoyment. Accordingly, the State intends to maintain the limited supply of timberland to ensure its current and continued availability for the growing and harvesting of timber and compatible uses; discourage premature or unnecessary conversion of timberland to urban and other uses; discourage expansion of urban services into timberland; encourage investment in timberlands based on reasonable expectation of harvest; and ensure that forest practice rules adopted by the State Board of Forestry and Fire Protection shall be followed.

Local

Kern County General Plan (KCGP)

The Kern County General Plan (KCGP) states that agriculture is vital to the future of Kern County and sets the goals of protecting important agricultural lands for future use and preventing the conversion of prime agricultural lands to other uses (e.g., industrial or residential). The KCGP includes three designations for agricultural land:

- **8.1 Intensive Agriculture** - Minimum parcel size is 20 acres gross. Devoted to the production of irrigated crops or having potential for such use;
- **8.2 Resource Reserve** - Minimum parcel size is 20 acres gross, except lands subject to a Williamson Act Contract/Farmland Security Zone Contract, in which case the minimum parcel size shall be 80 acres gross. Devoted to areas of mixed natural resource characteristics including rangeland, woodland, and wildlife habitat which occur in an established County water district; and
- **8.3 Extensive Agriculture** - Minimum parcel size is 20 acres gross, except lands subject to a Williamson Act contract/Farmland Security Zone contract, in which case the minimum parcel size shall be 80 acres gross. Devoted to uses involving large amounts of land with relatively low value-per-acre yields such as livestock grazing, dry-land farming, and woodlands.

The policies, goals, and implementation measures in the KCGP for Agriculture and Forest Resources applicable to the proposed project are provided below. The KCGP also contains additional policies, goals, and implementation measures that are more general in nature. Therefore, they are not listed below, but, as stated in Chapter 2, *Introduction*, all policies, goals, and implementation measures in the KCGP are incorporated by reference.

Chapter 1. Land Use, Open Space, and Conservation Element

Section 1.9 Resource

Goals

- **Goal 1.** To contain new development within an area large enough to meet generous projections of foreseeable need, but in locations which will not impair the economic strength derived from the petroleum, agriculture, rangeland, or mineral resources, or diminish the other amenities which exist in the County.
- **Goal 2.** Protect areas of important mineral, petroleum, and agricultural resource potential for future use.

- **Goal 3.** Ensure the development of resource areas minimize effects on neighboring resource lands.
- **Goal 5.** Conserve prime agriculture lands from premature conversion.

Policies

- **Policy 1.** Appropriate resource uses of all types will be encouraged as desirable and consistent interim uses in undeveloped portions of the County regardless of General Plan designation.
- **Policy 5.** Areas of low intensity agriculture use (Map Code 8.2 (Resource Reserve), Map Code 8.3 (Extensive Agriculture), Map Code 8.5 (Resource Management)) should be of an economically viable size in order to participate in the State Williamson Act Program/Farmland Security Zone Contract.
- **Policy 7.** Areas designated for agricultural use, which include Class I and II and other enhanced agricultural soils with surface delivery water systems, should be protected from incompatible residential, commercial, and industrial subdivision and development activities.
- **Policy 8.** Provide for the orderly expansion of new urban-scale infrastructure and development and the creation of new urban-scale centers in a manner that minimizes adverse effects on agriculture and natural resource uses.
- **Policy 9.** When evaluating General Plan Amendment Proposals to change a Map Code 8.1 (Intensive Agriculture) designation to accommodate residential, commercial, or industrial development, the County shall consider the following factors:
 - a. Approval of the proposal will not unreasonably interfere with agricultural operations on surrounding lands.
 - b. Necessary public services (fire, sheriff, etc.) and infrastructure are available to adequately serve the project.
 - c. There is a demonstrated need for the proposed project location based upon population projections, market studies and other indicators.
 - d. The requested change in land use designation is accompanied by a zone change and other implementing land use applications for a specific development proposal.
 - e. The site is contiguous to properties that are developed or characterized by non-agricultural land uses.
 - f. Past agricultural use of the site has led to soil infertility or other soil conditions which render the property unsuitable for long-term agricultural use.
 - g. Approval of the proposed project outweighs the need to retain the land for long-term agricultural use.
 - h. Where adjacent or within proximity (1/2 mile) to existing urban areas, the County shall discourage agricultural conversion that is discontinuous with urban development.
- **Policy 11.** Minimize the alteration of natural drainage areas. Require development plans to include necessary mitigation to stabilize runoff and silt deposition through utilization of grading and flood protection ordinances.

- **Policy 12.** Areas identified by the NRCS (formerly Soil Conservation Service) as having high range-site value should be conserved for Extensive Agriculture uses or as Resource Reserve, if located within a County water district.
- **Policy 13.** Any property in an Agriculture Preserve proposing to be subject to a Williamson Act Contract or Farmland Security Zone Contract must have a Resource designation.
- **Policy 15.** Agriculture and other resource uses will be considered a consistent use in areas designated for Mineral and Petroleum Resource uses on the General Plan.
- **Policy 24.** Urban residential or commercial development on property contiguous to property designated Map Code 8.1 (Intensive Agriculture) should employ landscaping, lot size, open space buffering, increased building setbacks, or other techniques to reduce the potential for land use conflicts when it can be demonstrated that such measures will provide for public welfare and benefit and promote continued agricultural uses.

Implementation Measures

- **Implementation Measure B.** Areas designated as Resource Reserve (Map Code 8.2), Extensive Agriculture (Map Code 8.3), Resource Management (Map Code 8.5) that are under Williamson Act Contracts or Farmland Security Zone Contracts will have a minimum parcel size of 80 acres until such time as a contract is expired or is cancelled, at which time the minimum parcel size will become 20 acres.
- **Implementation Measure F.** Prime agricultural lands, according to the Kern County Interim-Important Farmland map produced by the Department of Conservation, which have Class I or II soils and a surface delivery water system shall be conserved through the use of agricultural zoning with minimum parcel size provisions.

Section 1.10.10 Oak Tree Conservation

Policies

- **Policy 65.** Oak woodlands and large oak trees shall be protected where possible and incorporated into project developments
- **Policy 66.** Promote the conservation of oak tree woodlands for their environmental value and scenic beauty.

Implementation Measures

- **Implementation Measure KK.** The following applies to discretionary development projects (General Plan Amendment, zone change, conditional use permit, tract maps, parcel maps, precise development plan) that contain oak woodlands, which are defined as development parcels having canopy cover by oak trees of at least ten percent (10%), as determined from baseline aerial photography or by site survey performed by a licensed or certified arborist or botanist. If this study is used in an Environmental Impact Report, then a Registered Professional Forester (RPF) shall perform the necessary analysis.
 - a. Development parcels containing oak woodlands are subject to a minimum canopy coverage retention standard of thirty percent (30%). The consultant shall include recommendations regarding thinning and diseased tree removal in conjunction with the discretionary project.

- b. Use of aerial photography and a dot grid system shall be considered adequate in determining the required canopy coverage standard.
 - c. Adjustments below thirty percent (30%) minimum canopy standard may be made based on a report to assess the management of oak woodlands.
 - d. Discretionary development, within areas designated as meeting the minimum canopy standard, shall avoid the area beneath and within the trees unaltered drip line unless approved by a licensed or certified arborist or botanist.
- **Implementation Measure LL.** The following applies to development of parcels having oak tree canopy cover of less than ten percent (10%), but containing individual oak trees equal to or greater than a 12-inch diameter trunk at 4.5 feet breast height.
 - a. Such trees shall be identified on plot plans.
 - b. Discretionary development shall avoid the area beneath and within the trees unaltered drip line unless approved by a licensed or certified arborist or botanist.
 - c. Specified tree removal related to the discretionary action may be granted by the decision making body upon showing that a hardship exists based on substantial evidence in the record.

Kern County Specific Plans

Kern County has adopted 39 Specific Plans, 10 Rural Community Plans, and 14 Interim Rural Community Plan Maps. The Specific Plans and Rural Community Plans are intended to be an amplification of the goals and policies of the KCGP and are, therefore, consistent therewith. Interim Rural Community Plan Maps are areas where a specific plan has not been formally adopted, thus the goals and policies of the KCGP govern these areas. Future commercial cannabis cultivation, processing/packaging, and sales activities that would be authorized under the proposed project that would be located within the boundary of an adopted Specific Plan would be regulated according to County zoning.

Kern County Estray Ordinance (Title 7 of the Kern County Code of Ordinances)

Chapter 7.16 Estrays

The Estrays (Chapter 7.16) are areas within Kern County that are devoted chiefly to grazing as adopted by the Kern County Board of Supervisors per Section 17124 of the California Food and Agriculture Code. Sections 020, 030, 040, 050, and 055 of the Estrays Ordinance contain the legal description of Parcels A through E. The following constraints apply to Parcel B only:

- **Section 7.16.060 – Unlawful to permit livestock to be at large on cultivated land.** Every person within the area described in Parcel B of this chapter (Chapter 7.16) owning or having charge, care, custody or control of any cow, bull, steer, horse, mule, jack, hinny, sheep or other stock, who willingly or knowingly permits the same to run at large in or upon any cultivated or improved land owned by any person other than the owner of such animals, unless the consent of the owner is first obtained, except upon a public highway under adequate supervision, is guilty of a misdemeanor. Animal control services for achieving the control of said animals, as provided by the county to enforce the provisions of this section, shall be charged to the owner or the person having charge, care, custody, or control of animals

at large at the hourly rate as set forth in the fee schedule established by the board of supervisors.

Kern County Zoning Ordinance (Title 19 of the Kern County Code of Ordinances)

Chapter 19.12 Exclusive Agriculture (A) District

The purpose of the Exclusive Agriculture (A) District (Chapter 19.12) is to designate areas suitable for agricultural uses and to prevent the encroachment of incompatible uses onto agricultural lands and the premature conversion of such lands to non-agricultural uses. Uses in the Exclusive Agriculture (A) district are limited primarily to agricultural uses and other activities compatible with agricultural uses. Allowable land uses within the Exclusive Agriculture (A) district are set forth in Sections 19.12.020 and 19.12.030 and include those associated with growing and harvesting of crops, breeding and raising animals, agricultural industries, residential uses to house farm workers or the landowner, Christmas tree farms, utility corridors, resource extraction, waste facilities, institutional/educational uses, and various miscellaneous uses such as animal shelters and clubs. Facilities permitted on properties zoned for Exclusive Agricultural (A) with approval of a conditional use permit (CUP) include those associated with recreation, entertainment, and tourist facilities, utilities and communications, resource extraction and energy development (i.e., wind and solar generators, mining, dams, batch plants), institutional uses (i.e., churches, zoos, government facilities), and schools.

Chapter 19.14 Limited Agriculture District (A-1)

The purpose is to designate areas suitable for a combination of estate-type residential development, agricultural uses, and other compatible uses.

Chapters 19.12 and 19.14 currently include as permitted uses in the A and A-1 zones:

- Cogeneration facility or steam generators, primarily intended for steam production, used for production of oil and gas, excluding coal fired.
- Oil or gas exploration and production pursuant to Chapter 19.98 of this title, including the temporary installation of commercial coaches as accessory to this activity, not to exceed a two- (2-) year period.
- Nonhazardous oil production and/or oily waste disposal facility.
- Nonhazardous oilfield waste treatment or recycling.
- Coal-fired cogeneration facility or steam generators, primarily intended for production of oil or gas (with a conditional use permit).

Williamson Act Standard Uniform Rules

Kern County has adopted a set of Agricultural Preserve Standard Uniform Rules that identify land uses that are considered compatible uses within agricultural preserves established under the Williamson Act. These rules are designed to restrict the uses of land enrolled in a Williamson Act contract to agriculture or other compatible uses. Agricultural uses include crop cultivation, grazing operations, commercial wind farms, livestock breeding, dairies, and uses that are incidental to agricultural uses. Other compatible uses include the erection of gas, electric, communications, water, and other similar public utilities.

Metropolitan Bakersfield General Plan (MBGP)

The Metropolitan Bakersfield General Plan (MBGP), a joint effort between the Kern County Planning Department and the City of Bakersfield Planning Division, was last adopted on December 11, 2007. The MBGP includes both city and unincorporated County lands. The MBGP describes the community's physical development as well as its economic, social and environmental goals and is currently undergoing an update. Project-related development on unincorporated lands within the MBGP Planning Area would be subject to the following applicable policies and implementation measures of the MBGP, with respect to agricultural and forestry resources.

Chapter II. Land Use Element

Policy

- **Policy 77.** Allow for the continuance of agricultural uses in areas designated for future urban growth.

Chapter V. Conservation Element

C. Soils and Agriculture

Goals

- **Goal 1.** Provide for the planned management, conservation, and wise utilization of agricultural land in the Planning Area.
- **Goal 2.** Promote soil conservation and minimize development of prime agricultural land as defined by the following criteria:
 - Capability Class I and/or II irrigated soils.
 - 80-100 Storie Index rating.
 - Gross crop return of \$200 or more per acre per year.
 - Annual carrying capacity of 1 animal unit per acre per year.
- **Goal 3.** Establish urban development patterns and practices that promote soil conservation and that protect areas of agricultural production of food and fiber crops, and nursery products.

Policies

- **Policy 1.** Determine the extent and location of all prime agricultural land within the study area.
- **Policy 2.** Review projects that propose subdividing or urbanizing prime agricultural land to ascertain how continued commercial agricultural production in the Project vicinity will be affected.
- **Policy 4.** Monitor the amount of prime agricultural land taken out of production for urban uses or added within the plan area.
- **Policy 7.** Land use patterns, grading, and landscaping practices shall be designed to prevent soil erosion while retaining natural watercourses when possible.

- **Policy 12.** Prohibit premature removal of ground cover in advance of development and require measures to prevent soil erosion during and immediately after construction.

Implementation Measures

- **Implementation Measure 2.** Evaluate discretionary projects for their impact on agricultural resources.
- **Implementation Measure 3.** Document urban expansion and changes in the amount of agricultural land for purposes of determining cumulative impacts to prime agricultural land.

4.2.4 Impacts and Mitigation Measures

This section describes the impact analysis relating to agriculture and forest resources for the proposed project. It describes the methods used to determine the impacts of the project and lists the thresholds used to conclude whether an impact would be significant. Measures to mitigate (i.e., avoid, minimize, rectify, reduce, eliminate, or compensate for) significant impacts accompany each impact discussion.

Methodology

This analysis is based on the county-wide agriculture and forest land information that is publicly available. The evaluation of the proposed project's potential effects with respect to agriculture and forest land is at the program level. This EIR sets forth research criteria and report content needed to enable a project-level evaluation of resource occurrences. Any individual projects resulting from this proposed project would be required to adhere to the research criteria and report content set forth herein and could be required to undergo a separate CEQA evaluation pertaining to project-specific details.

The analysis in this section was conducted through review of: (1) the most current California DOC Division of Land Resource Protection's Important Farmland map and farmland conversion tables; (2) NRCS soils information; and (3) Kern County's Williamson Act Map.

Economic impacts are beyond the scope of environmental analysis under California Environmental Quality Act (CEQA), except to the extent that they may lead to physical changes to the environment. This EIR does not consider potential economic impacts of the proposed project on agriculture and forest resources because there are no economic impacts that would result in physical impacts. Section 15131(a) of the CEQA Guidelines states:

Economic or social effects of a project shall not be treated as significant effects on the environment. An EIR may trace a chain of cause and effect from a proposed decision on a project through anticipated economic or social changes resulting from the project to physical changes caused in turn by the economic or social changes. The intermediate economic or social changes need not be analyzed in any detail greater than necessary to trace the chain of cause and effect. The focus of the analysis shall be on the physical changes.

Development Standards Related to Agricultural and Forest Resources

Option A

Option A of the proposed project would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Therefore, no development standards

are identified in the proposed Zoning Ordinance; refer to Appendix B for specific wording of the proposed ordinance under Option A.

Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, testing, and retail cannabis stores with or without mobile delivery facilities. Development standards provided in the proposed Zoning Ordinance, that pertain to agriculture and forest resources include, but are not limited to, the following (refer to Appendix C for specific working of the proposed ordinance under Option B):

- All cannabis facilities must be 0.5 mile from any school, park, day care center or youth center.
- The applicant must demonstrate compliance with all applicable mitigation measures prior to the issuance of a grading or building permit for any future cannabis related facility.
- A Fire Safety Plan must be approved by the Kern County Fire Department for future cannabis related facilities.
- All entrances to the future cannabis facility shall be clearly marked and legibly posted. No minors or adults below the age of 21 years old will be allowed on the premises.
- A Hazardous Materials Business Plan must be approved by the Kern County Environmental Health Services Division/Hazardous Materials Section.
- No organized and advertised tours shall be permitted.
- For cultivation (indoor and outdoor), processing and packaging, and distribution facilities, recycled water use is required.

Thresholds of Significance

The Kern County CEQA Implementation Document and Kern County Environmental Checklist state that a project would normally be considered to have a significant impact if it would:

- Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use;
- Conflict with existing zoning for agricultural use or a Williamson Act contract;
- Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), or timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Productions (as defined in Government Code Section 51104(g));
- Result in the loss of forest land or conversion of forest land to non-forest use;
- Involve other changes in the existing environment which, because of their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use; or
- Result in the cancellation to an open space contract made pursuant to the California Land Conservation Act of 1965 or Farmland Security Zone Contract for any parcel of 100 or more acres (Section 15206(b)(3) Public Resources Code).

Project Impacts

Impact 4.2-1: Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) to Non-Agricultural Use

According to the California Department of Food and Agriculture (CDFA), cannabis is considered an agricultural product but is not considered an agricultural crop (CDFA, 2017). Therefore, the cultivation of cannabis would be considered a non-agricultural use.

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A does not provide opportunities for commercial cannabis activities and thus would not result in an increase in the need of land for the cultivation, processing and packaging, distribution, and sale of cannabis. Therefore, Option A would not convert farmland to non-agricultural use. No impact would occur in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis stores with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 square feet (ft^2) of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft^2 of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

Retail cannabis stores with or without mobile delivery that would be allowed through the implementation of the proposed project would be allowed in the following zone classifications: C-1 (Neighborhood Commercial); C-2 (General Commercial); CH (Highway Commercial); M-1 (Light

Industrial); M-2 (Medium Industrial); and M-3 (Heavy Industrial), and would therefore not result in the conversion of farmland to non-agricultural uses.

Commercial medical and adult use cannabis cultivation, both indoor and outdoor, processing and packaging, and distribution facilities that would be allowed through implementation of the proposed project could result in the conversion of farmland to non-agricultural uses throughout the project site. As shown in Appendix D, *Areas with Potential for Future Cannabis Activities and Facilities within Zone Classifications A and A-1*, there is a total of 2,697,532 acres of potential for future cannabis cultivation, processing and packaging, and distribution activities within zone classifications A (Exclusive Agriculture) and A-1 (Limited Agriculture). This total assumes no future cannabis activities are allowed within a one-mile boundary from any school, day care center, youth center, or city limit boundary within zone classifications A and A-1. It should be noted that the proposed ordinance under Option B identifies a 0.5-mile buffer area; however, a one-mile buffer area was used for the purposes of acreage calculations and impact analysis to provide conservative estimates in case the Kern County Planning Commission or Board of Supervisors requests a larger buffer area.

Of this total, 2,151,647 acres are located in Zone A and 545,885 acres are located in Zone A-1. Table 4.2-2, *Agricultural Lands with Potential for Future Cannabis Activities*, shows the agricultural lands that would potentially be available for future cannabis cultivation, processing and packaging, and distribution facilities.

Table 4.2-2. Agricultural Lands with Potential for Future Cannabis Activities

Agricultural Use Category	Potential Acreage ¹	Total Acreage in Kern County ²
Prime Farmland	392,586	585,035
Farmland of Statewide Importance	169,312	209,563
Unique Farmland	79,747	90,107
Farmland of Local Importance	0	0
Important Farmland Subtotal	641,645	884,705
Grazing Land	1,226,302	1,847,615
Other Agricultural Land	829,585	
Agricultural Land Total	2,697,532	2,732,320

Source: Kern County GIS data as depicted in Appendix D of this EIR; DOC, 2016a.

Note:

¹ Potential Acreage includes the areas within zone classifications A and A-1, with a one-mile buffer for future cannabis cultivation and packaging and process from any school, day care center, youth center, or city limit boundary and a 1,000-foot buffer for future retail cannabis stores from any school, day care center, youth center. Refer to Appendix D of this EIR for a map outlining areas within Zones A and A-1. Buffers used for calculations differ than the buffers required in the Option B ordinance language (refer to Appendix C of this EIR for details) in order to provide a conservative calculation.

² The 2012-2014 Land Use Conversion information from the DOC are the most recent numbers, being published in 2015. To date, the DOC has not released numbers for 2015 or 2016.

Kern County contains approximately 585,035 acres of Prime Farmland; approximately 209,563 acres of Farmland of Statewide Importance; and approximately 90,107 acres of Unique Farmland. Kern County does not contain Farmland of Local Importance. The County also contains approximately 1,847,615 acres of grazing land, for a total of approximately 2,732,320 acres of agricultural land (DOC, 2015).

As mentioned above, future commercial cannabis cultivation would be limited to a maximum of 2,000,000 ft² (approximately 46 acres) of indoor cultivation, including greenhouses, warehouses and

other structures, and 150 acres of outdoor cultivation countywide. Processing and packaging and distribution facilities would be allowed under agricultural and industrial zone classifications: A (Exclusive Agriculture); M-2 (Medium Industrial); and M-3 (Heavy Industrial). For the purposes of this analysis, it is assumed that all future processing, packaging, and distribution activities would be limited to 500,000 ft² (approximately 12 acres) within Zone A. Therefore, the total maximum acreage that could potentially be converted from agricultural land to non-agricultural land is approximately 208 acres. When compared to countywide agricultural land, the loss of 208 acres accounts for 0.007 percent of the total acreage of agricultural land in Kern County; however, such a loss may be considered cumulatively significant for the region.

The proposed project would potentially result in a significant impact on agricultural resources due to the conversion of Prime Farmland, Unique Farmland, and Farmland of Statewide Importance to non-agricultural use. Mitigation Measure MM 4.2-1 reduces the severity of the impact of the loss of this farmland by protecting regional agricultural lands at a ratio of one acre protected for every one acre of farmland on the project site that is converted to another use by employing one or more preservation mechanisms. This mitigation measure would only preserve farmland that otherwise might be converted; it would not create new farmland. Therefore, after implementation of the mitigation measure, the impact remains significant and unavoidable.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing before the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to the direct or indirect impacts to prime farmland, unique farmland, and farmland of statewide importance would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Agricultural Lands

1. The Williamson Act enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space uses in return for reduced property tax assessments.
2. The Farmland Security Zone Act allows a landowner already under a Williamson Act contract to apply for Farmland Security Zone status by entering into a contract with the county which automatically renews each year for an additional 20 year. In return for a further 35 percent reduction in the taxable value of land and growing improvements, the owner of the property promises not to develop the property into non-agricultural uses.
3. The KCGP Land Use, Open Space and Conservation Element Section 1.9, Resources, Goal 5; and Implementation Measure F related to the preservation of agricultural lands.
4. MBGP Policy 77 related to allowing continuance of agricultural uses in areas designated for future growth.

5. The MBGP Conservation Element, Soils and Agriculture, Goals 2 and 3; Policies 2 and 4, and Implementation Measures 2 and 3 address the preservation of prime agricultural land.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

MM 4.2-1: Prior to construction of any approved site plan, the project applicant shall provide written evidence of completion of one or more of the following measures to mitigate the loss of Prime Farmland, Farmland of Statewide Importance, and/or Unique Farmland, at a ratio of 1:1 for net acreage before conservation. New acreage is to be calculated by excluding existing roads and areas already developed with structures. A plot plan shall be submitted substantiating the net acreage calculation along with written evidence of compliance.

- Funding and purchase of agricultural conservation easements (will be managed and maintained by an appropriate entity);
- Purchase of credits from an established agricultural farmland mitigation bank;
- Participation in any agricultural land mitigation program adopted by Kern County that provides equal or more effective mitigation than the measures listed above.

Mitigation lands shall meet the definition of Prime Farmland, Farmland of Statewide Importance, and/or Unique Farmland, and be of similar agricultural quality or higher, as informed by definitions established by the California Department of Conservation Completion of the selected measure or, with the Kern County Planning and Natural Resources Director's approval, a combination of measures can occur on qualifying land within the San Joaquin Valley (San Joaquin, Stanislaus, Merced, Fresno, Madera, Kings, Tulare, or Kern County) or outside the San Joaquin Valley with written evidence that the same or equivalent crops can be produced on the mitigation land.

Any application for a conditional use permit shall include the above evidence and mitigation details and shall provide a plot plan substantiating the net acreage calculation along with written evidence of compliance.

Level of Significance After Mitigation

No impact would occur with respect to Option A. Impacts regarding Option B would be significant and unavoidable.

Impact 4.2-2: Conflict with Existing Agricultural Zoning or Williamson Act Contracts

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for

amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A does not provide opportunities for commercial cannabis activities and thus would not result in an increase in the need for land for the cultivation, distribution and sale of cannabis. Therefore, Option A would not conflict with existing agricultural zoning or Williamson Act contracts. No impact would occur in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

An Agriculture Preserve defines the boundary of an area within which Kern County could enter into agricultural contracts with landowners. Only land located within an Agriculture Preserve is eligible for a Williamson Act contract. The County has adopted a set of Agriculture Preserve Standard Rules that identify compatible land uses within Agriculture Preserves established under the Williamson Act. These rules are designed to restrict those land uses that are enrolled in a Williamson Act contract to agriculture or other compatible uses. Agricultural uses include crop cultivation, grazing operations, commercial wind farms, livestock breeding, dairies, and uses that are incidental to agricultural uses. Other compatible uses include the erection of gas, electric, communications, water, and other similar public utilities.

Retail cannabis stores with or without mobile delivery that would be allowed through the implementation of the proposed project would be allowed in the following zone classifications: C-1 (Neighborhood Commercial); C-2 (General Commercial); CH (Highway Commercial); M-1 (Light Industrial); M-2 (Medium Industrial); and M-3 (Heavy Industrial), and would therefore not conflict with agricultural zoning or Williamson Act Contracts.

Commercial medical and adult use cannabis cultivation, both indoor and outdoor, processing and packaging, and distribution facilities that would be allowed within zone classifications A and A-1.

Under Option B, the proposed amendment to Title 19 Chapter 19.120 of the Kern County Code of Ordinances (refer to Appendix C for full text of the proposed ordinance) would not allow cultivation on lands that are under Williamson Act contract. Therefore, future cannabis related activities would not conflict with a Williamson Act Contract because the activities would not be allowed on Williamson Act land. Any cancellation of a Williamson Act Contract is considered a separate discretionary action and subject to CEQA review and a public hearing process. Similarly, any amendment to the KCGP, MBGP, or Kern County Zoning Ordinance that would change the land use designation or zone classification of agricultural lands to non-agricultural uses would also require a separate application process with CEQA review and a public hearing process.

The County contains 24 agricultural preserves. Within each preserve, there are areas that have been excluded through special plans or other KCGP, ordinance, and agricultural preserve exclusion requests. Future development resulting from implementation of the proposed project would not conflict with any existing zoning or Williamson Act Contact and impacts would be less than significant. Commercial cultivation as well as processing and preparation would be considered agricultural uses consistent with the Zoning Ordinance, but not eligible under the Uniform Rules for reduced property taxes benefits from a Williamson Act or Farmland Security Act Contract.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing before the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, conflicts with any existing zoning or Williamson Act Contact would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Agricultural Lands

Refer to Impact 4.2-1, above, for a summary of applicable existing regulations and policies related to agricultural lands.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

No mitigation measures are required.

Level of Significance

No impact would occur with respect to Option A. Impacts regarding Option B would be less than significant.

Impact 4.2-3: Conflict with Existing Zoning for, or Cause Rezoning of, Forest Land, Timberland, or Timberland Zoned Timberland Production

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A does not provide opportunities for commercial cannabis activities and thus would not result in an increase in the need for land for the cultivation, distribution and sale of cannabis. Therefore, Option A would not conflict with existing zoning for, or cause rezoning of forest land, timberland, or timberland zoned timberland production. No impact would occur in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

As discussed in Section 4.2.2, *Existing Conditions*, the County does not contain Timberland Production Zones as identified by CAL FIRE however there are private timberlands in Kern County. Significant forested and woodland areas within the County include Bitter Creek National Wildlife Refuge, Los Padres National Forest, and Sequoia National Forest, as well as other forested areas in the Mountain Region and scattered oak tree woodlands in the Valley Region.

Neither the KCGP or MBGP specifically identify forest land or timberland. The KCGP does identify land use designations of Map Codes 8.2 (Resource Reserve) and 8.5 (Resource Management). The

MBGP identifies Extensive Agriculture (R-EA), which includes woodlands, and Open Space (OS) land use designations that could cover forest land. The Kern County Zoning Ordinance does not have a specific zone classification for forest land or timberland; however, the Zoning Ordinance does contain the following RF (Recreation-Forestry); OS (Open Space); NR (Natural Resource) districts that could include forest land and timberland.

Retail cannabis stores with or without mobile delivery that would be allowed through the implementation of the proposed project would be allowed in the following zone classifications: C-1 (Neighborhood Commercial); C-2 (General Commercial); CH (Highway Commercial); M-1 (Light Industrial); M-2 (Medium Industrial); and M-3 (Heavy Industrial), and would therefore not conflict with forest land or timberland zoning or timberland production.

For future cannabis cultivation, processing and packaging, and distribution activities, Option B does not propose to change the KCGP or MBGP land use designations nor would it change the zone districts. State law requires that zoning classifications comply with general plan land use designations, the presence of a resource designation over forest lands or effectively protects them from development, regardless of current zoning designation.

Option B does not include a general plan amendment or a zone code change for the purposes of developing future cannabis related activities. Rather, it proposes to update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities to guide future cannabis-related activities. Future cannabis cultivation, processing and packaging, and distribution activities would only be allowed in zones A and A-1, under Option B. Therefore, impacts would be less than significant as they relate to conflicts with existing forest land and timberland zoning and timber production.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing before the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, conflicts with existing forest land and timberland zoning and timber production would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Forest Land and Timberland

1. KCGP land use designations 8.2 and 8.5 related to resources such as forest land.
2. KCCP Land Use, Open Space and Conservation Element Section 1.10.10, Oak Tree Conservation, Policies 65 and 66; and Implementation Measures KK and LL promote the conservation of oak woodlands and large oak trees.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

No mitigation measures are required.

Level of Significance

No impact would occur with respect to Option A. Impacts regarding Option B would be less than significant.

Impact 4.2-4: The Project Would Result in the Loss of Forest Land or Conversion of Forest Land to Non-Forest Use

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A does not provide opportunities for commercial cannabis activities and thus would not result in an increase in the need for land for the cultivation, distribution and sale of cannabis. Therefore, Option A would not convert forest land to non-forest use. No impact would occur in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or

without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

As discussed in Impact 4.2-3, above, and in Section 4.2.2, *Existing Conditions*, the County does not contain Timberland Production Zones as identified by CAL FIRE; however, there are private timberlands in Kern County. Significant forested and woodland areas within the County include Bitter Creek National Wildlife Refuge, Los Padres National Forest, and Sequoia National Forest, as well as other forested areas in the Mountain Region and scattered oak tree woodlands in the Valley Region.

Retail cannabis stores with or without mobile delivery that would be allowed through the implementation of the proposed project would be allowed in the following zone classifications: C-1 (Neighborhood Commercial); C-2 (General Commercial); CH (Highway Commercial); M-1 (Light Industrial); M-2 (Medium Industrial); and M-3 (Heavy Industrial), and would therefore not result in the loss of forest land or conversion of forest land to non-forest land.

Option B does not include a general plan amendment or a zone code change for the purposes of developing future cannabis related activities. Rather, it proposes to update standards and conditions to guide future commercial cannabis-related activities and facilities. Future cannabis cultivation, processing and packaging, and distribution activities would only be allowed in zones A and A-1, under Option B. While these zone classifications do not contain specifically identified forest land, there is the possibility that future cannabis related activities, particularly in the Mountain Region and the oak woodland areas of the Valley Region, could result in loss of forest land to non-forest land. There are over 750,000 acres of healthy oak woodlands in Kern County. The establishment of outdoor cultivation in a forest area or that creates the removal of oak trees or oak woodlands could create issues regarding erosion, interference with grazing operations, impacts to existing livestock operations and interference with conservation lands which are already protected in the Mountain Region. Mitigation Measure MM 4.2-2 requires oak woodlands be replaced at a ratio of 1:1 net acreage for any cannabis related facility, where the land includes oak woodlands which are defined in the KCGP Section 1.10.10, *Oak Tree Conservation*, as having a canopy cover by oak trees of ten percent (10%) or more of the parcel. Therefore, impacts would be less than significant as they relate to converting forest land to non-forest land.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing before the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to converting forest land to non-forest land and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Forest Land and Timberland

Refer to Impact 4.2-3, above, for a summary of applicable existing regulations and policies related to forest land and timberland.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

MM 4.2-2 Any application for a conditional use permit or site plan for cultivation, processing and packaging, distribution, or testing facility shall include details on the site plan of the location of all oak trees and oak woodlands as applicable.

Prior to the establishment of any cannabis related facility on any property that contains oak woodlands that will be removed or disturbed by construction of the project, the project applicant shall provide written evidence of completion of one or more of the following measures to mitigate the loss of oak woodland at a ratio of 1:1 for net acreage before conservation. Oak woodlands are defined as parcels having canopy cover by oak trees of at least ten percent (10%) or more of the parcel, as defined in the Kern County General Plan, Section 1.10.10, Oak Tree Conservation. Any occurrence of oak woodlands on the legal parcel proposed for the cannabis operations shall trigger this mitigation measure.

Any new acreage is to be calculated by excluding existing roads and areas already developed with structures. A plan shall be submitted substantiating the net acreage calculation along with written evidence of compliance.

- Funding and purchase of oak woodland conservation easements (will be managed and maintained by an appropriate entity);
- Purchase of credits from an established oak woodland mitigation bank;
- Participation in any oak woodland mitigation program adopted by Kern County that provides equal or more effective mitigation than the measures listed above.

Mitigation lands shall meet the Kern County General Plan Section 1.10.10 definition of oak woodland and be of similar quality or higher, as established by the California Department of Conservation. Completion of the selected measure or, with the Kern County Planning and Natural Resources Director's approval, a combination of measures can occur on qualifying land within the Mountain Regions (Fresno, Madera, Kings, Tulare, Inyo or Kern County) or outside the Mountain Regions with written evidence that the same or equivalent crops can be produced on the mitigation land.

Level of Significance After Mitigation

No impact would occur with respect to Option A. Impacts regarding Option B would be less than significant

Impact 4.2-5: The Project Would Involve Other Changes in the Existing Environment Which, Due to Their Location or Nature, Could Result in Conversion of Farmland to Nonagricultural Use or Forest Land to Non-Forest Use

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A does not provide opportunities for commercial cannabis activities and thus would not result in an increase in the need of land for the cultivation, processing and packaging, distribution, and sale of cannabis. Therefore, Option A would not convert farmland to non-agricultural use or forest land to non-forest use. No impact would occur in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

Retail cannabis stores with or without mobile delivery that would be allowed through the implementation of the proposed project would be allowed in the following zone classifications: C-1 (Neighborhood Commercial); C-2 (General Commercial); CH (Highway Commercial); M-1 (Light Industrial); M-2 (Medium Industrial); and M-3 (Heavy Industrial), and would therefore not result in the conversion of agricultural land to nonagricultural land or forest land to non-forest land.

Future cannabis cultivation, processing and packaging, and distribution activities that would be authorized under Option B are not anticipated to result in a substantial population increase, as

further explained in Section 4.12, *Population and Housing*. Therefore, the proposed project would not result in an increase in development related to population increases, which could indirectly result in the conversion of agricultural land to nonagricultural land or forest land to non-forest land. Impacts in this regard are less than significant.

As discussed in Impact 4.2-1, Option B would authorize future cannabis-related activities within two of the County's agricultural zones, A (Exclusive Agriculture) and A-1 (Limited Agriculture). The County contains a total of 2,697,532 acres in zone classifications A (Exclusive Agriculture) and A-1 (Limited Agriculture) that have the potential for future cannabis cultivation, processing and packaging, and distribution activities given the proposed development restrictions and standards. The proposed project would potentially result in a significant impact on agricultural resources due to the conversion of Prime Farmland, Unique Farmland, and Farmland of Statewide Importance to non-agricultural use. Converting agricultural land to nonagricultural land could result in new development in the vicinity of a future cannabis cultivation, processing and packaging, or distribution facility, and thus direct conversion could lead to new development in the area and further loss of agricultural lands. Mitigation Measure MM 4.2-1 reduces the severity of the impact of the loss of this farmland by protecting regional agricultural lands at a ratio of one acre protected for every one acre of farmland on the project site that is converted to another use by employing one or more preservation mechanisms. This mitigation measure would only preserve farmland that otherwise might be converted; it would not create new farmland. Impacts are considered significant in this regard.

As discussed in Impact 4.2-4, Option B would authorize future cannabis-related activities within two of the County's agricultural zones, A (Exclusive Agriculture) and A-1 (Limited Agriculture). The County does not contain Timberland Production Zones as identified by CAL FIRE; however, there are private timberlands in Kern County. Significant forested and woodland areas within the County include Bitter Creek National Wildlife Refuge, Los Padres National Forest, and Sequoia National Forest, as well as other forested areas in the Mountain Region and scattered oak tree woodlands in the Valley Region.

Option B would authorize future cannabis-related activities within two of the County's agricultural zones, A (Exclusive Agriculture) and A-1 (Limited Agriculture). While these zone classifications do not contain specifically identified forest land, there is the possibility that future cannabis related activities, particularly in the Mountain Region and the oak woodland areas of the Valley Region, could result in loss of forest land to non-forest land. Converting forest land to non-forest land could result in new development in the vicinity of a future cannabis cultivation, processing and packaging, or distribution facility, and thus direct conversion could lead to new development in the area and further loss of forest lands. Mitigation Measure MM 4.2-2 reduces the severity of the impact of the loss of this forest land by protecting oak woodlands at a ratio of one acre protected for every one acre of oak woodland on the project site that is converted to another use by employing one or more preservation mechanisms. Therefore, impacts would be significant as they relate to converting forest land to non-forest land.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing before the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In

addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to converting farmland to non-farmland and forest land to non-forest land and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Agricultural Lands and Forest Land and Timberland

Refer to Impacts 4.2-1 and 4.2-3, above, for a summary of applicable existing regulations and policies related to agricultural lands, forest lands, and timberland.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

Implement Mitigation Measures MM 4.2-1 and MM 4.2-2, as described above.

Level of Significance After Mitigation

No impact would occur with respect to Option A. Impacts regarding Option B would be significant and unavoidable.

Impact 4.2-6: The Project Would Result in the Cancellation of an Open Space or Williamson Act Contract Made in Pursuant to the California Land Conservation Act of 1965 or Farmland Security Zone Contract for Any Parcel of 100 or More Acres

The Farmland Security Zone Act is similar to the Williamson Act in that it ensures long-term farmland preservation.

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A does not provide opportunities for commercial cannabis activities and thus would not result in an increase in the need of land for the cultivation, processing and packaging, distribution, and sale of cannabis. Therefore, Option A would not result in the cancellation of an

open space contract or farmland security zone contract or Williamson Act contract. No impact would occur in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

Retail cannabis stores with or without mobile delivery that would be allowed through the implementation of the proposed project would be allowed in the following zone classifications: C-1 (Neighborhood Commercial); C-2 (General Commercial); CH (Highway Commercial); M-1 (Light Industrial); M-2 (Medium Industrial); and M-3 (Heavy Industrial), and would therefore not result in the cancellation of an open space contract or farmland security zone contract or Williamson Act contract.

Commercial medical and adult use cannabis cultivation, both indoor and outdoor, processing and packaging, and distribution facilities that would be allowed within zone classifications A and A-1. Under Option B, the proposed amendment to Title 19 Chapter 19.120 of the Kern County Code of Ordinances (refer to Appendix C for full text of the proposed ordinance) would not allow cultivation on lands that are under an open space contract or farmland security zone contract or Williamson Act contract. Therefore, future cannabis related activities would not conflict with an open space contract or farmland security zone contract or Williamson Act contract because the activities would not be allowed on open space contract or farmland security zone contract land. Any cancellation of an existing open space contract or farmland security zone contract or Williamson Act contract is considered a separate discretionary action and subject to CEQA review and a public hearing process. Similarly, any amendment to the KCGP, MBGP, or Kern County Zoning Ordinance that would change the land use designation or zone classification of agricultural of lands to non-agricultural uses would also require a separate application process with CEQA review and a public hearing process.

Mitigation Measure MM 4.2-3 requires that a project applicant requesting future cannabis cultivation, processing and packaging, and distribution activities and facilities provide evidence that an open space contract or farmland security zone contract does not exist within the boundaries of the future cannabis-related activity site boundaries. Therefore, future development resulting from implementation of the proposed project would not conflict with any existing zoning or open space contract or farmland security zone contract or Williamson Act contract and impacts would be less than significant.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing before the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, conflicts with any existing zoning or open space contract or farmland security zone contract or Williamson Act contract and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Agricultural Lands and Forest Land and Timberland

Refer to Impacts 4.2-1 and 4.2-3, above, for a summary of applicable existing regulations and policies related to agricultural lands, forest lands, and timberland.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

MM 4.2-3: No site plan or conditional use permit shall be approved on land under Williamson Act Contract or Farmland Security Zone Contract or Open Space Contract.

Level of Significance After Mitigation

No impact would occur with respect to Option A. Impacts regarding Option B would be less than significant.

Cumulative Setting Impacts and Mitigation Measures

Cumulative Setting

The geographic scope for cumulative impacts on agricultural and forestry resources includes both the KCGP and the regional growth plan and projections included in the Kern COG Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) approved in 2014, as defined in Section 3.7, *Cumulative Projects*. This is a large enough area to encompass any effects of the proposed project on agricultural and forestry resources that may combine with similar effects caused by other projects, and provides a reasonable context wherein cumulative actions could affect these resources. The cumulative analyses consider whether the proposed project, Option A or Option B, in combination with the past, present, and reasonably foreseeable projects, could cumulatively affect agriculture or forest resources.

Impact 4.2-7: Contribute to Cumulative Agriculture and Forest Resource Impacts

Cumulative projects would have the potential to contribute incrementally to a cumulative impact if the project converts Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural uses, conflicts with existing zoning for agricultural uses and Williamson Act contracts, or involve other changes that could result in the conversion of agricultural land to non-agricultural uses.

Proposed Project Option A

Option A of the proposed project would ban all medical and adult use cannabis-related activities other than what is allowed under Proposition 64. Option A does not provide opportunities for business development and thus would not result in an increase in the need for land for the cultivation, distribution and sale of cannabis. As discussed above, Option A would not convert prime or unique farmland or farmland of statewide importance to nonagricultural uses (Impact 4.2-1), forest land to non-forest land (Impact 4.2-4), and would not otherwise convert agricultural land to nonagricultural land or forest land to non-forest land (Impact 4.2-5). Option A would not conflict with existing zoning protecting agriculture, forest land, or timberland (Impacts 4.2-2 and 4.2-3) and would not conflict with Williamson Act, open space, or farmland security zone contracts (Impacts 4.2-2 and 4.2-6). Therefore, Option A would not contribute to cumulative impacts when combined with past, present, or reasonably foreseeable projects. No impacts would occur in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B). The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3).

Retail cannabis stores with or without mobile delivery that would be allowed through the implementation of the proposed project would be allowed in the following zone classifications: C-1 (Neighborhood Commercial); C-2 (General Commercial); CH (Highway Commercial); M-1 (Light Industrial); M-2 (Medium Industrial); and M-3 (Heavy Industrial), and would therefore not contribute to cumulative impacts regarding agriculture and forest resources when combined with past, present, or reasonably foreseeable projects.

Commercial medical and adult use cannabis cultivation, both indoor and outdoor, and processing, packaging, and distribution facility that would be allowed through implementation of the proposed project could result in the conversion of farmland to non-agricultural uses throughout the project site. As shown in Appendix D, *Areas with Potential for Future Cannabis Activities and Facilities within Zone Classifications A and A-1*, there is a total of 2,697,532 acres of potential for future

cannabis cultivation, processing and packaging, and distribution activities within zone classifications A (Exclusive Agriculture) and A-1 (Limited Agriculture). This total assumes no future cannabis activities are allowed within a one-mile boundary from any school, day care center, youth center, or city limit boundary within zone classifications A and A-1. Of the total area within Zones A and A-1 that could potentially allow for future cannabis cultivation, processing and packaging, and distribution facilities, 2,151,647 acres are located in Zone A and 545,885 acres are located in Zone A-1.

Under Option B, future commercial cannabis cultivation would be limited to a maximum of 2,000,000 ft² (approximately 46 acres) of indoor cultivation, including greenhouses, warehouses and other structures, and 150 acres of outdoor cultivation. Processing, packaging, and distribution facilities, which would be allowed in Zone A (Exclusive Agriculture) would be limited to 500,000 ft² (approximately 12 acres). The total maximum acreage that could potentially be converted is approximately 208 acres.

Implementation of Option B would result in conversion of agriculture and forest/timber resources (Impacts 4.2-1, 4.2-4, and 4.2-5). Mitigation Measures MM 4.2-1 and MM 4.2-2 reduce the severity of the impact of the loss of this agriculture and forest land by protecting regional agricultural and forest lands at a ratio of one acre protected for every one acre of farmland or forest land on the future project site that is converted to another use by employing one or more preservation mechanisms. These mitigation measures would only preserve agricultural land and farmland that otherwise might be converted; it would not create new agricultural land or farmland. Conversion of agriculture and forest resources, when combined with past, present, or reasonably foreseeable projects are often small on an individual project scale, but large on a combined scale. Therefore, Option B would contribute to cumulative impacts when combined with past, present, or reasonably foreseeable projects. Cumulative impacts are significant.

With respect to existing zoning (Impact 4.2-3), Option B does not include a general plan amendment or a zone code change for the purposes of developing future cannabis related activities. Rather, it proposes to update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities to guide future cannabis-related activities. Future cannabis cultivation, processing and packaging, and distribution activities would only be allowed in zones A and A-1, under Option B. Therefore, Option B would not contribute to cumulative impacts when combined with past, present or reasonable foreseeable projects related to conflicts with existing zoning. Cumulative impacts would be less than significant in this regard.

With respect to conflicting with a Williamson Act, open space, or farmland security zone contracts (Impacts 4.2-2 and 4.2-6), future cannabis cultivation, processing and packaging, and distribution activities would be allowed within zone classifications A (Exclusive Agriculture) and A-1 (Limited Agriculture). Option B would not allow future cannabis cultivation, processing and packaging, or distribution facilities on lands that are under Williamson Act contract, open space contract, or farmland security zone contracts. A project applicant would not be allowed to propose any amendment to the KCGP, MBGP, or Kern County Zoning Ordinance that would allow conversion of these types of lands to non-agricultural uses for the sole purpose of future cannabis-related activities. Therefore, future cannabis related activities would not conflict with a Williamson Act contract, open space contract, or farmland security zone contract because the activities would not be allowed on contract land. Mitigation Measure MM 4.2-3 would require a project applicant

requesting future cannabis cultivation, processing and packaging, and distribution activities and facilities to provide evidence that an open space contract or farmland security zone contract or Williamson Act contract does not exist within the boundaries of the future cannabis-related activity site boundaries. Therefore, Option B would not contribute to cumulative impacts when combined with past, present or reasonable foreseeable projects related to conflicts with Williamson Act, open space, or farmland security zone contracts. Cumulative impacts would be less than significant in this regard.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

Implement Mitigation Measures MM 4.2-1 through MM 4.2-3, as described above.

Level of Significance after Mitigation

No cumulative impacts would occur with respect to Option A. Option B cumulative impacts associated with consistency with existing zoning, Williamson Act contracts, open space contracts, farmland security zone contracts, and timberland and forest land would be less than significant. Option B cumulative impacts associated with the conversion of agricultural land to nonagricultural land would be significant and unavoidable.

Section 4.3

Air Quality

Section 4.3 Air Quality

4.3.1 Introduction

This section of the Draft Environmental Impact Assessment (EIR) evaluates short and long-term air quality impacts associated with the Kern County Cannabis Land Use Ordinance Project (proposed project) and describes the affected environment and regulatory setting for air quality. Mitigation measures are also recommended to avoid or lessen the proposed project's impacts.

Information in this section is based on Chapter 3, *Project Description*, Section 4.15, *Transportation and Traffic*, and the following emissions estimation tools: California Emissions Estimator (CalEEMod) version 2016.3.1 (California Air Pollution Control Officers [CAPCOA], 2016) as well as the California Environmental Quality Act (CEQA) Guidelines, San Joaquin Valley Air Pollution Control District's (SJVAPCD) *Guidance for Assessing and Mitigating Air Quality Impacts* (GAMAQI) (San Joaquin Valley Air Pollution Control District [SJVAPCD], 2015a), Eastern Kern Air Pollution Control District (EKAPCD) *Guidelines for Implementation of the California Environmental Quality Act of 1970, as amended* (1999) and Kern County's 2006 *Guidelines for Preparing an Air Quality Assessment for Use in Environmental Impact Reports*.

4.3.2 Environmental Setting

The California Air Resources Board (CARB) has divided California into regional air basins according to topographic features. The western portion of Kern County is located in the San Joaquin Valley Air Basin (SJVAB) and the eastern portion of Kern County is located in the Mojave Desert Air Basin (MDAB). Emission sources within one basin could affect the other basin on extreme transport weather conditions. Air pollution in the SJVAB and MDAB can be attributed to both human-related (anthropogenic) and natural (non-anthropogenic) activities that produce emissions. The emissions characteristics for the two air basins are very different in terms of quantity and sources.

Topography and Meteorology

San Joaquin Valley Air Basin (SJVAB)

The SJVAPCD administers permits and regulatory compliance within the SJVAB. The SJVAB is approximately 250 miles long, an average of 35 miles wide, and is the second largest air basin in the State. This district encompasses the counties of Fresno, Kings, Madera, Merced, San Joaquin, Stanislaus, and Tulare and the San Joaquin Valley portion of Kern County. Air pollution from significant anthropogenic activities in the SJVAB includes a variety of industrial-based sources as well as on- and off-road mobile sources. Activities that tend to increase mobile activity include increases in population, increases in traffic (including automobiles, trucks, aircraft, and rail), urban sprawl (which increases commuter driving distances), and general local land management practices as they pertain to modes of commuter transportation (SJVAPCD, 2015a).

The transport and dispersion of air pollutants in ambient air are influenced by many complex factors. The primary factors are wind, topological boundaries, and atmospheric stability. The SJVAB is defined by the Sierra Nevada to the east (8,000 to 14,000 feet in elevation), the Coast

Range to the west (averaging 3,000 feet in elevation), and the Tehachapi Mountains to the south (ranging from 6,000 to 8,000 feet in elevation).

There is a slight downward elevation gradient from Bakersfield in the southeast end (elevation 408 feet) to sea level at the northwest end where the valley opens to the San Francisco Bay at the Carquinez Straits. At its northern end is the Sacramento Valley, which comprises the northern half of California's Central Valley. These topographic features result in weak airflow into the valley, which becomes vertically blocked by high barometric pressure over the SJVAB. As a result, the majority of the SJVAB is highly susceptible to pollutant accumulation over time. Furthermore, most of the surrounding mountains are above the normal height of the summer inversion layer.

The SJVAB's topography has a dominant effect on wind patterns. Winds tend to blow somewhat parallel to the valley and mountain range orientation. In spring and early summer, thermal low-pressure systems develop over the interior basins east of the Sierra Nevada mountain range, and the Pacific High (high pressure system that develops over the central Pacific Ocean near the Hawaiian Islands) moves northward. These developments and the topography produce the high incidence of relatively strong northwesterly winds in the spring and early summer (SJVAPCD, 2015a).

Wind speed and direction data indicate that during the summer, winds usually originate at the north end of the SJVAB and flow in a south/southeasterly direction through the Tehachapi Pass and into the southeast desert. During the winter, winds occasionally originate from the south end of the SJVAB and flow in a north/northwesterly direction. Also, during winter, the SJVAB experiences light, variable winds, typically less than 10 miles per hour. Low wind speeds, combined with low inversion layers in the winter, create a climate that is conducive to high carbon monoxide (CO) and inhalable particulates concentrations (SJVAPCD, 2015a).

The vertical mixing of air pollutants is limited by the presence of persistent temperature inversions. Inversions may be either at ground level or elevated. Ground-level inversions occur frequently during fall and early winter (i.e., October through January). High concentrations of primary pollutants, which are those emitted directly into the atmosphere (e.g., CO), may be found during these times. Elevated inversions act as a lid over the basin and limit vertical mixing and contribute to the occurrence of high levels of ozone (O_3) during the summer months.

The overall climate in the SJVAB is warm and semi-arid with over 250 sunny days per year. Summertime maximum temperatures often exceed 100°F in the valley. The San Joaquin Valley is in a Mediterranean Climate Zone, with sparse winter rainfall. With one wet season during the year, 90 percent of the precipitation falls between October and April. Snow in the valley is infrequent and thunderstorms seldom occur.

Mojave Desert Air Basin (MDAB)

The EKAPCD administers the Kern County portion of the MDAB. The Kern County portion of the basin is further subdivided into the Antelope Valley and an Indian Wells Valley. Most of the MDAB is sparsely populated and produces very few anthropogenic pollutants. This air basin experiences high wind and thus dusty conditions.

Away from the cooling effects of the Pacific Ocean, the climate of Kern County can be characterized as hot in summer and cold in winter, compared with the coastal basins where the climate is moderated by the adjacent ocean. Eastern Kern County in MDAB is classified as a "high

desert.” It is a transition between the “hot” Sonoran Desert to the south and the “cold” Great Basin Desert to the north. Characteristic of a desert climate, the Mojave Desert has extreme daily temperature changes, low annual precipitation, strong seasonal winds, and mostly clear skies. The area is characterized by very hot summer temperatures, with the mean maximum temperatures in July and August exceeding 100 °F. Winter temperatures are more moderate, with mean maximum temperatures in the 60s and lows in the 30s. Minimum temperatures below freezing (32°F) occur on an average of approximately one (1) day per year. The average annual precipitation is less than five inches with over 77 percent of the precipitation occurring between November and March. There is, however, a summer thunderstorm season from July to September with violent heavy precipitation that occasionally produces flash flooding. May and June are usually the driest months.

Large-scale weather patterns in the area are generally influenced by moderately intense anticyclonic circulation (i.e., associated with high pressure systems). During the summer, a large subtropical high-pressure system off the coast of California (Pacific High), in combination with the rain shadow produced by the coastal ranges and the mountain ranges that border the MDAB to the west and south, keeps the MDAB sunny and dry. However, the presence of a thermal low-pressure area above the MDAB promotes atmospheric transport from the Los Angeles Basin. During the winter months, the strength of the Pacific high-pressure area wanes, and 20 to 30 frontal systems may pass through the area each year. Some of these frontal systems are sufficiently strong to produce rain in the area. Precipitation is generally limited to a few storms during the winter season between November and April. Average annual precipitation in the proposed project area is less than five inches.

Sensitive Receptors

Some people are considered more sensitive to air pollutants than others, including those with pre-existing health problems, those who are close to an emissions source, or those who are exposed to air pollutants for long periods of time. The SJVAPCD’s GAMAQI defines sensitive receptors as those that are more susceptible to the effects of air pollution than the population at large and include “facilities that house or attract children, the elderly, and people with illnesses, hospitals, schools, convalescent facilities, and residential areas are examples of sensitive receptors” (SJVAPCD, 2015a). Land uses such as primary and secondary schools, hospitals, and convalescent homes are considered to be relatively sensitive because the very young, the old, and the infirm are more susceptible to respiratory infections and other air quality-related health problems than the general public. Residential areas are also considered sensitive to poor air quality because people in residential areas are often at home for extended periods. Recreational land uses are moderately sensitive to air pollution because exercise increases respiration rates which increases that potential to inhale emissions/pollutants.

The Kern County Cannabis Land Use Ordinance Project Option B includes the following setback parameters from potential sensitive receptors including school, parks, daycare, youth centers and city limits: a) 0.5 mile for future cannabis indoor cultivation, outdoor cultivation, processing and packaging, and distribution facilities; and b) 0.5 mile for retail cannabis stores. The analysis, however, uses a 1-mile setback for future cannabis indoor cultivation, outdoor cultivation, processing and packaging, and distribution facilities, and a 1,000-foot setback for retail cannabis stores to provide the most conservative analysis for this EIR.

Existing Air Quality

The United States Environmental Protection Agency (U.S. EPA) and the CARB have established health-based ambient air quality standards for several different pollutants. The U.S. EPA sets National Ambient Air Quality Standards (NAAQS) for the following seven pollutants for O₃, CO, nitrogen dioxide (NO₂), respirable particulate matter (PM₁₀), fine particulate matter (PM_{2.5}), sulfur dioxide (SO₂) and lead (Pb). These seven pollutants are commonly referred to as “criteria pollutants.” Primary standards provide public health protection, including protecting the health of “sensitive” populations, such as asthmatics, children, and the elderly. Secondary standards provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings.

In addition, CARB has established California Ambient Air Quality Standards (CAAQS) standards for these pollutants, as well as for sulfate (SO₄), visibility reducing particles, hydrogen sulfide (H₂S), and vinyl chloride. California standards are generally stricter than national standards. The NAAQS and the CAAQS are shown in Table 4.3-1.

Table 4.3-1. National and California Ambient Air Quality Standards			
Pollutant	Averaging Time	National Standards ^a	California Standards ^b
Ozone (O ₃)	8 Hours	0.070 ppm (137 µg/m ³) ^c	0.070 ppm (137 µg/m ³)
	1 Hour	-- ^d	0.09 ppm (180 µg/m ³)
Carbon Monoxide (CO)	8 Hours	9 ppm (10 mg/m ³)	9.0 ppm (10 mg/m ³)
	1 Hour	35 ppm (40 mg/m ³)	20 ppm (23 mg/m ³)
Nitrogen Dioxide (NO ₂)	Annual Average	0.053 ppm (100 µg/m ³)	0.030 ppm (56 µg/m ³)
	1 Hour	100 ppb (188.68 µg/m ³)	0.18 ppm (338 µg/m ³)
Sulfur Dioxide (SO ₂)	3 Hour	0.5 ppm (1,300 µg/m ³)	--
	24 Hours	0.14 ppm (365 µg/m ³)	0.04 ppm (105 µg/m ³)
	1 Hour	75 ppb (196 µg/m ³)	0.25 ppm (655 µg/m ³)
Particulate Matter (PM ₁₀)	Annual Arithmetic Mean	-- ^e	20 µg/m ³
	24 Hours	150 µg/m ³	50 µg/m ³
Particulate Matter—Fine (PM _{2.5})	Annual Arithmetic Mean	12.0 µg/m ³	12 µg/m ³
	24 Hours	35 µg/m ³	--
Sulfates (SO ₄)	24 Hours	--	25 µg/m ³
Lead ^f (Pb)	Rolling Three Month Average	0.15 µg/m ³	--
	30-day Average	--	1.5 µg/m ³
Hydrogen Sulfide (H ₂ S)	1 Hour	--	0.03 ppm (42 µg/m ³)
Vinyl Chloride (chloroethene)	24 Hours	--	0.01 ppm (26 µg/m ³)
Visibility-Reducing Particles (VRPs)	8 Hours	--	-- ^g

Source U.S. EPA, 2016a; CARB, 2016.
 ppm = parts per million; ppb = parts per billion; mg/m³ = milligrams per cubic meter; µg/m³ = micrograms per cubic meter.

^aThe NAAQS, other than O₃ and those based on annual averages, are not to be exceeded more than once a year. The O₃ standard is attained when the expected number of days per calendar year with maximum hourly average concentrations above the standard is equal to or less than 1. The National Primary Standards, which reflect the levels of air quality necessary, with an adequate margin of safety to protect the public health, are presented.

^bThe CAAQS for O₃, CO, SO₂ (1-hour and 24-hour standards), NO₂, PM₁₀, and PM_{2.5} are values not to be exceeded. All other California standards shown are values not to be equaled or exceeded.

^cOn October 1, 2015, the U.S. EPA Administrator signed the notice for the final rule to revise the primary and secondary NAAQS for O₃. The U.S. EPA is revising the levels of both standards from 0.075 ppm to 0.070 ppm, and retaining their indicators (O₃), forms (fourth-highest daily maximum, averaged across three consecutive years) and averaging times (eight hours). The U.S. EPA is in the process of submitting the rule for publication in the Federal Register. The final rule will be effective 60 days after the date of publication in the Federal Register. The lowered national 8-hour standards are reflected in the table.

^dOne-hour O₃ standard revoked effective June 15, 2005.

^eAnnual PM₁₀ standard revoked effective December 18, 2006.

^fOn October 15, 2008, U.S. EPA strengthened the lead standard.

Table 4.3-1. National and California Ambient Air Quality Standards			
Pollutant	Averaging Time	National Standards ^a	California Standards ^b
^g Statewide VRP Standard (except Lake Tahoe Air Basin): Particles in sufficient amounts to produce an extinction coefficient of 0.23 per kilometer when the relative humidity is less than 70 percent. This standard is intended to limit the frequency and severity of visibility impairment due to regional haze and is equivalent to a 10-mile nominal visual range.			

CARB operates the local meteorological and air quality monitoring stations in the County. Table 4.3-2 presents the air quality attainment status for the SJVAB. At the federal level, the entire SJVAB is classified as extreme non-attainment for 8-hour O₃, non-attainment for particulate matter less than 2.5 microns in diameter (PM_{2.5}) and attainment for the 1-hour O₃, particulate matter less than 10 microns (PM₁₀) and CO by the U.S. EPA for the federal National Ambient Air Quality Standards (NAAQS). At the State level, the SVAB is in nonattainment for 8-hour O₃, PM₁₀ and PM_{2.5} California Ambient Air Quality Standards (CAAQS). The SJVAB is attainment or unclassified for the federal and State standards for the other criteria pollutants.

Table 4.3-2. SJVAB Attainment Status

Pollutant	Designation/Classification	
	National Standards ^a	State Standards ^b
O ₃ : 1 hour	No Federal Standard ^c	Nonattainment/Severe
O ₃ : 8 hour	Nonattainment/Extreme ^d	Nonattainment
PM ₁₀	Attainment ^e	Nonattainment
PM _{2.5}	Nonattainment ^f	Nonattainment
CO	Attainment/Unclassified	Attainment/Unclassified
Nitrogen Dioxide	Attainment/Unclassified	Attainment
Sulfur Dioxide	Attainment/Unclassified	Attainment
Lead (Particulate)	No Designation/Classification	Attainment
Hydrogen Sulfide	No Federal Standard ^c	Unclassified
Sulfates	No Federal Standard ^c	Attainment
Visibility-Reducing Particles	No Federal Standard ^c	Unclassified
Vinyl Chloride	No Federal Standard ^c	Attainment

Source: SJVAPCD, 2016a.

^a See 40 CFR Part 81.

^b See CCR Title 17 Sections 60200–60210.

^c On September 25, 2008, U.S. EPA redesignated the San Joaquin Valley to attainment for the PM₁₀ National Ambient Air Quality Standard (NAAQS) and approved the PM₁₀ Maintenance Plan

^d The Valley is designated nonattainment for the 1997 PM2.5 NAAQS. U.S. EPA designated the Valley as nonattainment for the 2006 PM_{2.5} NAAQS on November 13, 2009 (effective December 14, 2009).

^e Though the Valley was initially classified as serious nonattainment for the 1997 8-hour ozone standard, U.S. EPA approved Valley reclassification to extreme nonattainment in the Federal Register on May 5, 2010 (effective June 4, 2010).

^f Effective June 15, 2005, the U.S. EPA revoked the federal 1-hour ozone standard, including associated designations and classifications. U.S. EPA had previously classified the SJVAB as extreme nonattainment for this standard. U.S. EPA approved the 2004 Extreme Ozone Attainment Demonstration Plan on March 8, 2010 (effective April 7, 2010). Many applicable requirements for extreme 1-hour ozone nonattainment areas continue to apply to the SJVAB.

On May 2014, the SJVAPCD formally requested that the U.S. EPA determine that the San Joaquin Valley has attained the federal 1-hour O₃ standard based on the fact that the San Joaquin Valley has been meeting the 1-hour O₃ standard based on the “expected exceedance days” test over the 2011–2013 three-year period air monitoring data.

Since 1992, the SJVAPCD air quality management strategies have focused on the 1-hour O₃ standard, trying to achieve the emissions reductions needed to demonstrate attainment by developing and implementing attainment plans, adopting over 500 stringent rules, and supplementing its regulatory programs with a voluntary incentive program.

Table 4.3-3 presents the air quality attainment status for the MDAB. The EKAPCD is currently classified as non-attainment for the one-hour State O₃ standard as well as non-attainment for the federal and State eight-hour O₃ standards. Additionally, the EKAPCD is classified as non-attainment for the State 24-hour PM₁₀ standard. The EKAPCD is currently in attainment and/or unclassified status for all other ambient air quality standards (EKAPCD, 2014).

Table 4.3-3. EKAPCD Attainment Status

Pollutant	Designation/Classification			
	EKAPCD	National Standards		State Standards
		Kern River / Cummings Valley ^{a, b}	Indian Wells Valley ^{c, d, e}	
O ₃ : 1 hour	Attainment ^{f, g}	Part of EKAPCD Area	Part of EKAPCD Area	Nonattainment
O ₃ : 8 hour	Nonattainment/Marginal	Part of EKAPCD Area	Unclassified / Attainment	Nonattainment
PM ₁₀	Unclassified / Attainment	Serious Nonattainment	Attainment Maintenance	Nonattainment
PM _{2.5}	Unclassified / Attainment	Part of EKAPCD Area	Part of EKAPCD Area	Unclassified
CO	Unclassified / Attainment	Part of EKAPCD Area	Part of EKAPCD Area	Unclassified
Nitrogen Dioxide	Unclassified	Part of EKAPCD Area	Part of EKAPCD Area	Attainment
Sulfur Dioxide	Unclassified	Part of EKAPCD Area	Part of EKAPCD Area	Attainment
Lead (Particulate)	Unclassified / Attainment	Part of EKAPCD Area	Part of EKAPCD Area	Attainment

Source: East Kern Air Pollution Control District (EKAPCD), 2014.

^a Kern River Valley, Bear Valley, and Cummings Valley were previously included in the federally designated San Joaquin Valley PM₁₀ Serious Nonattainment Area, but were made a separate nonattainment area in 2008.

^b Kern River Valley, Bear Valley, and Cummings Valley are included in EKAPCD for all NAAQS other than PM₁₀.

^c Indian Wells Valley is a separate planning area from the rest of EKAPCD for PM10 NAAQS.

^d Indian Wells Valley is a separate area for the 1997 and 2008 8-hour O₃ NAAQS (0.08 & 0.075 ppm).

^e Indian Wells Valley is included in EKAPCD for all NAAQS other than PM10 and 8-hour O₃.

^f 1-hour O₃ NAAQS was revoked effective June 15, 2004.

^g EKAPCD was in attainment for 1-hour O₃ NAAQS at time of revocation; the proposed Attainment Maintenance designation's effective date was June 21, 2004; therefore, it did not become effective.

^h Attainment for 1997 8-hour O₃ NAAQS (0.08 ppm), Nonattainment/Marginal for 2008 NAAQS (0.075ppm), and Nonattainment State 8-hour standard (0.070ppm).

Ambient Air Quality

The CARB and SJVAPCD operate an extensive network of air monitoring stations in the SJVAB and MDAB. The monitoring station network provides air quality monitoring data, including real-time meteorological data and ambient pollutant levels, as well as historical data. In the SJVAB portion of Kern County, data was collected from monitoring stations at Bakersfield Municipal Airport, Arvin-DiGiorgio, Bakersfield-5558 California Avenue, Bakersfield-Planz Ave, Edison, Maricopa, Oildale, and Shafter. In the MDAB portion of Kern County, data was collected from monitoring stations at Mojave, Ridgecrest (PM₁₀, PM_{2.5}), and Canebrake (PM₁₀, PM_{2.5}).

Table 4.3-4 presents the measured ambient pollutant concentrations and the exceedances of State and federal standards that have occurred at the above-mentioned monitoring stations located within Kern County from 2013 through 2015, the most recent years for which data are available.

Table 4.3-4. Existing Air Quality Monitoring Data in Proposed Project Area						
Pollutant and Monitoring Station Location	Maximum Concentration			Days Exceeding Standard		
	2013	2014	2015	2013	2014	2015
O ₃ – 1-hour CAAQS (0.09 ppm)						
SJVAB						
Bakersfield-5558 California Ave.	0.107	0.102	0.104	3	3	6
Bakersfield – Municipal Airport	0.109	0.108	0.118	6	10	23
Arvin – Di Giorgio	0.109	0.109	0.124	14	15	16
Edison	0.101	0.107	0.112	2	15	17

Table 4.3-4. Existing Air Quality Monitoring Data in Proposed Project Area

Pollutant and Monitoring Station Location	Maximum Concentration			Days Exceeding Standard		
	2013	2014	2015	2013	2014	2015
Maricopa – Stanislaus Street	0.089	0.090	0.094	0	0	0
Shafter – Walker Street	0.112	0.100	0.104	1	2	3
Oildale – 3311 Manor St.	0.099	0.093	0.099	1	0	2
MDAB						
Mojave – 923 Poole Street	0.094	0.104	0.104	0	9	1
O3 – 8-hour CAAQS (0.07 ppm)						
SJVAB						
Bakersfield-5558 California Ave.	0.099	0.093	0.097	47	39	54
Bakersfield – Municipal Airport	0.103	0.095	0.106	56	60	73
Arvin – Di Giorgio	0.095	0.092	0.101	68	69	55
Edison	0.086	0.092	0.099	21	55	45
Maricopa – Stanislaus Street	0.084	0.084	0.088	23	25	32
Shafter – Walker Street	0.097	0.087	0.091	19	28	34
Oildale – 3311 Manor St.	0.090	0.085	0.092	15	25	33
MDAB						
Mojave – 923 Poole Street	0.086	0.096	0.085	29	95	33
O3 – 8-hour NAAQS (0.07 ppm)						
SJVAB						
Bakersfield-5558 California Ave.	0.098	0.092	0.096	43	36	52
Bakersfield – Municipal Airport	0.102	0.095	0.106	55	58	69
Arvin – Di Giorgio	0.094	0.091	0.101	64	65	53
Edison	0.086	0.091	0.099	19	52	42
Maricopa – Stanislaus Street	0.083	0.083	0.087	23	24	32
Shafter – Walker Street	0.096	0.087	0.090	17	24	34
Oildale – 3311 Manor St.	0.090	0.085	0.092	13	24	33
MDAB						
Mojave – 923 Poole Street	0.086	0.095	0.084	23	88	31
PM10 – 24-hour CAAQS (50 µg/m ³)						
SJVAB						
Bakersfield-5558 California Ave.	116.9	419.5	103.6	16	69	20
Bakersfield – Golden State Hwy.	*	*	94.6	0	0	16
Oildale – 3311 Manor St.	138.0	335.6	104.4	27	20	26
MDAB						
Mojave – 923 Poole Street	131.5	171.0	74.9	26	12	5
Canebrake	39.8	78.9	59.4	0	2	1
Ridgecrest – 100 West California Ave	51.4	47.6	43.2	1	0	0
PM10 – 24-hour NAAQS (150 µg/m ³)						
SJVAB						
Bakersfield-5558 California Ave.	120.07	430.1	104.7	0	1	0
Bakersfield – Golden State Hwy.	*	*	100.5	0	0	0
Oildale – 3311 Manor St.	134.3	336.4	98.5	0	3	0
MDAB						
Mojave – 923 Poole Street	120.2	184.2	80.4	0	1	0
Canebrake	43.3	86.6	67.1	0	0	0
Ridgecrest – 100 West California Ave	56.4	51.8	44.5	0	0	0
PM2.5 - 24-hour NAAQS (35 µg/m ³)						
SJVAB						
Bakersfield – 410 E Planz Rd.	167.3	91.0	83.2	15	15	13
Bakersfield – 5558 California Ave.	111.7	101.9	107.8	44	37	29
Bakersfield – Golden State Highway	*	107.2	91.1	*	2	9

Table 4.3-4. Existing Air Quality Monitoring Data in Proposed Project Area

Pollutant and Monitoring Station Location	Maximum Concentration			Days Exceeding Standard		
	2013	2014	2015	2013	2014	2015
MDAB						
Mojave – 923 Poole Street	76.2	36.5	42.2	6	1	2
Ridgecrest – 100 West California Ave	15.3	10.5	12.5	0	0	0
CO - 8-Hour CAAQS & NAAQS (9.0 ppm)						
Fresno – 1st St.	n/a	n/a	n/a	n/a	n/a	n/a
NO2 - 1-Hour CAAQS (0.18 ppm)						
SJVAB						
Bakersfield – 5558 California Ave.	0.055	0.060	0.054	0	0	0
Shafter – Walker Street	0.058	0.058	0.045	0	0	0
Edison	0.047	0.035	0.046	0	0	0
Bakersfield – Municipal Airport	0.065	0.064	0.055	0	0	0
NO2 - 1-Hour NAAQS (0.10 ppm)						
SJVAB						
Bakersfield – 5558 California Ave.	0.055	0.061	0.055	0	0	0
Shafter – Walker Street	0.059	0.059	0.045	0	0	0
Edison	0.047	0.035	0.047	0	0	0
Bakersfield – Municipal Airport	0.065	0.064	0.055	0	0	0
SO2 – 24-hour Concentration - CAAQS (0.04 ppm) & NAAQS (0.14 ppm)						
Sacramento – Del Paso Manor	n/a	n/a	n/a	n/a	n/a	n/a
Pb - Maximum 30-Day Concentration CAAQS (1500 ng/m ³)						
Bakersfield - 5558 California Ave	0.0067	0.0140	0.0095	*	*	*

Source: CARB, 2017a

Notes: ppm= parts per million

* There was insufficient (or no) data available to determine the value.

Criteria Air Pollutants and Health Effects

The following is a general description of the criteria air pollutants that are hazardous to human health and are regulated by federal and State ambient air quality standards (Table 4.3-1) for outdoor concentrations.

Ozone (O₃)

As shown in Table 4.3-4, O₃ continues to be above the State 1-hour and both the federal and State 8-hour O₃ standards in many places in Kern County in both the SJVAB and the MDAB. O₃ occurs in two layers of the atmosphere. The layer surrounding the earth's surface is the troposphere. Here, at ground level, tropospheric, or "bad," O₃ is an air pollutant that damages human health, vegetation, and many common materials. It is a key ingredient of urban smog. The troposphere extends to a level about 10 miles up where it meets the second layer, the stratosphere. The stratospheric, or "good," O₃ layer extends upward from about 10 to 30 miles and protects life on earth from the sun's harmful ultraviolet rays.

"Bad" O₃ is what is known as a photochemical pollutant. It needs ROG and NO_x, known as O₃ precursors, and sunlight. ROG and NO_x are emitted from various sources throughout Kern County. Significant O₃ formation generally requires an adequate amount of precursors in the atmosphere and several hours in a stable atmosphere with strong sunlight. To reduce O₃ concentrations, it is necessary to control the emissions of these O₃ precursors.

O₃ is a regional air pollutant. It is generated over a large area and transported and spread by the wind. As the primary constituent of smog, O₃ is the most complex, difficult to control, and pervasive of the criteria pollutants. Unlike other pollutants, it is not emitted directly into the air by specific sources but is created by sunlight acting on other air pollutants (the precursors), specifically NO_x and ROG. Sources of precursor gases number in the thousands and include common sources such as consumer products, gasoline vapors, chemical solvents, and combustion byproducts of various fuels. Originating from gas stations, motor vehicles, large industrial facilities, and small businesses such as bakeries and dry cleaners, the O₃-forming chemical reactions often take place in another location, catalyzed by sunlight and heat. Thus, high O₃ concentrations can form over large regions when emissions from motor vehicles and stationary sources are carried hundreds of miles from their origins.

Health Effects

While O₃ in the upper atmosphere protects the earth from harmful ultraviolet radiation, high concentrations of ground-level O₃ can adversely affect the human respiratory system. Many respiratory ailments, as well as cardiovascular disease, are aggravated by exposure to high O₃ levels. O₃ also damages natural ecosystems, such as forests and foothill communities, agricultural crops, and some human-made materials, such as rubber, paint, and plastic. High levels of O₃ may negatively affect immune systems, making people more susceptible to respiratory illnesses, including bronchitis and pneumonia. O₃ also accelerates aging and exacerbates pre-existing asthma and bronchitis. Evidence has linked the onset of asthma to exposure to elevated O₃ levels in exercising children (McConnell et al., 2002). Active people who work or play outdoors appear to be more at risk from O₃ exposure than those with a low level of activity. In addition, the elderly and those with respiratory disease are also considered sensitive populations for O₃.

O₃ is a powerful oxidant and can be compared to household bleach, which can kill living cells (such as germs or human skin cells) upon contact. O₃ can damage the respiratory tract, causing inflammation and irritation, and induce symptoms such as coughing, chest tightness, shortness of breath, and worsening of asthmatic symptoms. O₃ in sufficient doses increases the permeability of lung cells, rendering them more susceptible to toxins and microorganisms. Exposure to levels of O₃ above the current ambient air quality standard leads to lung inflammation, lung tissue damage, and a reduction in the amount of air inhaled into the lungs. Elevated O₃ concentrations also reduce crop and timber yields, damage native plants, and damage materials such as rubber, paints, fabric, and plastics (CARB and American Lung Association of California, 2007).

Reactive Organic Gases (ROG) and Volatile Organic Compounds (VOC)

Hydrocarbons are organic gases that are formed solely of hydrogen and carbon. There are several subsets of organic gases, including volatile organic compounds (VOCs) and ROGs, which include all hydrocarbons except those exempted by CARB. Therefore, ROGs are a set of organic gases based on State rules and regulations. VOCs are similar to ROGs in that they include all organic gases except those exempted by federal law. The list of compounds exempt from the definition of a VOC is presented in District Rule 1102.

Both VOCs and ROGs are emitted from incomplete combustion of hydrocarbons or other carbon-based fuels. Combustion engine exhaust, oil refineries, and oil-fueled power plants are the primary sources of hydrocarbons. Another source of hydrocarbons is evaporation from petroleum fuels, solvents, dry cleaning solutions, and paint.

Health Effects

The primary health effects related to hydrocarbons stem from O₃ (see discussion above). High levels of hydrocarbons in the atmosphere can interfere with oxygen intake by reducing the amount of available oxygen through displacement. There are no separate national or California ambient air quality standards for ROG. Carcinogenic forms of ROG are considered toxic air contaminants (TACs). An example is benzene, which is a carcinogen. The health effects of individual ROGs are described under “Toxic Air Contaminants” below.

Carbon Monoxide (CO)

As shown in Table 4.3-4, the nearest CO monitoring station is in Fresno; there has been no CO data reported at the subject monitoring stations between 2013 and 2015. CO is emitted by mobile and stationary sources as a result of incomplete combustion of hydrocarbons or other carbon-based fuels. CO is an odorless, colorless, poisonous gas that is highly reactive.

CO is a byproduct of motor vehicle exhaust, which contributes more than 66 percent of all CO emissions nationwide. In cities, automobile exhaust can cause as much as 95 percent of all CO emissions. These emissions can result in high concentrations of CO, particularly in local areas with heavy traffic congestion. Other sources of CO emissions include industrial processes and fuel combustion in sources such as boilers and incinerators. Despite an overall downward trend in concentrations and emissions of CO, some metropolitan areas still experience high levels of CO.

Health Effects

CO enters the bloodstream and binds more readily to hemoglobin, the oxygen-carrying protein in blood, than oxygen, thereby reducing the oxygen-carrying capacity of blood and reducing oxygen delivery to organs and tissues. The health threat from CO is most serious for those who suffer from cardiovascular disease. Healthy individuals are also affected but only at higher levels of exposure. Exposure to CO can cause chest pain in heart patients, headaches, and reduced mental alertness. At high concentrations, CO can cause heart difficulties in people with chronic diseases and can impair mental abilities. Exposure to elevated CO levels is associated with visual impairment, reduced work capacity, reduced manual dexterity, poor learning ability, difficulty performing complex tasks, and, with prolonged enclosed exposure, death.

The adverse health effects associated with exposure to ambient and indoor concentrations of CO are related to the concentration of carboxyhemoglobin in the blood. Health effects observed may include an early onset of cardiovascular disease; behavioral impairment; decreased exercise performance of young, healthy men; reduced birth weight; sudden infant death syndrome; and increased daily mortality rate (Fierro et al., 2001).

Most of the studies that evaluate the adverse health effects of CO on the central nervous system examine high-level poisoning. Such poisoning results in symptoms ranging from common flu and cold symptoms (shortness of breath on mild exertion, mild headaches, and nausea) to unconsciousness and death.

Oxides of Nitrogen

NO_x is a family of highly reactive gases that are primary precursors to the formation of ground-level O₃; they react in the atmosphere to form acid rain. NO_x is emitted from solvents and combustion processes in which fuel is burned at high temperatures, principally motor vehicle

exhaust and stationary sources such as electric utilities and industrial boilers. A brownish gas, NO_x is a strong oxidizing agent that reacts in the air to form corrosive nitric acid as well as toxic organic nitrates.

NO_x is an O₃ precursor that combines with ROG to form O₃ (see the discussion of O₃ above for the health effects of O₃).

Health Effects

Direct inhalation of NO_x can also cause a wide range of health effects. NO_x can irritate the lungs, cause lung damage, and lower resistance to respiratory infections such as influenza. Short-term exposures (e.g., less than 3 hours) to low levels of nitrogen dioxide (NO₂) may lead to changes in airway responsiveness and lung function in individuals with pre-existing respiratory illnesses. These exposures may also increase respiratory illnesses in children. Long-term exposures to NO₂ may lead to increased susceptibility to respiratory infection and may cause irreversible lung damage. Other health effects are an increase in the incidence of chronic bronchitis and lung irritation. Chronic exposure may lead to eye and mucus membrane aggravation, along with pulmonary dysfunction. NO_x can cause fading of textile dyes and additives, deterioration of cotton and nylon, and corrosion of metals due to the production of particulate nitrates. Airborne NO_x can also impair visibility.

NO_x contributes to a wide range of environmental effects both directly and indirectly when combined with other precursors in acid rain and O₃. Increased nitrogen inputs to terrestrial and wetland systems can lead to changes in plant species composition and diversity. Similarly, direct nitrogen inputs to aquatic ecosystems such as those found in estuarine and coastal waters can lead to eutrophication (a condition that promotes excessive algae growth, which can lead to a severe depletion of dissolved oxygen and increased levels of toxins that are harmful to aquatic life). Nitrogen, alone or in acid rain, also can acidify soils and surface waters. Acidification of soils causes the loss of essential plant nutrients and increased levels of soluble aluminum, which is toxic to plants. Acidification of surface waters creates low pH conditions and levels of aluminum that are toxic to fish and other aquatic organisms. NO_x also contributes to visibility impairment.

Sulfur Dioxide

As shown in Table 4.3-4, the nearest SO₂ monitoring station is in Sacramento; there has been no SO₂ data reported at the subject monitoring stations between 2013 and 2015. SO₂ is a colorless, irritating gas with a “rotten egg” smell that is formed primarily by the combustion of sulfur-containing fossil fuels. Historically, SO₂ was a pollutant of concern in Kern County, but with the successful implementation of regulations, the levels have been reduced significantly.

Health Effects

High concentrations of SO₂ can result in temporary breathing impairment for asthmatic children and adults who are active outdoors. Short-term exposures of asthmatic individuals to elevated SO₂ levels during moderate activity may result in breathing difficulties that can be accompanied by symptoms such as wheezing, chest tightness, or shortness of breath. Other effects that have been associated with longer term exposures to high concentrations of SO₂ in conjunction with high levels of particulate matter include aggravation of existing cardiovascular disease, respiratory illness, and alterations in the lungs’ defenses. SO₂ also is a major precursor to PM_{2.5}, which is a significant

health concern and a main contributor to poor visibility. (See also the discussion of the health effects of particulate matter below.)

SO₂ not only has a bad odor, it can irritate the respiratory system. Exposure to high concentrations for short periods of time can constrict the bronchi and increase mucous flow, making breathing difficult. SO₂ can also irritate the lung and throat at concentrations greater than 6 ppm in many people, impair the respiratory system's defenses against foreign particles and bacteria when exposed to concentrations less than 6 ppm for longer time periods, and enhance the harmful effects of O₃ (combinations of the two gases at concentrations occasionally found in the ambient air appear to increase airway resistance to breathing).

SO₂ tends to have more toxic effects when acidic pollutants, liquid or solid aerosols, and particulates are also present. Effects are more pronounced among "mouth breathers" (e.g., people who are exercising or who have head colds). SO₂ easily injures many plant species and varieties, both native and cultivated. Some of the most sensitive plants include various commercially valuable pines, legumes, red and black oaks, white ash, alfalfa, and blackberry. Increases in SO₂ concentrations accelerate the corrosion of metals, probably through the formation of acids. SO₂ is a major precursor to acidic deposition. Sulfur oxides may also damage stone and masonry, paint, various fibers, paper, leather, and electrical components. Increased SO₂ also contributes to impaired visibility. Particulate sulfate, much of which is derived from SO₂ emissions, is a major component of the complex total suspended particulate mixture.

Particulate Matter (PM₁₀ and PM_{2.5})

As shown in Table 4.3-4, State PM₁₀ standards continue to be exceeded throughout Kern County in both the SJVAB and the MDAB. Federal PM₁₀ standards were exceeded in 2014 throughout Kern County in both the SJVAB and the MDAB.

Federal PM_{2.5} standards continue to be exceeded throughout Kern County in both the SJVAB and the MDAB. Particulate matter pollution consists of very small liquid and solid particles floating in the air. Some particles are large or dark enough to be seen as soot or smoke. Others are so small they can be detected only with an electron microscope. Particulate matter is a mixture of materials that can include smoke, soot, dust, salt, acids, and metals. Particulate matter also forms when gases emitted from motor vehicles and industrial sources undergo chemical reactions in the atmosphere. PM₁₀ refers to particles less than or equal to 10 microns in aerodynamic diameter. PM_{2.5} refers to particles less than or equal to 2.5 microns in aerodynamic diameter and are a subset of PM₁₀.

In the western United States, there are sources of PM₁₀ in both urban and rural areas. PM₁₀ and PM_{2.5} are emitted from stationary and mobile sources, including diesel trucks and other motor vehicles; power plants; industrial processes; wood-burning stoves and fireplaces; wildfires; dust from roads, construction, landfills, and agriculture; and fugitive windblown dust. Because particles originate from a variety of sources, their chemical and physical compositions vary widely.

Health Effects

PM₁₀ and PM_{2.5} particles are small enough to be inhaled and lodged in the deepest parts of the lung where they evade the respiratory system's natural defenses. Health problems begin as the body reacts to these foreign particles. Acute and chronic health effects associated with high particulate levels include the aggravation of chronic respiratory diseases; heart and lung disease; and coughing, bronchitis, and respiratory illnesses in children. Recent mortality studies have shown a statistically

significant direct association between mortality and daily concentrations of particulate matter in the air. PM₁₀ and PM_{2.5} can aggravate respiratory disease and cause lung damage, cancer, and premature death. Sensitive populations, including children, the elderly, exercising adults, and those suffering from chronic lung disease such as asthma or bronchitis are especially vulnerable to the effect of PM₁₀. Non-health-related effects include reduced visibility and soiling of buildings.

Attaining the California particulate matter standards would annually prevent about 6,500 premature deaths, or 3 percent of all deaths. These premature deaths shorten lives by an average of 14 years. This is roughly equivalent to the same number of deaths (4,200 to 7,400) linked to secondhand smoke in 2000. In comparison, motor vehicle crashes caused 3,200 deaths, and 2,000 deaths resulted from homicide. Attaining the California particulate matter and O₃ standards would annually prevent 4,000 hospital admissions for respiratory disease, 3,000 hospital admissions for cardiovascular disease, and 2,000 asthma-related emergency room visits. Exposure to diesel particulate matter causes about 250 excess cancer cases per year in California (CARB and American Lung Association of California, 2007).

A recent study provides evidence that exposure to particulate air pollution is associated with lung cancer. This study found that residents who live in an area that is severely affected by particulate air pollution are at risk of lung cancer at a rate comparable to nonsmokers exposed to secondhand smoke. This study also found an approximately 16 percent excess risk of dying from lung cancer due to fine-particulate air pollution (Pope et al., 2002). Another study shows that individuals with existing cardiac disease can be in a potentially life-threatening situation when exposed to high levels of ultrafine air pollution. Fine particles can penetrate the lungs, cause the heart to beat irregularly, or cause inflammation, which could lead to a heart attack (Peters et al., 2001). Currently, 57 percent of California's population lives in areas that exceed the National PM_{2.5} air standard, while 90 percent lives in areas that exceed California's PM_{2.5} air standard (CARB and American Lung Association of California, 2007).

Sulfates

Sulfates (SO₄²⁻) are particulate products from combustion of sulfur-containing fossil fuels. When sulfur monoxide or SO₂ is exposed to oxygen, it precipitates out into sulfates (SO₃ or SO₄). Data collected in Kern County identified sulfate levels that are significantly less than the applicable health standards.

Sulfates are the fully oxidized ionic form of sulfur. Sulfates occur in combination with metal and/or hydrogen ions. In California, emissions of sulfur compounds occur primarily from the combustion of petroleum-derived fuels (e.g., gasoline and diesel fuel) that contain sulfur. This sulfur is oxidized to SO₂ during the combustion process and subsequently converted to sulfate compounds in the atmosphere. The conversion of SO₂ to sulfates takes place comparatively rapidly and completely in urban areas of California because of regional meteorological features.

Health Effects

CARB's sulfates standard is designed to prevent aggravation of respiratory symptoms. Effects of sulfate exposure at levels above the standard include a decrease in oxygen intake, aggravation of asthmatic symptoms, and an increased risk of cardio-pulmonary disease. Sulfates are particularly effective in degrading visibility and, because they are usually acidic, can harm ecosystems, and damage materials and property (CARB, 2009).

Lead

Lead is a metal that is a natural constituent of air, water, and the biosphere. Lead is neither created nor destroyed in the environment, so it essentially persists forever. Historically, lead was used to increase the octane rating in automobile fuel. However, because gasoline-powered automobile engines were a major source of airborne lead through the use of leaded fuels and that use has been mostly phased out, the ambient concentrations of lead have dropped dramatically. Kern County's Bakersfield-5558 California Avenue monitoring station collects insufficient lead data to determine a conclusive result in the ambient air of the SJVAB.

Health Effects

Exposure to lead occurs mainly through inhalation of air and ingestion of lead in food, water, soil, or dust. It accumulates in the blood, bones, and soft tissues and can adversely affect the kidneys, liver, nervous system, and other organs. Excessive exposure to lead may cause neurological impairments such as seizures, mental retardation, and behavioral disorders. Even at low doses, lead exposure is associated with damage to the nervous systems of fetuses and young children, resulting in learning deficits and lowered IQ. Recent studies also show that lead may be a factor in high blood pressure and subsequent heart disease. Lead can also be deposited on the leaves of plants, presenting a hazard to grazing animals and humans through ingestion (U.S. EPA, 2011).

Hydrogen Sulfide

H₂S is associated with geothermal activity, oil and gas production, refining, sewage treatment plants, and confined animal feeding operations.

Health Effects

Exposure to low concentrations of H₂S may cause irritation to the eyes, nose, or throat. It may also cause difficulty in breathing for some asthmatics. Exposure to higher concentrations (above 100 ppm) can cause olfactory fatigue, respiratory paralysis, and death. Brief exposures to high concentrations of H₂S (greater than 500 ppm) can cause a loss of consciousness. In most cases, the person appears to regain consciousness without any other effects. However, in many individuals, there may be permanent or long-term effects such as headaches, poor attention span, poor memory, and poor motor function. No health effects have been found in humans exposed to typical environmental concentrations of H₂S (0.00011–0.00033 ppm). Deaths due to breathing in large amounts of H₂S have been reported in a variety of different work settings, including sewers, animal processing plants, waste dumps, sludge plants, oil and gas well drilling sites, and tanks and cesspools.

Vinyl Chloride

Vinyl chloride monomer is a sweet-smelling colorless gas at ambient temperature. Landfills, publicly owned treatment works, and polyvinyl chloride (PVC) production are the major identified sources of vinyl chloride emissions in California. PVC can be fabricated into several products, such as pipes, pipe fittings, and plastics. In humans, epidemiological studies of occupationally exposed workers have linked vinyl chloride exposure to development of a rare cancer, liver angiosarcoma, and have suggested a relationship between exposure and lung and brain cancers. There are currently no adopted ambient air standards for vinyl chloride.

Health Effects

Short-term exposure to vinyl chloride has been linked with the acute health effects listed below (Agency for Toxic Substances and Disease Registry [ATSDR], 2006; ATSDR, 2016).

- Acute exposure of humans to high levels of vinyl chloride via inhalation in humans has resulted in effects on the central nervous system, such as dizziness, drowsiness, headaches, and giddiness.
- Vinyl chloride is reported to be slightly irritating to the eyes and respiratory tract in humans. Acute exposure to extremely high levels of vinyl chloride has caused loss of consciousness, lung and kidney irritation, inhibition of blood clotting in humans, and cardiac arrhythmias in animals.
- Tests involving acute exposure of mice have shown vinyl chloride to have high acute toxicity from inhalation exposure.
- Long-term exposure to vinyl chloride concentrations has been linked with the chronic health effects listed below (ATSDR, 2006; ATSDR, 2016; U.S. EPA, 2000a).
- Liver damage may result in humans from chronic exposure to vinyl chloride through both inhalation and oral exposure.

A small percentage of individuals occupationally exposed to high levels of vinyl chloride in the air have developed a set of symptoms termed “vinyl chloride disease,” which is characterized by Raynaud’s phenomenon (fingers blanch and numbness and discomfort are experienced upon exposure to the cold), changes in the bones at the end of the fingers, joint and muscle pain, and scleroderma-like skin changes (thickening of the skin, decreased elasticity, and slight edema).

Central nervous system effects (including dizziness, drowsiness, fatigue, headache, visual and/or hearing disturbances, memory loss, and sleep disturbances) as well as peripheral nervous system symptoms (peripheral neuropathy, tingling, numbness, weakness, and pain in fingers) have also been reported in workers who are exposed to vinyl chloride.

Several reproductive/developmental health effects from vinyl chloride exposure have been identified and are listed below (ATSDR, 2006; ATSDR, 2016).

Several case reports suggest that male sexual performance may be affected by vinyl chloride. However, these studies are limited by lack of quantitative exposure information and possible co-occurring exposure to other chemicals.

Several epidemiological studies have reported an association between vinyl chloride exposure in pregnant women and an increased incidence of birth defects, while other studies have not reported similar findings.

Epidemiological studies have suggested an association between men occupationally exposed to vinyl chloride and miscarriages during their wives’ pregnancies, although other studies have not supported these findings.

Long-term exposure to vinyl chloride has also been identified as a cancer risk (ATSDR, 2006; ATSDR, 2016; U.S. EPA, 2000). Inhaled vinyl chloride has been shown to increase the risk of a rare form of liver cancer (angiosarcoma) in humans. Animal studies have also shown that vinyl chloride, via inhalation, increases the incidence of angiosarcoma.

Visibility-Reducing Particles

The CAAQS for visibility-reducing particles (VRPs), as shown in Table 4.3-1, is a measure of visibility. CARB does not have a measuring method with enough accuracy or precision to designate areas in the State as attainment or nonattainment areas with respect to visibility. The entire State is labeled as unclassified.

Toxic Air Contaminants (TAC)

“Hazardous air pollutants” (HAPs) is the term used by the Federal CAA to describe a variety of pollutants generated or emitted by industrial production activities. Called TACs under the California Clean Air Act of 1988 (CCAA), ten have been identified through ambient air quality data as posing the most substantial health risk in California (see discussion of each below). Direct exposure to these pollutants has been shown to cause cancer, birth defects, damage to the brain and nervous system, and respiratory disorders.

TACs do not have ambient air quality standards because no safe levels can be determined. Instead, TAC impacts are evaluated by calculating the health risks associated with a given exposure. The requirements of the Air Toxic “Hot Spots” Information and Assessment Act (Assembly Bill [AB] 2588) apply to facilities that use, produce, or emit toxic chemicals. Facilities that are subject to the toxic emission inventory requirements of the act must prepare and submit toxic emission inventory plans and reports and periodically update those reports.

A brief discussion of the characteristics and health effects of each TAC is provided below.

Acetaldehyde

Acetaldehyde is both emitted into the atmosphere directly and formed in the atmosphere from photochemical oxidation. Sources include combustion processes such as exhaust from mobile sources and fuel combustion from stationary internal combustion engines, boilers, and process heaters. Approximately 76 percent of acetaldehyde emissions are from mobile sources, with area sources such as residential wood combustion accounting for approximately 17 percent of total emissions.

Health Effects

Acetaldehyde is classified as a Federal HAP and as a California TAC. Acetaldehyde is a carcinogen that also causes chronic non-cancer toxicity in the respiratory system. The primary acute effect of inhalation exposure to acetaldehyde is irritation of the eyes, skin, and respiratory tract in humans. At higher exposure levels, erythema, coughing, pulmonary edema, and necrosis may also occur (U.S. EPA, 2000b).

Benzene

Benzene is highly carcinogenic and occurs throughout California. Approximately 84 percent of the benzene emitted in California comes from motor vehicles, including evaporative leakage and unburned fuel exhaust; currently, the benzene content of gasoline is less than one percent.

Health Effects

Benzene also has non-cancer health effects. Brief inhalation exposure to high concentrations can cause central nervous system depression. Acute effects include central nervous system symptoms

of nausea, tremors, drowsiness, dizziness, headache, intoxication, and unconsciousness (U.S. EPA, 2012). Exposure to liquid and vapor may irritate the skin, eyes, and upper respiratory tract in humans. Redness and blisters may result from dermal exposure.

1,3-Butadiene

The majority of 1,3-butadiene emissions comes from incomplete combustion of gasoline and diesel fuels. Mobile sources account for 83 percent of total statewide emissions. Area-wide sources such as agricultural waste burning and open burning contribute to approximately 13 percent of statewide emissions. Approximately 67 percent of 1,3-butadiene emissions are from mobile sources.

Health Effects

In California, 1,3-butadiene has been identified as a carcinogen. Butadiene vapors cause neurological effects at very high levels such as blurred vision, fatigue, headache, and vertigo. Dermal exposure of humans to 1,3-butadiene causes a sensation of cold, followed by a burning sensation, which may lead to frostbite (U.S. EPA, 2009).

Carbon Tetrachloride

The primary sources of carbon tetrachloride in California include chemical and allied product manufacturers and petroleum refineries.

Health Effects

In California, carbon tetrachloride has been identified as a carcinogen. Carbon tetrachloride is also a central nervous system depressant and mild eye and respiratory tract irritant. The U.S. EPA has classified carbon tetrachloride as a Group B2 probable human carcinogen (U.S. EPA, 2000c).

Chromium, Hexavalent

Chromium plating and other metal finishing processes are the primary sources of hexavalent chromium emissions in California. Approximately 65 percent of hexavalent chromium emissions are from stationary sources, such as electrical generation facilities, aircraft and parts manufacturing plants, and fabricated-metal manufacturing facilities.

Health Effects

In California, hexavalent chromium has been identified as a carcinogen. There is epidemiological evidence that exposure to inhaled hexavalent chromium may result in lung cancer. The principal acute effects are renal toxicity, gastrointestinal hemorrhage, and intravascular hemolysis (U.S. EPA, 2000d).

Para-Dichlorobenzene

The primary sources of para-dichlorobenzene include consumer products such as non-aerosol insect repellents and solid/gel air fresheners. These sources contribute 99 percent of the statewide para-dichlorobenzene emissions.

Health Effects

In California, para-dichlorobenzene has been identified as a carcinogen. Acute exposure to 1,4-dichlorobenzene via inhalation results in irritation to the eyes, skin, and throat in humans. In

addition, long-term inhalation exposure may affect the liver, skin, and central nervous system in humans (e.g., cerebellar ataxia, dysarthria, weakness in limbs, and hyporeflexia) (U.S.EPA, 2000e).

Formaldehyde

Formaldehyde is both emitted into the atmosphere directly and formed in the atmosphere as a result of photochemical oxidation. Formaldehyde is a product of incomplete combustion. One of the primary sources of formaldehyde is vehicular exhaust. Formaldehyde is also used in resins, many consumer products (as an antimicrobial agent), and fumigants and soil disinfectants. Approximately 68 percent of formaldehyde emissions in the SJVAB are from mobile sources.

Health Effects

The major toxic effects caused by acute formaldehyde exposure via inhalation are eye, nose, and throat irritation and effects on the nasal cavity. Other effects seen from exposure to high levels of formaldehyde in humans are coughing, wheezing, chest pains, and bronchitis. In California, formaldehyde has been identified as a carcinogen (U.S. EPA, 2000f).

Methylene Chloride

Methylene chloride is used as a solvent, a blowing and cleaning agent in the manufacture of polyurethane foam and plastic, and a solvent in paint-stripping operations. Paint removers account for the largest use of methylene chloride in California (approximately 82 percent).

Health Effects

Case studies of methylene chloride poisoning during paint-stripping operations have demonstrated that inhalation exposure to extremely high levels can be fatal to humans. Acute inhalation exposure to high levels has resulted in effects on the central nervous system, including decreased visual, auditory, and psychomotor functions, but these effects are reversible once exposure ceases. The major effects from chronic inhalation exposure are effects on the central nervous system, such as headaches, dizziness, nausea, and memory loss. California considers methylene chloride to be carcinogenic (U.S. EPA, 2000g).

Perchloroethylene

Perchloroethylene is used as a solvent, primarily in dry cleaning operations; it is also used in degreasing operations, paints and coatings, adhesives, aerosols, specialty chemical production, printing inks, silicones, rug shampoos, and laboratory solvents.

Health Effects

In California, perchloroethylene has been identified as a carcinogen. Perchloroethylene vapors are irritating to the eyes and respiratory tract. Following chronic exposure, workers have shown signs of liver toxicity as well as kidney dysfunction and neurological disorders (U.S. EPA, 2000h).

Diesel Particulate Matter

Diesel particulate matter is emitted from both mobile and stationary sources. In California, on-road diesel-fueled engines contribute approximately 24 percent of the statewide total, with an additional 71 percent attributed to other mobile sources such as construction and mining equipment,

agricultural equipment, and transport refrigeration units. Stationary sources contribute about 5 percent of total diesel particulate matter.

Health Effects

Diesel exhaust and many individual substances contained in it (including arsenic, benzene, formaldehyde, and nickel) have the potential to contribute to mutations in cells that can lead to cancer. Long-term exposure to diesel exhaust particles poses the highest cancer risk of any TAC evaluated by the California Office of Environmental Health Hazard Assessment (OEHHA). CARB estimates that about 70 percent of the cancer risk that the average Californian faces from breathing toxic air pollutants stems from diesel exhaust particles.

Diesel engines are a major source of fine-particle pollution. The elderly and people with emphysema, asthma, and chronic heart and lung disease are especially sensitive to fine-particle pollution. Numerous studies have linked elevated particle levels in the air to increased hospital admissions, emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory problems. Because children's lungs and respiratory systems are still developing, they are also more susceptible than healthy adults to fine particles. Exposure to fine particles is associated with increased frequency of childhood illnesses and can also reduce lung function in children. In California, diesel exhaust particles have been identified as a carcinogen (CARB, 2015).

Airborne Fungus (Valley Fever)

Valley Fever, or coccidioidomycosis, is caused by the microscopic fungus *coccidioides immitis* (*C. immitis*), which grows in arid soil in parts of Kern County and other parts of America. Infection occurs when the spores of the fungus become airborne and are inhaled. The fungal spores become airborne when contaminated soil is disturbed by human activities, such as construction and agricultural activities, and by natural phenomenon, such as wind storms, dust storms, and earthquakes.

Health Effects

Approximately 60 percent of infected persons have no symptoms. The remainder develop flu-like symptoms that can last for a month and tiredness that can sometimes last for several weeks. A small percentage of infected persons (less than one percent) can develop disseminated disease that spreads outside the lungs to the brain, bone, and skin. Without proper treatment, Valley Fever can lead to severe pneumonia, meningitis, and even death. Symptoms may appear between one and four weeks after exposure (CDC, 2017b).

A diagnosis of Valley Fever is made through a sample of blood or other body fluid or biopsy of the affected tissue. It is treatable with anti-fungal medicines and is not contagious. Once recovered from the disease, the individual is protected against further infection. Persons at highest risk from exposure are those with compromised immune systems, such as those with HIV, and those with chronic pulmonary disease. Farmers, construction workers, and others who engage in activities that disturb the soil are at highest risk for Valley Fever. Infants, pregnant women, diabetics, people of African, Asian, Latino, or Filipino descent, and the elderly may be at increased risk for disseminated disease. Historically, people at risk for infection are individuals not already immune to the disease and whose jobs involve extensive contact with soil dust, such as construction or agricultural workers and archeologists (County of Los Angeles, 2004; CDC, 2017b). The disease also has been known to infect animals. Infections occur most often in summer.

It is thought that during drought years the number of organisms competing with *C. immitis* decreases, and the *C. immitis* remains alive but dormant. When rain finally occurs, the arthroconidia germinate and multiply more than usual because of a decreased number of other competing organisms. Later, the soil dries out in the summer and fall, and the fungi can become airborne and potentially infectious (Kirkland and Fierer, 1996).

Persons at risk for Valley Fever should avoid exposure to dust and dry soil in areas where Valley Fever is common. Areas with high Valley Fever rates are called hyper-endemic. Approximately 10–50 percent of people living in endemic disease regions are seropositive and considered immune. In any given year, about 3 percent of people who live in an area where coccidioidomycosis is common will develop an infection (County of Los Angeles, 2004; CDC, 2017b). The areas of Kern County that have the most incidents of Valley Fever exposure are northeast Bakersfield, Lamont-Arvin, Taft, and Edwards Air Force Base. The Valley Fever fungus has been identified in soil samples taken near the California State University, Bakersfield campus.

Asbestos

Ultramafic serpentized rock is closely associated with asbestos and composed of the following minerals:

- Antigorite: $(Mg, Fe)3Si2O5(OH)4$;
- Clinochrysotile: $Mg_3Si_2O_5(OH)_4$;
- Lizardite: $Mg_3Si_2O_5(OH)_4$;
- Orthochrysotile: $Mg_3Si_2O_5(OH)_4$; and
- Parachrysotile: $(Mg, Fe)3Si2O5(OH)4$.

Chrysotile minerals are more likely to form serpentinite asbestos.

Health Effects

Asbestos can adversely affect humans only in its fibrous form, and these fibers must be broken and dispersed into the air and then inhaled. During geological processes, the asbestos mineral can be crushed, causing it to become airborne. It also enters the air or water from the breakdown of natural deposits. Constant exposure to asbestos at high levels on a regular basis may cause cancer in humans. The two most common forms of cancer are lung cancer and mesothelioma, a rare cancer of the lining that covers the lungs and stomach.

4.3.3 Regulatory Setting

In California, air quality is regulated by several agencies, including U.S. EPA, CARB, and local air districts such as the SJVAPCD and the EKAPCD. Each of these agencies develops rules and/or regulations to attain the goals or directives imposed upon them through legislation. Although U.S. EPA regulations may not be superseded, some State and local regulations may be more stringent than federal regulations. The County is located in the SJVAB and MDAB; therefore, projects are under the jurisdiction of either the SJVAPCD or EKAPCD, depending on location.

Federal

As explained in Section 3.2, *Regulatory History and Background*, even though cannabis is “decriminalized” under State law, and even with the U.S. Department of Justice (USDOJ) issuance of memoranda guiding federal law enforcement related to cannabis activities within jurisdictions

that have legalized cannabis, cannabis activities continue to be illegal at the federal level and subject to the prosecutorial discretion of the federal government.

U.S. Environmental Protection Agency (U.S EPA)

The principal air quality regulatory mechanism on the federal level is the CAA as amended in 1990 and in particular, the NAAQS established by the U.S. EPA pursuant to the CAA. These standards identify levels of air quality for “criteria” pollutants that are considered the maximum levels of ambient (background) air considered safe, with an adequate margin of safety, to protect the public health and welfare. The criteria pollutants include O₃, CO, NO₂, PM₁₀, PM_{2.5}, SO₂, which is a form of SO_X, and Pb. The U.S. EPA also has regulatory and enforcement jurisdiction over emission sources beyond State waters (outer continental shelf), and those that are under the exclusive authority of the federal government, such as aircraft, locomotives, and interstate trucking. The U.S. EPA’s primary role at the State level is to oversee the State air quality programs. The U.S. EPA sets federal vehicle and stationary source emission standards and oversees approval of all State Implementation Plans (SIP), as well as providing research and guidance in air pollution programs. The SIP is a State-level document that identifies all air pollution control programs within California that are designed to help the State meet the NAAQS.

Attainment defines the status of a given air shed with regard to NAAQS requirements. Air sheds not meeting these standards are classified as “nonattainment.”

Title V and Extreme Designation

Title V of the federal CAA, as amended in 1990, creates an operating permits program for facilities classified as major emission sources. Major emission sources are those that emit pollutants above the major source threshold applicable to the location of the emission source. In general, major source thresholds are 100 tons per year for any criteria pollutant. However, this will vary depending upon the attainment status of the source’s location. In an O₃ extreme nonattainment area, such as the proposed project area, sources that emit more than 10 tons per year of NO_X and ROG are classified as major sources for Title V permitting. This results in more businesses having to comply with Title V permitting requirements under the Extreme nonattainment designation.

Title V does not impose any new air pollution standards, require installation of any new controls on the affected facilities, or require reductions in emissions. Title V enhances public and U.S. EPA participation in the permitting process and requires additional record keeping and reporting by businesses, which results in significant administrative requirements.

U.S. EPA Emissions Standards

The U.S. EPA establishes and maintains emission standards of performance of new stationary sources under CAA Section 111(b), as the New Source Performance Standards (NSPS; 40 CFR 60). Categories of existing stationary sources can also be retroactively controlled under CAA Section 111(d).

Categories of sources that cause HAP emissions are controlled through separate standards under CAA Section 112: National Emission Standards for Hazardous Air Pollutants (NESHAP). These standards are specifically designed to reduce the potency, persistence, or potential bioaccumulation of toxic air pollutants. The emission standards for HAPs under CAA Section 112 prevent adverse health risks and carcinogenic effects from targeted types of facilities.

State

California Air Resources Board (CARB)

CARB, a department of the California Environmental Protection Agency (Cal/EPA), oversees air quality planning and control throughout California by administering the SIP. Its primary responsibility lies in ensuring implementation of the 1989 amendments to the CCAA as well as responding to the Federal CAA requirements and regulating emissions from motor vehicles sold in California. It also sets fuel specifications to reduce vehicular emissions further.

The amendments to the CCAA establish the CAAQS and a legal mandate to achieve these standards by the earliest practical date. These standards apply to the same criteria pollutants as the Federal CAA; they also include sulfate, VRPs, H₂S, and vinyl chloride. They are also more stringent than the National standards. The SJVAB is designated as a nonattainment area for the State 1-hour and 8-hour O₃, PM_{2.5}, and PM₁₀ standards. The MDAB is designated as a nonattainment area for the State 1-hour O₃, PM_{2.5}, and PM₁₀ standards. Concentrations of all other pollutants meet State standards.

CARB is also responsible for regulations pertaining to TACs. AB 2588 was enacted in 1987 as a means to establish a formal air toxics emission inventory risk quantification program. AB 2588, as amended, establishes a process that requires stationary sources to report information regarding the types and quantities of certain substances that their facilities routinely release into the SJVAB. Each air pollution control district ranks the data into high, intermediate, and low priority categories. When considering the ranking, the potency, toxicity, quantity, volume, and proximity of the facility to receptors are given consideration by an air district.

CARB also has on- and off-road engine emission-reduction programs that would indirectly affect the proposed project's emissions through the phasing in of cleaner on- and off-road engines. In addition, CARB has a Portable Equipment Registration Program that allows owners or operators of portable engines and associated equipment to register their units under a statewide program, with specified emission requirements, without having to obtain individual permits from local air districts.

The State enacted an additional regulation for the reduction of diesel particulate matter and criteria pollutant emissions from in-use off-road diesel-fueled vehicles (13 CCR Article 4.8, Chapter 9, Section 2449). This regulation provides target emission rates for particulate matter and NO_x emissions for owners of fleets of diesel-fueled off-road vehicles. It applies to equipment fleets of three specific sizes, and the target emission rates are reduced over time.

Regulation of Air Pollution Transport between Air Basins

The CCAA directs CARB to assess the contribution of O₃ and O₃ precursors in upwind basins or regions to O₃ concentrations that violate the State O₃ standard in downwind basins or regions. The movement of O₃ and O₃ precursors between basins or regions is referred to as "transport." In addition, the CCAA directs CARB to establish mitigation requirements for upwind districts commensurate with their contributions to the air quality problems in downwind basins or regions.

Over the last decade, CARB has published several transport reports that include technical assessments of transport relationships between air basins and regions in California. Along with these technical assessments, the reports have included mitigation requirements to ensure that

upwind areas do their part to limit the effects of transport on their downwind neighbors. CARB originally established mitigation requirements in 1990, which are contained in Title 17, CCR, Sections 70600 and 70601. These regulations were amended in 1993 and more recently in 2003. The most recent amendments added two new requirements for upwind districts. These amendments require upwind districts to: (1) consult with their downwind neighbors and adopt “all feasible measures” for O₃ precursors; and (2) amend their “no net increase” thresholds for permitting so that they are equivalent to those of their downwind neighbors. The amendments clarify that upwind districts are required to comply with the mitigation requirements, even if they attain the State O₃ standard in their own district, unless the mitigation measures are not needed in the downwind district.

According to SJVAPCD, air pollution transported from the San Francisco Bay and Sacramento areas account for approximately 27 percent of the total emissions in the northern portion of the SJVAPCD (San Joaquin, Stanislaus, and Merced counties). In the Central region (Fresno, Madera and Kings counties), the percentage drops to 11 percent, and in the south valley (the Valley portion of Kern and Tulare counties), transported air pollution accounts for only 7 percent of the total problem.

The MDAB includes the desert portions of Los Angeles, Kern, San Bernardino, and Riverside counties. The issue of O₃ transport in the Kern County area has been studied for many years. A 2006 study recognized the significant O₃ transport from the San Joaquin Valley into the Mojave Desert area through the Tehachapi Pass (Sonoma Technology, 2006).

The topography and climate of southern California combine to make the South Coast Air Basin an area with a high potential for air pollution, which constrains efforts to achieve clean air. During the summer months, a warm air mass frequently descends over the cool, moist marine layer produced by the interaction between the ocean’s surface and the lowest layer of the atmosphere. The warm upper layer forms a cap over the cool marine layer and inhibits the pollutants in the marine layer from dispersing upward. In addition, light winds during the summer further limit ventilation. Furthermore, sunlight triggers the photochemical reactions which produce O₃, and this region experiences more days of sunlight than many other major urban areas in the nation. Trans-boundary O₃ transport from Asia and its impact on air quality in the SJVAB is being further studied and increases in O₃ levels due to transport have been confirmed (SJVAPCD, 2016b).

Local

Kern County General Plan

Chapter 1. Land Use, Open Space, and Conservation Element

1.10.2 Air Quality

Goals

- **Goal 1.** Ensure that the County can accommodate anticipated future growth and development while maintaining a safe and healthful environment and a prosperous economy by preserving valuable natural resources, guiding development away from hazardous areas, and assuring the provision of adequate public services.

Policies

- **Policy 18.** The air quality implications of new discretionary land use proposals shall be considered in approval of major developments. Special emphasis will be placed on minimizing air quality degradation in the desert to enable effective military operations and in the valley region to meet attainment goals.
- **Policy 19.** In considering discretionary projects for which an EIR must be prepared pursuant to the California Environmental Quality Act (CEQA), the appropriate decision-making body, as part of its deliberations, will ensure that:
 - a. All feasible mitigation to reduce significant adverse air quality impacts have been adopted; and
 - b. The benefits of the proposed project outweigh any unavoidable significant adverse effects on air quality found to exist after inclusion of all feasible mitigation. This finding shall be made in a statement of overriding considerations and shall be supported by factual evidence to the extent that such a statement is required pursuant to the CEQA.
- **Policy 20.** The County shall include fugitive dust control measures as a requirement for discretionary projects and as required by the adopted rules and regulations of the San Joaquin Valley Unified Air Pollution Control District and the KCAPCD on ministerial permits.
- **Policy 21.** The County shall support air districts' efforts to reduce PM₁₀ and PM_{2.5} emissions.
- **Policy 22.** Kern County shall continue to work with the San Joaquin Valley Unified Air Pollution Control District and the Kern County Air Pollution Control District toward air quality attainment with federal, State, and local standards.
- **Policy 23.** The County shall continue to implement the local government control measures in coordination with the Kern Council of Governments and the San Joaquin Valley Unified Air Pollution Control District.

Implementation Measures

- **Implementation Measure F.** All discretionary permits shall be referred to the appropriate air district for review and comment.

Kern County Specific Plans

Kern County has adopted 39 Specific Plans, 10 Rural Community Plans, and 14 Interim Rural Community Plan Maps. The Specific Plans and Rural Community Plans are intended to be an amplification of the goals and policies of the KCGP and are, therefore, consistent therewith. Interim Rural Community Plan Maps are areas where a specific plan has not been formally adopted, thus the goals and policies of the KCGP govern these areas. Future commercial cannabis cultivation, processing/packaging, and sales activities that would be authorized under the project that would be located within the boundary of an adopted Specific Plan would be regulated according to County zoning.

Metropolitan Bakersfield General Plan (MBGP)

The Metropolitan Bakersfield General Plan (MBGP), a joint effort between the Kern County Planning Department and the City of Bakersfield Planning Division, was last adopted on December 11, 2007. The MBGP includes both city and unincorporated County lands. The MBGP describes the community's physical development as well as its economic, social and environmental goals and is currently undergoing an update. Proposed project-related development on unincorporated lands within the MBGP Planning Area would be subject to the applicable policies and implementation measures of the MBGP, with respect to air quality.

Chapter V. Conservation Element

Air Quality

Goals

- **Goal 1.** Promote air quality that is compatible with health, wellbeing, and enjoyment of life by controlling point sources and minimizing vehicular trips to reduce air pollutants.
- **Goal 2.** Continue working toward attainment of federal, State and Local standards as enforced by the San Joaquin Valley Air Pollution Control District.
- **Goal 4.** Reduce air pollution associated with agricultural activities.

Policies

- **Policy 1.** Comply with and promote San Joaquin Valley Unified Air Pollution Control District (SJVAPCD) control measures regarding Reactive Organic Gases (ROG). Such measures are focused on: (a) steam driven well vents, (b) Pseudo-cyclic wells, (c) natural gas processing plant fugitives, (d) heavy oil test stations, (e) light oil production fugitives, (f) refinery pumps and compressors, and (g) vehicle inspection and maintenance.
- **Policy 2.** Encourage land uses and land use practices which do not contribute significantly to air quality degradation.
- **Policy 3.** Require dust abatement measures during significant grading and construction operations.
- **Policy 4.** Consider air pollution impacts when evaluating discretionary permits for land use proposals. Considerations should include: a) Alternative access routes to reduce traffic congestion, b) Development phasing to match road capacities, c) Buffers including increase vegetation to increase emission dispersion and reduce impacts of gaseous or particulate matter on sensitive uses.
- **Policy 5.** Consider the location of sensitive receptors such as schools, hospitals, and housing developments when locating industrial uses to minimize the impact of industrial sources of air pollution.
- **Policy 7.** Participate in regional air quality studies and comprehensive programs for air pollution reduction.
- **Policy 19.** Promote a pattern of land uses which locates residential uses in close proximity to employment and commercial services to minimize vehicular travel.
- **Policy 31.** Encourage agricultural burn alternatives.

Eastern Kern Air Pollution Control District (EKAPCD)

The EKAPCD has primary responsibility for regulating stationary sources of air pollution situated within its jurisdictional boundaries. To this end, the EKAPCD implements air quality programs

required by State and federal mandates, enforces rules and regulations based on air pollution laws, and educates businesses and residents about their role in protecting air quality. The EKAPCD is also responsible for managing and permitting existing, new, and modified sources of air emissions within the Mojave Desert portion of Kern County and also established the following rules and regulations to ensure compliance with local, State, and federal air quality regulations:

- **Rule 201.** Rule 201 establishes permitting requirements for stationary sources. Any stationary source permits will be the responsibility of the construction contractor.
- **Rule 210.1.** Rule 210.1 implements requirements of Title V of the FCCA for permits to operate.
- **Rule 401.** Rule 401 limits discharge of visible emissions of any air contaminant for a period or periods aggregating more than 3 minutes in any one hour.
- **Rule 402.** The purpose of this rule is to reduce the amount of PM₁₀ emitted from significant man-made fugitive dust sources in an amount sufficient to maintain NAAQS. The rule applies to bulk storage, earthmoving, construction and demolition, and man-made conditions resulting in wind erosion.
 - This rule requires one or more Reasonably Available Control Measures (RACMs) to minimize fugitive dust emissions from each source type that is part of any active operation, including unpaved roadways.
 - This rule bans increases in downwind PM10 ambient concentrations by more than 50 micrograms per cubic meter above downwind concentrations as determined by simultaneous upwind and downwind sampling utilizing high-volume particulate matter samplers, or other U.S. EPA-approved equivalent method(s).
 - This rule requires that large operation either: (1) conduct on-site PM10 air quality monitoring and associated recordkeeping; or (2) file for and obtaining an approved fugitive dust emission control plan.
- **Rule 404.1.** This rule limits particulate matter discharges to 0.2 grains per cubic foot or less.
- **Rule 419.** Limits the discharge from any source of contaminants (or other material) that could cause injury, detriment, nuisance, or annoyance to people or the public.

San Joaquin Valley Air Pollution Control District (SJVAPCD)

State law assigns much of the authority to regulate stationary, indirect, and area sources to local air pollution control and air quality management districts. The SJVAPCD has primary responsibility for regulating stationary sources of air pollution situated within its jurisdictional boundaries. To this end, the SJVAPCD implements air quality programs required by State and federal mandates, enforces rules and regulations based on air pollution laws, and educates businesses and residents about their role in protecting air quality. The SJVAPCD is responsible for regulating stationary, indirect, and area sources of air pollution in the SJVAB. The eight counties that comprise the SJVAPCD are divided into three regions: the Northern Region (Merced, San Joaquin, and Stanislaus counties), the Central Region (Madera, Fresno, and Kings counties), and the Southern Region (Tulare County and San Joaquin Valley portion of Kern County).

The SJVAPCD is responsible for managing and permitting existing, new, and modified sources of air emissions within its boundaries and also established the following rules and regulations to ensure compliance with local, State, and federal air quality regulations.

Rules and Regulations

The SJVAPCD's primary means of implementing air quality plans are by adopting and enforcing rules and regulations. Stationary sources within the jurisdiction are regulated by the SJVAPCD's permit authority over such sources and through its review and planning activities. Unlike stationary source projects, which encompass very specific types of equipment, process parameters, throughputs, and controls, air emissions sources from land use development projects are mainly mobile sources (traffic) and area sources (small dispersed stationary and other non-mobile sources), including exempt (i.e., no permit required) sources such as consumer products, landscaping equipment, furnaces, and water heaters. The following SJVAPCD Rules and Regulations apply to the Cannabis Land Use Ordinance Project.

Regulation I (General Provisions)

Regulation I (General Provisions) is a series of rules that establish the basic framework for interacting with the SJVAPCD including enforcement procedures, inspections, and source sampling requirements, and regulatory accountability.

Regulation II (Permits)

Rule 2010 (Permits Required) requires any person constructing, altering, replacing, or operating any source operation which emits, may emit, or may reduce emissions to obtain an Authority to Construct or a Permit to Operate.

Rule 2092 (Standards for Permits to Operate) defines the conditions which must be met in order for an APCO to issue a Permit to Operate.

Rule 2201 (New and Modified Stationary Source Review Rule) provides for the review of new and modified Stationary Sources of air pollution and to provide mechanisms including emission offsets by which Authorities to Construct such sources may be granted, without interfering with the attainment or maintenance of Ambient Air Quality Standards; and ensure that no net increase in emissions above specified thresholds from new and modified Stationary Sources of all nonattainment pollutants and their precursors occur.

Rule 2250 (Permit-Exempt Equipment Registration) is essentially an SJVAPCD rule designed to provide the SJVAPCD with oversight of equipment that would otherwise not require an air permit. According to the SJVAPCD's Permit-Exempt Equipment Registration – Frequently Asked Questions document, “PEER is necessary to enforce the requirements of certain District prohibitory rules in which the emissions equipment is exempt from permitting requirements” (SJVAPCD 2008). Section 4.5 of Rule 2250 states that the District shall issue the Permit-Exempt Equipment Registration (PEER) within 90 days of receipt of a completed application. Section 4.7 - 4.8 specify that a PEER unit is neither transferable between locations or owners without an application for transfer. See Rule 3155 for information on fees relating to PEER units. Additionally, Rules 4702, 4307, and 4622 define different types of PEER units.

Rule 2280 (Portable Equipment Registration) provides the administrative requirements for permitting portable emissions units for operation in participating districts throughout the State of California, starting in Section 4.0 - 4.13. To register portable equipment, an application must be submitted to the district in which operation will first occur. The Applicant shall provide the administering district with all necessary emissions and engineering data in order to demonstrate compliance with Section 5 of this rule. Section 4.4 states that prior to issuing a permit for portable

registration, the SJVAPCD will conduct an onsite inspection of the unit. There are several notification and reporting rules associated with portable equipment. Namely, Section 6.1 states that if a portable emissions unit remains at a location for more than 24 hours, the SJVAPCD must be notified within two calendar days, and Section 6.2 states that within 30 days after the end of every calendar quarter, the SJVAPCD must be provided with the level of activity (hours of operation) for the previous quarter, unless the equipment is a rental. Finally, Section 8.0 provides emissions limitation and minimum distance requirements of 1,000 feet from kindergarten-12th grade schools.

Rule 2410 (Prevention of Signification Deterioration) is triggered when obtaining construction permits for a new major stationary source and/or major modification to existing major stationary sources located in areas classified as “in attainment” or in areas that are unclassifiable for any criteria pollutant. The most important of the “Requirements” in Section 4.0 is that of 4.1 requiring that a PSD permit be obtained prior to beginning any construction of a new major stationary source or a major modification to an existing major stationary source. Lastly, the SJVAPCD must follow the public notice requirements of Rule 2201 prior to issuing a federal PSD permit.

Rule 2520 (Federally Mandated Operating Permits) applies to major sources of criteria pollutants and/or toxics, stationary sources with the potential to emit 100 tons per year or more of any air contaminant, sources required by Title V to obtain acid rain permits, sources required by the PSD program to have a preconstruction review, solid waste incinerators subject to Sections 111 or 129 of the CAA and any source in a source category designated by the U.S. EPA.

Regulation III (Fees)

Regulation III sets the fees associated with owning and operating facilities, activities, and equipment that have the potential to emit air pollutants in the San Joaquin Valley.

Regulation IV (Prohibitions)

Rule 4001 (New Source Performance Standards) applies to all new sources of air pollution and modifications of existing sources of air pollution within the source categories for which U.S. EPA has adopted standards. Section 4.0, Requirements, lists all of the provisions of 40 CFR Part 60 that are incorporated into the New Source Performance Standard.

Rule 4002 (National Emission Standards for Hazardous Air Pollutants) applies in the event that any portion of an existing building will be renovated, partially demolished or removed. Prior to any demolition activity, an asbestos survey of existing structures on the proposed project site may be required to identify the presence of any asbestos-containing building material (ACBM). Any identified ACBM having the potential for disturbance must be removed by a certified asbestos contractor in accordance with California Occupational Safety and Health Administration (Cal/OSHA) requirements.

Rule 4101 (Visible Emissions) prohibits the emission of visible air contaminants into the atmosphere and applies to any source operation with the potential to emit air contaminants. Section 4.0 - 4.12 list the following exemptions: fires set by a permitted public officer (such as those for the instruction of fighting fire), orchard or citrus grove heater which produces less than one gram per minute unconsumed solid carbonaceous matter, hazard reduction burning, aircraft distribution of agricultural aids over lands devoted to agriculture, open outdoor fires used for cooking and/or recreation, emissions from equipment used for the instruction/certification of individuals in visible emissions, wet plumes where the presence of uncombined water is the only reason for the failure of an emission to meet rule limitations, emissions from maritime vessels using steam boilers during

emergency boiler shutdowns for safety reasons, the use of an obscurant for the purpose of training military personnel and the testing of military equipment by the U.S. Department of Defense, and emissions specifically exempt from Regulation VIII. Section 5.0 - 5.2 requires that there be no discharge from a single source of emission for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker than a designated Ringelmann No. 1 rating by the U.S. Bureau of Mines, or of opacity that can obscure an observers view equal to or greater than the Ringelmann No. 1 rating.

Rule 4102 (Nuisance) applies to any source operation that emits or may emit air contaminants or other materials. In the event that elements of the proposed project creates a public nuisance, it could be in violation and be subject to SJVAPCD enforcement action.

Rule 4201 (Particulate Matter Concentration) sets a standard maximum of 0.1 grain per cubic foot of gas at dry standard conditions for PM emissions. This rule applies to any source operation that emits dust, fumes, or total suspended PM.

Rule 4202 (Particulate Matter – Emission Rate) establishes allowable emissions rates for PM. This rule requires any source operation that may emit particulate matter emissions to meet the standards set forth in the table “Allowable Emission Rate Base on Process Weight Rate.”

Rule 4301 (Fuel Burning Equipment) was created to limit the emission of air contaminants from fuel burning equipment. This rule applies to any fuel burning equipment except air pollution control equipment which is exempted in Section 4.0 of this rule. This rule requires in Section 5.0 that combustion contaminants discharged into the atmosphere do not exceed 0.1 grain per cubic foot of gas calculated to 12 percent CO₂ at dry standard conditions. The rule also requires the building, installation and expansion of non-mobile fuel burning equipment not to exceed 200 pounds/hour of sulfur compounds, 140 pounds/hour of N₂O, or 10 pounds/hour of combustion contaminants as defined in rule 1020 (definitions) and derived from the fuel. Finally, Section 6.0 specifies the test methods to determine compliance.

Rule 4304 (Equipment Tuning Procedures for Boilers, Steam Generators, and Process Heaters) applies to any boiler, steam generator, or process heater that requires tuning pursuant to SJVAPCD regulations or permit conditions. Attachments to this rule detail tuning requirements for different types of boilers, steam generators, and process heaters: Mechanical Draft (4304-A) and Natural and Induced Draft (4304-B).

Rule 4305 (Boilers, Steam Generators, and Process Heaters – Phase 2) limits the emissions of NO_x and CO emissions from boilers, steam generators, and process heaters. This rule applies to any gaseous fuel or liquid fuel fired boiler, steam generator, or process heater with a heat input rating greater than 5 Million Metric British Thermal Units per hour (MMBtu/hr). Exemptions to the rule are solid fuel fired units, dryers, kilns and smelters, unfired or fired waste recovery boilers that are used to recover or augment heat from the exhaust of combustion turbines or internal combustion engines, and exemptions from the requirements when using fuel other than Public Utilities Commission quality natural gas during curtailments and for units that operate exclusively from November to February for less than 500 hours total. Amongst the requirements in Sections 5.0, the most commonly referenced is the NO_x emission limits table in Section 5.1.1, setting the following limitations: For all units, except box or cabin type units and vertical cylindrical process heaters operated on gaseous fuel 30 ppmv or 0.036 lb/MMBtu or operated on liquid fuel 40 parts per million volume (ppmv) or 0.052 lb/MMBtu. For box or cabin type units, and vertical cylindrical process heaters operated on gaseous fuel, 147 ppmv or 0.18 lb/MMBtu or operated on liquid fuel,

155 ppmv or 0.2 lb/MMBtu. Units operated on a combination of gaseous and liquid fuel shall use a heat input weighted average of the previous limits. Additionally, all units subject to this rule shall not exceed 400 ppmv of CO emissions.

Rule 4306 (Boilers, Steam Generators, and Process Heaters – Phase 3) limits emissions of NO_x and CO from boilers, steam generators, and process heaters and “build on” the rules set forth in Rule 4305. As with Rule 4305, this rule applies to any gaseous fuel or liquid fired boiler, steam generator, or process heater with a total rated heat input greater than 5 MMBtu. Section 5.0 sets forth extensive NO_x and CO limits, in addition to monitoring provisions in Section 5.4 – 5.4.5. Additionally, there are compliance testing guidelines in Section 6, most often requiring a source test to demonstrate compliance annually.

Rule 4307 (Boilers, Steam Generators, and Process Heaters 2.0 MMBtu/hr to 5.0 MMBtu/hr) limits the emissions of NO_x, CO, SO₂, and PM10 from gaseous or liquid fuel fired boilers, steam generators or process heaters with a total rated heat input of 2.0 MMBtu /hr up to and including 5.0 MMBtu/hr. NO_x and CO limits are set forth in Section 5.0 - 5.6.5 in which details on PM10 control requirements, start up and shut down requirements, monitoring provisions and more are provided.

Rule 4308 (Boilers, Steam Generators, and Process Heaters 0.075 MMBtu/hr to less than 2.0 MMBtu/hr) limits NO_x and CO from boilers, steam generators, process heaters and water heaters with heat inputs greater than or equal to 0.075 MMBtu/hr to less than 2.0 MMBtu/hr. Exemptions from this rule are units installed in manufactured homes, recreational vehicles, and hot water pressure washers. Tables 1 and 2 in Section 5.0 provide emissions limits while administrative requirements, such as source testing and certification for retrofits, are in Section 6.0.

Rule 4601 (Architectural Coatings) limits VOCs from architectural coatings. This rule specifies architectural coatings storage, clean up and labeling requirements and is applicable to any person who supplies, sells, offers for sale, applies, or solicits the application of any architectural coating or who manufactures, blends or repackages any architectural coating for use within the SJVAPCD. Aerosol coating products, architectural coatings from outside of the SJVAPCD, and the majority of architectural coating containers with a volume of one liter or less are exempt. VOC contents, restrictions, directions for thinning, and a table of standards are all supplied in the Requirements Section 5.0.

Rule 4623 (Storage of Organic Liquids) limits VOC emissions from the storage of organic liquids. This rule applies to any tank with a capacity of 1,100 gallons or greater in which any organic liquid is placed, held, or stored. Table 1 provides General VOC Control System Requirements and Table 2 provides Small Producer VOC Control System Requirements for Crude Oil Storage Tanks. This rule provides specification for pressure-vacuum relief valves and external floating roof tanks in Section 5.2 - 5.3, as well as guidance for welded tanks with primary metallic-shoe type seals, tanks with primary resilient toroid seals and much more guidance based on seal type in the latter portion of Section 5.0. Additionally, Section 5.6 provides specification for vapor recovery systems and Section 5.7.5.4 provides tank degassing requirements. There are many administrative requirements ranging from inspections to gravity testing to record keeping in Section 6.0.

Rule 4624 (Transfer of Organic Liquid) limits VOC emissions from the transfer of organic liquids and applies to organic liquid transfer facilities as defined within the rule. This rule requires that VOC emissions from Class 1 organic liquid transfer facilities not exceed 0.08 pounds per 1,000 gallons of liquid transferred. Additionally, Class 2 organic liquid transfer facilities shall prevent the release to the atmosphere of at least 95% by weight of the VOC displaced during organic liquid

transfers. Section 5.0 also sets forth delivery, transfer, construction and leak inspection requirements. Several record keeping requirements are detailed in Section 6.0 in addition to compliance testing.

Rule 4625 (Wastewater Separators) limits the emission of VOCs from wastewater separators, including air floatation units as defined in this rule, during the separation of crude oil and water after custody transfer by requiring vapor loss control devices, recordkeeping, inspection, and test methods.

Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving, and Maintenance Operations) limits VOC emissions by restricting the application and manufacturing of certain types of asphalt for paving and maintenance operations. This rule applies to the manufacture and use of cutback asphalt, slow cure asphalt and emulsified asphalt for paving and maintenance operations. Section 5.0 requires that a person shall not manufacture for sale nor use any of the following for penetrating prime coat, tack coat, dust palliative, or other paving and maintenance operations: rapid cure cutback asphalt, medium cure cutback asphalt, slow cure asphalt which contains more than 0.5% of organic compounds which evaporate at 500 degrees Fahrenheit or lower, or emulsified asphalt containing organic compounds in excess of 3% by volume which evaporate at 500 degrees Fahrenheit or lower.

Rule 4701 (Internal Combustion Engines – Phase 1) limits the emission of NO_x, CO, and VOCs from internal combustion engines. The rule applies to any internal combustion engine rated greater than 50 brake horsepower (bhp) that requires a permit to operate except for those exempted in Section 4.0.

Rule 4702 (Internal Combustion Engines) limits the emissions of NO_x, CO, VOC and SO_x from internal combustion engines. The rule applies to any internal combustion engine rate at 25 bhp or greater.

Regulation V (Procedure Before the Hearing Board)

Regulation V (Procedure Before the Hearing Board) establishes the procedures in which an owner/operator can approach the Hearing Board in order to file petitions for variances from regulations.

Regulation VI (Air Pollution Emergency Contingency Plan)

Regulation VI (Air Pollution Emergency Contingency Plan) establishes a plan of action to be taken to prevent air pollutant concentration from reaching levels which could endanger the public health or to abate such concentrations should they occur.

Regulation VII (Toxic Air Pollutants)

Rule 7050 (Asbestos - Containing Material for Surfacing Applications) controls airborne emissions of asbestos containing rock. Compliance schedule, recordkeeping, and test methods are specified. This rule incorporates provisions of the CCR Section 93106.

Regulation VIII (Fugitive PM10 Prohibitions) is a series of rules to reduce ambient concentrations of fine particulate matter (PM10) by requiring actions to prevent, reduce or mitigate anthropogenic fugitive dust emissions.

Rule 8021 (Construction, Demolition Excavation, Extraction, and Other Earthmoving Activities) limits fugitive dust emissions from construction, demolition, excavation, extraction, and

other earthmoving activities and applies to any construction, demolition, excavation, extraction, and other earthmoving activities, including, but not limited to, land clearing, grubbing, scraping, travel onsite, and travel on access roads to and from the site.

Rule 8031 (Bulk Materials) limits fugitive dust emissions from the outdoor handling, storage, and transport of bulk materials and applies to the outdoor handling, storage, and transport of any bulk material.

Rule 8041 (Carryout and Trackout) prevents or limits fugitive dust emissions from carryout and trackout and applies to all sites that are subject to any of the following rules where carryout or trackout has occurred or may occur on paved public roads or the paved shoulders of a paved public road.

Rule 8051 (Open Areas) limits fugitive dust emissions from open areas and applies to any open area having 0.5 acre or more within urban areas, or 3.0 acres or more within rural areas; and contains at least 1,000 square feet of disturbed surface area.

Rule 8061 (Paved and Unpaved Roads) limits fugitive dust emissions from paved and unpaved roads by implementing control measures and design criteria.

Rule 8071 (Unpaved Vehicle/Equipment Traffic Areas) limits fugitive dust emissions from unpaved vehicle and equipment traffic areas.

Rule 9410 (Employer Based Trip Reduction) reduces vehicle miles traveled (VMT) from private vehicles used by employees to commute to and from their worksites to reduce emissions of NO_x, VOC and PM.

Rule 9510 (Indirect Source Review, Adopted December 15, 2005). Indirect sources are land uses that attract or generate motor vehicles trips. Indirect source emissions contain many pollutants, principally PM₁₀, ROG, and NO_x. SJVAPCD first implemented this requirement in the adopted 2003 PM10 Plan to develop and implement an Indirect Source Rule (ISR) by July 2004, with implementation to begin in 2005. Senate Bill 709 (SB 709) as well required the SJVAPCD to adopt by regulation a schedule of fees to be assessed on area-wide and indirect sources of emissions. After public hearings the Air District adopted Rule 9510 December 15, 2005, and it became effective in 2006.

The purpose of Rule 9510 is to fulfill the District's commitments to the PM₁₀ and Ozone Attainment Plans. In order to do so, the rule requires the reduction of emissions of NO_x and PM₁₀ from new development projects. The District determined that reducing NO_x (an O₃ precursor), would reduce the cumulative impact on O₃ from new development projects to less than significant levels. Sufficient ROG reductions would be achieved from other control measures to enable the District to predict attainment without additional ROG controls. The rule applies to development projects that seek to gain a discretionary approval for projects that, upon full buildout, will include any one of the following: 50 residential units; 2,000 square feet of commercial space; 25,000 square feet of light industrial space; 20,000 square feet of medical or recreational space; 39,000 square feet of general office space; 100,000 square feet of heavy industrial space; 9,000 square feet of educational space; 10,000 square feet of government space; or 9,000 square feet of any land use not identified above. Several sources are exempt from the rule, including transportation and transport project that generate less than 2 tons per year of NO_x and 2 tons per year of PM10, reconstruction projects that result from a natural disaster, and development projects whose primary source of emissions are subject to district Rules 2201 and 2010, which address stationary sources. Any development project

that has a mitigated baseline of less than 2 tons per year for each of NO_x and PM₁₀ is exempted from the mitigation requirements of the rule. Developers are encouraged to reduce as much air pollution as possible through onsite mitigation, or incorporating air-friendly designs and practices into the proposed project. Some examples include; bike paths and sidewalks, traditional street design; medium- to high-density residential developments; locating projects near bus stops and bike paths; locating projects near different land use zones, such as commercial; and increasing energy efficiency. If these practices do not completely meet the required reductions then, under the rule, new development projects are required to mitigate the remainder of their emissions by contributing to a mitigation fund that would be used to pay for the most cost-effective projects to reduce emissions. Examples of such projects include retirement and crushing of gross polluting cars, replacement of older diesel engines, and diesel-powered vehicles and programs that would encourage the replacement of gas-powered lawn mowers with electric lawn mowers.

The ISR requires developers to reduce 20 percent of construction-exhaust NO_x, 45 percent of construction-exhaust PM₁₀, 33.3 percent of operational NO_x over 10 years and 50 percent of operational PM₁₀ over 10 years.

Indirect Source Mitigation Fee. Indirect sources are land uses that attract or generate motor vehicles trips. Indirect source emissions contain many pollutants, principally PM₁₀, ROG, and NO_x. The SJVAPCD included a requirement in the adopted 2003 PM₁₀ Plan to develop and implement an ISR rule by July 2004, with implementation to begin in 2005. The ISR rule went into effect in March 2006. SB 709 required the SJVAPCD to adopt by regulation a schedule of fees to be assessed on area-wide and indirect sources of emissions. After public hearings, the district adopted Rule 9510 on December 15, 2005.

The purpose of Rule 9510 is to reduce emissions of NO_x and PM₁₀ from new development projects. The rule applies to development projects that, at full buildout, seek to gain discretionary approval for any one of the following: 50 residential units, 2,000 square feet of commercial space, 25,000 square feet of light industrial space, 20,000 square feet of medical or recreational space, 39,000 square feet of general office space, 100,000 square feet of heavy industrial space, 9,000 square feet of educational space, 10,000 square feet of government space, or 9,000 square feet of any land use not identified above. Several sources are exempt from the rule, including transportation projects and transit projects (exempt only from Rule 9510 Section 6.2 and Section 7.1.2), reconstruction projects that result from a natural disaster, and development projects whose primary sources of emissions are subject to SJVAPCD Rules 2201 and 2010, which address stationary sources. Any development project that has a mitigated baseline of less than 2 tons per year for NO_x and PM₁₀ is also exempted from the mitigation requirements of the rule. Developers are encouraged to reduce as much air pollution as possible through on-site mitigation or the incorporation of air-friendly designs and practices into the project. Some examples include bike paths and sidewalks; traditional street design; medium- to high-density residential developments; locating near bus stops and bike paths; locating near different land use zones, such as commercial; and increasing energy efficiency. If these practices do not completely meet the required reductions (under the rule), new development projects are required to mitigate the remainder of their emissions by contributing to a mitigation fund that would be used to pay for the most cost-effective projects to reduce emissions. Examples include projects to retire or crush polluting cars, replace older diesel engines, and replace gas-powered lawnmowers with electric lawnmowers.

The ISR requires developers to reduce 20 percent of construction-exhaust NO_x, 45 percent of construction-exhaust PM₁₀; 33 percent of operational NO_x over 10 years; and 50 percent of operational PM₁₀ over 10 years. The SJVAPCD estimates that the potential reductions from this program in 2010 will be 11.5 tons per day (4,197.5 tons per year) of PM₁₀ and 4.1 tons per day (1,496.5 tons per year) of NO_x.

Emission Reduction Agreements

The implementation, as mitigation, of a Development Mitigation Contract (DMC) or Voluntary Emission Reduction Agreement (VERA) to reduce criteria pollutants of NO_x, ROGs, and PM₁₀ net incremental emissions generated by a project has been incorporated into development projects in Kern County since 2008. They are not a “voluntary” agreement with the SJVAPCD but are mandated by enforceable mitigation measures and are therefore called Development Mitigation Contracts (DMC). The emission reductions required by a DMC are implemented within the SJVAB in quantities sufficient to fully mitigate the Project’s air quality impacts such that development of the Project could be considered to result in no net increase in the designated criteria pollutant emissions over the criteria pollutant emissions that would otherwise exist without the development of the Project, all to be verified by the SJVAPCD. Thus, the DMC results in greater reductions than would otherwise occur under the District’s ISR, since the ISR does not require ROG reductions and the ISR only requires a percentage of reductions rather than full reductions of NO_x and PM₁₀ resulting from Project construction and operations. When adopting the ISR and the subsequent VERA/DMC programs, the District acknowledges that as ROG is a precursor to O₃, the reductions are not required in the ISR. In the VERA/DMC, the reductions are achieved by increasing the NO_x and PM₁₀ tonnage for project levels. As the actual amount of ROG reductions achieved from NO_x and PM₁₀ reductions is not absolutely certain, Project emissions are still considered significant and unavoidable; however all feasible and reasonable mitigation has been required to reduce criteria pollutants as close to “no net increase” as scientifically possible.

Appendix L of this EIR provides the background support for this approach with the Carl Moyer Program guidelines that validate the use of funding for offset projects. Appendix M of this EIR provides background support for this approach with the 2016 Annual Report on the Indirect Source Rule from the SJVAPCD, the SJVAPCD staff report when the ISR was adopted, and an example of a DMC or VERA. This approach has been found legally sufficient by court rulings in the following cases; *California Building Industry Assn. v. SJVAPCD*, Fresno County Case No. 06 CECG 02100 DS13. *National Association of Home Builders v. SJVAPCD*; Federal District Court, Eastern District of California, Case No. 1:07-CV-00820-LJO-DLB; and *Center for Biological Diversity et al v. Kern County*, Fifth Appellate District, Case No. F061908.

Local Control Measures

The SJVAPCD requires all local governments within its eight-county jurisdiction to adopt resolutions as part of the Ozone Attainment Demonstration Plan (OADP) that must be approved by U.S. EPA. The resolutions describe the reasonably available control measures that each jurisdiction will implement to reduce O₃-causing emissions into the air from transportation sources. Local jurisdictions are also required to adopt best available control technology measures to reduce particle emissions as part of the PM₁₀ Area Attainment Demonstration Plan. This process is coordinated and assisted by regional transportation planning agencies, such as the Kern COG.

The Kern County Board of Supervisors adopted a resolution on March 12, 2002, that committed the County to implementing several measures to reduce O₃-causing emissions. Among the measures are cost incentives for road contractors to minimize land closures, transit-oriented land use planning, and measures to encourage County employees and other motorists to restrict driving on days with high O₃ levels as well as continuing efforts to convert County vehicles to low-emission compressed natural gas and gasoline/electric hybrid engines. Many of these measures have been incorporated as general plan policies.

The Kern County Board of Supervisors adopted a resolution on January 7, 2003, that committed the County to implementing several measures aimed at reducing PM₁₀ emissions from County roadways. Among the measures are plans to determine the feasibility of paving the County's unpaved roads, which are lightly traveled; paving the shoulders of the most heavily traveled paved County roads as funding allows; and purchasing two PM₁₀-compliant street sweepers as funding allows. The resolution also committed the County to imposing tougher rules for cancelling road improvements on large rural parcels; requiring public and private access roads for new commercial and industrial development to be paved; evaluating the adverse air quality impacts of new development and, where appropriate, requiring mitigation measures; implementing policies that require developers to control and abate dust during grading and construction operations; and to receive a permit for expansion or a significantly altered use, requiring unpaved parking and storage areas of commercial and agricultural operations in County areas to be paved. These measures are being implemented through the Kern County Land Division Ordinance, Zoning Ordinance, and in the approved General Plan.

Air Quality Plans

The SJVAPCD has developed plans to attain State and federal standards for O₃ and particulate matter. The District's air quality plans include emissions inventories to identify the sources and quantities of air pollutants, to evaluate how well different control methods have worked, and to demonstrate how air pollution will be reduced. The plans also use computer modeling to estimate future levels of pollution and make sure that the Valley will meet air quality goals. The SJVAPCD's attainment plans are subject to approval by the SJVAPCD's Governing Board. At the time of this writing, the following attainment plans were in effect.

The adopted plans include emissions inventories, projected changes in population, vehicles, fuels and equipment, and associated emissions. The plans then identify existing rules and additional proposed measures required to reduce emissions to the ambient air quality standards. These rules and proposed measures include requirements to obtain permits to construct and operate, and rules regulating the allowable emissions from various activities or classes of equipment.

One-Hour Ozone Plan

CARB submitted the 2004 Extreme Ozone Attainment Demonstration Plan to the U.S. EPA on November 15, 2004. The plan was amended by the District in 2008. Effective June 15, 2005, the U.S. EPA revoked the federal 1-hour O₃ ambient air quality standard, finding that the 8-hour O₃ standard was more health protective and adopted anti-backsliding provisions to preserve existing 1-hour O₃ control measure and emissions reductions obligations; this delayed U.S. EPA action on the District's 2004 Plan until 2010. The SJVAPCD implemented the 2004 plan's control measures and emissions reductions strategies, and the SJVAB must still attain the revoked standard before it can rescind the CAA Section 185 fees collected under Rule 3170.

In 2012, the U.S. EPA withdrew its 2010 approval of the SJVAPCD's 2004 Plan required submittal of a new plan for the revoked 1-hour standard that includes the following:

- A Rate of Progress (ROP) demonstration;
- Contingency measures for ROP and for attainment;
- An attainment demonstration;
- A demonstration for Reasonably Available Control Measures (RACM);
- A demonstration for clean fuels/clean technologies are in place for boilers; and
- A VMT offset demonstration;

The SJVAPCD's Governing Board adopted the 2013 Plan for the Revoked 1-Hour Ozone Standard in September 2013, thereby fulfilling air quality planning requirements under the federal CAA for the revoked 1-Hour O₃ standard. The SJVAPCD Governing Board also requested U.S. EPA to set 2017 as the attainment date for the revoked 1-hour O₃ NAAQS, adopted in 1979.

Eight-Hour Ozone Plan

The SJVAPCD's Governing Board adopted the 2007 Ozone Plan on April 30, 2007. This far-reaching plan, with innovative measures and a “dual path” strategy, assures expeditious attainment of the federal 8-hour O₃ standard as set by the U.S. EPA in 1997. The plan projects that the Valley will achieve the 8-hour O₃ standard for all areas of the SJVAB no later than 2023 and calls for a 75 percent reduction in O₃-forming NO_x emissions. Regulatory measures for mobile and stationary sources are projected to reduce NO_x emissions by 61 percent by 2023; incentives and the deployment of advanced technologies are project to reduce NO_x emissions 14 percent by 2023.

CARB approved the plan on June 14, 2007. The U.S. EPA approved the 2007 Ozone Plan effective April 30, 2012. The SJVAPCD Governing Board adopted its 2016 Plan for the U.S. EPA's 2008 revised 8-hour O₃ standard in June 2016. This plan will reduce NO_x emissions by over 60 percent between 2012 and 2031, and will bring the San Joaquin Valley into attainment of U.S. EPA's 2008 8-hour O₃ standard as expeditiously as practicable, no later than December 31, 2031.

PM₁₀ Maintenance Plan

Based on PM₁₀ measurements from 2003-2006, the U.S. EPA found that the SJVAB has reached federal PM₁₀ standards. On September 21, 2007, the SJVAPCD adopted the 2007 PM₁₀ Maintenance Plan and Request for Redesignation. This plan demonstrates that the Valley will continue to meet the PM₁₀ standard. The U.S. EPA approved the document and on September 25, 2008, the SJVAB was re-designated to attainment for PM₁₀ NAAQS.

2008 PM_{2.5} Plan

The Valley is designated nonattainment for federal PM_{2.5} standards. The U.S. EPA set their first PM_{2.5} standards in 1997, and they strengthened the 24-hour standard in 2006. Building upon the strategy used in the 2007 Ozone Plan, the SJVAPCD agreed to additional control measures to reduce directly produced PM_{2.5}. The SJVAPCD's Governing Board adopted the 2008 PM_{2.5} Plan on April 30, 2008. The plan estimates that the SJVAB will reach the PM_{2.5} standard by 2014. The CARB approved the Plan on May 22, 2008. The U.S. EPA approved most provisions of the 2008 PM_{2.5} Plan effective January 9, 2012.

2012 PM_{2.5} Plan

The SJVAPCD adopted the 2012 PM_{2.5} Plan on December 20, 2012. The plan demonstrates that the SJVAB will achieve the 2006 24-hour PM_{2.5} NAAQS of 35 µg/m³ by 2019. The CARB approved the SJVAPCDs 2012 PM_{2.5} Plan in January 2013.

Air Quality Conformity Determination for Transportation Plans and Programs

The CAA amendments of 1990 require a finding to be made stating that any project, program, or plan subject to approval by a metropolitan planning organization conforms to air plans for attainment of air quality standards. Kern COG is designated the Regional Transportation Planning Agency and Metropolitan Planning Organization for Kern County. In that capacity, Kern COG models air quality projections on population projections in conjunction with current general plan designations and estimated vehicle miles as well as the current Regional Transportation Plan (RTP) and the federal transportation plan for Kern County finalized in June 19, 2014. Kern County is contained within two air basins: SJVAB and the MDAB. Each air basin has its own plans and pollutant budgets. Kern COG makes conformity findings for each air basin (Kern COG, 2016). The Federal Transportation Improvement Program (FTIP) for the Kern County region is a six-year schedule of multimodal transportation improvements, and the RTP is a long-range, 26-year transportation plan and sustainability.

The Conformity Analysis for the 2015 FTIP and 2014 RTP was adopted by Kern COG June 19, 2014, and approved by the Federal Highway Administration and the Federal Transit Administration on December 15, 2014. The regional emissions analysis was conducted for the years 2014, 2017, 2018, 2020, 2023, 2025, 2032, 2035, and 2040 for each applicable pollutant. The conformity findings conclude that the FTIP and RTP result in emissions that are less than the emission budgets of baseline emissions or approved trading mechanisms for transportation conformity purposes for CO, VOC, NO_x, PM₁₀ and PM_{2.5} (Kern COG, 2016).

4.3.4 Impacts and Mitigation Measures

This section describes the methodology used in conducting the impact analysis for air quality, the thresholds of significance used in assess impacts to air quality, and the assessment of impacts to air quality. Measures to mitigate (i.e., avoid, minimize, rectify, reduce, eliminate, or compensate for) significant impacts accompany each impact discussion, where applicable.

Methodology

The Air Quality Impact Analysis was prepared pursuant to SJVAPCD's GAMAQI (2015a), EKAPCD's *Guidelines for Implementation of the California Environmental Quality Act of 1970, as amended* (1999) and Kern County's 2006 *Guidelines for Preparing an Air Quality Assessment for Use in Environmental Impact Reports* (2006).

SJVAPCD

The SJVAPCD GAMAQI states that the latest SJVAPCD-approved models should be used to conduct an air quality analysis. The current model to estimate potential project-generated criteria air pollutant emissions from construction and operations is the CalEEMod, Version 2016.3.1 (CAPCOA, 2016). CalEEMod is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify

potential criteria air pollutant emissions from a variety of land use projects. In accordance with SJVAPCD procedures, the analysis contained in this report evaluates annual construction and operational emissions separately (see Appendix G of this EIR for the CalEEMod output reports).

When considering the impact of construction emissions on air quality, on-site and on-road (off-site) mobile source emissions should be assessed in the evaluation of construction-related emissions. In addition, the GAMAQI recommends that the lead agency, which is Kern County for this project, consider the extent to which compliance with SJVAPCD Regulation VIII and Rule 9510 will reduce fugitive dust and construction exhaust emissions.

EKAPCD

The EKAPCD guidance, *Guidelines for Implementation of the California Environmental Quality Act of 1970, as amended* (1999), sets forth its procedures in implementing CEQA for when it is a Lead Agency, Responsible Agency and Trustee Agency. For Air Quality Impact Assessment, EKAPCD refers to Kern County's *Guidelines for Preparing an Air Quality Assessment for Use in Environmental Impact Reports* (2016).

Kern County

Kern County's *Guidelines for Preparing Air Quality Assessments for Use in EIRs* is intended to create uniform approach, methods and assumptions from one project to the next. The County's guidance requires the most recent air quality guidance documents from the SJVAPCD and EKAPCD must be used and referenced in the preparation of an air quality assessment and that the latest version of all models must be used for the appropriate application. It also notes that where the Kern County Planning and Natural Resources Department guidelines require quantification and the SJVAPCD and EKAPCD guidelines do not, for purposes of CEQA, the Planning Department guidelines must be followed.

County guidance states that an air quality assessment should include estimates of short-term construction and long term operational emissions in tons per year. The estimates must include site grading and building construction emissions, with comparison to the adopted County CEQA thresholds and the applicable air district (SJVAPCD for western Kern County; EKAPCD for eastern Kern County) thresholds. The latest emissions model should be used (currently CalEEMod 2016.3.1, EMFAC2014, AERMOD and if applicable for CO, CALINE4). All assumptions should be clearly presented, the emission factors used should be clearly documented, and the model output should be included in the report.

Evaluation Methods and Calculation Assumptions

In accordance with SJVAPCD, EKAPCD and Kern County guidance, construction and operational emissions are evaluated separately.

Construction and operational emissions were estimated at buildout of each activity for Option B of the Kern County Cannabis Land Use Ordinance including: 2,000,000 square feet (ft^2) of indoor cultivation, 150 acres of outdoor cultivation, 500,000 ft^2 of processing, packaging, and distribution facilities, and up to 40 retail cannabis stores with or without mobile delivery. There are currently 22 dispensaries in Kern County. However, given that many do not have valid permits and it is unknown how many may be relocated, and this is a program-level EIR, a worst-case conservative approach

was applied and emission estimates include construction and operations of 40 new retail cannabis stores.

The proposed project was assessed as if all construction occurred in one year in one air basin, to simulate absolute worst-case construction-related GHG emissions. Full buildout proposed project operations were assessed as being Year 2018, also a very conservative analysis approach. Two full buildout scenarios were estimated: 1) all development located in SJVAB; and 2) all development located in MDAB. To simulate the full buildout in one year, the project activity emissions were estimated in a reasonable increment by air basin, as follows:

SJVAB

- 25,000 ft² of indoor cultivation
- 1 acre of outdoor cultivation
- 10,000 ft² of processing, packaging, and distribution
- One retail cannabis store

MDAB

- 25,000 ft² of indoor cultivation
- 1 acre of outdoor cultivation
- 10,000 ft² of processing, packaging, and distribution
- One retail cannabis store

The proposed project's construction and operational GHG emissions were estimated using the CalEEMod version 2016.3.1 program for the above defined scenarios. The model was adjusted to represent the land use scenarios defined above as well as trip generation rates defined in Section 4.15, *Transportation and Traffic*. All other CalEEMod defaults were applied (and model outputs for the eight scenarios are presented in Appendix G). The modeled construction and operations output emissions were then multiplied by the following appropriate factors to then assess full buildout conditions:

- 25,000 ft² of indoor cultivation x 80 = 2,000,000 ft²
- 1 acre of outdoor cultivation x 150 = 150 acres
- 10,000 ft² of processing, packaging, and distribution x 50 = 500,000 ft²
- One retail cannabis store x 40 = 40 retail cannabis store

Although full buildout conditions will realistically span both the SJVAB and MDAB over multiple years, assuming all proposed project activities in one or the other air basin in one year simulates the absolute worst case conditions. This approach also allows project emissions to be separately assessed according to the unique CEQA threshold of significance as established by SJVACPD and EKAPCD.

Construction emissions were divided into six phases, as is the CalEEMod default analysis approach: a site preparation phase (clearing and grubbing), an excavation/grading phase, a trenching phase for utilities, a roadway/parking paving phase, a building construction phase for each land use category,

and an architectural coating phase. These short-term construction-related emissions were then reported in tons per year.

Kern County guidance states that an air quality assessment should include estimates of long-term operational emissions in tons per year. In accordance with Kern County's guidance, this report includes a summary of the unmitigated emissions (and including effects of Regulation VIII), with a comparison to Kern County, SJVAPCD and EKAPCD CEQA thresholds in a table format within the impact analysis.

Valley Fever

The Valley Fever fungal spores, *Coccidioides immitis*, live in the top 2 to 12 inches of soil in many parts of the State, including parts of Kern County. When fungal spores are present, any work activity that disturbs the soil, such as digging, grading, or other earth-moving operations, or vehicle operation on dirt roads, can cause the spores to become airborne, thereby increasing the risk of Valley Fever exposure. All workers on sites where the fungus is present, and who are exposed to dusty conditions and wind-blown dusts, are at increased risk of becoming infected.

The fungal spores are too small to be seen by the naked eye, and there is no reliable way to test the soil for spores before working in a particular place. Accordingly, the Valley Fever analysis assumes the potential presence of the fungal spores within the project site. The potential for Valley Fever exposure as a result of the project is evaluated based on the anticipated earth-moving activities, and considers implementation of a dust control plan to help control the release of the *Coccidioides immitis* fungus during construction activities.

Ambient Air Quality

Ambient air quality impacts associated with the project operation impacts were assessed for this proposed project by modeling a theoretical worst-case facility as an area source by air basin because the exact location of the various activities cannot now be determined. A retail cannabis store was determined to have the worst-case emissions from any individual facility. Therefore, the ambient air quality impacts from a single retail cannabis store can be considered a representative worst case for each facility. The ambient air quality impacts were modeled using the U.S. EPA-approved AERMOD dispersion model; an ambient air quality analysis is used to determine if project emissions are predicted to cause or contribute to a violation of an ambient air quality standard by exceeding any CAAQS or NAAQS during proposed project operations. Any construction activities from proposed project construction were found to be short-term and subject to extensive project conditions as well as mitigation measures; therefore, construction level scenarios were not further modeled with AERMOD. All SJVAPCD ambient air quality parameters were applied because this air district provides the most stringent requirements for this type of modeling in an effort to take the most conservative approach; additional details regarding the ambient air quality modeling assumptions are presented in Appendix G.

Toxic Air Contaminants

The proposed project is for the construction and operation of up to 2,000,000 ft² of indoor cannabis cultivation, up to 150 acres of outdoor cannabis cultivation, up to 500,000 ft² of processing, packaging, and distribution facilities and up to 40 retail cannabis stores. The primary source of potential air toxics emissions would be from diesel trucks. Through a review of the proposed project trip generation rates, these levels of activity would be less than 10 trucks per day per activity center

(generally one to five trucks per day, worst-case) and sufficiently dispersed throughout the County. Based on these anticipated diesel truck activity levels and the dispersion anticipated throughout the County, the proposed project would not have the potential to trigger a project-related health risk assessments; no further TAC analysis was conducted.

Carbon Monoxide (CO) Hotspot Analysis

The SJVAPCD and Kern County screening criteria were both applied to determine the potential for the project to result in a CO hotspot. The Traffic Impact Study prepared for the project by Rutgers & Schuller in 2017 (Appendix J) was used to perform the screening evaluation. The exact locations of all the proposed project activities are dispersed throughout the County. Additionally, except for the retail cannabis stores (which can be high volume traffic generators, similar to a fast food restaurant), the individual activity levels of the indoor and outdoor cultivation and processing, packaging, and distribution facilities are expected to have low daily and peak hour traffic volumes. Because the locations are not yet known and the activity centers are not expected to adversely affect traffic levels of service, therefore, a CO hotspots analysis was not performed for the proposed project activities.

Visibility Impacts

According to Kern County guidelines, a visibility analysis is not required since the project is not a large industrial stationary-source project or a mining project, and it would not have long-term operational components that could generate substantial dust or emissions plumes related to visibility. Compliance with Regulation VIII, including implementation of all feasible dust control measures specified in GAMAQI and incorporated into a dust control plan, would be sufficient mitigation to reduce air quality effects from construction-related PM₁₀ emissions to less-than-significant levels (SJVAPCD, 2015b).

Odors

Potential odor impacts associated with the project operation impacts were assessed for this proposed project by modeling a theoretical worst-case area source by air basin because the exact location of the various activities cannot now be determined. The quantitative assessment of the potential for the project to generate odors considers the reasonably anticipated, permitted land uses identified in the Kern County Cannabis Land Use Ordinance and potential activity levels by activity types. The cultivation and processing facilities are known to be a source odorous compounds. As such, an assessment of typical odorous compounds associated with the cultivation and packaging of cannabis, including estimates of odor range is included in the impact analysis. An odors analysis is used to determine if project emissions are predicted to cause or contribute to a violation of odors in a specific location to create a nuisance. If a nuisance level is determined in excess of 1,000 feet (the setback distance required as part of the proposed project), then mitigation measure(s) are provided.

The ambient air quality odor impacts were modeled using the most recent version of EPA's AMS/EPA Regulatory Model – AERMOD (recompiled for Lakes ISC-AERMOD View 9.3 (interface). This dispersion model is used throughout the U.S. for health risk assessments to determine the probable area where various airborne constituents may be dispersed from a given location. In order to determine which odor constituents to model, a review of an odor analysis study (Rice and Koziel, 2015) was conducted. The study determined that the VOCs with the four highest odor activity values (OAV) from loose cannabis were Benzaldehyde, Myrcene, Decanal, and Heptanal (Rice and Koziel, 2015). OAV is the calculated ratio of surrogate concentrations to odor detection thresholds (ODT) which is used to determine the VOCs with the greatest odor impact. The

top four odorous constituents based on OAV from cannabis plants were reviewed and were modeled. Odor control devices/systems for indoor growing and processing operations that could control or eliminate odors from such operations to reduce or eliminate potential nuisance odor issues from adjacent residents or businesses were also considered.

In order to establish the most conservative result, flat terrain was modelled with standard meteorological conditions found within the San Joaquin Valley Air Basin. This method was chosen since typical wind speeds within the San Joaquin Valley are lower than the Mojave Desert Air Basin (Eastern Kern County) which would result in a more conservative concentrated result. Similar modeling results conducted in the Mojave Desert Air Basin would be expected to have much greater dispersion due to standard weather conditions and would, therefore result in lower concentrations of any one of the chosen constituents. Additionally, these constituents were modeled with no mitigation or controls to provide the most conservative result and would also be indicative of what would be expected for uncontrolled emissions from future cannabis outdoor cultivation facilities as well. All SJVAPCD ambient air quality parameters for odors were applied because this air district provides the most stringent requirements for this type of modeling in an effort to take the most conservative approach. Additional details regarding the odors modeling assumptions are presented in Appendix G.

Air Quality Plan Consistency

The SJVAPCD has prepared plans to attain federal and State ambient air quality standards, as required under the federal and California CAAs, as discussed above in Section 4.3.3, *Regulatory Setting*. The SJVAPCD has established thresholds of significance for criteria pollutant emissions, which are based on SJVAPCD's New and Modified Stationary Source Review offset requirements for stationary sources. Pursuant to the GAMAQI, projects with emissions below the thresholds of significance for criteria pollutants would be determined to "not conflict [with] or obstruct implementation of the District's air quality plan" (SJVAPCD, 2015b).

As a component of the cumulative impact analysis, the Kern County Air Quality Assessment guidance states that the following should be included in the consistency determination for existing air quality plans: 1) Discuss project in relation to Kern County Council of Governments (Kern COG) conformity and traffic analysis zones (TAZs); 2) Quantify the emissions from similar projects in the Ozone Attainment Plan for the applicable basin; and 3) Discuss the Ozone Attainment Plan for the applicable air district, development, and relation to regional basin, Triennial Plan, and SIP.

Because this is a programmatic level EIR and the exact location of the specific activities cannot yet be assessed, the cumulative analysis evaluated regional emissions projections and considered consistency with a regional transportation plan prepared by Kern COG.

Cumulative Impacts

Cumulative impacts refers to two or more individual effects that, when considered together, are considerable or compound or increase other environmental impacts. Air pollution by nature is largely a cumulative impact. The nonattainment status of regional pollutants is a result of past and present development, and the SJVAPCD develops and implements plans for future attainment of ambient air quality standards. Based on these considerations, project-level thresholds of significance for criteria pollutants are relevant in the determination of whether a project's individual emissions would have a cumulatively significant impact on air quality. The potential for the project to result in a cumulatively

considerable impact, per the SJVAPCD guidance and thresholds, is based on the project's potential to exceed the project-specific annual thresholds.

Kern County's *Guidelines for Preparing an Air Quality Assessment for Use in Environmental Impact Reports* (2006) requires three steps for estimating the potential significance of cumulative impacts: (1) evaluate localized impacts (Guideline Instruction 16a), (2) evaluate consistency with existing air quality plans (Guideline Instruction 16b), and (3) summarize CARB air basin emissions (Guideline Instruction 16c).

Development Standards Related to Air Quality

Option A

Option A of the proposed project would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Therefore, no development standards are identified in the proposed Zoning Ordinance; refer to Appendix B for specific wording of the proposed ordinance under Option A.

Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, testing, and retail cannabis stores with or without mobile delivery facilities. Development standards provided in the proposed Zoning Ordinance, that pertain to air quality include, but are not limited to, the following (refer to Appendix C for specific working of the proposed ordinance under Option B):

- All cannabis facilities must be 0.5 mile from any school, park, day care center or youth center.
- The applicant must demonstrate compliance with all applicable mitigation measures prior to the issuance of a grading or building permit for any future cannabis related facility.
- Future cannabis related facilities shall be equipped with an effective odor control system which at all times must prevent unreasonable interference with neighbors' use and enjoyment of their property. The odor control system shall: consist of one or more fans; utilize an alternative method or technology to achieve equal to or greater odor mitigation than provided by the fan system; and the system must be maintained in working order and in use.
- For indoor cultivation, processing and packaging, and distribution facilities, the project applicant must prepare an Odor Complaint Management Plan prior to approval of a site plan or issuance of a grading or building permit.
- For cannabis cultivation (indoor and outdoor), processing and packaging, and distribution facilities, on-site energy shall be provided or offset with a solar photovoltaic system; small wind generators may be used only in appropriate areas of Eastern Kern County.
- No cannabis shall be smoked on the premises of a future cannabis related facility.

Thresholds of Significance

Kern County

The Kern County CEQA Implementation Document and Kern County Environmental Checklist state that a project would have a significant impact on air quality if it would:

- Conflict with or obstruct implementation of the applicable air quality plan.
- Violate any air quality standard as adopted in (c) i or (c) ii, or as established by U.S. EPA or an air district, or contribute substantially to an existing or projected air quality violation.
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable National or State ambient air quality standard (including emissions that exceed quantitative thresholds for O₃ precursors). Specifically, would implementation of the project exceed any of the thresholds outlined in Table 4.3-5, *Proposed Project Air Quality Thresholds of Significance By Air Basin*.
- Expose sensitive receptors to substantial pollutant concentrations.
- Cause the creation of objectionable odors, affecting a substantial number of people.

Table 4.3-5. Proposed Project Air Quality Thresholds of Significance By Air Basin						
Air Basin	Criteria Pollutant					
	ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
SJVAB ¹						
Construction Sources (tons/year)	10	10	100	27	15	15
Operations Sources (tons/year)	10	10	100	27	15	15
MDAB ²						
Operations Daily Mobile Sources (lbs/day)	137	137	--	--	--	--
Operations Sources (tons/year)	25	25	NA	27	15	15

NA = not applicable.
Sources: 1) SJVAPCD, 2015a.
2) EKAPCD, 1999.

Project Impacts

Impact 4.3-1: The Project Would Conflict with or Obstruct Implementation of an Applicable Air Quality Plan

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain medical dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be

allowed. Option A does not provide opportunities for commercial cannabis activities and thus would not result in an increase in the need of land for the cultivation, processing and packaging, distribution, and sale of cannabis.

Under Option A, it is anticipated that existing medical dispensaries required to immediately cease operations would eventually become other businesses. It is not anticipated that these structures would be demolished. However, future businesses using structures from the closed dispensaries could result in demolition or renovation activities. Demolition and renovation would generate some amount of criteria air pollutant emissions; however, at this time, it is unknown and speculative to determine the number of structures that would undergo demolition or renovation as a result of new businesses opening after dispensaries have closed. Therefore, while the amount of potential criteria air pollutant emissions from the potential demolition or renovation cannot now be quantified and is therefore unknown, potential new businesses using closed dispensary structures would be required to obtain appropriate permits from Kern County and other regulatory agencies and potential criteria air pollutant emissions would be considered at that time.

Under Option A, the closing of the existing medical dispensaries would result in customer trips being displaced to cities within the County that would allow for the sale of cannabis products or to outside the County. For the purposes of this analysis, it is assumed that customers would leave Kern County in order to obtain cannabis products. Section 4.15, *Transportation and Traffic*, estimated that the total vehicle miles travelled would be up to 3.5 times more for Option A than for Option B. This is based on the assumption that the demand for cannabis would not disappear and cities within the County would not allow cannabis sales, therefore, customers would travel to locations outside the County. This increase in travel would increase mobile source criteria air pollutant emissions.

Using Option B data as described below, and provided in Appendix G, mobile sources account for more than 90 percent of total criteria air pollutant emissions for Option B. Assuming total distance travelled under Option A are 3.5 times greater than Option B, then total criteria air pollutant operations emissions for Option A would be more than three times greater than for Option B. Therefore, Option A would potentially generate substantial levels of criteria air pollutant emissions through increasing vehicle miles travelled and would have a potentially adverse effect on obstruction of an air quality plan. This impact would be potentially significant.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, retail cannabis stores that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without

mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

Implementation of the proposed project would generate both temporary (construction) and long-term (operational) emissions which could conflict with or obstruct with an applicable Air Quality Attainment Plan (AQAP). The proposed project is under the administrative boundaries of the SJVAPCD and EKAPCD and is located within the SJVAB and MDAB. The SJVAPCD and EKAPCD have the primary responsibility for controlling emissions in the SJVAB and MDAB, respectively from stationary sources. CARB and the U.S. EPA are responsible for mobile sources (such as locomotives, motor vehicles) and other specified statewide sources (such as consumer products). Air districts adopt and enforce rules and regulations to ensure that emissions comply with national, State, and local emission standards, and will not interfere with the attainment and maintenance of the State and federal ambient air quality standards.

The Kern County Cannabis Land Use Ordinance is not expected to include stationary sources within indoor cultivation, outdoor cultivation or retail cannabis stores. The equipment anticipated for the processing and packaging facilities is not yet known and the use of permitted equipment cannot be ruled out. However, most of the proposed project emissions are anticipated from mobile sources and indirect energy usage sources. Less than 10 percent of proposed project emissions would be from area sources and indirect water and waste generation or stationary sources.

Air quality impacts are controlled through policies and provisions of the SJVAPCD, EKAPCD, the KCGP, and the Kern County Code of Building Regulations. Each project should also demonstrate consistency with the SJVAPCD's adopted AQAP for O₃ and PM₁₀ and EKAPCD's AQAPs. The SJVAPCD is required to submit a "Rate of Progress" document to the CARB that demonstrates past and planned progress toward reaching attainment for all criteria pollutants. The CCAA requires air pollution control districts with severe or extreme air quality problems to provide for a five percent reduction in nonattainment emissions per year. The AQAP prepared for the San Joaquin Valley by SJVAPCD complies with this requirement. The CARB reviewers approve or amend the document and forward the plan to U.S. EPA for final review and approval within the SIP.

Air pollution sources associated with stationary sources are regulated through the permitting authority of the SJVAPCD under the "New and Modified Stationary Source" rule (SJVAPCD Rule 2201) and permitting authority of EKAPCD under Regulation 2, Permits. Owners of any new or modified equipment that emits, reduces, or controls air contaminants, except those specifically exempted by the SJVAPCD or EKAPCD, are required to apply for an Authority to Construct and Permit to Operate (SJVAPCD Rule 2010, EKAPCD Rule 201.). Additionally, best available control technology is required on specific types of stationary equipment. Through this mechanism, the SJVAPCD ensures that all stationary sources within the project area would be subject to the standards of the SJVAPCD and that new developments do not result in net increases in stationary sources of criteria air pollutants.

CEQA Guidelines and the Federal Clean Air Act (Sections 176 and 316) contain specific references on the need to evaluate consistencies between a project and the applicable AQAP for a project site. To accomplish this, CARB has developed a three-step approach to determine project conformity with the applicable AQAP:

1. *Determination that an AQAP is being implemented in the area where the project is being proposed.* SJVAPCD approved the 2016 Plan for the 2008 8-hour O₃ standard on June 16, 2016. The SJVAPCD's strategy in this plan will reduce NO_x emissions by more than 60 percent

between 2012 and 2031 and is expected to bring the SJVAB into attainment of the approved by U.S. EPA2008 8-hour O₃ standard as quickly as possible, but no later than December 31, 2031.

2. *The proposed project must be consistent with the growth assumptions of the applicable AQAP.* The Kern COG growth modeling for the 2014 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) provides for future employment/dwelling unit factors that are supportive of planned development expansion in the project area.
3. *The project must contain in its design all reasonably available and feasible air quality control measures.* The project incorporates various policy and rule-required implementation measures that would reduce related emissions.

The Kern COG's Regional Conformity Analysis Determination demonstrates that the regional transportation expenditure plans (Destination 2030 Regional Transportation Plan and Federal Transportation Improvement Program) in the Kern County portion of the San Joaquin Valley air quality attainment areas would not hinder the efforts set out in the CARB's SIP for each area's non-attainment pollutants (CO, O₃ and PM₁₀). The analysis uses an adopted regional growth forecast, governed by both the adopted *Kern COG Policy and Procedure Manual* and a *Memorandum of Understanding* between the County of Kern and Kern COG.

The growth represented by the proposed project was anticipated by the Kern COG RTP/SCS and incorporated into the AQAP in that all project activities would be allowed only in specified land use zones, and the proposed project incorporates all reasonably available and feasible air quality control measures; the proposed project can therefore be determined in conformity with the AQAP.

Since the proposed project is consistent with the 2014 RTP/SCS, and RTP/SCS projections are incorporated into the SIP, the project is also consistent with the SIP. In addition, the proposed project includes project development conditions including DMC.

The proposed project shows conformity with CARB's three step approach and the project growth was anticipated by the Kern COG RTP/SCS and incorporated into the AQAP. Implementation of mitigation measures would ensure that the proposed project would not obstruct an air quality plan during construction or operation.

Certain future cannabis-related activities and facilities would require processing a Conditional Use Permit (CUP) and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing before the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to obstructing an air quality plan during construction or operation would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Air Quality Plans

1. U.S. Clean Air Act, as amended in 1990, provides requirements for setting air quality standards and creates a program to oversee SIPs.
2. California Clean Air Act establishes the State air quality standards and legal mandates to achieve these standards.
3. AB 2588 establishes a process that requires stationary sources to report information regarding emissions.
4. KCGP, Land Use, Open Space, and Conservation Element, Section 1.10.2, Air Quality, Goal 1; Policies 18, 21, 22, and 23; and Implementation Measure F related to air quality standards and reducing emissions.
5. MBGP Chapter V Conservation Element, Air Quality, Goals 1 and 2 and Policies 1, 2, 7, and 19 related to air quality plans, regulations, and land uses.
6. EKAPCD and SJVAPCD enforce rules and regulations based on air pollution laws.
7. SJVAPCD has developed plans to attain State and federal standards for O₃, PM₁₀, and PM_{2.5}.
8. FTIP and RTP provides conformity analysis regarding regional emissions.

Mitigation Measures

Options A and B

MM 4.3-1 Prior to the approval of a site plan, issuance of a grading or building permit as on site plans for applications for a conditional use permit, the project applicant shall comply with applicable State and federal air pollution control laws and regulations, and with applicable rules and regulations of the San Joaquin Valley Air Pollution Control District and/or Eastern Kern Air Pollution Control District, depending on the facility location, during any construction and during operations of cannabis facilities. Written documentation that the cannabis facility is in compliance with the appropriate air district shall be provided to the Kern County Planning and Natural Resources Department.

MM 4.3-2 Prior to any ground disturbing activities, the project applicant shall submit a Fugitive Dust Control Plan to either the San Joaquin Valley Air Pollution Control District or Eastern Kern Air Pollution Control District, depending on the cannabis facility location, for review and approval. The Fugitive Dust Control Plan shall reduce emissions, during construction of particulate matter that is 10 microns or less and 2.5 microns or less in diameter (PM₁₀ and PM_{2.5}). The Fugitive Dust Control Plan shall include:

- 1) Name(s), address(es), and phone number(s) of person(s) responsible for the preparation, submission and implementation of the plan.
- 2) Description and location of operation(s).
- 3) Listing of all fugitive dust emissions sources included in the operation.
- 4) The following dust control measures shall be implemented:

- a) All on-site unpaved roads shall be effectively stabilized use water or chemical soil stabilizers that can be determined to be as efficient as or more efficient for fugitive dust control than California Air Resources Board approved soil stabilizers, and that shall not increase any other environmental impacts included loss of vegetation.
- b) All material excavated or graded will be sufficiently watered to prevent excessive dust. Watering will occur as needed with complete coverage of disturbed areas. The excavated soil piles will be watered as needed to limit dust emissions to less than 20 percent opacity or covered with temporary coverings.
- c) Construction activities that occur on unpaved surfaces will be discontinued during windy conditions when winds exceed 25 miles per hour and those activities cause visible dust plumes. Construction activities may continue if dust suppression measures are used to minimize visible dust plumes.
- d) Track-out debris onto public paved roads shall not extend 50 feet or more from an active operation and track-out shall be removed or isolated such as behind a locked gate at the conclusion of each workday.
- e) All hauling materials should be moist while being loaded into dump trucks.
- f) All haul trucks hauling soil, sand and other loos materials on public roads shall be covered (e.g., with tarps or other enclosures that would reduce fugitive dust emissions).
- g) Soil loads should be kept below 6 inches or the freeboard of the truck.
- h) Drop heights should be minimized when loaders dump soil into trucks.
- i) Gate seals should be tight on dump trucks.
- j) Traffic speeds on unpaved roads shall be limited to a maximum of 25 miles per hour.
- k) All grading activities shall be suspended when visible dust emissions exceed 20 percent.
- l) Other fugitive dust control measures as necessary to comply with San Joaquin valley Air Pollution Control District Rules and Regulations.
- m) Disturbed areas should be minimized.

MM 4.3-3 For any off-road equipment with engines rated at 75 horsepower or greater, no construction equipment will be used that is less than Tier 3, less than Tier 4 Interim if construction starts after 2025, and Tier 4 Final is construction starts after 2030. An exemption from these requirements may be granted by Kern County in the event that the project applicant documents that (1) equipment with the required tier is not reasonably available (e.g., reasonability factors to be considered include those available within Kern County within the scheduled construction period), and (2) corresponding reductions in criteria pollutant emissions are achieved from other construction equipment.

MM 4.3-4 For projects within the boundaries of the San Joaquin Valley Air Pollution Control District the project proponent shall comply with the Indirect Source Rule. For any emissions of reactive organic gases (ROGs), oxides of nitrogen (NO_x), and particulate matter with an aerodynamic diameter less than or equal to 10 microns (PM_{10}) to achieve emission reductions for projected construction and operational

related emissions of ROG, NO_x and PM₁₀ to no net increase as determined by the SJVAPCD District. Evidence of compliance shall be provided to Kern County Planning and Natural Resources before issuance of building permits and all design requirements shall be shown on the site plan. Any application for a conditional use permit shall include details on the site plan that demonstrate compliance.

MM 4.3-5 Prior to the approval of a site plan or issuance of a grading or building permit or for any application for a conditional use permit, the project applicant shall provide the Kern County Planning and Natural Resources Department with an Energy Plan documenting compliance with applicable energy conservation requirements of applicable Title 24 standards in the California Code of Regulations,

The Energy Plan shall also confirm that a menu of energy efficiency design elements, along with other design considerations and options, has been made available by the project proponent to builders, developers, and property owners as part of the internal design review process. Installation of solar panels on commercial growing, processing and preparation shall be mandatory and included in combination with a plan to shift use of grow lights to evening hours.

All provisions outlined in the approved Energy Plan shall be conditions of approval for any site plan.

Level of Significance after Mitigation

Impacts resulting from Option A would be significant and unavoidable. Impacts resulting from Option B would be less than significant level.

Impact 4.3-2: The Project Would Violate Any Air Quality Standard as Adopted in Kern County Environmental Checklist (c) i or (c) ii, or as Established by the U.S. Environmental Protection Agency or an Air District, or Contribute Substantially to an Existing or Projected Air Quality Violation

The proposed project is located within the SJVAB within the jurisdiction of the SJVAPCD as well as within MDAB within the jurisdiction of the EKAPCD.

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be

allowed. Option A does not provide opportunities for commercial cannabis activities and thus would not result in an increase in the need of land for the cultivation, processing and packaging, distribution, and sale of cannabis.

Under Option A, it is anticipated that existing medical dispensaries required to immediately cease operations would eventually become other businesses. It is not anticipated that these structures would be demolished. However, future businesses using structures from the closed dispensaries could result in demolition or renovation activities. Demolition and renovation would generate some amount of criteria air pollutant emissions; however, at this time, it is unknown and speculative to determine the number of structures that would undergo demolition or renovation as a result of new businesses opening after dispensaries have closed. Therefore, while the amount of potential criteria air pollutant emissions from the potential demolition or renovation cannot now be quantified and is therefore unknown, potential new businesses using closed dispensary structures would be required to obtain appropriate permits from Kern County and other regulatory agencies and potential criteria air pollutant emissions would be considered at that time.

Under Option A, the closing of the existing medical dispensaries would result in customer trips being displaced to cities within the County that would allow for the sale of cannabis products or to outside the County. For the purposes of this analysis, it is assumed that customers would leave Kern County in order to obtain cannabis products. Option A would generate operational criteria air pollutants from mobile sources. Table 4.3-6, *Option A - Summary of Estimated Unmitigated Long Term Operations Mobile Source Criteria Air Pollutant Emissions for Year 2018*, presents operational emissions for year 2018, which includes full buildout and associated operational emissions of the proposed project. Additional technical information is presented in Appendix G.

Table 4.3-6. Option A - Summary of Estimated Unmitigated Long Term Operations Mobile Source Criteria Air Pollutant Emissions for Year 2018 (tons/year)						
Year	ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
SJVAB	12.95	164.37	174.08	0.84	49.53	14.17
SJVAPCD Threshold	10	10	100	27	15	15
Exceeds Threshold?	YES	YES	YES	NO	YES	NO
MDAB	12.95	164.37	174.71	0.84	49.53	14.17
EKAPCD Threshold	25	25	NA	27	15	15
Threshold Exceeded?	NO	YES	NA	NO	YES	NO

Source: Insight Environmental Consultants 2017; Refer to Appendix G for CalEEMod output files.

As shown in Table 4.3-6, above, project-generated operational unmitigated emissions would exceed the SJVAPCD for ROG, NO_x, CO, and PM₁₀ and would exceed the EKAPCD annual thresholds for NO_x and PM₁₀. Option A project operations would not exceed the SJVAPCD annual operational thresholds for SO₂ or PM_{2.5} and would not exceed the EKAPCD annual operational threshold for ROG, CO, SO₂, and PM_{2.5}. There are currently no enforceable feasible mitigation measures related to customers traveling to future retail cannabis stores that are located outside of the County's jurisdiction. Therefore, Option A would have a substantial adverse effect on operations-related criteria air pollutant emissions. This impact would be potentially significant.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within

unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

Construction – Criteria Air Pollutants

Construction of the proposed project would result in emissions of the air pollutants ROG, NO_x, CO, PM₁₀, PM_{2.5}, and SO_x emissions. Emissions would originate from mobile and stationary construction equipment exhaust, employee vehicle exhaust, dust from clearing the land, exposed soil eroded by wind, and ROG emissions from architectural coatings and asphalt paving. Construction-related emissions would vary substantially depending on the level of activity, length of the construction period, specific construction operations, types of equipment, number of personnel, wind and precipitation conditions, and soil moisture content. On-site sources of criteria air pollutant emissions would include off-road equipment and fugitive dust, and off-site sources would include hauling and vendor trucks and worker vehicles. Emissions estimates are based on assumptions provided in the air quality impact analysis for the project site (see Appendix G).

Table 4.3-7, *Option B - Summary of Estimated Annual Unmitigated Construction Criteria Air Pollutant Emissions*, presents the total project-related unmitigated short-term air emissions from construction during 2017. As described above, all project construction activities were modeled assuming the absolute worst-case scenario: all construction happens in the first year in one air basin. Thus Table 4.3-7 presents the results for both SJVAB and MDAB. Emissions from on-site and off-site sources were combined for this analysis. The SJVAPCD, EKAPCD and the Kern County Planning and Natural Resources Department thresholds of significance are also included in this table as well as information regarding whether annual construction emissions for ROG, NO_x, and PM₁₀ would exceed those thresholds. As presented in Table 4.3-7, short-term construction emissions are predicted to be less than the SJVAPCD and EKAPCD significance threshold levels for SO_x. Compliance with SJVAPCD Regulation VIII, as required by law, would ensure that project-generated fugitive dust would be reduced to the extent feasible and that dust impacts would be less than significant. The unmitigated construction emissions would exceed than the SJVAPCD significance threshold levels for ROG, NO_x, CO, PM₁₀ and PM_{2.5} and would exceed the EKAPCD significance thresholds for ROG, NO_x, PM₁₀ and PM_{2.5}.

Table 4.3-7. Option B - Summary of Estimated Unmitigated Construction Criteria Air Pollutant Emissions for Year 2017 (tons/year)

Year	ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
SJVAB						
Indoor Cultivation	20.42	61.54	41.61	0.06	4.78	3.90
Outdoor Cultivation	25.37	174.24	125.81	0.20	11.61	10.85
Processing & Packaging	7.39	37.64	24.85	0.04	2.73	2.37
Retail Cannabis Stores	4.47	29.80	19.58	0.03	2.12	1.87

Table 4.3-7. Option B - Summary of Estimated Unmitigated Construction Criteria Air Pollutant Emissions for Year 2017 (tons/year)						
Year	ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Total	57.64	303.22	211.84	0.33	21.24	18.99
SJVAPCD Threshold	10	10	100	27	15	15
Exceeds Threshold?	YES	YES	YES	NO	YES	YES
MDAB						
Indoor Cultivation	29.69	61.54	41.61	0.07	4.78	3.90
Outdoor Cultivation	25.37	174.24	125.81	0.20	11.61	10.85
Processing & Packaging	9.70	37.64	24.85	0.04	2.73	2.37
Retail Cannabis Stores	5.40	29.80	19.58	0.03	2.12	1.87
Total	70.15	303.22	211.84	0.33	21.24	18.99
EKAPCD Threshold	25	25	NA	27	15	15
Threshold Exceeded?	YES	YES	NA	NO	YES	YES

Source: Insight Environmental Consultants 2017; Appendix G.

As shown in Table 4.3-7, proposed project unmitigated construction emissions would exceed the SJVAPCD significance threshold levels for ROG, NO_x, CO, PM₁₀ and PM_{2.5} and would exceed the EKAPCD significance thresholds for ROG, NO_x, PM₁₀ and PM_{2.5}. Construction of the project would not exceed the SJVAPCD and EKAPCD annual thresholds for SO_x; (refer to Appendix G for CalEEMod output files).

Implementation of Mitigation Measure MM 4.3-1 would minimize construction-related criteria air pollutant emissions from various on-site and off-site emission sources. The proposed project would comply with applicable federal, State, and local laws and regulations. Idling restrictions on trucks and off-road equipment would minimize combustion pollutant emissions, including NO_x, by prohibiting idling for more than five minutes except as permitted by CARB. Compliance with SJVAPCD architectural coating rules would minimize off-gassing emissions of ROGs (i.e., VOCs) by placing a limit on the VOC content (measured in grams per liter of VOC) allowed for different types of coatings (e.g., flat and non-flat paint).

Mitigation Measure MM 4.3-2 would require a Fugitive Dust Control Plan to reduce PM₁₀ (inclusive of PM_{2.5}) emissions from grading and other earthmoving and construction activities by development of a plan to implement fugitive dust control measures during construction in compliance with the requirements of SJVAPCD Regulation VIII as well as compliance with EKAPCD. Because PM₁₀ and PM_{2.5} emissions associated with fugitive dust have not been quantified, no reduction in emissions of these pollutants has been attributed to this mitigation measure.

Implementation of Mitigation Measure MM 4.3-3 would reduce air pollutants associated with most off-road diesel construction equipment—chiefly ROG, NO_x, PM₁₀, and PM_{2.5}. This mitigation measure would restrict the model years, which are associated with engine tiers, of construction equipment or its engines according to prescribed milestone dates. While the implementation of mitigation would reduce emissions from tier to tier, the actual reductions would depend on the actual ages (tiers) of the engines in construction equipment being used at any particular time and the degree that compliance with the CARB Airborne Toxic Control Measures (ATCM) has been achieved as of a particular deadline. That is, if the actual construction equipment fleet being used were relatively new compared to when a milestone in Mitigation Measure MM 4.3-3 becomes effective (e.g., a high percentage of the equipment already uses Tier 3 engines in 2020), the benefits would be lower than those shown in.

Although implementation of Mitigation Measures MM 4.3-1 through MM 4.3-3 could reduce short-term construction related emissions, the timing and extent of the emission reductions from these mitigation measures cannot be reasonably predicted given this is an ordinance and therefore were not modeled. Because the construction-related ambient air quality impacts would exceed SJVAPCD and EKAPCD thresholds of significance, these short-term impacts were found to be significant and unavoidable for ROG, NO_x, CO, PM₁₀ and PM_{2.5}.

Operations – Criteria Air Pollutant

The proposed project operations would generate operational criteria air pollutants from mobile sources, area sources, energy (electricity and natural gas), and potential stationary sources. Table 4.3-8, *Option B - Summary of Estimated Unmitigated Long Term Operations Criteria Air Pollutant Emissions for Year 2018*, presents operational emissions for year 2018, which includes full buildup and associated operational emissions of the proposed project. Additional technical information is presented in Appendix G.

Table 4.3-8. Option B - Summary of Estimated Unmitigated Long Term Operations Criteria Air Pollutant Emissions for Year 2018 (tons/year)						
Year	ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
SJVAB						
Indoor Cultivation	11.37	25.77	22.55	0.11	5.31	1.63
Outdoor Cultivation	0.61	7.44	6.63	0.03	1.67	0.48
Processing & Packaging	3.88	19.09	16.74	0.08	4.08	1.20
Retail Cannabis Stores	8.66	88.72	52.66	0.22	7.61	2.33
Total	24.51	141.02	98.58	0.44	18.66	5.64
SJVAPCD Threshold	10	10	100	27	15	15
Exceeds Threshold?	YES	YES	NO	NO	YES	NO
MDAB						
Indoor Cultivation	12.26	25.37	22.22	0.11	5.28	1.61
Outdoor Cultivation	0.61	7.44	6.63	0.03	1.67	0.48
Processing & Packaging	4.10	18.99	16.65	0.08	4.07	1.19
Retail Cannabis Stores	8.63	87.63	51.75	0.21	7.53	2.25
Total	25.59	139.43	97.24	0.43	18.54	5.52
EKAPCD Threshold	25	25	NA	27	15	15
Threshold Exceeded?	YES	YES	NA	NO	YES	NO

Source: Insight Environmental Consultants 2017; Refer to Appendix G for CalEEMod output files.

As shown in Tables 4.3-8 above, project-generated operational unmitigated emissions would exceed the SJVAPCD and EKAPCD annual thresholds for ROG, NO_x and PM₁₀ during full buildup of the proposed project. Proposed project operations would not exceed the SJVAPCD and EKAPCD annual operational threshold for CO, SO_x, and PM_{2.5}.

Implementation of Mitigation Measure MM 4.3-1 would minimize operations-related criteria air pollutant emissions from various emission sources associated with operation of the proposed project including idling delivery trucks and some commercial and light industrial operations, architectural coatings used for building maintenance, commercial water heaters and furnaces, among others. The proposed project would comply with applicable federal, State, and local laws and regulations, including the SJVAPCD and EKAPCD Regulations and Rules during operation.

Emission reductions associated with compliance with these regulatory measures have not been quantified. To the extent that CalEEMod reflects the emission sources subject to these regulations, the operational emission estimates generally assume that compliance with these measures would

be achieved. Thus, while compliance would reduce air pollutant emissions, impacts would remain significant.

Implementation of the DMC would fully mitigate emissions of ROG, NO_x, and PM₁₀ (inclusive of PM_{2.5}) in the non-attainment basin. Accordingly, net operational emissions of these air pollutants would be reduced to zero. Emissions of SO_x and CO would not be mitigated.

The project proponent would mitigate the project's remaining emissions of ROG, NO_x, and PM₁₀ (inclusive of PM_{2.5}) from operation by achieving quantifiable and enforceable emission reductions. Emissions of CO and SO_x, however, would not be offset with incorporation of the DMC. Project-generated mitigated operational emissions with incorporation of the DMC are presented in Table 4.3-9, *Option B – Estimated Annual Mitigation Operational Criteria Air Pollutant Emissions with DMC*.

Table 4.3-9. Option B - Estimated Annual Mitigated Operational Criteria Air Pollutant Emissions With DMC

	Criteria Air Pollutants (tons/year)					
	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Maximum Annual SJVAB Emissions	24.51	141.02	98.58	0.44	18.66	5.64
DMC Reductions for SJVAB Maximum Annual Emissions	(24.51)	(141.02)	0.00	0.00	(18.66)	(5.64) ^a
Net Emissions With DMC	0.00	0.00	98.58	0.44	0.00	0.00
<i>SJVAPCD Threshold</i>	10	10	100	27	15	15
Threshold Exceeded?	NO	NO	NO	NO	NO	NO
Maximum Annual MDAB Emissions	25.59	139.43	97.24	0.43	18.54	5.52
DMC Reductions for MDAB Maximum Annual Emissions	(25.59)	(139.43)	0.00	0.00	(18.54)	(5.52)
Net Emissions With DMC	0.00	0.00	97.24	0.43	0.00	0.00
<i>EKAPCD Threshold</i>	25	25	NA	27	15	15
Threshold Exceeded?	NO	NO	NO	NO	NO	NO

Source: Insight Environmental Consultants, 2017.

Notes: Refer to Appendix G of this EIR.

^a PM_{2.5} emissions are a subset of PM₁₀ emissions. Accordingly, it is assumed that PM₁₀ emission reductions under a DMC would also cover PM_{2.5} emissions (SJVAPCD 2016).

Incorporation of the DMC would reduce project-generated net operational emissions of ROG, NO_x, PM₁₀, and PM_{2.5} to zero, which would be a less than significant impact for these pollutants. Although DMC emission reduction strategies would reduce all project-generated emissions, the DMC would not specifically reduce CO emissions. Because project-generated operational CO emissions would not exceed the SJVAPCD operational CO emissions threshold, the project would not result in a significant CO impact; additionally, the Kern County portion of the SJVAB is in attainment of federal and State CO standards.

Implementation of Mitigation Measure MM 4.3-5 would reduce emissions of all pollutants associated with combustion of natural gas in nonresidential land uses and indirectly reduce emissions associated with generation of electricity from fossil fuels (e.g., power plants using gas turbines). The reduction in energy consumption and associated emissions is not directly proportional to the extent that Title 24 requirements are exceeded; that is, the reduction is less than the 25 percent improvement above Title 24 requirements specified in Mitigation Measure MM 4.3-5. The degree of reduction for generation of electricity also reflects future requirements of the Renewal Portfolio Standard in that a higher percentage of renewable energy in the serving utilities

energy mix would reduce the emissions per unit of electricity used (e.g., kilowatt-hour) and the corresponding emission reduction on a mass basis would be less.

Ambient Air Quality

An ambient air quality analyses were performed to determine if the project's operations have the potential to impact ambient air quality through a violation of the ambient air quality standards or a substantial contribution to an existing or projected air quality standard. The basis for the analysis is dispersion modeling applied to the project as described. Maximum daily emissions were used as the basis for determining the project's potential impact on ambient air quality. Additional information on the ambient air quality modeling methods and assumptions are presented in Appendix G.

For the initial assessment (Step 1) of the ambient air quality impact analysis, the maximum background concentration for the project area for each pollutant and averaging period combination was added to the corresponding maximum ground level concentration (GLC) from project-related operations emissions. The sum of these values was then compared to the corresponding ambient air quality standard. If the incremental increase in concentration from project-related sources did not cause an exceedance of an ambient air quality standard, then the analysis was complete for that source/receptor/pollutant combination. If the incremental increase in concentration from proposed project-related sources caused an exceedance of an ambient air quality standard, then the analysis proceeded to Step 2. Step 2 was similar to a Step 1 with one major difference. For this step, the maximum GLC of each pollutant and averaging period combination were compared to its corresponding SIL. The SIL is used to evaluate whether the project's operations emissions would contribute to a violation of an ambient air quality standard, where the background level is close to or exceeds an ambient air quality standard. If the maximum GLC did not exceed the corresponding SIL, then the analysis was complete for that source/receptor/pollutant combination, and no further analysis was required.

Table 4.3-10, *Option B - Operations Ambient Air Quality Impact Assessment Results*, presents a summary of the two-step process taken to determine whether operations activities associated with the proposed project would cause or contribute to ambient air quality impacts.

Table 4.3-10. Option B - Operations Ambient Air Quality Impact Assessment Results ¹					
STEP 1 – Ambient Air Quality Standard Basis					
Impact Parameter	State/Federal AAQS	Operations SJVAB		Operations MDAB	
		µg/m3	µg/m3	Status	µg/m3
1-hour CO	22,900	1,747	PASS	7,344	PASS
	40,100	1,747	PASS	7,344	PASS
8-hour CO	10,300	1,367	PASS	4,238	PASS
	10,300	1,367	PASS	4,238	PASS
1-hour NO2	338	137.57	PASS	117.62	PASS
	188	137.57	PASS	117.62	PASS
Annual NO2	56	25.19	PASS	17.00	PASS
	100	25.19	PASS	17.00	PASS
24-hour PM ₁₀	50	90.37	Step 2	138.47	Step 2
	150	90.37	PASS	138.48	PASS
Annual PM ₁₀	20	44.19	Step 2	18.76	PASS
24-hour PM _{2.5}	35	54.90	Step 2	26.08	PASS

Table 4.3-10. Option B - Operations Ambient Air Quality Impact Assessment Results ¹					
Annual PM _{2.5}	12	16.67	Step 2	5.15	PASS
	12	16.67	Step 2	5.15	PASS
STEP 2 – SJVAPCD Significant Impact Level (SIL) Basis					
Impact Parameter	Class II SILs		Construction SJVAB		Construction MDAB
	µg/m ³	µg/m ³	Status	µg/m ³	Status
24-hour PM ₁₀	5	0.37	PASS	0.47	PASS
Annual PM ₁₀	1	0.09	PASS	-	NA
24-hour PM _{2.5}	5	0.30	PASS	-	NA
Annual PM _{2.5}	1	0.07	PASS	-	NA

Source: Insight Environmental Consultants, 2017.

¹ Step 1 - the AAQS basis compares the background concentrations plus project contribution to the State and federal AAQS to determine if there would be an exceedance of the respective standard. For PM₁₀ and PM_{2.5}, background concentrations already exceed the applicable AAQS (except for the 24-hour federal PM₁₀ AAQS), so Step 2—the SIL basis—compares the project contributions to levels determined by the SJVAPCD to cause or contribute to ambient air quality exceedances and impacts.

As demonstrated in Table 4.3-10, the project would result in the operations levels that would generate criteria pollutant emissions below the applicable thresholds for ambient air quality impacts. This impact would be less than significant.

Impact Summary

In regards to project-generated operational emissions, the proposed project's impact related to the potential to violate any air quality standard as adopted in Kern County Environmental Checklist Air Quality (c)i, or as established by U.S. EPA or air district or contribute substantially to an existing or projected air quality violation would be less than significant with mitigation (Mitigation Measures MM 4.3-1, MM 4.3-4, and MM 4.3-5) for ROG, NO_x, PM₁₀, and PM_{2.5}.

Because project-generated operational CO emissions would not exceed the SJVAPCD operational CO emissions threshold after incorporation of mitigation, the project would result in a less than significant impact; additionally, Kern County portion is in attainment of federal and State CO standards, and CO hotspot and stationary source impact modeling determined that the proposed project would not contribute substantially to an existing or projected CO air quality violation.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing before the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to potentially violating an air quality standard would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Air Quality Standards

Refer to Impact 4.3-1, above, for a summary of applicable existing regulations and policies related to air quality standards. In addition, the following are also applicable.

1. KCGP Land Use, Open Space, and Conservation Element, Section 1.10.2, Air Quality, Policies 19 and 20 related to feasible mitigation and fugitive dust control measures.
2. MBGP Chapter V Conservation Element, Air Quality, Goal 4 and Policies 3, 4, 5, 19, and 31 related to air quality standards and reducing emissions.

Mitigation Measures

Option A

Implement Mitigation Measures MM 4.3-1 through MM 4.3-5, as described above.

Option B

Implement Mitigation Measures MM 4.3-1 through MM 4.3-5, as described above.

Level of Significance After Mitigation

Impacts resulting from Option A would be significant and unavoidable. Impacts resulting from Option B would be less than significant level.

Impact 4.3-3: Result in a Cumulatively Considerable Net Increase of Any Criteria Pollutant for Which the Project Region is Nonattainment under an Applicable Federal or State Ambient Air Quality Standard

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A does not provide opportunities for commercial cannabis activities and thus would not result in an increase in the need of land for the cultivation, processing and packaging, distribution, and sale of cannabis.

Under Option A, it is anticipated that existing medical dispensaries required to immediately cease operations would eventually become other businesses. It is not anticipated that these structures would be demolished. However, future businesses using structures from the closed dispensaries

could result in demolition or renovation activities. Demolition and renovation would generate some amount of criteria air pollutant emissions; however, at this time, it is unknown and speculative to determine the number of structures that would undergo demolition or renovation as a result of new businesses opening after dispensaries have closed. Therefore, while the amount of potential criteria air pollutant emissions from the potential demolition or renovation cannot now be quantified and is therefore unknown, potential new businesses using closed dispensary structures would be required to obtain appropriate permits from Kern County and other regulatory agencies and potential criteria air pollutant emissions would be considered at that time.

Under Option A, the closing of the existing medical dispensaries would result in customer trips being displaced to cities within the County that would allow for the sale of cannabis products or to outside the County. For the purposes of this analysis, it is assumed that customers would leave Kern County in order to obtain cannabis products. Section 4.15, *Transportation and Traffic*, estimated that the total VMT would be up to 3.5 times more for Option A than for Option B. This is based on the assumption that the demand for cannabis would not disappear and cities within the County would not allow cannabis sales, therefore, customers would travel to locations outside the County. This increase in VMT would increase mobile source criteria air pollutant emissions, as shown in Table 4.3-6, above. Project-generated operational unmitigated emissions would exceed the SJVAPCD and EKAPCD annual thresholds as discussed in Impact 4.3-2, above. There are currently no enforceable feasible mitigation measures to customers traveling to future retail cannabis stores that are located outside the County's jurisdiction. Therefore, Option A would have a substantial adverse effect on operations-related criteria air pollutant emissions. This impact would be potentially cumulatively considerable.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

Cumulative air quality impacts are the effect of long-term emissions of the project plus any existing emissions at the same location, as well as the effect of long-term emissions of reasonably foreseeable similar projects, on the projected regional air quality or localized air pollution in the County.

The potential for the proposed project to result in a cumulatively considerable impact, per the SJVAPCD guidance and thresholds, is based on the proposed project's potential to exceed the

project-specific annual thresholds. As evaluated under Impact 4.3-2, the proposed project would exceed the annual SJVAPCD thresholds for ROG, NO_x, and PM₁₀, during operation. However, the proposed project would be required to mitigate ROG, NO_x, and PM₁₀ (inclusive of PM_{2.5}) emissions, including stationary source emissions, by achieving surplus, quantifiable and enforceable emission reductions; therefore, the proposed project would not result in project-specific impacts for these pollutants. Proposed project-generated operational CO emissions would be just below the SJVAPCD operational CO emissions threshold; additionally, Kern County is in attainment of federal and State CO standards, and therefore the proposed project would not substantially contribute to an existing or projected CO air quality violation.

With implementation of the DMC, the proposed project would not result in significant impacts or a cumulatively considerable contribution to air quality impacts of ROG, NO_x, PM₁₀, and PM_{2.5} per the SJVAPCD guidance. However, because of scientific uncertainty regarding the relationship between the mitigation measures that can be used to satisfy the DMC obligations, and because other future projects within the SJVAB are not required to fully offset air emissions, cumulative emissions of these nonattainment pollutants will continue to be significant and unavoidable.

The proposed project's proposed development is consistent with the development projected in the Kern COG RTP/SCS. In addition, mitigation measures require emission reductions beyond those required by the applicable air quality plans. As such, the proposed project would be consistent with the policies of the applicable SJVAPCD air quality attainment plans.

Based on these considerations, the proposed project's potential to result in a cumulatively considerable net increase of any criteria pollutant for which the proposed project region is nonattainment under an applicable federal or State ambient air quality standard would be potentially significant.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing before the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, proposed project-specific, as well as cumulative, impacts related to cumulative air quality impacts would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Criteria Pollutants

Refer to Impacts 4.3-1 and 4.3-2, above, for a summary of applicable existing regulations and policies related to criteria pollutants.

Mitigation Measures

Option A

Implement Mitigation Measures MM 4.3-1 through MM 4.3-5, as described above.

Option B

Implement Mitigation Measures MM 4.3-1 through MM 4.3-5, as described above.

Level of Significance after Mitigation

Impacts resulting from Option A would be significant and unavoidable. Impacts resulting from Option B would be significant and unavoidable.

Impact 4.3-4: The Project Would Expose Sensitive Receptors to Substantial Pollutant Concentrations

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A does not provide opportunities for commercial cannabis activities and thus would not result in an increase in the need of land for the cultivation, processing and packaging, distribution, and sale of cannabis. Option A would continue to allow individuals to cultivate up to six plants on private property. Any pollutants generated would be similar to pollutants generated from residential gardens and the residential gardening standards would continue to apply. Therefore, Option A would not have a substantial adverse effect on sensitive receptors to substantial pollutant concentrations. Impact would be less than significant in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without

mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

Valley Fever Exposure

As previously discussed, the proposed project would be required to comply with Rule 8021 Section 6.3, which requires applicants to develop, prepare, submit, obtain approval of, and implement a Dust Control Plan, which would reduce fugitive dust impacts to less than significant for all construction phases of the proposed project, which would also control the release of the *Coccidioides immitis* fungus from construction activities. This requirement is included in Mitigation Measure MM 4.3-2; however, exposure to the *Coccidioides immitis* fungus would be potentially significant and Mitigation Measure MM 4.3-6 is provided to further reduce impacts associated with Valley Fever and to protect on-site construction workers and nearby receptors.

Hazardous Air Pollutants (HAPs) and Toxic Air Contaminants (TACs)

The primary source of potential air toxics emissions would be from diesel trucks. Through a review of the proposed project trip generation rates, these levels of activity would be less than 10 trucks per day per activity center (generally one to five trucks per day, worst-case) and sufficiently dispersed throughout the County. Based on these anticipated diesel truck activity levels and the dispersion anticipated throughout the County, the proposed project would not have the potential to trigger a proposed project-related health risk assessments; no further TAC analysis was conducted.

Potential Impacts from Carbon Monoxide (CO)

Hotspot Analysis

As discussed above under Thresholds of Significance and Methodology, the SJVAPCD and Kern County have established criteria to determine if a proposed project would potentially result in a CO hotspot. If neither of the following SJVAPCD screening criteria are met at any of the intersections affected by the proposed project, the proposed project would result in no potential to create a violation of the CO standard (SJVAPCD, 2015b):

- A traffic study for the project indicates that the level of service (LOS) on one or more streets or at one or more intersections in the project vicinity will be reduced to LOS E or F.
- A traffic study indicates that the project will substantially worsen an already existing LOS F on one or more streets or at more or more intersections in the project vicinity.

A traffic study was prepared for this proposed project (Ruetters & Schuler, 2017). Because the proposed project would be dispersed throughout the County, and it is anticipated that intersection and roadway LOS would not be LOS E or worse, no further CO hotspot analysis was conducted.

Indoor CO Levels

If a future indoor cannabis cultivator promotes plant growth by elevating levels of carbon dioxide (CO₂), the process of elevation CO₂ levels for plant growth can produce elevated levels of ultrafine particles, such as PM₁₀ and PM_{2.5}, and CO; which can be hazardous to workers within the indoor facility. Appropriate heating, ventilation, and air conditioning (HVAC) systems would be required. The future cannabis related facility would be required to adhere to development standards as outlined above and provided in full in Appendix C of this EIR, as well as all other federal, State, and local requirements regarding HVAC systems.

Visibility Impacts

As discussed above under, Thresholds of Significance and Methodology, Kern County has established criteria to determine if a project would potentially result in a visibility impact; however, the SJVAPCD has not established guidance to address visibility in CEQA documents. Per the Kern County guidelines, a visibility analysis is not required since the proposed project is not a large industrial stationary source project or a mining project, and it would not have long-term operational components that could generate dust or emissions plumes related to visibility. Compliance with Regulation VIII, including implementation of all feasible dust control measures specified in GAMAQI and incorporated into a dust control plan, is sufficient mitigation to reduce air quality effects from construction-related PM₁₀ emissions to a less-than-significant level (SJVAPCD, 2015b).

The proposed project's potential to expose sensitive receptors to substantial pollutant concentrations associated with potential visibility impacts would be less than significant and no mitigation is required.

Impact Summary

The proposed project's impact related to the potential to expose sensitive receptors to substantial pollutant concentrations would be less than significant without mitigation in regards to construction health risk, stationary source health risk, CO hotspots, indoor CO level, and visibility.

The proposed project's impact related to the potential to expose sensitive receptors to substantial pollutant concentrations would be less than significant with mitigation in regards to Valley Fever (Mitigation Measures MM 4.3-2 and MM 4.3-6).

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing before the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to exposing sensitive receptors to substantial pollutant concentrations would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Pollutant Concentrations

Refer to Impacts 4.3-1 and 4.3-2, above, for a summary of applicable existing regulations and policies related to pollutant concentrations.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

Implement Mitigation Measures MM 4.3-1 through MM 4.3-5, as described above.

MM 4.3-6 Prior to any ground disturbance activities, the project applicant shall implement the following, or equivalent, Valley Fever Provisions:

- 1) Provide evidence to the Kern County Planning and Natural Resources Department that the project operator and/or construction manager has developed a “Valley Fever Training Handout”, training, and schedule of sessions for education to be provided to all personnel. All evidence of the training session materials, handout(s) and schedule shall be submitted to the Kern County Planning and Natural Resources Department within 24 hours of the first training session. Multiple training sessions may be conducted if different work crews will come to the site for different stages of construction; however, all construction personnel shall be provided training prior to beginning work. The evidence submitted to the Kern County Planning and Natural Resources Department regarding the “Valley Fever Training Handout” and Session(s) shall include the following:
 - a. A sign-in sheet (to include the printed employee names, signature, and date) for all employees who attended the training session.
 - b. Distribution of a written flier or brochure that includes educational information regarding the health effects of exposure to criteria pollutant emissions and Valley Fever.
 - c. Training on methods that may help prevent Valley Fever infection.
 - d. A demonstration to employees on how to use personal protective equipment, such as respiratory equipment (masks), to reduce exposure to pollutants and facilitate recognition of symptoms and earlier treatment of Valley Fever. Where respirators are required, the equipment shall be readily available and shall be provided to employees for use during work. Proof that the demonstration is included in the training shall be submitted to the county. This proof can be via printed training materials/agenda, DVD, digital media files, or photographs.
- 2) The project applicant shall consult with the Kern County Health Services Department to develop a Valley Fever Dust Management Plan that addresses the potential presence of the *Coccidioides* spore and mitigates for the potential for *Coccidioidomycosis* (Valley Fever). Prior to issuance of permits, the project applicant shall submit the Plan to the Kern County Public Health Services Department for review and approval. The Plan shall include a program to evaluate the potential for exposure to Valley Fever from construction activities and to identify appropriate safety procedures that shall be implemented, as needed, to minimize personnel and public exposure to potential *Coccidioides* spores. Measures in the Plan shall include the following:
 - a. Provide High-Efficiency Particulate Air (HEPA) filters for heavy equipment equipped with factory enclosed cabs capable of accepting the filters. Require contractors utilizing applicable heavy equipment to furnish proof of worker training on proper use of applicable heavy equipment cabs, such as turning on air conditioning prior to using the equipment.
 - b. Provide communication methods, such as two-way radios, for use in enclosed cabs.

- c. Require National Institute for Occupational Safety and Health (NIOSH)-approved half-face respirators equipped with minimum N-95 protection factor for use during worker collocation with surface disturbance activities, as required per the hazard assessment process.
- d. Cause employees to be medically evaluated, fit-tested, and properly trained on the use of the respirators, and implement a full respiratory protection program in accordance with the applicable California Occupational Safety and Health Administration Respiratory Protection Standard (8 CCR 5144).
- e. Provide separate, clean eating areas with hand-washing facilities.
- f. Install equipment inspection stations at each construction equipment access/egress point. Examine construction vehicles and equipment for excess soil material and clean, as necessary, before equipment is moved off-site.
- g. Train workers to recognize the symptoms of Valley Fever, and to promptly report suspected symptoms of work-related Valley Fever to a supervisor.
- h. Work with a medical professional to develop a protocol to medically evaluate employees who develop symptoms of Valley Fever.
- i. A one-time payment of \$3,200 for new construction or rehabilitation construction that involves any grade disturbing activities shall be made to the Kern County Public Health for Valley Fever Education. When possible, position workers upwind or crosswind when digging a trench or performing other soil-disturbing tasks.
- j. Prohibit smoking at the worksite outside of designated smoking areas; designated smoking areas will be equipped with handwashing facilities.
- k. Post warnings on-site and consider limiting access to visitors, especially those without adequate training and respiratory protection.
- l. Audit and enforce compliance with relevant California Occupational Safety and Health Administration health and safety standards on the jobsite.

Level of Significance after Mitigation Measures

Impacts would be less than significant with respect to Option A. Impacts regarding Option B would be less than significant.

Impact 4.3-5: The Project Would Cause the Creation of Objectionable Odors, Affecting a Substantial Number of People

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A does not provide opportunities for commercial cannabis activities and thus would not result in the creation of objectionable odors from commercial cannabis activities. Odors may occur from personal cultivation, personal cultivation would be required to comply with Proposition 64, which specifies that any living plants and any cannabis produced by the plants are kept within a person's private residence, or upon the grounds of that private residence, are in a locked space, and are not visible by normal unaided vision from a public place (California Health and Safety Code Section 11362.2). In addition, per Proposition 64, smoking cannabis or cannabis products are not allowed within 1,000 feet of a school, day care center, or youth center while children are present and the use on property of a private residence must be in accordance with Section 26200 of the Business and Professions Code or Chapter 3.5 of Division 8 of the Business and Professions Code (California Health and Safety Code Section 11362.3). Therefore, while some odors may occur under Option A, they would be minimal and governed by similar smoking laws within the State and County. Therefore, impacts are considered less than significant in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

Types of land uses that typically pose potential odor problems include agriculture, wastewater treatment plants, food processing and rendering facilities, chemical plants, composting facilities, landfills, waste transfer stations, and dairies. In this case, the outdoor cultivation, indoor cultivation and packing operations pose the most potential for proposed project odor problems. In addition, the occurrence and severity of odor impacts depend on numerous factors, including the nature, frequency, and intensity of the source; wind speed and direction; and the presence of sensitive receptors. Although offensive odors rarely cause any physical harm, they can still be very unpleasant, leading to considerable distress and often generating citizen complaints to local governments and regulatory agencies.

The proposed project includes land uses with sources that have the potential to generate substantial odors, including indoor cultivation, outdoor cultivation, processing and packaging, and distribution facilities. The specific location of these potential sources or proximity to receptors is unknown at this time. The results of the dispersion modeling indicate that specific cannabis compounds may be

detectable at concentrations at a distance of two miles or more, depending on weather conditions. Within the dispersion area, sensitive receptors may be able to smell these compounds but it could not be determined if this would rise to the level of a nuisance.

For future cannabis indoor cultivation and processing facilities, there are a variety of methods for controlling odors resulting from the cannabis operations. The primary method is carbon filtration whereby the ambient air from within a cannabis cultivation facility is cycled through a single or series of carbon canisters to filter the various odorous compounds out of the air before discharge outside. Future cannabis indoor cultivation facilities that control odor emissions from their facility using carbon filtration should be able to significantly reduce or completely eliminate odorous emissions if the carbon filtration system is engineered (i.e., sized) properly for the future cannabis facility.

Mitigation Measure MM 4.3-7, requires future cannabis outdoor cultivation facilities to maintain a setback of 0.5 mile from any potential sensitive receptor. Mitigation Measure MM 4.3-8, requires future cannabis indoor cultivation, processing and packaging, and distribution facilities to install air filtration equipment to reduce or eliminate odorous compounds to non-detectable levels. Mitigation Measure MM 4.3-9, requires the implementation of an Odor Complaint Management Plan for future cannabis facilities that could emit significant odors. The proposed project could locate future cannabis related facilities with the potential to generate substantial odors in close proximity to receptors, as well as locate sensitive receptors in an area with existing ambient odors (including agriculture, oil and gas operations, and confined animal feeding operations), this impact is considered potentially significant.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing before the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to creating a significant odor impacts would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Odors

Refer to Impacts 4.3-1 and 4.3-2, above, for a summary of applicable existing regulations and policies related to odors and emissions.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

MM 4.3-7 Prior to the approval of a site plan or issuance of a grading or building permit or as a condition of approval of a conditional use permit for a cannabis cultivation facility,

the project applicant shall be required to provide documentation to the Kern County Planning and Natural Resources Department that the cannabis cultivation facility is located a minimum of 0.5 mile from any potential sensitive receptor (including but not limited to residence, hospital, public or private school (K-12) permitted large family day care, permitted senior care facility).

- MM 4.3-8** Prior to the approval of a site plan, issuance of a grading or building permit as shown on site plans for applications for a conditional use permit for an indoor cannabis cultivation facility, a cannabis processing and packaging facility, or a cannabis distribution facility, the project applicant shall be required to install air filtration equipment to reduce or eliminate odorous compounds to non-detectable levels.
- MM 4.3-9** Prior to the approval of a site plan or issuance of a grading or building permit or for any application for a conditional use permit, the project applicant shall be required to prepare an Odor Complaint Management Plan and submit to the Kern County Planning and Natural Resources Department. The Odor Complaint Management Plan shall include provisions necessary to reduce noxious odors generated from the proposed use. At a minimum, the Odor Complaint Management Plan shall include the following:
- a. Name and telephone number of contact person(s) at the facility responsible for logging in and responding to odor complaints
 - b. Policy and procedure describing the actions to be taken when an odor complaint is received, including the training provided to the staff on how to respond
 - c. Description of potential odor sources at the facility
 - d. Description of potential methods for reducing odors, including minimizing idling of delivery and service trucks and buses, process changes, facility modifications, and/or feasible add-on air pollution control equipment
 - e. Contingency measures to curtail emissions in the event of a public nuisance complaint.

Level of Significance after Mitigation Measures

Impacts would be less than significant with respect to Option A. Impacts regarding Option B would be less than significant.

Cumulative Setting Impacts and Mitigation Measures

Cumulative Setting

The localized impact evaluation typically includes estimation of operational emissions from combined projects identified within a one-mile and six-mile radius of the project boundaries. Although a list-type approach works well for some environmental issue areas, it may not be the most appropriate approach to analyze the proposed project's cumulative air quality impacts, because the proposed project is County-wide and would include a DMC for mobile and stationary sources not requiring permits with offsets, and would not result in a net increase in emissions of pollutants of primary concern. As such, the potential for the proposed project to result in significant cumulative impacts was determined using other approaches in place of the one-mile and six-mile cumulative analysis.

The geographic scope for cumulative impacts on air quality includes both the KCGP and the regional growth plan and projections included in the Kern COG Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) approved in 2014, as defined in Section 3.7, *Cumulative Projects*. This is a large enough area to encompass any effects of the proposed project on air quality that may combine with similar effects caused by other projects, and provides a reasonable context wherein cumulative actions could affect these resources. The cumulative analyses consider whether the proposed project, Option A or Option B, in combination with the past, present, and reasonably foreseeable projects, could cumulatively affect air quality to both the SJVAB and MDAB.

Cumulative Impacts and Mitigation Measures

Impact 4.3-6: The Project Would Result in a Cumulatively Considerable Net Increase of Any Criteria Pollutant for Which the Project Region Is in Nonattainment under an Applicable National or State Ambient Air Quality Standard

Proposed Project Option A

Option A of the proposed project would ban all commercial medical and adult use cannabis-related activities other than what is allowed for personal use under Proposition 64. Option A would generate substantial levels of criteria air pollutant emissions through increasing vehicle miles travelled as shown in Table 4.3-6 (Impact 4.3-2 and Impact 4.3-3) and would have an adverse effect on obstruction of an air quality plan (Impacts 4.3-1). This increase in emissions, when combined with past, present, or reasonably foreseeable projects, would result in cumulatively substantial levels of criteria air pollutants and would thus contribute to the obstruction of an air quality plan. Therefore, Option A would contribute to cumulative impacts when combined with past, present, or reasonably foreseeable projects. Cumulative impacts would be significant.

As discussed above, Option A would not have a substantial adverse effect on sensitive receptors to substantial pollutant concentrations (Impact 4.3-4). Therefore, Option A would not contribute to cumulative impacts when combined with past, present, or reasonably foreseeable projects. Less than significant impacts would occur in this regard.

Option A could generate odors related to personal cultivation of cannabis plants; however, cultivation and use would be governed by Proposition 64 requiring cannabis plants to be in a locked space and not visible by normal unaided vision from a public space. Use of cannabis products could also produce odors under Option A; however, use of cannabis products would be regulated by Proposition 64 as well as State and County smoking regulations. Therefore, Option A would not contribute to cumulative impacts when combined with past, present, or reasonably foreseeable projects. Less than significant impacts would occur in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or

without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B). The County currently allows medical cannabis dispensaries.

As noted in Table 4.3-2 and in Impact 4.3-3 above, the SJVAB is a nonattainment area for State 1-hour O₃, 8-hour O₃, PM₁₀, and PM_{2.5} standards and is a nonattainment area for National 8-hour O₃ and PM_{2.5} standards. As shown above, proposed project construction and operational emissions of these pollutants would not violate NAAQS and CAAQS.

Rule 8021 applies to any construction, demolition, excavation, extraction, and other earthmoving activities, including land clearing, grubbing, scraping, travel on-site, and travel on access roads to and from the sites. In addition, any projects under concurrent construction would be subject to SJVAPCD Rule 9510, the ISR, which requires mitigation of construction and indirect exhaust emissions. The SJVAPCD recommends use of a “clean” construction fleet, with newer engines that meet CARB Tier 2 standards, to comply with Rule 9510.

With overlapping construction schedules, there is the potential for cumulative air quality impacts from these projects. The proposed project together with all other planned projects located within a six-mile radius would result in potentially significant cumulative impacts during construction.

Cumulative Hazardous Air Pollutants (HAPs)

The GAMAQI also states that when evaluating potential impacts related to HAPs, “*impacts of local pollutants (CO, HAPs) are cumulatively significant when modeling shows that the combined emissions from the project and other existing and planned projects will exceed air quality standards.*” Based on the results of a health risk assessment and the proposed project’s Traffic Impact Study (Appendix J), the proposed project would not pose a significant cumulative CO or HAPs impact.

Cumulative Carbon Monoxide (CO) - Mobile Sources

The Traffic Impact Study was prepared for the proposed project and is provided in Appendix J of this EIR. The Traffic Impact Study evaluated the LOS impacts at the intersections affected by Option B. Based on the dispersed nature of the proposed project future cannabis related activities, County intersections would not be reduced to LOS E or worse. Therefore, the proposed project would not create a violation of the CO standard. Thus, Option A would not combine with past, present, or reasonably foreseeable projects. Less than significant impacts would occur in this regard.

Cumulative Carbon Monoxide (CO) - Mobile Sources

With respect to future cannabis indoor cultivation and indoor air quality, each future cannabis facility resulting from the implementation of Option B in combination with other past, present, and reasonably foreseeable projects in the County would be required to comply with all applicable State, federal, and County regulations concerning indoor air quality and HVAC systems, including compliance with required mitigation. Therefore, Option B would not contribute to cumulative impacts when combined with past, present, or reasonably foreseeable projects.

Consistency with Existing Air Quality Plans

Refer to Impacts 4.3-1 and 4.3-4, above. Impacts in this regard would be less than significant.

CARB Air Basin Emissions

The most recent, certified SJVAB and MDAB Emission Inventory data available is based on data gathered for the 2012 annual inventory. This data would be used to assist the SJVAPCD and EKAPCD in demonstrating attainment of federal 1-hour O₃ standards. Table 4.3-11 provides a comparative look at the proposed project emissions to the SJVAB and MDAB emissions inventory for 2012.

As shown in Table 4.3-11, *Option B - Comparative Analysis Based on 2012 Inventory by Air Basin*, the proposed project emissions estimates do not pose a substantial increase to emissions in either SJVAB or MDAB; as such, the SJVAB and MDAB emissions would be essentially the same if the proposed project is approved.

Table 4.3-11. Option B - Comparative Analysis Based on 2012 Inventory by Air Basin

Emissions Inventory Source	Criteria Pollutants (tons per year)					
	ROG	NOx	CO	SOx	PM ₁₀	PM _{2.5}
SJVAB						
Kern County portion of SJVAB – 2012 ^a	36,026	26,426	58,108	949	16,097	4,964
SJVAB – 2012 ^a	218,964	119,282	490,998	4,526	117,567	40,150
Proposed Project (2018 buildout)	24.51	141.02	98.58	0.44	18.66	5.64
Proposed Project's Percent of Kern County	0.0680%	0.5336%	0.1697%	0.0462%	0.1159%	0.1135%
Proposed Project's Percent of SJVAB	0.0112%	0.1182%	0.0201%	0.0097%	0.0159%	0.0140%
MDAB						
Kern County portion of MDAB - 2012	15,148	13,140	64,532	1,205	9,746	5,804
MDAB - 2012	41,282	63,839	175,346	3,139	53,728	18,141
Proposed Project	25.59	139.43	97.24	0.43	18.54	5.52
Proposed Project's % of Kern	0.1689%	1.0611%	0.1507%	0.0355%	0.1903%	0.0952%
Proposed Project's % of MDAB	0.0620%	0.2184%	0.0555%	0.0136%	0.0345%	0.0304%

Source: CARB, 2017b.

^a This is the latest inventory available as of February 2017.

The CARB emissions inventory for Kern County and the SJVAB and MDAB is presented in Table 4.3-12, *Option B - Emissions Inventory –2020 Estimated Projections by Air Basin*. Table 4.3-13, *Option B - 2020 Estimated Projections for Proposed Project and by Air Basin*, presents the emissions projections and the proposed project's contribution. The Kern County portion of the air basin is a moderate source of the emissions in SJVAB and a substantial source in MDAB. The proposed project produces a small portion of the total emissions in both Kern County and the entire SJVAB and MDAB, as shown in Table 4.3-13.

Table 4.3-12. Option B - Emissions Inventory –2020 Estimated Projection by Air Basin

	ROG	NOx	PM ₁₀
SJVAB			
Kern County portion of SJVAB (tons/year)	34,018	16,206	15,294
Percent Stationary Sources	45.49%	17.34%	11.46%
Percent Area-Wide Sources	24.57%	3.38%	80.67%
Percent Mobile Sources	10.19%	79.05%	5.97%
Percent Natural Sources	19.74%	0.23%	1.67%
Total Stationary Source Emissions (tons/year)	15,476	2,811	1,752
Total Area-Wide Source Emissions (tons/year)	8,359	548	12,337

Table 4.3-12. Option B - Emissions Inventory –2020 Estimated Projection by Air Basin

	ROG	NOx	PM ₁₀
Total Mobile Source Emissions (tons/year)	3,468	12,812	913
Total Natural Source Emissions (tons/year)	6,716	37	256
SJVAB Total Emissions (tons/year)	214,292	78,037	116,180
Percent Stationary Sources	16.81%	13.19%	4.71%
Percent Area-Wide Sources	31.97%	6.22%	77.98%
Percent Mobile Sources	10.00%	79.79%	4.56%
Percent Natural Sources	41.22%	0.80%	12.72%
Total Stationary Source Emissions (tons/year)	36,026	10,293	5,475
Total Area-Wide Source Emissions (tons/year)	68,511	4,855	90,593
Total Mobile Source Emissions (tons/year)	21,426	62,269	5,293
Total Natural Source Emissions (tons/year)	88,300	621	14,783
MDAB			
Kern County portion of MDAB (tons/year)	14,746	12,629	9,819
Percent Stationary Sources	3.22%	60.69%	17.84%
Percent Area-Wide Sources	3.96%	0.87%	29.37%
Percent Mobile Sources	16.34%	37.57%	12.64%
Percent Natural Sources	76.49%	0.87%	40.15%
Total Stationary Source Emissions (tons/year)	475	7,665	1,752
Total Area-Wide Source Emissions (tons/year)	584	110	2,884
Total Mobile Source Emissions (tons/year)	2,409	4,745	1,241
Total Natural Source Emissions (tons/year)	11,279	110	3,942
MDAB Total Emissions (tons/year)	41,501	57,415	59,459
Percent Stationary Sources	3.22%	60.69%	17.84%
Percent Area-Wide Sources	3.96%	0.87%	29.37%
Percent Mobile Sources	16.34%	37.57%	12.64%
Percent Natural Sources	76.49%	0.87%	40.15%
Total Stationary Source Emissions (tons/year)	475	7,665	1,752
Total Area-Wide Source Emissions (tons/year)	584	110	2,884
Total Mobile Source Emissions (tons/year)	2,409	4,745	1,241
Total Natural Source Emissions (tons/year)	11,279	110	3,942

Source: CARB, 2017b.

Note: Total may not add due to rounding.

Table 4.3-13. Option B - 2020 Emissions Projections for Proposed Project and by Air Basin

	ROG	NOx	PM ₁₀
SJVAB			
Proposed Project (tons/year)	25	141	19
Kern County (tons/year)	34,018	16,206	15,294
SJVAB (tons/ year)	214,292	78,037	116,180
Proposed Project Percent of Kern County	0.07%	0.87%	0.12%
Proposed Project Percent of SJVAB	0.01%	0.18%	0.02%
Kern County Percent of SJVAB	15.87%	20.77%	13.16%

MDAB			
Proposed Project (tons/year)	26	139	19
Kern County portion of MDAB (tons/year)	14,746	12,629	9,819
MDAB (tons/year)	41,501	57,415	59,459
Proposed Percent of Kern County	0.17%	1.10%	0.19%
Proposed Project Percent of MDAB	0.06%	0.24%	0.03%
Kern County Percent of MDAB	35.53%	22.00%	16.51%

Source: CARB, 2017b.
Note: Total may not add due to rounding.

As shown in Table 4.3-13, the project would pose a small impact on regional O₃ and PM₁₀ formation.

Cumulative Impacts Summary

Cumulative air quality impacts are the effect of long-term emissions of the proposed project plus any existing emissions at the same location, as well as the effect of long-term emissions of reasonably foreseeable similar projects, on the projected regional air quality or localized air pollution in the County.

As discussed above, the potential for the proposed project to result in a cumulatively considerable impact, in accordance with the SJVAPCD guidance and thresholds, is based on the proposed project's potential to exceed the project-specific annual thresholds. As evaluated in Impact 4.3-2, the proposed project would exceed the annual SJVAPCD and EKAPCD thresholds for ROG, NO_x, PM₁₀ and PM_{2.5} during construction and for ROG, NO_x, and PM₁₀ during project operations. However, as detailed in Mitigation Measure MM 4.3-4, the proposed project will mitigate the project's ROG, NO_x, and PM₁₀ (inclusive of PM_{2.5}) emissions from construction and operation, including stationary source emissions, by achieving surplus, quantifiable and enforceable emission reduction in the nonattainment basin of the SJVAPCD and comply with the requirements of EKACPD therefore, the proposed project would not result in project-specific impacts for these pollutants. While the DMC would not reduce CO, proposed project-generated operational CO emissions would not exceed the SJVAPCD and EKACPD operational CO emissions threshold, which would be a less than significant project-level and cumulative impact. Additionally, the Kern County portion of the SJVAB and MDAB are in attainment of federal and State CO standards, and therefore the proposed project would not contribute substantially to an existing or projected CO air quality violation.

With implementation of the DMC in the SJVAPCD and compliance with EKACPD rules, the proposed project would not result in significant project-specific impacts or a cumulatively considerable contribution to air quality impacts of ROG, NO_x, PM₁₀, and PM_{2.5} per the SJVAPCD and EKAPCD guidance. However, because of scientific uncertainty regarding the relationship between the mitigation measures that can be used to satisfy the DMC obligations, and because other future projects within the SJVAB and MDAB are not required to fully offset air emissions, the County practice is to conclude that cumulative emissions of these nonattainment pollutants would continue to be significant and unavoidable.

The proposed project's proposed development is consistent with the development projected in the Kern COG RTP/SCS. In addition, Mitigation Measure MM 4.3-4 requires emission reductions

beyond those required by the applicable air quality plans. As such, the proposed project would be consistent with the policies of the applicable SJVAPCD air quality attainment plans.

Based on these considerations, the proposed project's potential to result in a cumulatively considerable net increase of any criteria pollutant for which the proposed project region is nonattainment under an applicable federal or State ambient air quality standard would be potentially significant.

Mitigation Measures

Option A

Implement Mitigation Measures MM 4.3-1 through MM 4.3-5, as described above.

Option B

Implement Mitigation Measures MM 4.3-1 through MM 4.3-9, as described above.

Level of Significance after Mitigation

Option A cumulative impacts would be significant and unavoidable for criteria air pollutant emissions and obstruction of an air quality plan. All other cumulative impacts would be less than significant with respect to Option A. Cumulative CO and NO_x emissions resulting from Option B would be significant and unavoidable. All other cumulative impacts would be less than significant with respect to Option B.

Section 4.4

Biological Resources

Section 4.4

Biological Resources

4.4.1 Introduction

This section of the Draft Environmental Impact Report (EIR) addresses potential impacts of the Kern County Cannabis Land Use Ordinance Project (proposed project) on biological resources within Kern County (County). This section also provides the environmental and regulatory settings and discusses mitigation measures to reduce impacts, where applicable.

A description of the environmental setting (affected environment) for agriculture and forest resources is presented below in Section 4.4.2, *Environmental Setting*, including discussions of existing biological resources on a regional basis. The regulatory setting applicable to biological resources is presented in Section 4.4.3, *Regulatory Setting*, while impacts and associated mitigation measures, where applicable, are analyzed in Section 4.4.4, *Impacts and Mitigation Measures*. The information and analysis that is presented in this section has been derived from published literature and federal and State databases.

4.4.2 Environmental Setting

Kern County is California's third largest county, encompassing 8,202 square miles at the southern end of the Central Valley. The County contains 11 incorporated cities. Bakersfield is the largest city by population and serves as the County seat. The unincorporated area is 6,156 square miles. Kern County has three distinct geographical regions: Valley Region (San Joaquin Valley); Mountain Region (Tehachapi Mountains, Sierra Nevada Mountains, San Emigdio Mountains, Coast Ranges); and Desert Region (Mojave Desert, Indian Wells Valley, Antelope Valley). Dominant land uses within the County include agriculture, petroleum exploration and extraction, and alternative energy (i.e., wind and solar) facilities; however, over the last several decades, urban development has occurred in and adjacent to the County's 11 incorporated cities, including the City of Bakersfield.

Land Cover Types

Agricultural Lands

Agricultural land uses throughout the County have reduced native vegetation and, thus, reduced habitat values, for plant and wildlife species for over a century. Agricultural lands, which generally consist of mono-crops of a uniform height, provide more valuable habitat for birds than for mammals, reptiles, or amphibians. Birds are often more mobile and are able to forage or nest off site if the agricultural lands do not provide suitable habitat for these activities. Agricultural lands provide limited habitat value for mammals, reptiles, and amphibians due in part to the use of pesticides resulting in a reduced prey base. During certain times of the year when fields are allowed to go fallow or following harvesting, agricultural lands can provide a rich source of food for a wide range of species such as rodents, which in turn can be utilized as a prey base by raptors. Nevertheless, heavy irrigation and flooding used in the cultivation of crops may lower the likelihood of substantial populations of rodents and other ground dwelling animals. Generally, agricultural areas that are systematically disked and then used as pasture or fodder can provide

habitat for rodents, which in turn may be hunted by raptors. Edges of fields, which are tilled less often, may be the most valuable to wildlife.

Large mammals are known to use agriculture land as habitat connectivity corridors (i.e., coyote, San Joaquin kit fox, American badger). Bird species (i.e., American kestrel, Swainson's hawk, red-tailed hawk, burrowing owl) hunt small mammals and insects of these areas. Agricultural crops can provide cover and food for small mammals (i.e., California ground squirrel, desert cottontail, black-tailed jackrabbit, Mojave ground squirrel, Tehachapi pocket mouse). Water conveyance facilities associated with agriculture, such as canals, ditches, and ponds, also provide wildlife habitat.

During certain times of the year when fields are allowed to go fallow or following harvesting, agricultural lands can provide a rich source of food for a wide range of small mammals, which in turn can be utilized as a prey base by raptors and large mammals. Nevertheless, heavy irrigation and flooding used in the cultivation of crops may lower the likelihood of substantial populations of rodents and other ground dwelling animals. Generally, agricultural areas that are systematically disked and then used as pasture or fodder can provide habitat for rodents, which in turn may be hunted by raptors. Edges of fields, which are tilled less often, may be the most valuable to wildlife.

Disturbed and Developed Lands

Disturbed lands are those on which the native vegetation has been completely removed by grading, cultivation, and development. Disturbed areas include paved and unpaved roadways, houses, barns, and related structures, parking areas, and storage yards. Such areas are not expected to support any naturally occurring vegetation, although invasive native and non-native plant species frequently colonize disturbed sites. Landscaped lands are similarly disturbed, in that all, or most, of the native vegetation has been removed and replaced with horticultural species. Disturbed and landscaped areas have little potential to support significant botanical resources.

Developed lands include airports, landfills, highways, commercial and industrial areas, golf courses, residential, commercial, industrial, educational facilities, public facilities, government facilities, natural resources, mills, power and communication facilities, and mineral development activities. Developed lands do not provide substantial wildlife habitat, but a few occurrences of protected or sensitive species have been documented. Structures may provide potential habitat for birds and bats, while abandoned structures may provide potential habitat to a variety of wildlife species including birds, bats, and opportunistic mammals which could burrow beneath the structures. Ornamental trees and shrubs used for landscaping may provide additional habitat opportunities to birds and bats.

Windbreaks – Ornamental Trees

Planted windbreaks occur most common in the Desert Region of the County. These windbreaks are typically present along roads and agricultural fields, as well as around residential structures. They are composed of single species stands of ornamental trees including, but not limited to, Arizona cypress (*Cupressus arizonica* ssp. *arizonica*), tamarisk (*Tamarix parviflora*), pine (*Pinus* sp.), and Siberian elm (*Ulmus pumila*).

A range of songbirds such as house finch and common corvid and raptor species such as red-tailed hawk may use wind break trees for nesting. They may also be used by special-status raptors such as Swainson's hawk (*Buteo swainsonii*) and white-tailed kite (*Elanus leucurus*).

Natural Lands

Unincorporated Kern County contains a wide variety of natural lands within the three geographic areas. These lands include, but are not limited to, woodlands, forests, chaparral, scrublands, grasslands, partially-stabilized sand fields, sand dunes, washes, and freshwater resources. These natural lands generally maintain high value habitat for plant and animal species.

In some areas of natural lands, grazing is allowed; these areas devoted to grazing are often within the Kern County Estray (grazing) Ordinance. Kern County established the Estray Ordinance in 1942 and last updated it in 1995. Under the Estray Ordinance, there are three categories: Exception, Open Range, and Open Range with Conditions. area, a person must fence animals off their property if they do not want them on their property. Grazing, an historical use for over a century, can maintain habitat values for some species, although certain species may be negatively affected by livestock impacts to drainages, ponds, and similar resources.

Vegetation

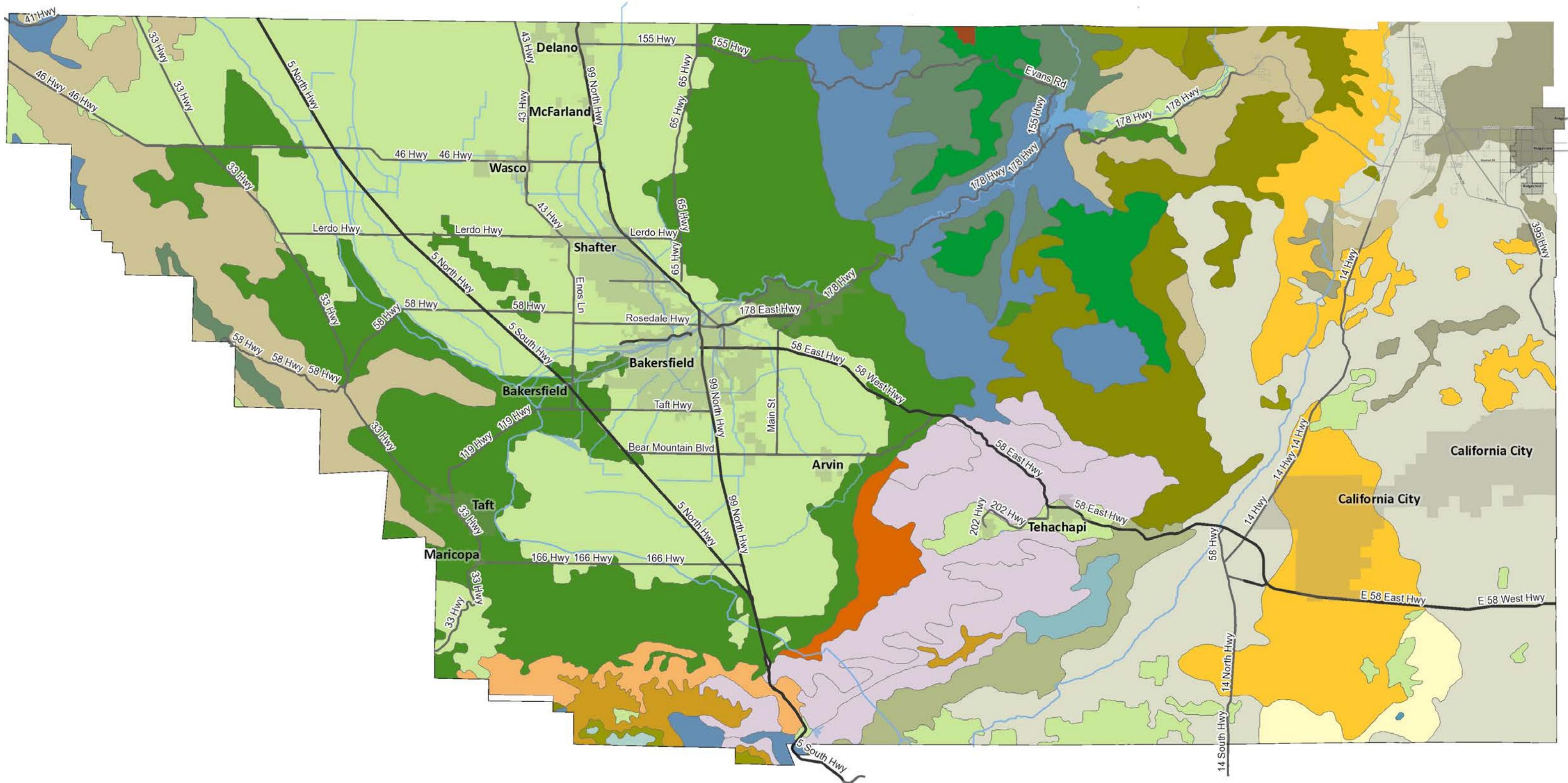
According to the Kern County General Plan (KCGP), Kern County is an area of merger and transition of several of the floristic provinces and regional floras of California. Here, the flora of the Sierra Nevada and the San Joaquin Valley reach their southern limits; the southern California mountains its northern limits; and the inner south Coast Ranges its southeastern limits. A large part of the endemic rich flora of the Mojave Desert reaches its western and northwestern limits in the County. Finally, the distinctive flora of the arid upper San Joaquin Valley reaches its southern limit in the central part of the County. General vegetation types are depicted in Figure 4.4-1, *Kern County Vegetation Types*.

The U.S. Forest Service (USFS) Classification and Assessment with Landsat of Visible Ecological Groupings (CALVEG) system classifies California vegetation communities for use in statewide resource planning considerations. The CALVEG database currently maps more than 200 vegetation communities occurring in nine regions. Kern County is at the intersection of five vegetation mapping zones for California. These zones include the Central Valley, Central Coast, South Coast, South Sierran, and South Interior. The Great Basin Zone does not reach into Kern County; however, it is immediately north of the northeastern corner of the County. The vegetation inventory for these zones is currently being updated, therefore data were not available at the time of this EIR publication (U.S. Forest Service [USFS], 2017a).

Valley Region

The San Joaquin Valley Floristic Regions

This highly xeric (drier) flora covers the San Joaquin Valley in Kern County and extends over the southern Temblor Range to the southern Carrizo Plains in San Luis Obispo County and to the upper Cuyama Valley in Santa Barbara County. Approximately 83 species that grow in Kern County are found in the San Joaquin Valley; of these, approximately 33 are San Joaquin Valley endemics. An additional approximately 109 have their Kern County occurrence restricted to the valley and the closely related Temblor Range.



**KERN COUNTY CANNABIS LAND USE ORDINANCE PROJECT EIR
AMENDMENT TO TITLE 19 – KERN COUNTY ZONING
ORDINANCE FOCUSED ON CHAPTER 19.120 (CANNABIS LAND USE REGULATION)**

Kern County Vegetation Types

Figure 4.4-1

This regional flora is composed mainly of fast-growing winter annuals adapted to success with irregular rainfall. A large majority of the plants that are endemic grow on the arid plains; the flora of the wetlands of the Valley's old central drainage system consist largely of plants of widespread occurrence. Relatively few of these wetland plants are restricted to Kern County and California, and may occur widely over North America.

The Coast Ranges Floristic Region

The flora of the Coast Ranges is rather weakly represented in Kern County. Coast Range flora is locally common in the Temblor Range, on the lower slopes of Mt. Abel and in the Mt. Pinos region. There are scattered occurrences on the west slope of the Tehachapi Range and occasional relic colonies on the southeast slope along the borders of the Antelope Valley and north to the Greenhorn foothills. Approximately 70 plants of primarily Coast Range distribution occur in Kern County; of which approximately 30 are endemic to those ranges.

Mountain Region

Sierra Nevada Floristic Regions.

In this region, a large number of plants largely restricted to the Sierra Nevada, reach their southern limits and a total of approximately 188 species occur in the Greenhorn Range that are not known elsewhere in the County. Approximately 30 species reach their southern limits within the Kern County portion of the Kern Plateau. An additional approximately 15 species reach their southern limits on Breckenridge Mountain and in the Piute Mountains. Thus, a total of approximately 234 species occur in Kern County only within the southern limits of the Sierra Nevada; approximately 66 species are endemic to the Sierra Nevada.

The southern limits of the Sierra Nevada Flora are not as abrupt as these figures would indicate; largely at the southern geological limit of that range at the Piute Mountains and Breckenridge Mountain. Jeffrey Pine associations predominate at the higher elevations southwest to Mt. Pinos. Many of the Sierra plants that occur south to Mt. Pinos represent the eastern Sierran elements; these extend from the eastern Sierra southwest through the Piute and Tehachapi Mountains. South and west of the Piute Mountains, flora of the Sierra Nevada occur in discontinuous units, separated at the lower elevations by mixed chaparral, Douglas oak woodland and Upper Sonoran grassland plant associations, both largely made up of plants that occur over wide areas of the California Botanical Province. Sierran plants are locally common on the forested slopes of Tehachapi Peak, Double Mountain and Bear Mountain, and are widespread at the higher elevations of the Mt. Pinos region. There are also scattered occurrences at such places as Tollgate Ridge and Cache Peak in the northeastern Tehachapi Mountains.

A large number of Sierran species reach their southern limits in the Greenhorn Range south to Kern Canyon; a few continue south through the Tehachapi foothills, and grow in isolated colonies as far southwest as Black Bob Canyon in the San Emigdio Range. In the Greenhorn Range, Cedar and Lumreau creeks and Poso Creek southwest to Poso Mine are a significant floral boundary for the Sierra Nevada plants of the lower elevations.

Southern California Mountain Floristic Regions

Ancestrally, species found in the southern California mountains are closely related to and largely derived from the plants of the Sierra Nevada flora. This southern flora is most common in Kern County in the Mt. Pinos region. While the Mt. Pinos flora are composed of species of several flora,

including those of the Mojave Desert and the Great Basin regions, those of southern California and the Sierra Nevada are of equal importance. The Mt. Pinos flora includes approximately 38 southern California species, of which approximately 18 are endemic. Although not a major component of the flora, plants of the southern California mountains occasionally extend into the Tehachapi Mountains, become scarce in the Piute and Breckenridge Mountains, and are relatively uncommon in the Greenhorn Range and the Kern Plateau.

Desert Region

The Mojave Desert Floristic Regions

The Mojave Desert flora occupies approximately 30 percent of the County's land area surface. It consists of a colorful and abundant group of springtime annuals and an extensive list of shrubs. Approximately 160 plants in the County occur only in the desert with approximately 25 of these are endemic to the Mojave Desert. Species may have migrated from the arid southwest, while others evolved from old woodland flora. The Mojave Desert Regional Flora is made up of two associations. The first consists of widespread desert plains dominated by the Creosote Scrub plant association. The second is found primarily along desert borders at the base of the desert ranges and at slightly higher elevations (approximately 2,000 to 5,000 feet) such as the Joshua Tree Woodland or Single Leaf Pinyon Pine-Juniper Woodland associations.

Wildlife

As habitats have been modified, restricted or eliminated by human activities, so were animal species dependent upon these habitats. Wildlife presently existing in Kern County is closely linked with remaining natural areas that provide key habitats which fulfill survival and reproductive needs of each species.

Important Bird Areas

Kern County is located on the Pacific Flyway, and various efforts have been undertaken to conserve the County's migratory bird habitat. Audubon California's Important Bird Area (IBA) Program was launched in 1996. With the initiation of the California IBA Report, dozens of California field ornithologists, representing a broad range of agencies and affiliations, were interviewed and questioned about sites significant to birds in the State. There are seven Important Bird Areas designated in Kern County:

Buena Vista Lake Bed

The Buena Vista Lake Bed is between 10,000 and 50,000 acres in size. Key areas for birds include large water banks both east and west of Interstate 5 (I-5) within the historic Kern River bed that are flooded by the County when water reserves are above normal; Cole's Levee Ecosystem Preserve (6,000 acres); and several smaller overflow basins just north of South Lake Road east of Taft.

The Buena Vista Lake Bed contains approximately 14 sensitive bird species including, but not limited to, White-faced Ibis, Northern Harrier, Swainson's hawk, Ferruginous Hawk, Mountain Plover, Forster's Tern, Black Tern, Burrowing Owl, Short-Eared Owl, Loggerhead Shrike, Yellow Wabler, Sage Sparrow, and the Tricolored Blackbird.

Carrizo Plain National Monument

The Carrizo Plain National Monument encompasses 180,000 acres along the San Andreas Fault between the Central Valley and the coast, and includes two large valleys (Carrizo Plain and Elkhorn Plain), a massive seasonal alkali lake (Soda Lake), and a low, rolling hills of grass and arid scrub. Most of the National Monument is located in San Luis Obispo County, with a small portion located along the Kern/San Luis Obispo County border in Kern County.

The Carrizo Plain National Monument contains approximately 14 sensitive bird species including the Northern Harrier, Golden Eagle, Ferruginous Hawk, Prairie Falcon, Sandhill Crane, Mountain Plover, Burrowing Owl, Short-eared Owl, Long-eared Owl, Loggerhead Shrike, LeConte's Thrasher, Sage Sparrow, Grasshopper Sparrow, and the Tricolored Blackbird.

Goose Lake

Goose Lake covers approximately 5,000 acres in southwestern San Joaquin Valley, straddling I-5 approximately 20 miles south of the Kern National Wildlife Refuge (NWR). Primarily used as a water recharge area during wet winters by Semitropic Irrigation District, it includes alkali sink scrub, grassland, and freshwater marsh, typically holding water until May or June.

Goose Lake contains approximately 12 sensitive bird species including the White-faced Ibis, Northern Harrier, Swainson's Hawk, Ferruginous Hawk, Sandhill Crane, Snowy Plover, Forster's Tern, Burrowing Owl, Short-eared Owl, Loggerhead Shrike, Sage Sparrow, and the Tricolored Blackbird.

Kern National Wildlife Refuge (NWR) Area

The Kern NWR protects more than 10,000 acres of alkali grassland, constructed freshwater marsh and scrubby riparian stringers in the southern San Joaquin Valley, approximately 40 miles northwest of Bakersfield.

The Kern NWR contains approximately 13 sensitive bird species including the Least Bittern, White-faced Ibis, Northern Harrier, Ferruginous Hawk, Sandhill Crane, Mountain Plover, Caspian Tern, Burrowing Owl, Long-eared Owl, Short-eared Owl, Loggerhead Shrike, Sage Sparrow, and the Tricolored Blackbird.

Kern River Preserve

The Kern River Preserve protects 1,127 acres located 57 miles northeast of Bakersfield along the South Fork Kern River in Weldon. The Kern River Preserve was one of the first ten sites in the U.S. to receive "Globally Important Bird Area" recognition. Approximately 332 bird species have been recorded at the Kern River Preserve. Most significantly, approximately 200 species nest in the preserve and it includes major breeding populations of Yellow-billed Cuckoo, Summer Tanager, Wood Duck, Mallard, Cinnamon Teal, and Willow Flycatcher.

North Kern Grasslands

The North Kern Grasslands refers to a large expanse of low, treeless hills at the base of the southern Sierra foothills north of Bakersfield. The habitat extends from Poso Creek north into Tulare County, east of State Route (SR) 65.

The North Kern Grasslands contains approximately nine sensitive bird species including the Ferruginous Hawk, Golden Eagle, Prairie Falcon, Burrowing Owl, Loggerhead shrike, Grasshopper Sparrow, and the Tricolored Blackbird.

Taft Hills

The Taft Hills refers to the low, rolling hills at the eastern edge of the Temblor Range in the southwestern San Joaquin Valley. It extends along the far western border of Kern County from Maricopa and Taft to north of McKittrick.

The Taft Hills contains approximately eight sensitive bird species including the Ferruginous Hawk, Golden Eagle, Prairie Falcon, Burrowing Owl, Loggerhead Shrike, LeConte's Thrasher, Sage Sparrow, and the Tricolored Blackbird.

Wildlife Refuges and Other Protected Areas

The following section describes significant areas in Kern County that provide protection, preservation and conservation for native vegetation and wildlife. These areas total approximately 1,226,558 acres.

Red Rock Canyon State Park

Red Rock Canyon was the first State Park in Kern County and was established in 1968 for protection of outstanding scenic values and wildlife habitat. Red Rock Canyon State Park provides habitat for two endemic plants, Red Rock poppy and Red Rock supplant. This State Park also contains nest sites for prairie falcons and two unique alkali seeps support the alkali mariposa lily.

Bitter Creek National Wildlife Refuge (NWR)

Bitter Creek National Wildlife Refuge was purchased to preserve and protect foraging habitat for the California condor. The Bitter Creek NWR habitat is primarily grasslands with some pinyon pine-juniper community, scrub oak, and Bitter Creek riparian habitat. It is part of the larger Hopper Mountain National Wildlife Refuge Complex which oversees four national wildlife refuges located in Kern, Ventura, Tulare, and San Luis Obispo counties, totaling approximately 20,015 acres (U.S. Fish and Wildlife Service [USFWS], 2017c).

Kern NWR Area

Located west of Delano, the refuge includes both cropland managed for waterfowl use as well as relicts of alkaline playas and sloughs of the Kern River. It preserves a portion of the San Joaquin Valley freshwater wetlands and acts as a refuge primarily for waterfowl. Approximately 1,300 acres of marshland exist on the Kern NWR as well as a total of approximately 8,131 acres of upland habitat. Vegetation controls are periodically employed to reduce overgrown stands of emergent and exotic vegetation such as salt cedar within the marsh units and elsewhere on the site (USFWS, 2017a).

Mt. Pinos Condor Area

The Mt. Pinos Condor Area is situated in southwestern Kern County and straddles the Kern and Ventura County line adjacent to Mt. Pinos and Sawmill Mountain. This critical habitat area was designated in 1976 as part of the original Recovery Plan for the California condor; the most recent update to this recovery plan was prepared in 1996 (USFWS, 1996).

Coles Levee Ecosystem Reserve

This preserve was created in October 1992 and provides habitat for vegetation such as the Valley saltbrush scrub, Valley sink scrub, sancaton grassland, sloughs, Great Valley cottonwood riparian, and vernal playas. With a variety of habitats within this reserve, this reserve provides habitat for wildlife species such as San Joaquin kit fox, Tipton kangaroo rat, giant kangaroo rat, blunt-nosed leopard lizard, and Swainson's hawk.

Wind Wolves Preserve

The Wind Wolves Preserve is a non-profit preserve operated by The Wildlands Conservancy. The Wind Wolves Preserve ranges in elevation from 640 to 6,005 feet and includes unique land forms and ecologically important habitat. The Tule Elk were reintroduced to Wind Wolves Preserve in the late 1990s. In addition, the Wind Wolves Preserves offers habitat to many special-status species including, but not limited to, blunt-nosed leopard lizard, San Joaquin coachwhip, Nelson's antelope squirrel, and Buena Vista Lake shrew (The Wildlands Conservancy, 2017).

Desert Tortoise Research Natural Area

This area was designated for the preservation of the Desert Tortoise in 1976 by the Bureau of Land Management (BLM). The area, north of California City, is jointly managed by the BLM, California Department of Fish and Wildlife (CDFW), and the Desert Tortoise Preserve Committee, a non-profit group established to acquire and manage lands for protection of the desert tortoise.

Tule Elk State Preserve

Tule Elk State Natural Reserve protects a small herd of tule elk, once in danger of extinction, and provides opportunities to observe native birds of the San Joaquin Valley. The preserve possesses a remnant of the once extensive valley grasslands (California Department of Parks and Recreation [DPR], 2016d).

Jawbone and Butterbredit Spring

The California BLM site is located 15 miles southwest of Ridgecrest, CA. With less than five inches of rain annually, including some snowfall, the dryness of the climate causes rapid evaporation. Some water seeps underground to feed area springs that provide water, which is essential to wildlife. Butterbredit Spring supports desert wildlife while also providing water and habitat for waterfowl migrating in the spring and fall. The land at the spring is privately owned, and vehicle travel and hunting in the area is restricted. The Audubon Society, in cooperation with the private landowner, has established the spring as a wildlife sanctuary.

Lokern Preserve

This preserve located 33 miles west of Bakersfield along State Highway 58. The vegetation is a mixture of Valley Saltbush scrub and Valley Sink communities, which make a very high quality for at least six species of endangered plants and animals. Access is by permission only.

Mourning Cloak Ranch

The ranch is a privately owned botanic garden located west of Tehachapi in the Golden Hills area. Much of the garden is planted with native vegetation; non-natives are included in the mix of plant materials.

The United States Bureau of Land Management (BLM) and the United States Forest Service (USFS)

These agencies manage large areas of public lands in Kern County. Both agencies manage under the mandate of multiple use policies which permit certain activities on public lands, while managing for conservation and recovery of habitat and wildlife.

United States Army Corps of Engineers (USACE)

In the early 1980's, the U.S. Army Corps of Engineers (USACE) designated a Wildlife Management Area on the South Fork of the Kern River at Lake Isabella. This area preserves an example of riparian vegetation as part of a willow/cottonwood forest as well as providing habitat for numerous species of wildlife.

The Center for Natural Lands Management (CNLM)

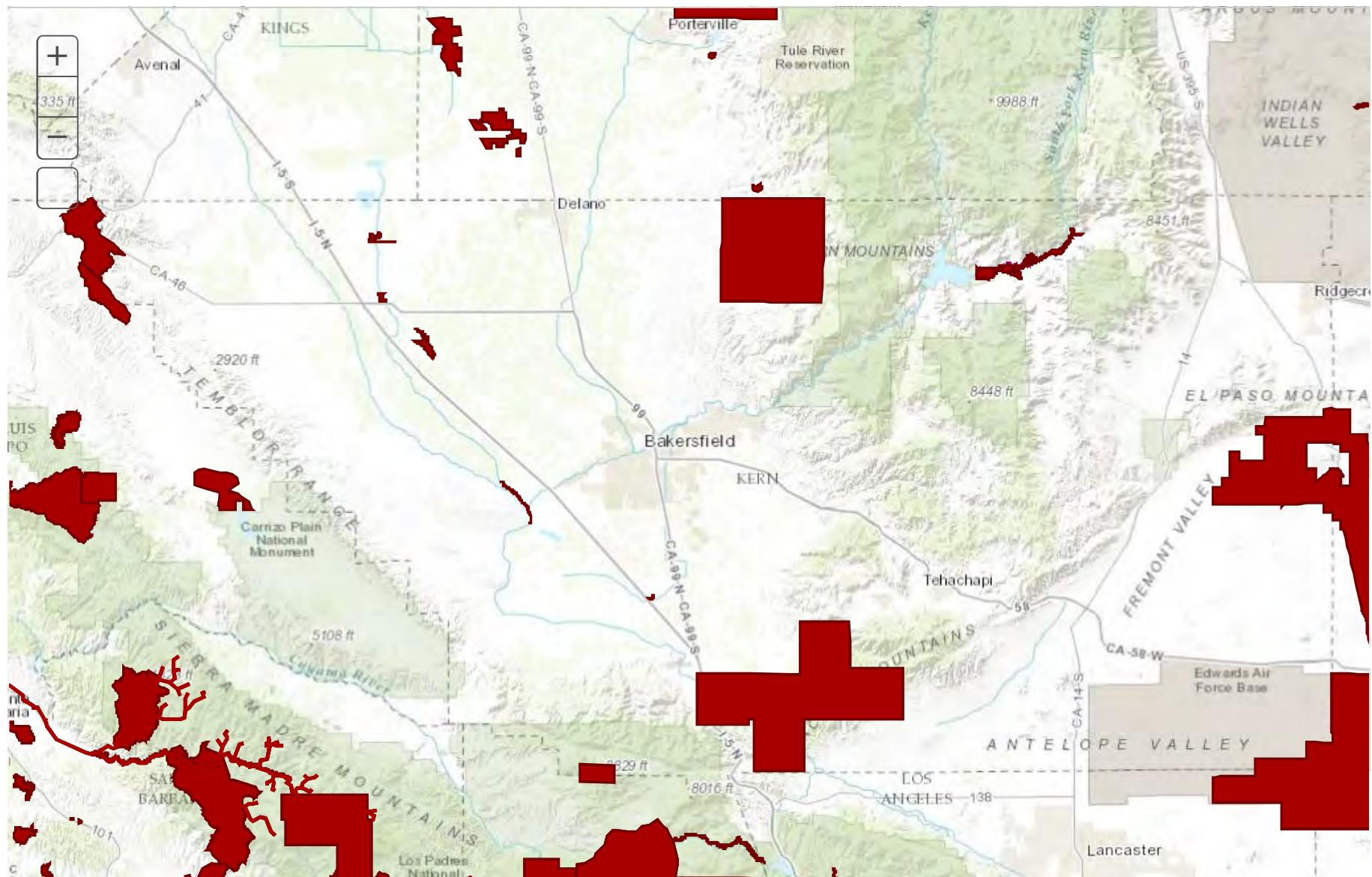
The Center of Natural Lands Management (CNLM) manages several thousand acres in Kern County in various size holdings. The Sand Ridge Preserve comprises 270 acres, located 15 miles east of Bakersfield, and is one of the few remaining areas with examples of original flora and fauna once common in the lower San Joaquin Valley. The sand ridge on which the Preserve is situated winds along the northwest bank of Caliente Creek, an intermittent stream with headwaters in the Sierra Nevada and Paiute Mountains. Semitropic Ridge Preserve. Semitropic is a 3,000 acre preserve located in the southern San Joaquin Valley, 30 miles northwest of Bakersfield, along Corcoran Road and north of Highway 46. The animals that make their home at the Semitropic Ridge Preserve include the San Joaquin kit fox, blunt-nosed leopard lizard, San Joaquin antelope ground squirrel, and the Tipton kangaroo rats. Other species of interest include horned lizard, golden eagle, burrowing owl, weasel and coyote. Originally, this preserve was named Paine Preserve. Access to the preserve is by permission only.

Kern River Preserve

The National Audubon Society, California Chapter manages the Kern River Preserve located along the South Fork Kern River near Weldon. At elevations between 2,600 and 2,700 feet, the preserve is centered along the South Fork. Several small irrigation ditches and beaver ponds are scattered about the site. On these rich alluvial soils with their accompanying high water table, a dense growth of riparian trees and shrubs is supported, known as Great Valley cottonwood forest habitat. Covering about 870 acres, this area is dedicated to riparian forest sanctuary while the remaining 250 acres of the preserve is leased out for cattle grazing and farming. The riparian forest contains only two major trees: Fremont cottonwood and red willow. The South Fork Valley forest is the largest contiguous remaining riparian area in California. In addition, the preserve wildlife is abundant. The yellow-billed cuckoo, endangered in California, uses the riparian growth for nesting sites, as do many species of hawk, owl and songbirds. More than 240 bird species have been observed.

U.S. Fish and Wildlife Service Designated Critical Habitat

The U.S. Fish and Wildlife Service (USFWS) designates critical habitat for special-status species and has identified areas within Kern County, as depicted on Figure 4.4-2, *Designated Critical Habitat in Kern County*. Critical habitat has been designated by the USFWS for the following species within the following species within the following areas of Kern County:



SOURCE: USFWS, 2017e

LEGEND

- USFWS Critical Habitat for Threatened and Endangered Species
- - - County Line

KERN COUNTY CANNABIS LAND USE ORDINANCE PROJECT EIR
AMENDMENT TO TITLE 19 – KERN COUNTY ZONING
ORDINANCE FOCUSED ON CHAPTER 19.120 (CANNABIS LAND USE REGULATION)

Designated Critical Habitat in Kern County

Figure 4.4-2

- Valley Region: California red-legged Frog, Buena Vista Lake ornate shrew, California Condor;
- Mountain Region: California red-legged Frog, California condor, yellow-billed cuckoo, southwestern willow fly catcher; and
- Desert Region: desert tortoise.

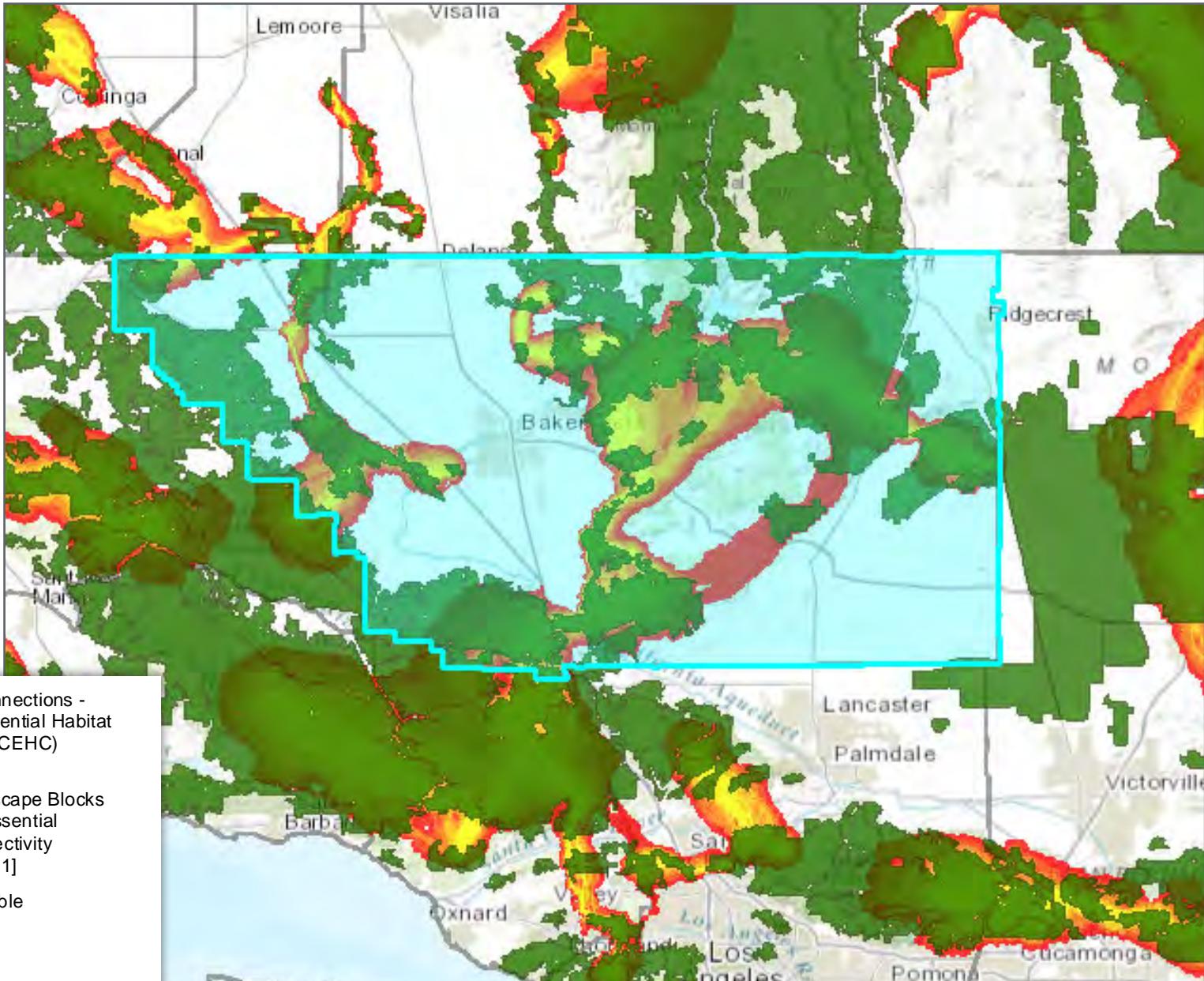
Wildlife Connectivity and Migration Corridors

Movement and dispersal between habitat areas is essential for gene flow, maintenance of populations, migration for some species, and biodiversity. Linkages and corridors facilitate regional animal movement and are generally centered around waterways, riparian corridors, flood control channels, contiguous habitat, and upland habitat. Drainages often serve as movement corridors because wildlife can move easily through these areas, and fresh water is available; however, in arid desert environments, upland areas can be just as important to wildlife movement. Corridors also offer wildlife unobstructed terrain for foraging and for dispersal of young individuals. Ridgelines that occur throughout the region may also serve as movement corridors.

Habitat linkages are contiguous areas of open space that connect two larger habitat areas. Linkages provide for both diffusion and dispersal for a variety of species within the landscape. In addition, linkages can serve as primary habitat for some smaller species (U.S. Army Corps of Engineers [USACE] and CDFG, 2009). Corridors are linear linkages between two or more habitat patches. Corridors provide for movement and dispersal, but do not necessarily include habitat capable of supporting all life history requirements of a species (USACE and CDFG, 2009).

The mountain ranges within the County form wildlife corridors because of the biogeographical linkage they provide between each other as well as between the Valley and Desert regions and the high-elevation forests. The *California Essential Habitat Connectivity Project: A Strategy for Conserving a Connected California* prepared for CDFW and Caltrans analyzes the ecoregions within the State and discusses connectivity within each region, between regions, and between states. As Figure 4.4-3, *California Essential Habitat Connectivity*, depicts, the “natural landscape blocks,” which is described as relatively natural habitat blocks that support native biodiversity, are generally along the mountain ranges and their foothills. The Valley Region and Desert Region both have areas of natural landscape blocks, however, the connectivity between these areas varies depending on location and amount of developed or agricultural land. In addition to the mountain ranges and their foothills, waterways, such as streams, creeks, washes, canals, and aqueducts, can also provide connectivity between natural habitat blocks (Spencer et.al., 2010).

The Pacific Flyway is a migratory bird route that includes Alaska, Arizona, California, Idaho, Nevada, Oregon, Utah, Washington, and the portions of Colorado, Montana, New Mexico, and Wyoming on the west side of the Continental Divide. It is a large migration route used by numerous bird species that pass throughout large portions of California, including Kern County. Kern County has areas known as traps or stopovers. These include, but are not limited to, a known migratory bird trap, also referred to as a vagrant migrant trap, located at Galileo Hill near California City. In addition, many species of migratory bird vagrants, birds that wander off their normal fall and spring migratory routes, are observed in the area. The Piute Ponds on Edwards Air Force Base are also important habitats and resting areas for various migrating birds. The Butterbreyt Spring Wildlife Sanctuary is a known avian stopover.



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California Essential Habitat Connectivity

The Kern River potential corridor runs east-west through an impacted riparian corridor for approximately 30 miles. The riparian habitat within this corridor is considered a remnant of the historic conditions due to water table drawdown and low annual flows in the Kern River. Plant and wildlife movement of certain species in this potential corridor may be impeded by the urban development in the Bakersfield area that affects immediately adjacent land uses and activities within the river bed and bank. The Kern River Valley is also a known turkey vulture migration route. The largest turkey vulture migration in the United States has been recorded in the Kern River Valley near Kelso Creek, in Kern County, with over 27,000 vultures counted during 46 days in 1994. This fall migration route passes through the South Fork Kern River and provides roosting sites at riparian habitats for the vultures before passing over the Mojave Desert to the nearest documented roosting site along the Mojave River near Victorville, California. Over 12,000 turkey vultures have been counted by the Mojave Desert Raptor Watch near Victorville.

The most significant barriers to plant and wildlife movement within potential and known wildlife connectivity corridors are gaps in habitat, density of vegetation, and water impoundments, which potentially restrict the movement of terrestrial species across areas that recently have had only intermittent water flow. In addition, urban development and agricultural uses, including grazing, can also hinder habitat connectivity and thus wildlife movements and migrations (Spencer et. al., 2010).

Special-Status Species and Habitats

Sensitive Vegetation Communities

Sensitive vegetation communities are those that are considered rare in the region, support special-status plant or animal species, or receive regulatory protection (e.g., waters, which includes wetlands as defined by the U.S. Army Corps of Engineers [USACE] and streams and creeks regulated by CDFW). Plants within a particular region can be grouped together into several different associations or communities. Some of these communities may exist only in small areas or are otherwise considered rare. These communities are listed as sensitive natural communities by CDFW on the List of Vegetation Alliances and Associations (or Natural Communities List), which lists communities found in California; for a full list refer to Appendix I.

Communities that are generally known to occur or have potential to occur in Kern County are provided in, but not limited to those listed in, Table 4.4-1, *Sensitive Natural Communities Known to Occur or Potentially Occur in Kern County*.

Table 4.4-1. Sensitive Natural Communities Known to Occur or Potentially Occur in Kern County	
Alkali Meadow	Northern Claypan Vernal Pool
Alkali Playa	Northern Hardpan Vernal Pool
Alkali Seep	Pinyon Woodland
Alkali Sink	Red Fir Forest
Arid Shrub	Relictural Interior Dunes
Big Sagebrush Scrub	Shadscale Scrub
Buttonbush Scrub	Shin Oak brush
Chaparral	Sierra-Tehachapi Saltbush Scrub
Cismontane Alkali Marsh	Streambed
Coastal and Valley Freshwater Marsh	Southern Cottonwood Riparian Forest
Creosote Bush	Upper Sonora Grassland

Table 4.4-1. Sensitive Natural Communities Known to Occur or Potentially Occur in Kern County

Desert Native Grassland	Upper Sonoran Subshrub
Douglas Oak Woodland	Valley Needlegrass Grassland
Freshwater Marsh	Valley Oak Woodland
Great Valley Cottonwood Riparian Forest	Valley Sacaton Grassland
Great Valley Mesquite Scrub	Valley Saltbush Scrub
Great Valley Willow Scrub	Valley Sink Scrub
Jeffrey Pine-Fir Forest	Vernal Poolbed
Joshua Tree Woodland	Westside Ponderosa Pine Forest
Lower Sonoran Grassland	Wildflower Field
Mountain Meadow	Yellow Pine Forest

Source: CDFW, 2010.

Not all natural communities within Kern County are listed below; however, the following are brief descriptions of the prominent natural communities in the County.

Alkali Playa

Alkali playa can be found in closed basins of the Transmontane Deserts, and some smaller examples in the Central Valley. Poorly drained soils with high salinity and/or alkalinity due to evaporation of water that accumulates in closed drainages are typical of this community. Often these areas have a high water table with a salt crust on the surface. The total plant cover is low, resulting from wide spacing between shrubs and minimally developed understory. Vegetation that does occur is usually low, grayish, microphyllous and succulent shrubs. Characteristic species include: iodine bush (*Allenrolfea occidentalis*), shadscale (*Atriplex confertifolia*), Parry's saltbush (*A. parryi*), and greasewood (*Sarcobatus vermiculatus*).

Alkali Sink (Chenopod/Saltbush)

Almost all of Kern County lacks oceanic drainage; only the small portion of upper Cuyama Valley even theoretically has such drainage. This results in land-locked basins that receive the seasonal run-off. These are found within four general geographical areas: (1) the long drainage basin in the center of the San Joaquin Valley that lies between Buena Vista Lake on the south and Tulare Lake on the north; (2) the land area along major faults in the hills surrounding the Valley (consisting of sag ponds);some along the San Andreas Fault in the Temblor Range (smaller series); and another series at the western end of the San Emigdio Range; (3) an area of basins, within Castaic Lake near Lebec, Tejon Lake, and Proctor Lake near Tehachapi, can cover several acres; and (4) the alkali sinks on the desert, including Muroc Dry Lakes (Rosamond and Roger's Lakes), Koehn Lake, and China Lake.

The traditional alkali sink occurs in areas in which the soil, even in the wettest of seasons, is fully mineralized and there is a sharp vegetational change. Here plants are often perennial, markedly halophytic, and highly specialized. In the areas with low alkalinity will be plants such as goldfields: *Lasthenia minor*, *L. chrysantha*, and *L. ferrisiae*. Other conspicuous plants are alkali larkspur (*Delphinium recurvatum*) in the San Joaquin Valley and alkali wall flower (*Erysimum capitatum* var. *capitatum*) on the Mojave Desert.

Arid Shrub

This association lies between the pinyon woodland and the desert creosote bush association between 2,500 and 4,000 feet elevation. This occurs in a region of deep canyons with steep

slopes that are hot and dry in the summer and cold and often windswept in the winter. Soils are coarse, often of granitic sand and gravel on broad steep slopes, and are almost always well drained. These slopes are most extensive on the west side of Indian Wells Valley and form a more or less well defined zone south to Tehachapi Pass. Southwest of that pass, their occurrence is irregular and the vegetation less clearly marked to the west end of the Antelope Valley. Here, on the southeast base of the Tehachapi Range, the canyons collect more moisture and the arid shrub association is gradually replaced by chaparral. The vegetative cover is often open but some of the slopes have a dense cover of xerophytic shrubs and subshrubs that also grow in other associations. California buckwheat (*Eriogonum fasciculatum* ssp. *polifolium*) grows in dense patches. Few other species typical of this association are widespread within it, and are often found in other communities such as the Sagebrush Scrub or Joshua Tree Woodland. One of the most typical is the clustered-stemmed Joshua tree, *Yucca brevifolia*, which grows in most of the places with deep sandy soil. Bladder pod (*Isomeris arborea*) is widespread in this association.

Big Sagebrush Scrub

Big sagebrush scrub is considered rare and worthy of consideration by CNDDB due to highly limited distribution. This habitat consists of soft-woody shrubs, 0.5 meters tall, usually with bare ground underneath and between shrubs. It occurs on a wide variety of soils and terrain, from rocky, well-drained slopes to fine-textured valley soils with high water table.

Big sagebrush (*Artemesia tridentata*) is the dominant shrub in this community. Other plant species that commonly occur within this habitat include cheatgrass (*Bromus tectorum*), rubber rabbitbrush (*Chrysothamnus nauseosus*), green ephedra (*Ephedra viridis*), Juniper species (*Juniperus spp.*), singleleaf pinyon, one-sided bluegrass (*Poa secunda*), desert bitterbrush (*Purshia tridentata* var. *glandulosa*), desert snowberry (*Symporicarpos longiflorus*), and Joshua tree (Sawyer and Keeler-Wolf 1995). Wildlife mammal species commonly found in this habitat include jackrabbits (*Lepus californicus*), desert cottontail rabbits (*Silvilagus audubonii*), ground squirrels (*Spermophilus beecheyi*), kangaroo rats (*Dipodomys spp.*), and sagebrush vole (*Lemmiscus curtatus*). Birds likely to occur within this habitat include the black-billed magpie (*Pica hudsonia*), gray flycatcher (*Empidonax wrightii*), pinyon jay (*Gymnorhinus cyanocephalus*), sage thrasher (*Oreoscoptes montanus*), and several species of hawks.

Chaparral

There are extensive stands of chaparral on the northwest spur of Mt. Abel and at other scattered localities in the Mt. Pinos region, in the central Temblor Range, in the southwestern and northeastern Tehachapi Mountains and ridges, on the southwest flank of Piute Mountain, the Blue Mountain region near Glennville, and occasionally on other mountain slopes. The County has four chaparral species of manzanita (*Arctostaphylos*) and four chaparral species of *Ceanothus*; greasewood (*Adenostoma fasciculatum*) is a rarity in Kern County.

There are also extensive growths of chaparral from Tollgate Ridge east of Keene to the west slope of Cache Peak at the head of Jawbone Canyon high above the Mojave Desert. Here, the most common components are three species, dwarf oak (*Quercus john-tuckeri*) and the two closely related species of buckbrush, *Ceanothus vestitus* and *C. cuneatus*. Rainfall in the Kern County chaparral belt is not precisely known; however, rainfall is estimated between 12 to 13 inches annually. The association occurs at elevations from 3,200 feet to 4,200 feet in the Blue Mountain region, between 4,000 and 5,000 feet on Piute Mountain, and well over 5,000 feet on Mt. Abel.

On Cache Peak its lower level is about 4,000 feet; it ascends to over 6,000 feet. Winters are cold, with minimum temperatures from 0° F to 10° F. Summers are hot; typical daytime temperatures are above 90° F and readings of more than 100°F are not uncommon.

Creosote Bush

The most extensive plant assemblage in Kern County is the creosote bush association. This xeric vegetation covers the entire northwest corner of the broad Mojave Desert that lies within Kern County. Creosote bush (*Larrea tridentata*), the dominant shrub of this association, grows typically as rather evenly spaced shrubs. On higher slopes, large groups of other shrubs occur, including many of the species of the arid shrub association. In low basins, common and spiny saltbush (*Atriplex polycarpa* and *A. spinifera*) near alkali sinks. Groves and desert woodlands of the Joshua tree grow in favorable areas with deep soils and adequate rainfall. In the rugged canyons of the desert ranges, particularly the canyon country of the El Paso Range grow several western outposts of species common in the Sonoran Desert and the Death Valley region. Although the creosote bush association is generally limited to the desert, some of its annuals occur in the upper San Joaquin Valley; others grow in the arid mountains south and west of the valley and as far to the northwest as the Mt. Hamilton Range. In years of adequate rainfall, this association will support a lush growth of colorful specialized annuals. In years of little rainfall, only a few individuals of the native species may sprout and survive to set new seed.

The creosote bush association occurs at elevations from about 2,300 feet at Muroc, Boron and Ridgecrest, to more than 4,700 feet at Government Peak in the Rand Mountains. Winters are relatively cold (Cantil, at the mouth of Red Rock Canyon, has a recorded low of -3°F) and summers are hot with very low humidity (Cantil and Inyokern share record highs for Kern County with readings of 117°F). The average annual precipitation for the creosote bush association is between 2.5 and 5.5 inches. The rainfall, however, is highly variable. A seasonal total of less than 0.5 inch has been recorded at Armitage on the east side of Indian Wells Valley; as much as 14.1 inches has fallen at Backus Rd. near Willow Springs and 12.4 inches at Randsburg.

Desert Native Grassland

Desert Native Grassland is generally dominated by perennial bunchgrasses solely or in combination by Indian ricegrass and/or desert needlegrass and/or big galleta (*Pleuraphis rigida*). Other native bunchgrasses can also be present, such as foothill needlegrass (*Nasella lepida*), nodding needlegrass (*Nasella cernua*), one-sided bluegrass (*Poa secunda*), or squirreltail (*Elymus elymoides*). Desert Native Grassland occurs on flat ridges and lower slopes, often in stabilized sandy areas. Stands are often small. The Desert Native Grassland plant community is a State-designated sensitive plant community.

Douglas Oak Woodland

The slopes of the middle elevations of the mountains and those in favorable places in the Temblor Range are occupied by open woodland which is characterized by the Douglas, or Blue Oak (*Quercus douglasii*). This woodland occurs in three non-distinct plant associations. The first of these is dominated by the Douglas Oak itself, which occurs as well-developed trees in broad parklands, usually in good soils on broad slopes and flats. This woodland is best developed between Granite Station, Woody, and Glennville.

Valley Oak (*Quercus lobata*) forms open park-like woodlands in areas with deep soils and good moisture. Vernal pools are often associated with the Valley and Douglas oaks. Impressive groves grow in Castac Valley at Lebec, on the flats at Tejon Pass, in the valleys around Tehachapi, and at Lynns Valley in the Greenhorn Range.

Digger Pine (*Pinus sabiniana*) is dominant in rocky and exposed places along ridges and in canyons, usually with poor or shallow soil. In this habitat, Douglas oak, although common, often grows in a stunted, dwarfed, or even shrubby form. In this digger pine phase California buckeye (*Aesculus californica*) is also found and in such places as lower Kern Canyon, is dominant. At its lower levels, the woodland occurs on north slopes and in canyons with the Upper Sonoran grassland on the south slopes. With the exception of the region in the Greenhorn foothills between Granite Station and Glennville, the Douglas oak woodland is rarely extensive. At the middle and higher elevations, it alternates with the chaparral, shin oak brush, and even the yellow pine forest. The Douglas oak woodland occurs locally particularly in the region from Tehachapi south to the west end of Antelope Valley. It is also well developed on the south end of the Piute Mountains at Kelso Valley. In the San Emigdio and Temblor ranges it occurs in a distinctive association with California junipers, and from the Piute Mountain region south through the Tehachapi Mountains with junipers and pinyon pines.

The association occurs from about 1,000 feet elevation to 3,500 feet elevation in the Greenhorn Range. In the Tehachapi Mountains and Mt. Pinos region it occurs from 2,000 to as high as 6,000 feet; in the Temblor Range from 1,500 feet to 4,300 feet. Typically, in these valleys the median annual average rainfall is between 11 to 14 inches. Winter temperatures range from relatively mild in the Temblor and San Emigdio ranges, not usually below 20°F, to cold in some areas such as Lynns Valley, reaching 10°F nearly every year. Oak woodlands are important to a wide range of wildlife species. More than 300 species of vertebrates, birds, amphibians, reptiles and mammals are known to utilize oak woodlands.

Freshwater Marsh

Marshlands once occupied vast areas in the Buena Vista-Tulare drainage system of the central San Joaquin Valley. The nearly level basin (Buena Vista Lake in the south is 252 feet above sea level; Tulare Lake, the northern terminus, 190 feet) was connected by numerous sloughs, marshes, and playas that received water from the Kern River and from less important streams that flowed out of the mountains and then meandered sluggishly northward.

The construction of major dams on the Tule and Kaweah rivers and particularly Isabella Dam on the Kern River, together with deep well pumping in the valley, has severely lowered the water table so that water from these systems rarely reaches the valley. The reclamation of this region for farming has greatly disrupted the primitive flora and it is possible that some species are now extinct.

Although the marshlands are gone, the present network of canals and low-lying places where irrigation water collects often simulate the old wet-place habitats, and have a good representation of the marshland plants. Another location of occurrence is the Kern National Wildlife Refuge, west of Delano, where there is a splendid sanctuary for the marshland flora and vegetation.

Great Valley Mesquite Scrub

Great Valley mesquite scrub grows in sandy loams of alluvial origin. It is dominated by mesquite (*Prosopis glandulosa torreyana*) and the desert saltbush (*Atriplex polycarpa*). Understories are grassy during wet years, usually dominated by introduced annuals such as red brome (*Bromus rubens*).

Jeffrey Pine-Fir Forest

Jeffrey pine-fir forest is considered rare and worthy of consideration by CNDDB due to highly limited distribution. This habitat consists of a high canopy (up to 60 meters) with an open understory of scattered chaparral and smaller trees. Growth occurs in early to mid-summer on well-drained slopes at high elevations (6,000-8,000 feet in the north and 7,000-9,000 feet in the south).

Jeffrey pine is the dominant species in this community. Other plant species that commonly occur within this habitat include white fir (*Abies concolor*), red fir (*Abies magnifica* var. *magnifica*), mountain whitethorn, bush chinquapin, western white pine (*Pinus monticola*), and huckleberry oak. Wildlife species that are likely to occur in this habitat include western gray squirrel, California ground squirrel, northern flying squirrel (*Glaucomys sabrinus*), mule deer, nuthatches (*Sitta* sp.), brown creeper (*Certhia americana*), woodpeckers, and the southern rubber boa (*Charina bottae umbratica*).

Joshua Tree Woodland

The Joshua Tree Woodland plant community typically contains Joshua tree as the only arborescent species, with a diverse shrub layer. It occurs on sandy, loamy, or gravelly alluvial slopes. Joshua Tree Woodland generally occurs at an elevation between 2,500 and 5,000 feet above mean sea level (AMSL) and is recorded from the Mojave Desert and the desert slopes of the Tehachapi, Sierra Nevada, and Transverse mountain ranges of California. The Joshua Tree Woodland plant community is a State-designated sensitive plant community.

Lower Sonoran Grassland

The broad treeless plains at the head of the San Joaquin Valley that encircle the Buena Vista-Tulare drainage system are arid and often shrubless. Although only recently recognized as such, this region is a true desert; the annual rainfall averages less than six inches. The vegetation largely consists of winter annuals of rapid growth, many of them introduced. Only in years of exceptional rainfall do these plants grow with vigor. Years of drought with less than 2 inches are not unknown. The rainy season is usually between late November and early April, often supplemented with dense Tule fog from December to February.

Perennials are uncommon and only one shrub, common salt bush (*Atriplex polycarpa*) is at all widespread. The annual flora is quite distinctive in normal years. In very dry years, few plants reach maturity. The most successful plants in years of scant rainfall are the native *Vulpia microstachys* var. *pauciflora*, *Lepidium dictyonum* (which is often in bloom in January), *Lasthenia californica*, and the introduced Arabian grass (*Schismus arabicus*), red-stemmed filaree (*Erodium cirutarium*), red brome (*Bromus madritensis* ssp. *rubens*), and common foxtail (*Hordeum murinum* ssp. *glaucum*). In years with dry winters followed by late spring rains there is a dense growth of Russian thistle (*Salsola tragus*) that sometimes covers thousands of acres.

Mountain Meadow

Meadows, small and large, are a characteristic feature of the Sierra Nevada forests. Some areas are quite wet all year, and are the home to semiaquatic plants. Completely aquatic plants grow in the occasional small permanent pools. Around these wet areas there is usually a belt of soil that is perennially moist but not wet. Finally, dry but disturbed soils are characteristic of the meadow borders. Meadows that have areas with soil that is quite wet early in the summer but dry by fall are common. These soils favor a distinctive group of plants that mature by mid-summer. This is especially true of the meadows of the Jeffrey pine forest, such as Little Cannell and Cane meadows on the Kern Plateau and Landers and Woolstaff meadows in the Piute Mountains. In the Greenhorn Range, all of the meadows are quite small and are generally wet. They occur mostly on the east slope of the range. In the Piute Mountains, they are broad, sunny, and in normal years are usually dry by mid-summer. The Piute meadows are dominated by big sage (*Artemisia tridentata*). Typical meadows in the Piutes are Pine Flat on the Kern Plateau and Woolstaff and Weldon meadows. True mountain meadows do not occur in the Tehachapi Mountains. Except for the long series of connecting meadows in the Mil Potreros, which separate the San Emigdio Range from Mt. Pinos, they are unknown in that region and the meadow flora is limited to seeps and ciénegas.

Pinyon Woodland

On the desert-facing slopes of the Sierra Nevada, the arid easterly slopes of the Piute Mountains, the northwestern Tehachapi Range, and much of the Mt. Pinos region, the Douglas oak woodland of the western slopes is replaced by a well-developed or sparse woodland of pinyon pines (*Pinus monophylla*), usually with large shrubs of California juniper (*Juniperus californica*) at lower borders. This pinyon woodland is especially well developed along the Kern-Tulare County line at the southeast border of the Kern Plateau in the Lamont Peak region; from here it extends to Kiahvah (Scodie) Mountain south of Walker Pass. South of here, on the desert-like summits of the extreme Southern Sierra Nevada, such as Gold, Dove and Butterbredt Peaks, it is poorly developed. Pinyons are scattered but hardly form true woodland along the east slope of the Tehachapi Mountains, especially south of Tehachapi Pass. Finally, the woodland grows in a continuous belt, often of forest proportions, around Mt. Pinos and in the San Emigdio Range west to the canyons bordering the upper Cuyama Valley in Ventura and Santa Barbara counties. Rainfall records are not complete; however, the normal range seems to be from 7 to 12 inches. Winters are cold, with minimum temperatures of 10°F, and typical summer days have temperatures from 85°F to 95°F.

Red Fir Forest

Although occupying by far the smallest area of any association recognized, the red fir forest on the north and east slope of Sunday Peak near the summit is well worth recognition as it is the southern limits of a widespread and important forest zone of the Sierra Nevada. This association grows for the most part on open slopes in thoroughly decomposed granite, rich in organic matter, interspersed with open areas with extensive colonies of choke cherry (*Prunus emarginata*) and chinquapin (*Castanopsis sempervirens*). Here the granite outcrops have colorful colonies of pride-of-the-mountains (*Penstemon newberryi*), and Sierra manzanita (*Arcostaphylos nevadensis*).

The red fir forest has the County's shortest growing season, probably no more than 120 days, and the highest precipitation, up to 40 inches. Summer temperatures rarely reach 100°F; winter extremes are unknown, but are undoubtedly below 0°F. The forest occurs from 7,600 feet elevation to the 8,400-foot elevation at the summit of the Sunday Peak.

Shadscale Scrub

The shadscale scrub association is a plant complex typical of much of the Mojave Desert but rather sparingly represented in Kern County. It occurs in relatively heavy clay soils, usually with a shallow hardpan, which tends to restrict or eliminate the deep-rooted creosote bush and many of its associated shrubs. It consists of a small group of specialized low shrubs, mostly the annuals that are found with the creosote bush association. In Kern County, these are *Eschscholzia glyptosperma*, *Cryptantha angustifolia*, *Abronia villosa* and *Chaenactis marcrantha*.

The shadscale scrub is common on the lower northeastern slopes of the El Paso Range, is local in the Rademacher Hills southeast of Ridgecrest, in clay deposits at the heads of many canyons in the El Paso Range, on the plains north of Boron, and on some of the benches around the east and southern borders of Indian Wells Valley. A typical plant is the desert-holly (*Atriplex hymenelytra*). The climate and weather is much the same as that of the creosote bush association.

Shin Oak Brush

Shin oak brush is a plant association that reaches its best development in the mountains of Kern and northeastern Los Angeles counties. Shin oak (*Quercus garryana* var. *breweri*) grows in dense almost impenetrable thickets on the west slope of the Greenhorn Range, on the east slope of Breckenridge Mountain, and, less extensively, on the north end of Piute Mountain. Shin Oak densely covers large mountainous areas in thick, pure stands in the Tehachapi Mountains, around the summit of Cummings Mountain and particularly on the high steep slopes south of Tejon pass. The shrub does not occur in the San Emigdio or Temblor Ranges.

Shin oak brush requires substantial spring and summer moisture and will endure cold winters. It tolerates and even thrives in deep, rich, heavy soils. Shin oak brush mixes with other shrubs only in draws, ravines, wet places, or disturbed areas. The dense stands are usually pure except for scattered canyon live oaks (*Quercus chryssolepis*); these usually grow in a shrubby form.

Shin oak brush grows at elevations of 3,000 to 4,500 feet in the Greenhorn Range, at 4,000 to 6,000 feet on Breckenridge Mountain, and from 5,000 to 7,500 feet in the Tehachapi Mountains. Winter temperatures of less than 15°F are common; extremes approaching 0°F are probably not rare. Typical summer temperatures are about 85°F; extremes are probably no more than 105°F. The median annual precipitation is approximately 17 inches.

Sierra-Tehachapi Saltbush Scrub

Sierra-Tehachapi saltbush scrub thrives in alluvial, non-alkaline soils in the Valley Region. It is found on rolling hills in areas of hot, dry summers and short, wet winters with no prolonged periods of tule fog. The community is dominated by the desert saltbush *Atriplex polycarpa* and other shrubs, interspersed with extensive areas of non-native and native annual grasses and forbs.

Other plants associated with this community include grey California buckwheat (*Eriogonum fasciculatum polifolium*), cheese brush (*Hymenoclea salsola*), bladderpod (*Isomeris arborescens*), and the Bakersfield cactus (*Opuntia releasei*).

Streambank

Streambank plants are conspicuous anywhere; in an arid land, they are especially so. The Kern River is the County's largest watershed system. A few creeks running most of the year include Poso Creek and its tributaries on the west slope of the Greenhorn Range and El Paso Creek in the Tehachapi Mountains. Caliente, Tehachapi and San Emigdio creeks normally have water until late in the season; in wet cycles these run all summer.

The Kern River and other streams support a characteristic flora on their banks. The common and conspicuous trees are Fremont cottonwood (*Populus fremontii*), yellow willow (*Salix lucida* ssp. *lasiandra*), and red willow (*Salix laevigata*). Oregon ash (*Fraxinus latifolia*), buttonwillow (*Cephalanthus occidentalis* var. *californicus*) are common along Kern River and occasionally along the streams in the Greenhorn Range. Along lower Kern River, introduced, naturalized trees of California fan palm (*Washingtonia filifera*) and common peppertree (*Schinus molle*) are interesting additions to the native flora. Big-leaf maple (*Acer macrophyllum*) is local along El Paso Creek and near the head of Black Bob Creek. California sycamore (*Platanus racemosa*) is along Kern Canyon south. Black cottonwood (*Populus trichocarpa*) is local along Tejon and Bull Run Creeks, and in a shrubby form along the Kern River above Kernville. White Alder (*Alnus rhombifolia*) is found at higher elevations. Canadian waterweed (*Elodea densa*) is an aquatic that seems to grow only in running water; it is common in Kernville and in Poso Creek. The miniature greater duckweed (*Spirodela polyrhiza*) is common in quiet water and on damp sand. The herbaceous perennials and annuals that grow along the streams are a mixture of those of the fresh water marsh association and those typical of the meadows of the yellow pine forest.

Southern Cottonwood-Willow Riparian Forest

Southern cottonwood-willow riparian forest, found along the banks of the Kern River, is dominated by the broad-leaved deciduous Fremont's popular (*Populus fremontii*) and the black cottonwood (*P. trichocarpa*). Understories usually are shrubby willows.

The Upper Sonoran Grassland

Most of the foothills above the Lower Sonoran grassland and below the Upper Sonoran woody associations are treeless and often also free of shrubs. This is a region of grassland that is distinctly different from that of the valley floor. Unlike the Lower Sonoran grassland, perennials grasses are relatively common (although of secondary forage value) and scattered low shrubs grow in favorable sites. North slopes, especially at the higher elevations, are often covered with woody vegetation. In areas with more rainfall, Douglas and valley white oaks occur in scattered stands, making the limits of the Douglas oak woodland and the Upper Sonoran grassland sometimes difficult to define.

The Upper Sonoran grassland occurs rather intermittently over a wide area, from as low as 900 feet elevation in the hills in the Granite Station region to nearly 6,000 feet elevation on the high rounded summits and slopes of the southwestern Tehachapi Mountains. Here the hot desert winds of late spring and summer probably prevent the development of woodland or even forest. Although commonly considered a cismontane association, islands which are sometimes extensive occur on the high eastern slopes of the Tehachapi Mountains, on the west side of the desert Antelope Valley, and along the west side of Kelso Valley at the Southeast base of the Piute Mountains.

Normal rainfall for the Upper Sonoran grassland varies from 6.5 inches at lower levels to 10 inches where it blends with the Douglas oak woodland. Mean minimum temperatures are 23°F to 0°F on the high Tehachapi summits. Frosts can be expected from November 1 to April 15.

Upper Sonoran Sub-shrub

The arid hills around the head of the San Joaquin Valley from Adobe Canyon northeast of Bakersfield southwest through the Tehachapi Mountains and the San Emigdio Range, then northwest along the east side of the Temblor Range, support the Sonoran Subshrub vegetative association. This is a vegetative zone that is transitional between the valley grassland and the more typical Upper Sonoran associations. This association is an assembly of low shrubs of the neighboring dryer plant associations. These shrubs are not only summer-dormant but most can endure long periods or even years of winter drought. Four taxa are almost entirely limited to this association (which extends north along the slopes bordering the west side of the San Joaquin Valley as far as Corral Hollow in eastern Alameda County). These are: Eastwoodia (*Eastwoodia elegans*), Temblor buckwheat (*Eriogonum temblorense*), Temblor clarkia (*Clarkia tembloriensis*), and *Stylomecon heterophylla* var. *micropetala* (which also ranges south to Baja California).

In this association, winters are warm and summers are hot. The minimum winter temperatures are rarely less than 26° F; summer days are typically over 90°F, with those over 100°F not at all uncommon. The rainfall averages from 5 to 7 inches; moisture is augmented by periods of dense winter fog. Elevations for the association range from 900 to 1,500 feet, ascending to as high as 2,200 feet in the extremely arid southern Temblor Range west of Taft and Fellows. Soils are largely sandstone and shale; in the Temblor Range, often of pure white diatomaceous shale.

Valley Oak Woodland

Valley oak woodland) is considered rare and worthy of consideration by CNDDDB due to highly limited distribution. In addition, native species of oaks within this habitat may be protected under the County's oak tree conservation ordinance. This habitat consists of an open woodland reaching 15 to 35 meters with a grassy understory. It is found on deep, well-drained alluvial soils, usually in valley bottoms below 2,000 feet and on non-alluvial soils in the South Coast and Transverse Ranges.

Valley oak (*Quercus lobata*) is the dominant species in this community. Other plant species that commonly occur within this habitat include blue oak, poison oak, and beardless wild rye (*Leymus triticoides*). Wildlife species commonly found in this habitat include fox squirrel (*Sciurus niger*), western gray squirrel (*Sciurus griseus*), mule deer, California quail (*Callipepla californica*), plain titmouse, scrub jay, rufous-sided towhee (*Pipilo erythrorthalmus*), Bewick's wren (*Thryomanes bewickii*), bushtit, acorn woodpecker, and several species of hawks.

Valley Saltbush Scrub

Valley Saltbush scrub community is composed of gray or blue-green shrubs of the Goosefoot (*chenopod*) family growing over a low, annual undergrowth. It is generally found in the gentle, rolling hills surrounding the Tulare Basin in the sandy to loamy soils of alluvial deposits. Typically, the soils lack surface alkalinity.

The community was once widespread in the San Joaquin Valley but has been nearly extirpated, or locally eliminated by agricultural conversion, flood control, and groundwater pumping.

Typical goosefoot shrubs in the community include the desert saltbush (*Atriplex polycarpa*), arrowscale saltbush (*A. phyllostegia*) and the spiny saltbush (*A. spinifera*). Wildflowers occurring in the community include alkali larkspur (*Delphinium recurvatum*), alkali heath (*Frankenia grandifolia campestris*), Gilia tricolor, and creamcups (*Plagystemon californicus*).

Valley Sink Scrub

The valley sink scrub community once surrounded the San Joaquin Valley lakes (i.e., Kern, Buena Vista, Tulare and Goose), that have since been drained. Growing in heavily saline or alkaline clays, these perennial plants drew water from the high ground water table. Loss of habitat has caused the near extirpation of this community.

Valley sink scrub lands are open to dense shrublands dominated by alkali-tolerant plants of the goosefoot family (*Chenopodiaceae*) such as iodine bush (*Allenrolfea occidentalis*) and sea-blite (*Sueda spp.*). Understory growth is usually absent, though a sparse cover of red brome (*Bromus rubens*) can occasionally develop. Other plant species found in this community include alkali larkspur (*Delphinium recurvatum*), saltgrass (*Distichlis spicata*), and Mojave red sage (*Kockia californica*).

Vernal Poolbeds

Depressions that collect rainfall in the winter but are dry by summer or late spring are common in the County; however, they are not the typical California vernal poolbeds that accumulate water nearly every winter. Many are ephemeral and may go many years without any water at all. Some such as in the Temblor and San Emigdio Ranges are at least somewhat subalkaline and their flora may more closely approximate alkali sink vegetation than it does the California poolbed flora. This is especially true of the sag ponds along the San Andreas Fault.

Typical vernal poolbeds that do accumulate water every winter occur in the Glennville region, particularly in Lynns Valley. They were once common in the Tehachapi region, but most have been destroyed by farming and other developments. These poolbeds often have a flora of great diversity in a small area. The plants are sporadic in their occurrence; many occur at only one poolbed or only in one region.

Westside Ponderosa Pine Forest

Westside ponderosa pine forest is considered rare and worthy of consideration by CNDBD due to highly limited distribution. This habitat consists of an open park-like forest of coniferous evergreen trees up to 70 meters tall with a sparse understory of scattered chaparral shrubs and young trees. There is often a significant litter layer of needles and pine cones. Growth occurs from late spring to mid-summer and all plants are dormant in the winter. Westside ponderosa pine forest is found on coarse, well-drained, often granitic or basaltic, soils on south-facing slopes in areas with warm, dry summers and cool, moist winters with considerable snow accumulation.

Ponderosa pine is the dominant species in this community. Other plant species that commonly occur within this habitat include white fir, Greenleaf manzanita, incense-cedar, ceanothus, mountain misery (*Chamaebatia foliolosa*), tanoak, knobcone pine, coulter pine, sugar pine, canyon live oak, black oak, and hoary coffeeberry (*Rhamnus tomentella*). Westside ponderosa pine forest is an important migratory habitat for deer and a vital nesting habitat for large raptors, most notably the California condor (*Gymnogyps californianus*). Other notable wildlife species that may be found in this habitat include the Sierra Nevada red fox (*Vulpes vulpes necator*),

Siskiyou mountain salamander (*Plethodon stormi*), and Shasta salamander (*Hydromantes shastae*) (Kern County, 2010).

Yellow Pine Forest Association

The yellow pine forest is one of the Kern County's more easily distinguished plant associations. This conifer forest is the typical vegetation of all the higher elevations of the mountains except a small area at Sunday Peak in the extreme northern part of the Greenhorn Range where the Sierran red fir forest reaches its southern limits. The common conifer in the Greenhorn Range and on Breckenridge Mountain is the Ponderosa pine (*Pinus ponderosa*). In the other colder, more arid mountains ponderosa pine occurs only in relict colonies and is generally replaced by the Jeffrey pine (*Pinus jeffreyi*).

The ponderosa pine is the dominant tree of the dense forests in the Greenhorn Range and on Breckenridge Mountains. Jeffrey and Ponderosa Pines mix in the Piute Mountains. The tree is rare in the Tehachapi Mountains and is known in the Mt. Pinos region only from a colony on the east slope of Brush Mountain. Incense cedar (*Calocedrus decurrens*) is common in the Greenhorn Range and as a scattered grove in the Black Bob Canyon, San Emigdio-Mt. Pinos region. White fir (*Abies concolor*) is also found in the Greenhorn, San Emigdio-Mt Pinos forests. Big cone spruce or Douglas fir (*Pseudotsuga macrocarpa*) occurs in the Jeffrey pine forest in the Mt. Pinos region. The Kellogg oak (*Quercus kelloggii*) is a characteristic and common tree of both forests often extending as a narrow woodland below the lowest yellow pines.

The ponderosa pine forest in Kern County is notable for the number of species that reach their southern limits, and includes no less than 48 plants. These plants at the southern limits of their range are often scattered and rare, sometimes forming single, isolated colonies.

The annual precipitation, falling mostly as snow, is from 20 to 35 inches in the ponderosa pine forest and from 14 to 20 inches in the Jeffrey pine forest. Winter Temperatures often approach 0° F, and a high of 80° F and 90° F in the summer, with high temperature extremes rarely of more than 100° F. The yellow pine forest occurs at elevations above 5,500 feet in the Mt. Pinos region, the Tehachapi Mountains, and in the Piute Mountains. On Breckenridge Mountain and in the Greenhorn Range, it makes its appearance between 4,000 and 5,000 feet, and on the Kern Plateau at approximately 6,000 feet.

Sensitive Plant and Wildlife Species

Due to the expansive size and habitat diversity of the County, a variety of special-status plant and wildlife species have the potential to occur. It is important to note that many of these special-status species have broad distributions and ranges and could potentially occur in suitable habitats across the entire County. According to the California Department of Fish and Wildlife and U.S. Fish and Wildlife Service, Kern County is home to several threatened and endangered candidate, sensitive, or special status animals and plant species.

Special-Status Plant Species

Special-status plant species are defined herein as those that are listed as threatened and/or endangered by the USFWS or CDFW; designated as SSC or locally significant by CDFW; fully protected under State law; or species that meet the definition of rare or endangered under CEQA Sections 15380(b) and (d). A total of 104 special-status plant species were identified by the California Natural Diversity Database (CNDDB) as potentially occurring within Kern County.

Five of the species are federally listed as threatened or endangered, and three are State-listed only (one threatened and two endangered). Details regarding occurrences and habitat for special-status plant species is included in the CNDB query in Appendix H.

Special-Status Wildlife Species

Special-status wildlife species are defined herein as those that are listed as threatened and/or endangered by the USFWS or CDFW; designated as SSC or locally significant by CDFW; fully protected under State law; or species that meet the definition of rare or endangered under CEQA Sections 15380(b) and (d). Special status is also extended to birds protected under the Migratory Bird Treaty Act (MBTA). A total of approximately 121 special-status wildlife species were identified by the CNDB as potentially occurring within Kern County. Approximately 18 special-status wildlife species are federally listed as threatened or endangered and 8 special-status wildlife species are State-listed only (7 threatened and 1 endangered). Details regarding occurrences and habitat for special-status wildlife species is included in the CNDB query in Appendix H.

Jurisdictional Waters

Aquatic resources, including riparian areas, wetlands, and certain aquatic vegetation communities are considered sensitive biological resources and can fall under the jurisdiction of several regulatory agencies.

The U.S. Army Corps of Engineers exerts jurisdiction over “waters of the U.S.,” including, but not limited to, all waters which are subject to the ebb and flow of tide; wetlands and other waters such as lakes, rivers, streams (including intermittent or ephemeral streams), mudflats, sandflats, sloughs, prairie potholes, vernal pools, wet meadows, playa lakes, or natural ponds, and tributaries of the above features.

Wetlands, including swamps, bogs, seasonal wetlands, seeps, marshes and similar areas, are defined by the USACE as “those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” (EPA, 2016b).

CDFW exercises jurisdiction over wetland and riparian resources associated with rivers, streams, and lakes under California Fish and Game Code Sections 1600 to 1607. CDFW has the authority to regulate work that will substantially divert, obstruct, or change the natural flow of a river, stream, or lake; substantially change the bed, channel, or bank of a river, stream, or lake; or use material from a streambed. The CDFW’s jurisdiction along a river, stream, creek, or other water body is usually bounded by the top-of-bank or the outermost edges of riparian vegetation.

The Valley and Mountain regions generally contain the majority of the jurisdictional waters within the County; however, the Desert Region also has jurisdictional waters. Many of the features identified on U.S. Geological Survey (USGS) topographic maps throughout the County do not demonstrate features consistent with mapping waters of the State, such as a defined bed and bank, evidence of surface flow (e.g., sandy soils void of vegetation, water marks), or other watercourse features/fluvial indicators. The County contains many jurisdictional waters that are subject to the USACE and CDFW permitting requirements.

Habitat Conservation, Natural Community Conservation, and Recovery Plans

There are multiple conservation programs or mitigation requirements that have been approved or proposed to comply with State and federal Endangered Species laws within Kern County, including the issuance of incidental take coverage through habitat conservation plans, federal Section 7 Consultations, Biological Opinions and mitigation measures that are a part of the CEQA and NEPA environmental documents. The following Habitat Conservation Plans (HCPs) and Natural Community Conservation Plans (NCCPs) have been approved within Kern County:

Valley HCPs:

- Draft Valley Floor HCP (currently under development)
- Chevron North American Exploration and Production Lokern HCP
- California Resources Corporation Elk Hills HCP
- Freeport-McMoRan Oil & Gas (formerly Nuevo-Torch then Plains Exploration and Production Company) HCP
- CRC Non-Unity HCP (formerly Occidental of Elk Hills, Inc. HCP)
- Aera Coles Levee Ecosystem Preserve HCP (previously Arco Western Energy HCP)
- Chevron Pipeline HCP
- Kern County Waste Facilities HCP
- Kern Water Bank HCP/NCCP
- Pacific Gas and Electric (PG&E) San Joaquin Valley Operations and Maintenance Program HCP
- Metropolitan Bakersfield HCP
- San Joaquin Field Division Aqueduct HCP

Mountain HCPs:

- Tejon Ranch Comprehensive Land Use and Conservation Agreement
- Tehachapi Uplands Multiple Species HCP

Desert HCPs/NCCPs:

- West Mojave Plan and West Mojave HCP on BLM land only
- Desert Renewable Energy Conservation Plan a joint State and Federal NCCP (within BLM's California Desert Conservation Area)

Kern County is also covered by the following recovery plans:

- Recovery Plan for Upland Species of the San Joaquin Valley, California
- Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon
- California Condor Recovery Plan
- Pacific Bald Eagle Recovery Plan

4.4.3 Regulatory Setting

Federal

As explained in Section 3.2, *Regulatory History and Background*, even though cannabis is “decriminalized” under State law, and even with the U.S. Department of Justice (USDOJ) issuance of memoranda guiding federal law enforcement related to cannabis activities within jurisdictions that have legalized cannabis, cannabis activities continue to be illegal at the federal level and subject to the prosecutorial discretion of the federal government.

Federal Endangered Species Act of 1973 (16 U.S.C. 1531 through 1543)

The Federal Endangered Species Act (FESA) and subsequent amendments provide guidance for the conservation of endangered and threatened species and the ecosystems upon which they depend. The FESA defines species as “threatened” or “endangered” and provides regulatory protection for listed species. The FESA provides a program for conservation and recovery of threatened and endangered species, and conservation of designated critical habitat that the USFWS has determined is required for the survival and recovery of these listed species.

Section 4 requires federal agencies to, among other things, prepare recovery plans for newly listed species unless USFWS determines such a plan would not promote the conservation of the species.

Section 7 requires federal agencies, in consultation with, and with the assistance of the Secretary of the Interior or the Secretary of Commerce, as appropriate, to insure that actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of threatened or endangered species or result in the destruction or adverse modification of critical habitat for these species. The USFWS and National Marine Fisheries Service (NMFS) share responsibilities for administering FESA. Regulations governing interagency cooperation under Section 7 are found at 50 CFR Part 402. The opinion issued at the conclusion of consultation will include a statement authorizing a take that may occur incidental to an otherwise legal activity.

Section 9 lists those actions that are prohibited under FESA. Take of a species listed in accordance with FESA is prohibited. Section 9 of FESA prohibits take (i.e., to harass, harm, pursue, hunt, wound, kill, etc.) of listed species of fish, wildlife, and plants without special exemption. “Harm” is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns such as breeding, feeding, or shelter. “Harass” is further defined as actions that create the likelihood of injury to listed species to an extent as significantly disrupt normal behavior patterns which include, but not limited to, breeding, feeding, and shelter.

Section 10 provides a means whereby a non-federal action with a potential to result in the take of a listed species could be allowed under an incidental take permit. Application procedures are found at 50 CFR Parts 13 and 17 for species under the jurisdiction of USFWS and 50 CFR Parts 217, 220, and 222 for species under the jurisdiction of NMFS.

Migratory Bird Treaty Act (16 U.S.C. 703 through 711)

The Migratory Bird Treaty Act (MBTA) is the domestic law that affirms, or implements, the United States’ commitment to four international conventions (with Canada, Mexico, Japan, and Russia) for the protection of a shared migratory bird resource. The MBTA makes it unlawful at any time, by

any means or in any manner, to pursue, hunt, take, capture, or kill migratory birds. The law also applies to the removal of nests occupied by migratory birds during the breeding season. The MBTA makes it unlawful to take, pursue, molest, or disturb these species, their nests, or their eggs anywhere in the United States.

Bald and Golden Eagle Protection Act of 1940 (16 U.S.C. 668, enacted by 54 Stat. 250)

The Bald and Golden Eagle Protection Act (BGEPA) of 1940 protects bald and golden eagles by prohibiting the taking, possession, and commerce of such birds and establishes civil penalties for violation of this Act. Take of bald and golden eagles is defined as follows: “disturb means to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available: (1) injury to an eagle; (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior; or, (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior” (72 FR 31132; 50 CFR 22.3).

On November 10, 2009, USFWS implemented new rules (74 FR 46835) governing the “take” of golden and bald eagles. The rules were released under the existing BGEPA which has been the primary regulation protection for unlisted eagle populations since 1940. All activities that may disturb or incidentally take an eagle or its nest as a result of an otherwise legal activity must be permitted by the USFWS under this act.

A programmatic permit would be available to industries or agencies undertaking activities that may disturb or otherwise take eagles on an ongoing operational basis. The USFWS has defined programmatic take as “take that (1) is recurring, but not caused solely by indirect effects, and (2) occurs over the long term and/or in a location or locations that cannot be specifically identified.” The second criterion is the key factor that distinguishes programmatic take from any other take that has indirect effects that continue to cause take after the initial action.

In April 2012, a proposed rule change was published by the USFWS regarding take permits for golden eagles that would extend the maximum allowable permit life of a programmatic take permit from 5 to 30 years. The rule would also increase the associated fees to cover the actual costs of processing the permit application. The USFWS is studying the proposal pursuant to the National Environmental Policy Act (NEPA).

On December 14, 2016, USFWS announced a final rule revising the regulations for permits for incidental take of eagles and take of eagle nests. The USFWS analyzed various alternative management options and rule revisions, including the final rule revisions, in a programmatic environmental impact statement (EIS) (United States Fish and Wildlife Service [USFWS], 2016). The final rule addresses criteria for permit issuance, compensatory mitigation requirements, permit duration, and data standards for submitting permit applications (USFWS, 2016).

Federal Clean Water Act (33 U.S.C. 1251 through 1376)

The Federal Clean Water Act (CWA) provides guidance for the restoration and maintenance of the chemical, physical, and biological integrity of the nation's waters.

Section 401 requires that a project proponent for a federal license or permit that allows activities resulting in a discharge to waters of the United States must obtain a State certification that the

discharge complies with other provisions of CWA. The RWQCBs administer the certification program in California.

Section 402 establishes a permitting system for the discharge of any pollutant (except dredge or fill material) into waters of the United States.

Section 404 establishes a permit program, administered by the USACE, regulating the discharge of dredged or fill material into waters of the United States, including wetlands. The extent of waters of the United States is generally defined as the portion that falls within the limits of the OHWM, which typically corresponds to the two-year flood event. Wetlands, including swamps, bogs, seasonal wetlands, seeps, marshes, and similar areas are defined by USACE as “those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” (33 CFR 328.3[b]; 40 CFR 230.3[t]). Implementing regulations by USACE are found at 33 CFR Parts 320-330. Guidelines for implementation are referred to as the Section 404(b)(1) Guidelines and were developed by the U.S. Environmental Protection Agency (EPA) in conjunction with USACE (40 CFR Parts 230). The Guidelines allow the discharge of dredged or fill material into the aquatic system only if there is no practicable alternative that would have less adverse impacts.

State

California Environmental Quality Act (CEQA) (Public Resource Code Section 21000 et seq.)

The California Environmental Quality Act (CEQA) was adopted in 1970 and applies to actions directly undertaken, financed, or permitted by State and local lead agencies. CEQA requires that agencies inform themselves about the environmental effects of their proposed actions, consider all relevant information, provide the public an opportunity to comment on the environmental issues, and avoid or reduce potential environmental harm whenever feasible. CEQA establishes State policy to prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures. Regulations for implementation are found in the CEQA Guidelines published by the Resources Agency. These guidelines establish an overall process for the environmental evaluation of projects.

Section 15380. Although threatened and endangered species are protected by specific federal and State statutes, CEQA Guidelines Section 15380(b) provides that a species not listed on the federal or State list of protected species may be considered rare or endangered if the species can be shown to meet certain specified criteria. These criteria have been modeled after the definition in the FESA and the section of the California Fish and Game Code dealing with rare or endangered plants or animals. This section was included in CEQA primarily to deal with situations in which a public agency is reviewing a project that may have a significant effect on, for example, a candidate species that has not been listed by either USFWS or CDFW. Thus, CEQA provides an agency with the ability to protect a species from the potential impacts of a project until the respective government agencies have an opportunity to designate the species as protected, if warranted. CEQA also calls for the protection of other locally or regionally significant resources, including natural communities. Although natural communities do not at present have legal protection of any kind, CEQA calls for an assessment of whether any such resources would be affected, and requires findings of

significance if there would be substantial losses. Natural communities listed by CNDDDB as sensitive are considered by CDFW to be significant resources and fall under the CEQA Guidelines for addressing impacts. Local planning documents such as general plans often identify these resources as well.

California Endangered Species Act (California State Fish and Game Code 2050 et seq.)

The California Endangered Species Act (CESA) establishes the policy of the State to conserve, protect, restore, and enhance threatened or endangered species and their habitats. The CESA mandates that State agencies should not approve projects that would jeopardize the continued existence of threatened or endangered species if reasonable and prudent alternatives are available that would avoid jeopardy. There are no State agency consultation procedures under the CESA. For projects that affect both a State and federal listed species, compliance with FESA will satisfy the CESA if the CDFW determines that the federal incidental take authorization is “consistent” with the CESA under California State Fish and Game Code Section 2080.1. For projects that will result in a take of a State-only listed species, the project proponent must apply for a take permit under Section 2081(b).

Section 2080. Section 2080 of the California State Fish and Game Code states, “No person shall import into this State [California], export out of this State, or take, possess, purchase, or sell within this State, any species, or any part or product thereof, that the Commission [State Fish and Game Commission] determines to be an endangered species or threatened species, or attempt any of those acts, except as otherwise provided in this chapter, or the Native Plant Protection Act, or the California Desert Native Plants Act.” Pursuant to Section 2081 of the California State Fish and Game Code, the CDFW may authorize individuals or public agencies to import, export, take, or possess, any State-listed endangered, threatened, or candidate species as long as they do not have State Fully Protected status. These otherwise prohibited acts may be authorized through permits or a memorandum of understanding (MOU) if: (1) the take is incidental to an otherwise lawful activity; (2) impacts of the authorized take are minimized and fully mitigated; (3) the permit is consistent with any regulations adopted pursuant to any recovery plan for the species; and, (4) the project proponent ensures adequate funding to implement the measures required by the CDFW. The CDFW makes this determination based on available scientific information and considers the ability of the species to survive and reproduce.

Fully Protected Species. The State of California first began to designate species as “Fully Protected” prior to the creation of the CESA. Lists of Fully Protected species were initially developed to provide protection to those animals that were rare or faced possible extinction, and included fish, mammals, amphibians and reptiles, birds, and mammals. Most Fully Protected species have since been listed as threatened or endangered under the CESA and/or ESA. The regulations that implement the Fully Protected Species Statute (Fish and Game Code Sections 3511, 4700, 5050, 5515) provide that Fully Protected species may not be taken or possessed at any time. Furthermore, the statute prohibits any State agency from issuing incidental take permits for Fully Protected species, except for scientific research or relocation of the bird species for the protection of livestock pursuant to Section 670.7 of the California Code of Regulations or Section 2835 of the Fish and Game Code.

Other California State Fish and Game Code Provisions

Sections 1360 to 1372 (Oak Woodlands Conservation Act). California Public Resources Code Section 21083.4 requires a county, as part of the CEQA process, to consider whether a project would impact oak woodlands, including oak trees (meaning a native tree species in the genus *Quercus*) that are 5 inches or more in diameter at breast height. If a project may have a significant effect on oak woodlands (defined in Fish and Game Code Section 1361(h) as “an oak stand with a greater than 10 percent canopy cover or that may have historically supported greater than 10 percent canopy cover”), the code requires implementation of specific mitigation measures to reduce impacts to oak woodlands, but also provides for mitigation through county-designed measures. Mitigation options include conservation of existing oak woodlands, planting of new trees, contribution of funds to the Oak Woodlands Conservation Fund, or any other measures developed by the county.

The Oak Woodlands Conservation Act (Fish and Game Code Sections 1360 to 1372) was enacted to support and encourage voluntary, long-term private stewardship and conservation of oak woodlands by offering landowners financial incentives to protect and promote biologically functional oak woodlands. It provides incentives to farming and ranching operations that are operated in a manner that protect and promote healthy oak woodlands, promotes the protection of oak trees, and encourages planning that is consistent with oak woodland preservation. The Oak Woodlands Conservation Act is implemented by the Wildlife Conservation Board.

Sections 1600 through 1616. Under these sections of the California State Fish and Game Code, the project proponent is required to notify CDFW prior to any project that would divert, obstruct, or change the natural flow, bed, channel, or bank of any river, stream, or lake. Pursuant to the California State Fish and Game Code, a “stream” is defined as a body of water that flows at least periodically, or intermittently, through a bed or channel having banks and supporting fish or other aquatic life. Based on this definition, a watercourse with surface or subsurface flows that supports or has supported riparian vegetation is a stream and is subject to CDFW jurisdiction. Altered or artificial valuable to fish and wildlife are subject to CDFW jurisdiction. The CDFW also has jurisdiction over dry washes that carry water ephemerally during storm events.

Preliminary notification and project review generally occur during the environmental process. When an existing fish or wildlife resource may be substantially adversely affected, CDFW is required to propose reasonable project changes to protect the resource. These modifications are formalized in a Streambed Alteration Agreement that becomes part of the plans, specifications, and bid documents for the project.

Sections 3503 and 3503.5. Under these sections of the California State Fish and Game Code, the project proponent is not allowed to conduct activities that would result in the taking, possessing, or destroying of any birds-of-prey, taking or possessing of any migratory non-game bird as designated in the MBTA or the taking, possessing, or needlessly destroying of the nest or eggs of any raptors or non-game birds protected by the MBTA, or the taking of any non-game bird pursuant to California State Fish and Game Code Section 3800.

Sections 3511, 4700, 5050, and 5515. Sections 3511 (birds), 4700 (mammals), 5050 (reptiles and amphibians), and 5515 (fish) of the California State Fish and Game Code provide that designated fully protected species may not be taken or possessed without a permit. Incidental takes of these species are not authorized by law.

Native Plant Protection Act (California State Fish and Game Code 1900 through 1913)

California's Native Plant Protection Act (NPPA) requires all State agencies to utilize their authority to carry out programs to conserve endangered and rare native plants. Provisions of the NPPA prohibit the taking of listed plants from the wild and require notification of the CDFW at least 10 days in advance of any change in land use. This allows CDFW to salvage listed plant species that would otherwise be destroyed. The project proponent is required to conduct botanical inventories and consult with CDFW during project planning to comply with the provisions of this Act and sections of CEQA that apply to rare or endangered plants.

California Oak Protection Act §21083.4

Public Resources Code (PRC) § 21083.4 establishes State conservation standards for oak woodlands and requires the adoption of an oak woodland management plan, in any county where oak woodlands occur. Oak woodlands are defined as areas having a 10% or greater canopy cover of *Quercus* species with individual trees having a diameter at breast height (DBH) of 5 inches or more. PRC § 21083.4 also sets statewide minimum mitigation standards for significant impacts to oak woodland under CEQA. Kern County has not adopted a management plan for oak woodlands.

Natural Community Planning Act (Fish and Game Code 2800 et seq.)

In 1991 California enacted the Natural Community Conservation Planning Act (CFG C Section 2800 et seq.) to authorize the creation and implementation of NCCPs to conserve natural communities at the ecosystem level while accommodating compatible land use. The act was revised in 2003 and has been subsequently amended. An MCPC is intended to function much like a federal HCP and provide for the long-term conservation of wildlife and plant communities in regional locations in manner that also allows for economic development and growth. Section 2805(e) allows the incidental take of fully protected species that are covered under an approved MCPC.

Regional Water Quality Control Board

Under Section 401 of the Clean Water Act, the Regional Water Quality Control Board (RWQCB), for the proposed project Central Valley RWQCB on the west side of the County and Lahontan RWQCB on the east side of the county, must certify that actions receiving authorization under Section 404 of the CWA also meet State water quality standards. The RWQCB also regulates waters of the State under the Porter-Cologne Act Water Quality Control Act (Porter-Cologne Act). The RWQCB requires projects to avoid impacts to wetlands if feasible and requires that projects do not result in a net loss of wetland acreage or a net loss of wetland function and values. The RWQCB typically requires compensatory mitigation for impacts on wetlands and/or waters of the State. The RWQCB also has jurisdiction over waters deemed isolated or not subject to Section 404 jurisdiction under the *Solid Waste Agency of Northern Cook County v. Army Corps of Engineers* decision. Dredging, filling, or excavation of isolated waters constitutes a discharge of waste to waters of the State and prospective dischargers are required to obtain authorization through an Order of Waste Discharge or waiver thereof from the RWQCB and comply with other requirements of Porter-Cologne Act.

Porter-Cologne Water Quality Control Act

Under the Porter-Cologne Water Quality Control Act, waters of the State fall under the jurisdiction of the appropriate RWQCB. Under the act, the RWQCB must prepare and periodically update basin plans. Each basin plan sets forth water quality standards for surface water and groundwater as well as actions to control nonpoint and point sources of pollution, thereby achieving and maintaining these standards. Projects that affect wetlands or waters must meet waste discharge requirements of the RWQCB, which may be issued in addition to water quality certification or a waiver under Section 401 of the CWA. The relevant Central Valley RWQCB publication for the study area is the Tulare Lake Basin Plan.

Local

Kern County General Plan (KCGP)

The policies, goals, and implementation measures in the KCGP relevant to biological resources that are applicable to the project are provided below. The KCGP also contains additional policies, goals, and implementation measures that are more general in nature. Therefore, they are not listed below, but, as stated in Chapter 2, *Introduction*, all policies, goals, and implementation measures in the KCGP are incorporated by reference.

Chapter 1. Land Use, Open Space, and Conservation Element

The Land Use, Open Space, and Conservation Element of the KCGP states that the element provides for a variety of land uses for future economic growth while also assuring the conservation of County's agricultural, natural, and resource attributes. Section 1.10, *General Provisions*, provides goals, policies, and implementation measures that apply to all types of discretionary projects.

Section 1.10 General Provisions

Goals

- **Goal 1.** Ensure that the County can accommodate anticipated future growth and development while maintaining a safe and healthful environment and a prosperous economy by preserving valuable natural resources, guiding development away from hazardous areas, and assuring the provision of adequate public services.

Section 1.10.5 Threatened and Endangered Species

Policies

- **Policy 27.** Threatened or endangered plant and wildlife species should be protected in accordance with State and federal laws.
- **Policy 28.** County should work closely with State and federal agencies to assure that discretionary projects avoid or minimize impacts to fish, wildlife, and botanical resources.
- **Policy 29.** The County will seek cooperative efforts with local, State, and federal agencies to protect listed threatened and endangered plant and wildlife species through the use of conservation plans and other methods promoting management and conservation of habitat lands.

- **Policy 30.** The County will promote public awareness of endangered species laws to help educate property owners and the development community of local, State, and federal programs concerning endangered species conservation issues.
- **Policy 31.** Under the provisions of the California Environmental Quality Act (CEQA), the County, as lead agency, will solicit comments from the California Department of Fish and Game and the U.S. Fish and Wildlife Service when an environmental document (Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report) is prepared.
- **Policy 32.** Riparian areas will be managed in accordance with United States Army Corps of Engineers, and the California Department of Fish and Game rules and regulations to enhance the drainage, flood control, biological, recreational, and other beneficial uses while acknowledging existing land use patterns.

Implementation Measures

- **Implementation Measure Q.** Discretionary projects shall consider effects to biological resources as required by the California Environmental Quality Act.
- **Implementation Measure R.** Consult and consider the comments from responsible and trustee wildlife agencies when reviewing a discretionary project subject to the California Environmental Quality Act.
- **Implementation Measure S.** Pursue the development and implementation of conservation programs with State and federal wildlife agencies for property owners desiring streamlined endangered species mitigation programs.

Section 1.10.6 Surface Water and Ground Water

Policies

- **Policy 44.** Discretionary projects shall analyze watershed impacts and mitigate for construction-related and urban pollutants, as well as alterations of flow patterns and introduction of impervious surfaces as required by the California Environmental Quality Act (CEQA), to prevent the degradation of the watershed to the extent practical.

Section 1.10.7. Light and Glare

Policies

- **Policy 47.** Ensure that light and glare from discretionary new development projects are minimized in rural as well as urban areas
- **Policy 48.** Encourage the use of low-glare lighting to minimize nighttime glare effects on neighboring properties.

Implementation Measures

- **Implementation Measure AA.** The County shall utilize CEQA Guidelines and the provisions of the Zoning Ordinance to minimize the impacts of light and glare on adjacent properties and in rural undeveloped areas.

Section 1.10.8 Smart Growth

Policies

- **Policy 49.** Discretionary development projects should be encouraged to incorporate innovative or “smart growth” land use planning techniques as design features, as follows:

- a. Higher Density development, where compatible, to maximize the efficient use of land.
- b. Mixed use developments that promote reduced vehicle trips by having residential, commercial, and public uses proximate to each other.
- c. Variety of housing types, including those using energy efficient design, and densities to address Kern County's housing needs.
- d. Master planned communities that feature interconnected roads, transit stops, sidewalks, landscaping, and trails to encourage efficient vehicle and pedestrian movement.
- e. Compact development that conserves open space, agricultural land, floodprone areas, creeks, hillsides, ridge tops, wetlands, and other natural features.
- f. Adequate infrastructure (i.e. roads, sewer, water, parks, etc.) is provided as a condition of development approval by the project proponent.
- g. Aesthetically pleasing and unifying design features that promote a visually pleasing environment.

Section 1.10.10. Oak Tree Conservation

Policies

- **Policy 65.** Oak woodlands and large oak trees shall be protected where possible and incorporated into project developments.
- **Policy 66.** Promote the conservation of oak tree woodlands for their environmental value and scenic beauty.

Implementation Measures

- **Implementation Measure KK.** The following applies to discretionary development projects (General Plan Amendment, zone change, conditional use permit, tract maps, parcel maps, precise development plan) that contains oak woodlands, which are defined as development parcels having canopy cover by oak trees of at least ten percent (10%), as determined from base line aerial photography or by site survey performed by a licensed or certified arborist or botanist. If this study is used in an Environmental Impact Report, then a Registered Professional Forester (RPF) shall perform the necessary analysis.
 - a. Development parcels containing oak woodlands are subject to a minimum canopy coverage retention standard of thirty percent (30%). The consultant shall include recommendations regarding thinning and diseased tree removal in conjunction with the discretionary project.
 - b. Use of aerial photography and a dot grid system shall be considered adequate in determining the required canopy coverage standard.
 - c. Adjustments below thirty percent (30%) minimum canopy standard may be made based on a report to assess the management of oak woodlands.
 - d. Discretionary development, within areas designated as meeting the minimum canopy standard, shall avoid the area beneath and within the trees unaltered dripline unless approved by a licensed or certified arborist or botanist.

- **Implementation Measure LL.** The following applies to development of parcels having oak tree canopy cover of less than ten percent (10%), but containing individual oak trees equal to or greater than a 12-inch diameter trunk at 4.5 feet breast height.
 - a. Such trees shall be identified on plot plans.
 - b. Discretionary development shall avoid the area beneath and within the trees unaltered drip line unless approved by a licensed or certified arborist or botanist.
 - c. Specified tree removal related to the discretionary action may be granted by the decision making body upon showing that a hardship exists based on substantial evidence in the record.

Kern County Specific Plans

Kern County has adopted 39 Specific Plans, 10 Rural Community Plans, and 14 Interim Rural Community Plan Maps. The Specific Plans and Rural Community Plans are intended to be an amplification of the goals and policies of the KCGP and are, therefore, consistent therewith. Interim Rural Community Plan Maps are areas where a specific plan has not been formally adopted, thus the goals and policies of the KCGP govern these areas. Future commercial cannabis cultivation, processing/packaging, and sales activities that would be authorized under the proposed project that would be located within the boundary of an adopted Specific Plan would be regulated according to County zoning.

Kern County Code of Ordinances

Chapter 7.16 – Estrays

The Estrays (Chapter 7.16) are areas within Kern County that are devoted chiefly to grazing as adopted by the Kern County Board of Supervisors per Section 17124 of the California Food and Agriculture Code. Sections 020, 030, 040, 050, and 055 of the Estrays Ordinance contain the legal description of Parcels A through E. Section 7.16.60 outlines constraints that apply to Parcel B as follows:

Every person within the area described in Parcel B of this chapter [Chapter 7.16 of the Kern County Code of Ordinances] owning or having charge, care, custody or control of any cow, bull, steer, horse, mule, jack, hinny, sheep or other stock, who willingly or knowingly permits the same to run at large in or upon any cultivated or improved land owned by any person other than the owner of such animals, unless the consent of the owner is first obtained, except upon a public highway under adequate supervision, is guilty of a misdemeanor. Animal control services for achieving the control of said animals, as provided by the county to enforce the provisions of this section, shall be charged to the owner or the person having charge, care, custody, or control of animals at large at the hourly rate as set forth in the fee schedule established by the board of supervisors.

Chapter 8.46 – Weeds

Chapter 8.46 provides definitions and guidance in abating public nuisances which consists of excessive accumulations or growths of weeds which may create fire hazards for property or persons, and can jeopardize native plants species with the introduction of non-native weeds.

Title 13 - Parks, Recreation Areas, and Public Places Ordinance

Title 13 of the Kern County Code of Ordinances provides guidance for parks and recreational areas. This includes permitted activities within nature preserves, as well as other recreational areas such as lakes and campgrounds. Chapter 13.16 of Title 13 of the Kern County Code of Ordinances discusses Natura Preservation Areas and provides guidance and preservation activities for the North Edwards Bird Sanctuary (Section 13.16.101) and the Kern River County Park Natural Preserve Area (Section 13.16.020). These ordinances set forth the rules and define unlawful behavior that could harm plant and animal species within these areas.

Habitat Conservation Plans, Natural Community Conservation Plans or other Approved Local, Regional, or State HCP in the County

Commercial cannabis activities could take place in areas within the boundaries of an approved HCP and/or NCCP. As discussed in the regulatory setting below, HCPs are approved by the USFWS in conjunction with providing incidental take permit coverage for listed species and to also foster the conservation of other covered species. NCCPs are approved by the CDFW and are intended to function in a manner similar to the federal a HCP for State listed and other covered species. The CDFW may also issue incidental take permits for State covered species that are based on and coordinated with an approved federal HCP under section 2081(b) of the CESA. HCPs and NCCPs typically have permits terms ranging from 30 to 50 years. The HCPs, NCCPs, and recovery plans discussed below are incorporated by reference.

Draft Valley Floor HCP

The Valley Floor (VF) HCP encompasses 3,110 square miles and generally includes most of the San Joaquin Valley Floor portion of Kern County up to an elevation of 2,000 feet. The 2,000-foot elevation line was selected as the elevation limit for the VFHCP because: (1) this border would, based on the professional judgment of resource agency personnel (including USFWS, CDFW, and BLM) encompass most locations in the Kern County valley floor likely to be subject to potential take of threatened and endangered species during the 30-year term of the proposed program; and (2) the 2,000-foot level approximates the elevation at which the species compositions of valley floor flora and fauna transition to foothill species. The HCP is intended to provide federal and State protected species incidental take authorization for covered activities throughout the valley floor area over a 30-year period. The VFHCP has not yet been approved by the CDFW, USFWS, Kern County, or other applicable local, State, and federal agencies.

Chevron North American Exploration and Production Lokern HCP (LHCP)

Chevron has prepared an HCP and applied to the USFWS and CDFW for State and/or federally protected species incidental take authorization under Section 10(a)(1)(B) of the federal ESA and Section 2081(b) of the CFGC of the CESA over a 50-year permit term.

The Chevron Lokern Lands consist of 13,333 acres, including 13,090 acres of currently undisturbed, high quality habitat, located north of the existing Elk Hills oil field and east of the existing Cymric-McKittrick oil fields and would be used primarily for conservation purposes. Chevron proposes to limit development in the Chevron Lokern Lands to 10 percent of the existing undisturbed habitat, or 1,309 acres. In addition, no more than 25 percent of any single section (or proportionately less if Chevron owns only part of a section) would be subject to impacts in the Chevron Lokern Lands. As a result, 11,781 of the Chevron Lokern Lands would be

reserved for conservation and mitigation purposes, including mitigation for Chevron oil and gas activities within the Chevron Lokern Lands, the Lokern Contiguous Area, and the four oil fields covered by the HCP as a part of its permit area.

California Resources Corporation Elk Hills HCP (EHHCP)

California Resources Corporation - Elk Hills (CRC) is applying for an incidental take permit (ITP) from CDFW, pursuant to Section 2081(b) of the Fish and CFGC. The Section 2081 application, which includes an associated HCP that supports the proposed conservation and management program for the proposed Elk Hills Oil Field (EHOF), was deemed complete by CDFW on March 3, 2014. The area covered by the proposed EHOF ITP encompasses the EHOF which is approximately 47,884 acres; facility rights-of-way (ROWs) located outside of the EHOF; and any Conservation Lands located within a Target Acquisition Area inside the 2-mile buffer and within a second Target Acquisition Area located outside the 2-mile buffer that are dedicated pursuant to the proposed EHOF and managed for the mitigation of impacts (the EHOF ITP Covered Lands).

Freeport-McMoRan Oil & Gas (formerly Nuevo-Torch then Plains Exploration and Production Company) HCP

The Freeport-McMoRan Oil & Gas (formerly Nuevo-Torch then Plains Exploration and Production Company) HCP was adopted in 1999 and addresses ongoing oilfield exploration and production activities on oilfield properties located in western Kern County. The HCP encompasses 21,900 acres, including an initial 839.9 acres of conservation area lands in the Lokern area that will be set aside incrementally to compensate for habitat disturbances from oilfield activities.

CRC Non-Unity HCP (Formerly Occidental of Elk Hills, Inc.)

The CRC Non-Unit HCP is a conservation plan that covers 7,050 acres. The HCP was originally prepared for Nuevo-Torch in February 1999. Incidental take authorization and responsibilities under the HCP were transferred to Plains Exploration and Production Company (PXP) on May 9, 2005. PXP subsequently transferred 300 acres of authorized incidental take and 15 acres of conservation lands to CRC on August 3, 2009. PXP retained take authorization and responsibilities on the remaining 1,400 acres of the original 1,700 acres authorized for incidental take, and these interests were subsequently conveyed to Freeport-McMoRan. In December 2009 USFWS approved the inclusion of 3,504 acres of new properties located in the vicinity of McKittrick Valley and the EHOF into the CRC Non-Unit HCP; 1,134 acres of the 3,504 acres were designated for use as mitigation land. No increase in the initially authorized 1,700 acres of take was included in the 2009 approval.

Aera Coles Levee Ecosystem Preserve HCP (previously Arco Western Energy HCP)

The Coles Levee Ecosystem Preserve HCP conserved 6,059 acres under an existing oil and gas HCP to the east of the Elk Hills Oil Field (EHOF) and south of the Kern Water Bank.

Chevron Pipeline HCP

The Chevron Pipeline HCP includes 25.5 acres of valley saltbrush scrub (USFWS, 2017d).

Kern County Waste Facilities HCP

The Kern County Waste Management Department (KCWMD) is responsible for the construction and management of 14 sanitary solid waste facilities (landfills) in Kern County, including seven closed or inactive sites where transfer stations may be operated. The Kern County Waste Facilities HCP covering these locations was adopted in 1997 and is in the process of being amended to cover expansion at the remaining active landfills and the closure of historic burn dumps.

Kern Water Bank HCP/NCCP

The Kern Water Bank HCP/Natural Community Conservation Plan (HCP/NCCP) is managed by the Kern Water Bank Authority and covers 19,900 acres. The plan was approved in 1997 and covers water conservation by developing water recharge and recovery facilities, the conservation and restoration of upland, intermittent wetland/rangeland, and other sensitive habitat.

Pacific Gas and Electric (PG&E) San Joaquin Valley Operations and Maintenance Program HCP

The PG&E San Joaquin Valley region HCP was approved in early 2008 and covers routine operations and maintenance and minor new construction activities related to PG&E's electrical system in the San Joaquin Valley for 30 years. The HCP covers 23 wildlife and 42 plant species, including the San Joaquin kit fox, California red-Legged frog, vernal pool fairy shrimp, and Western burrowing owl. PG&E facilities that are covered by the HCP occur throughout the Project Area, generally within existing ROWs owned by the company.

Metropolitan Bakersfield HCP (MBHCP)

Implemented in 1994, the MBHCP (City of Bakersfield and County of Kern, 1994) covers both federally and State-listed species in the 408-square-mile Metropolitan Bakersfield area, which includes both City land and unincorporated County land. The goal of the MBHCP is to allow urban development consistent with the Metropolitan Bakersfield 2010 General Plan and offset habitat loss by acquiring, preserving, and enhancing habitat for sensitive species.

San Joaquin Field Division Aqueduct HCP

The San Joaquin Field Division Aqueduct HCP area occupies approximately 11,816 acres. It is located within Kings and Kern counties and includes approximately 121 miles of California Aqueduct right-of-way, 15 miles of Coastal Branch Phase I, and land around pumping plants and operations and maintenance centers that serve these two portions of the State Water Project (Toyon Environmental Consultants, Inc., 2004).

Tejon Ranch Comprehensive Land Use and Conservation Agreement

In June 2008, Tejon Ranch Company entered into a Comprehensive Land Use and Conservation Agreement (Tejon Ranchwide Agreement) with the Audubon California, the Endangered Habitats League, Natural Resources Defense Council, Planning and Conservation League, and the Sierra Club. The Ranchwide Agreement covers the entirety of Tejon Ranch, and provides for the permanent preservation of over 90 percent of Tejon Ranch (approximately 240,000 acres) through a combination of donated and acquired conservation easements, and designated open space areas within the remaining areas of Tejon Ranch. The Tejon Ranchwide Agreement also designates areas for potential future development that would not be opposed by the signatories to the Tejon Ranchwide Agreement. These areas include Tejon Mountain Village, Centennial (a project in Los

Angeles County), and Grapevine. The Tejon Ranchwide Agreement does not authorize development, nor does it create any exemptions from applicable local, State, and federal governmental environmental review or permitting processes. The Tejon Ranchwide Agreement allows the Tejon Ranchcorp to continue existing uses on Conserved Lands as follows: grazing, game management, and filming activities, which are permitted throughout Tejon Ranch; farming, sand and gravel mining, and oil and gas extraction activities, which are permitted within existing areas and defined expansion areas.

Tehachapi Uplands Multiple Species Habitat Conservation Plan

The Tehachapi Uplands Multiple Species Habitat Conservation Plan (TUMSHCP), which was approved by the USFWS in 2013, is a HCP intended to meet recovery goals of multiple special-status species. On April 29, 2013, the USFWS issued Incidental Take Permit (ITP) No. TE198636, pursuant to FESA, for incidental take of 25 covered species described in the TUMSHCP. The covered lands include a combination of foothill grasslands and montane woodlands that make up the Tehachapi Uplands component of Tejon Ranch. The covered lands include 141,866 acres of the 270,365-acre Tejon Ranch and are generally above 2,000 feet amsl near the San Joaquin Valley floor, and to the south by the Antelope Valley floor, where the elevation ranges from about 3,200 to 4,700 feet amsl, following the Los Angeles County line, with an average elevation of 4,100 feet amsl. The HCP is designed primarily to preclude development and protect as open space in perpetuity 91 percent of the covered lands (Dudek, 2013).

West Mojave Plan and West Mojave HCP

In response to concerns regarding impacts on species, diminishing habitat, and difficulty in complying with the FESA and CESA on public and private land within the Mojave Desert, a consortium of government agencies has initiated preparation of the West Mojave Plan. The West Mojave Plan covers approximately 9.4 million acres encompassing most of California's western Mojave Desert. It extends from Olancha in Inyo County on the north to the San Gabriel and San Bernardino Mountains on the south, and from the Antelope Valley on the west to the Mojave National Preserve on the east. About one third of this area is private land, another third lies within military bases, and the final third consists of public land managed by the federal Bureau of Land Management (BLM); 1.5 million acres are located in Kern County.

The West Mojave Plan Habitat Conservation was proposed on both private and public land but never adopted or completed for private land. The plan adopted on BLM public land is an attempt to define a regional strategy for conserving 58 plant and animal species and their habitats, and to define a process for complying with threatened and endangered species laws.

Desert Renewable Energy Conservation Plan (DRECP) NCCP

The DRECP NCCP includes a Conceptual Plan-Wide NCCP Reserve Design and describes a regional strategy for the protection of plants, animals, and their habitats. The NCCP also addresses renewable energy and transmission covered activities (California Energy Commission, 2014).

Recovery Plan for Upland Species for the San Joaquin Valley, California

In 1998, the USFWS published an ecosystem-oriented recovery plan for 11 threatened and endangered species (one, Hoover's woolley star, since delisted) and 23 other native plants and animals in the San Joaquin Valley, including the California jewelflower, palmate-bracted bird's-

beak, Kern mallow, San Joaquin woolly-threads, Bakersfield cactus, Hoover's woolly-star, giant kangaroo rat, Fresno kangaroo rat, Tipton kangaroo rat, blunt-nosed leopard lizard, San Joaquin kit fox, lesser saltscale, Bakersfield smallscale, Lost Hills saltbush, Vaseks clarkia, Temblor buckwheat, Tejon poppy, diamond-petaled California poppy, Comanche Point lavia, Munz's tidy-tips, jared's peppergrass, Merced monardella, Merced phacelia, oil neststraw, San Joaquin dune beetle, Dovens dune weevil, San Joaquin antelope squirrel, short-nosed kangaroo rat, riparian woodrat, Tulare grasshopper mouse, Buena Vista Lake shrew, riparian brush rabbit, and San Joaquin Le Conte's thrasher.

Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon

The Vernal Pool Recovery Plan (USFWS, 2004) seeks to protect known and potential habitat for vernal pools and associated sensitive species. The plan recommends the preparation and adoption of an HCP in areas potentially containing the listed species.

California Condor Recovery Plan

The California Condor Recovery Plan was developed in 1984 and last revised in April 1996 (USFWS, 1996). The plan calls for a multi-pronged recovery strategy for the California condor, including (1) increasing reproduction in captivity to provide condors for release, (2) the release of condors to the wild, (3) minimizing condor mortality factors in wild populations, (4) maintaining habitat for condor recovery, and (5) implementing condor information and education programs. The primary objective of the recovery plan is the down-list of the condor to threatened status; with the minimum criterion for achieving this objective being the maintenance of at least two non-captive populations and one captive population. USFWS is responsible for implementation of the California Condor Recovery Plan.

Pacific Bald Eagle Recovery Plan

The United States published five bald eagle recovery plans for various regions of the United States. The Pacific Bald Eagle (*Haliaeetus leucocephalus*) Recovery Plan (USFWS 1986) covers the western states including California. The primary objectives of The Pacific Bald Eagle Recovery Plan are to provide secure habitat for bald eagles in the Pacific recovery area and to increase the bald eagle population size to a level that warrants delisting of the species. Subsequent to the publication of the plan, the bald eagle was delisted under the ESA, but remains protected under the federal Bald and Golden Eagle Protection Act.

Kern River Plan Element

The Kern River Plan Element governs land use within the Kern River Planning Area. The Element was prepared as a joint effort by the City of Bakersfield and Kern County. The following Kern River Plan Element policies are applicable to the proposed Project with respect to biological resources for all unincorporated county lands within the Kern River Planning Area:

Chapter III. Issues, Goals, and Basic Plan Policies

3.3. Riparian Vegetation and Wildlife Habitat

Policies

- **Policy 2.** All development proposals shall be evaluated by a competent biologist to identify any significant biological areas necessary for protection. Cost incurred under this procedure shall be borne by the applicant.
- **Policy 3.** Native vegetation shall be protected by minimizing the introduction of dominant nonnative plant species. All development proposals, except intensive agriculture, shall include a landscape plan to identify vegetation to be used on the site and the method of long-term maintenance of landscaped areas. The submitted landscape plan shall be used to verify the acceptability of vegetation for use along the River. Those plants not found acceptable shall not be used.
- **Policy 4.** Existing significant plant specimens and stands of riparian vegetation shall be protected to the greatest extent feasible where channel maintenance is not affected.
- **Policy 5.** Riparian vegetation and wildlife habitat shall be protected within the area of primary floodway to the degree that the floodway will not be obstructed or propagate debris.
- **Policy 6.** The placement of structures and other related accessory uses shall respect wildlife corridors and shall not obstruct nor hinder the movement or migration of wildlife.

Chapter IV. Map Provisions and Policies

The intent of this plan with regard to the Primary and Secondary Floodways of the Kern River is that:

- No development or physical improvements for uses in the Primary Floodway which would restrict flows, interfere with groundwater recharge or increase the rise in water surface during high flows of the Kern River, or displace the primary floodway will be permitted.
- Limited development, with an emphasis on preserving open space within the area of the Secondary Floodway, with recognition of the potential flood hazard that exists therein, may be permitted.

4.8. Industrial

Policies

- **Policy 6.** Industrial areas adjacent to the Kern River primary or secondary floodway should be buffered by landscaping or vegetation to provide the least possible conflict with open space values of the River.

Chapter V. Implementation Policies

B. Open Space and Development

Implementation Policies

- **Implementation Policy 2.** Any new non-open space development, including projects by public agencies, shall not occur without prior City or County approval of a “Development Plan.” The “Development Plan” shall be reviewed for completeness and consistency with the following guidelines:
 - a. Elevation drawings of all proposed structures and signs.
 - b. Landscaping plan which provides for screening of obnoxious uses and respects existing views of the Kern River channel.
 - c. Grading and revegetation plan.
 - d. Plot plan or recent aerial photograph depicting existing uses and natural vegetation cover.
 - e. A biota survey and analysis of effects which development would impose on any significant identified biota.
 - f. A certified delineation of the primary and secondary floodways, if applicable to the site, depicting both predevelopment conditions and future development conditions.
 - g. Other standard zoning and subdivision ordinance requirements in force at the time of application.
- **Implementation Policy 7.** New or relocated utility lines shall be placed underground, except in areas subject to intensive agricultural uses, 8.4 areas (Mineral and Petroleum), and at River crossings or where it can be shown that the specific nature of the facility is such that it is entirely infeasible to do so.

C. Riparian Vegetation

Implementation Policies

- **Implementation Policy 1.** The City and County shall develop a master list of plant species for criteria to approve “Development Plans.” This list shall be considered for incorporation into this plan by General Plan Amendment. Revegetation or landscaping with native or compatible shrubs and trees shall be required as part of all public and private projects. Areas of unique habitat value, such as the Mesquite-Saltbush Association in the vicinity of Enos lane, shall be preserved in accordance with the City’s approved plan for use of the 2,800-acre recharge area and River channel maintenance.
- **Implementation Policy 2.** Prior to any development within the Kern River Plan boundaries, including residential, commercial, industrial, recreational, water recharge, channel improvement, and resource recovery projects, a landscaping plan shall be submitted to the respective City or County Planning Department for review and approval.
- **Implementation Policy 3.** For all new development in residentially, commercially, and industrially zoned properties within the plan boundaries, the River setback area shall be either landscaped or revegetated. Except as might be required by the City or County Fire

Department, no clearing of shrubs or tree cutting will be allowed unless otherwise provided for by this plan.

Metropolitan Bakersfield General Plan (MBGP)

The MBGP, a joint effort between the Kern County Planning Department and the City of Bakersfield Planning Division, was last adopted on December 11, 2007. The MBGP includes both city and unincorporated County lands. The MBGP describes the community's physical development as well as its economic, social and environmental goals and is currently undergoing an update. Project-related development on unincorporated lands within the MBGP Planning Area would be subject to the following applicable policies and implementation measures of the MBGP, with respect to biological resources.

Chapter V. Conservation Element

A. Biological Resources

Goals

- **Goal 1.** Conserve and enhance Bakersfield's biological resources in a manner which facilitates orderly development and reflects the sensitivities and constraints of these resources.
- **Goal 2.** To conserve and enhance habitat areas for designated "sensitive" animal and plant species.

Policies

- **Policy 1.** Direct development away from "sensitive biological resource" areas, unless effective mitigation measures can be implemented.
- **Policy 2.** Preserve areas of riparian vegetation and wildlife habitat within floodways along rivers and streams, in accordance with the Kern River Plan Element and channel maintenance programs designed to maintain flood flow discharge capacity.
- **Policy 3.** Discourage, where appropriate, the use of off-road vehicles to protect designated sensitive biological and natural resources.
- **Policy 4.** Determine the feasibility of enhancing sensitive biological habitat and establishing additional wildlife habitat in the Project Boundary with State and/or federal assistance.
- **Policy 5.** Determine the locations and extent of suitable habitat areas required for the effective conservation management of designated "sensitive" plant and animal species.

Implementation Measures

- **Implementation Measure 1.** When considering discretionary development proposals, consult available biological resource data covering the area. Determine the potential impacts and necessary mitigation measures for identified biological resources, as requiring in the California Environmental Quality Act. Regularly consult with responsible resource agencies.
- **Implementation Measure 3.** Preserve habitat and avoid "take" of protected species as required in the Metropolitan Bakersfield Habitat Conservation Plan.

Chapter VI. Open Space Element

Goal

- **Goal 3.** Locate and site development to minimize the disruption of open space areas.

Policies

- **Policy 1.** Promote the establishment, maintenance and protection of the planning area's open space resources, including the following:
 - a. Conservation of natural resources (refer to Chapter II-Land Use, Chapter V-Conservation, and Chapter XII Kern River Plan Element).
 - Kern River corridor
 - Management of hillsides
- **Policy 5.** Development location and siting should be sensitive to its relationship to the Kern River.
- **Policy 9.** Encourage depleted resource extraction sites to be restored as alternative open space or developed with uses compatible with those adjacent.

4.4.4 Impacts and Mitigation Measures

This section describes the methodology used in conducting the impact analysis for biological resources, the thresholds of significance used in assessing impacts to biological resources, and the assessment of impacts to biological resources, including relevant mitigation measures.

Methodology

This analysis is based on the county-wide biological resources information that is publicly available. The evaluation of the proposed project's potential effects with respect to biological resources is at the program level. This EIR sets forth research criteria and report content needed to enable a project-level evaluation of resource occurrences. Any individual projects resulting from this proposed project would be required to adhere to the research criteria and report content set forth herein and could be required to undergo a separate CEQA evaluation pertaining to project-specific details.

Development Standards Related to Biological Resources

Option A

Option A of the proposed project would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Therefore, no development standards are identified in the proposed Zoning Ordinance; refer to Appendix B for specific wording of the proposed ordinance under Option A.

Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, testing, and retail cannabis stores with or without mobile delivery facilities. Development standards provided in the proposed Zoning

Ordinance, that pertain to biological resources include, but are not limited to, the following (refer to Appendix C for specific working of the proposed ordinance under Option B):

- All cannabis facilities must be 0.5 mile from any school, park, day care center or youth center.
- The applicant must demonstrate compliance with all applicable mitigation measures prior to the issuance of a grading or building permit for any future cannabis related facility.
- A Fire Safety Plan must be approved by the Kern County Fire Department for future cannabis related facilities.
- All entrances to the future cannabis facility shall be clearly marked and legibly posted. No minors or adults below the age of 21 years old will be allowed on the premises.
- A Hazardous Materials Business Plan must be approved by the Kern County Environmental Health Services Division/Hazardous Materials Section.
- Noise from mechanical equipment shall not exceed 30 A-weighted decibels when measured at the property line, between 10 PM and 7 AM.
- Future cannabis related facilities shall be equipped with an effective odor control system which at all times must prevent unreasonable interference with neighbors' use and enjoyment of their property. The odor control system shall: consist of one or more fans; utilize an alternative method or technology to achieve equal to or greater odor mitigation than provided by the fan system; and the system must be maintained in working order and in use.
- For indoor cultivation, processing and packaging, and distribution facilities, the project applicant must prepare an Odor Complaint Management Plan prior to approval of a site plan or issuance of a grading or building permit.
- For cannabis cultivation (indoor and outdoor), processing and packaging, and distribution facilities, on-site energy shall be provided or offset with a solar photovoltaic system; small wind generators may be used only in appropriate areas of Eastern Kern County.
- No cannabis related facility shall have a private patio or café seating.
- The entire property, including the parking and landscaped areas, shall be lighted such that all areas are clearly visible at all times during business hours and shall comply with the Dark Skies Ordinance.
- No organized and advertised tours shall be permitted.
- For cultivation (indoor and outdoor), processing and packaging, and distribution facilities, recycled water use is required.
- Trash dumpsters shall be enclosed and not accessible to the public.

Thresholds of Significance

The Kern County CEQA Implementation Document and Kern County Environmental Checklist State that a project would have a significant impact on biological resources if it would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS;
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act, including, but not limited to, marsh, vernal pool, coastal, etc., through direct removal, filling, hydrological interruption, or other means;
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or,
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan.

Project Impacts

Impact 4.4-1: Have a Substantial Adverse Effect, Either Directly or through Habitat Modifications, on any Species Identified as a Candidate, Sensitive, or Special Status Species in Local or Regional Plans, Policies, or Regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service

A substantial adverse effect to special-status plant species would occur if the project would: (1) reduce the population size or reduce the area of occupied habitat of a rare, threatened, or endangered species; or (2) reduce the population size or reduce the area of occupied habitat of a locally uncommon species. A substantial adverse effect on a special-status wildlife species would occur if the project would: (1) reduce the known distribution of a species; (2) reduce the local or regional population of a species; (3) increase predation of a species, leading to population reduction; (4) reduce habitat availability sufficiently to affect potential reproduction; or (5) reduce habitat availability sufficiently to constrain the distribution of a species and not allow for natural changes in distributional patterns over time.

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A does not provide opportunities for commercial cannabis activities and thus would not result in an increase in the need of land for the cultivation, processing and packaging, and distribution and sale of cannabis. Therefore, Option A would not have a substantial adverse effect on any candidate, sensitive, or special status species. No impact would occur in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 square feet (ft^2) of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft^2 of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

Threatened and endangered candidate, sensitive, and special status wildlife and plant species are found in Kern County (refer to Appendix H of this EIR for the CNDDDB list). Potential commercial cannabis cultivation, both indoor and outdoor, and processing and packaging allowed through implementation of the proposed project could result in special status plant and wildlife species being adversely affected by construction and operational activities. Potential land disturbance activities in locations occupied by special status plant and wildlife species or their habitat could result in both direct and indirect impacts to such species. Direct impact would occur from the reduction of habitat or directly to a species during future cannabis related activities or construction of facilities. Future cannabis-related activities and facilities could indirectly affect special status plant and wildlife species by generating dust, emissions, noise, light, and unintentional spills or discharges; introducing invasive species; or increasing the risk of unauthorized vehicular use or other human activity that disturb occupied or suitable species status species habitats. Impacts specific to impacts related to light, particulate matter, air quality, hazards and hazardous materials, and noise are discussed in Sections 4.1, *Aesthetic and Visual Resources*; 4.3, *Air Quality*; 4.8, *Hazards and Hazardous Materials*, and 4.11, *Noise* of this EIR.

As shown in Appendix D, *Areas with Potential for Future Cannabis Activities and Facilities within Zone Classifications A and A-1*, a total of 2,697,532 acres within zone classifications A (Exclusive Agriculture) and A-1 (Limited Agriculture) would be available for future cannabis related activities as defined in the proposed project. These areas within the County have the potential to contain sensitive natural communities and thus special status plant and wildlife species. This total acreage assumes no future cannabis activities are allowed within a one-mile

boundary from any school, day care center, youth center, or city limit boundary within zone classifications A (Exclusive Agriculture) and A-1 (Limited Agriculture). It should be noted that the proposed ordinance under Option B identifies a 0.5-mile buffer area; however, a one-mile buffer area was used for the purposes of this biological resources analysis in order to analyze the maximum potential impacts, should the Kern County Planning Commission or Board of Supervisors recommend buffer area larger than 0.5 mile.

The proposed project would potentially result in a significant impact on biological resources due to future commercial cannabis-related activities and potential construction of facilities. Mitigation Measures MM 4.4-1 through MM 4.4-11 would require construction-related measures that protect sensitive habitats and prevent disturbed areas from becoming established with invasive, non-native species that can spread into suitable habitat, as well as establish a mitigation ratio to help protect significant stretches of undisturbed land. However, because the proposed project would potentially develop previously undeveloped lands, there could be a significant and unavoidable impact to special status plant and wildlife species or their habitat.

Certain future cannabis-related activities and facilities would require processing a Conditional Use Permit (CUP) and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing before the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to the direct or indirect impacts to special status plant and wildlife species or their habitat would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Biological Resources

1. The FESA provides a program for conservation and recovery of threatened and endangered species, and conservation of designated critical habitat that the USFWS has determined is required for the survival and recovery of these listed species.
2. The MBTA makes it unlawful to pursue, hunt, take, capture, or kill migratory birds; to remove nests occupied by migratory birds during the breeding season; or to take, pursue, molest, or disturb these species, their nests, or their eggs anywhere in the United States.
3. The BGEPA protects bald and golden eagles by prohibiting the taking, possession, and commerce of such birds.
4. The CESA does not allow the State agencies to approve projects that would jeopardize the continued existence of threatened or endangered species if reasonable and prudent alternatives are available. For projects that will result in a take of a State-only listed species, the project proponent must apply for a take permit.

5. CEQA protect biological resources through guidelines, processes, and providing criteria that must be met to determine if a species not listed on the federal or State list may be considered rare or endangered.
6. Sections 3503 and 3503.5 of the California State Fish and Game Code protects birds-of-prey.
7. Sections 1900 through 1913 of the California State Fish and Game Code requires that project proponents conduct botanical inventories and consult with CDFW in order to conserve endangered and rare native plants.
8. Public Resources Code (PRC) § 21083.4 establishes State conservation standards for oak woodlands and requires the adoption of an oak woodland management plan, in any county where oak woodlands occur.
9. There are 11 HCPs and 1 HCP/NCCP applicable to the Valley Region; 1 HCP applicable in the Mountain Region; 2 HCPs and 1 NCCP applicable in the Desert Region; and 4 recovery plans applicable countywide in Kern County.
10. KCCP Land Use, Open Space and Conservation Element Section 1.10.5, Threatened and Endangered Species, Policies 27, 28, 29, 30, 31 and 32; and Implementation Measures Q, R, and S promote the conservation of biological resources.
11. KCCP Land Use, Open Space and Conservation Element Section 1.10.7, Light and Glare, Policies 47 and 48; and Implementation Measure AA minimized the impact of light and glare.
12. KCCP Land Use, Open Space and Conservation Element Section 1.10.10, Oak Tree Conservation, Policies 65 and 66; and Implementation Measures KK and LL promote the conservation of oak woodlands and large oak trees.
13. MBGP Conservation Element Policies 1, 2, 3, 4, and 5 relate to the conservation of biological resources.
14. MBGP Open Space Element Policies 1, 5, and 9 relate to the conservation of open space.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

Implement Mitigation Measures MM 4.2-1 and MM 4.2-2, as described in Section 4.2, *Agriculture and Forest Resources*, Mitigation Measure MM 4.1-5, as described in Section 4.1, *Aesthetics*, Mitigation Measures MM 4.3-1 through MM 4.3-5, as described in Section 4.3, *Air Quality*, Mitigation Measures MM 4.8-1 through MM 4.8-6, as described in Section 4.8, *Hazards and Hazardous Materials*, Mitigation Measure MM 4.9-1 through MM 4.9-5, as described in Section 4.9, *Hydrology and Water Quality*, and Mitigation Measure MM 4.11-1, as described in Section 4.11, *Noise*.

MM 4.4-1

Prior to site plan approval, or as part of any application for a conditional use permit, a summary biological report shall be prepared and submitted by a qualified biological consultant detailing the habitat on the site, the quality of the habitat, potential for threatened and endangered species and plants, and any applicable Habitat Conservation Plan or completed mitigation for the site.

Special status wildlife surveys must be completed by a qualified biologist, as defined by United States Fish and Wildlife Service, within a 30-day period prior to commencement of new ground-disturbance construction activities for new cannabis related facilities. The purpose of the pre-disturbance surveys is to confirm the presence or absence of any species listed as threatened or endangered under the federal Endangered Species Act, threatened or endangered under the California Endangered Species Act, or designated as fully-protected in the California Fish and Game Code (collectively, “Protected Species”), and to confirm the presence or absence of any other species considered “sensitive” under California Environmental Quality Act (“Sensitive Species”), and to identify and implement feasible avoidance and minimization measures for such species. The surveys shall be conducted in accordance with all currently-applicable presence and absence survey and/or species protocols established by the United States Fish and Wildlife Service and the California Department of Fish and Wildlife (“Species Protocols”). In the absence of any approved protocols, the survey shall extend for a minimum of 250 feet from all areas where any ground disturbance activities would occur, provided that permission to access areas outside of the future cannabis property has been obtained. As an alternative to individual pre-disturbance surveys for each application, and after consultation with and concurrence by the California Department of Fish and Wildlife and the United States Fish and Wildlife Service, multiple parcels or areas of commercial cannabis lands (including lands which may have multiple ownership) may be consolidated for the purpose of more efficiently managing pre-disturbance surveys and determinations regarding the absence of protected species in areas of proposed new ground disturbance activities.

MM 4.4-2

Pre-disturbance surveys for active bird nests must be conducted no more than 10 days prior to the commencement of disturbance. Surveys shall follow United States Fish and Wildlife and California Department of Fish and Wildlife guidance and/or protocols. If no active nests or nesting birds are identified, then project construction activities may proceed and no further mitigation measures for nesting birds are required. If active nest(s) are identified, the active nest(s) should be continuously surveyed for the first 24 hours after detection, to establish a behavioral baseline prior to any construction-related activities. Once construction commences, all nests shall be continuously monitored to detect any behavioral changes as a result of the project (i.e., nest avoidance or abandonment). If behavioral changes are observed, the work causing that change should cease and the California Department of Fish and Wildlife should be consulted for additional avoidance and minimization measures. If continuous monitoring of identified nests by a qualified wildlife biologist is not feasible, a minimum no-disturbance buffer of 250 feet will be established around active

nests and a 500-foot no-disturbance buffer around the nests of raptors until the breeding season has ended, or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival, and any adult birds are no longer occupying the nest. Variance from these no-disturbance buffers may be implemented by a qualified biologist concludes that work within the buffer area would not cause nest avoidance or abandonment (e.g., when the disturbance area would be concealed from a nest site by topography). The California Department of Fish and Wildlife and the United States Fish and Wildlife must be notified in advance of implementing of a variance in the no-disturbance buffer.

MM 4.4-3

With the exception of focused surveys that are seasonally restricted, special status wildlife species, other than nesting birds as discussed in Mitigation Measure MM 4.4-2, surveys must be completed by a qualified biologist, as defined by United States Fish and Wildlife Service, within a 30-day period prior to commencement of new ground-disturbance construction activities for new cannabis related facilities.

- a. Any special status wildlife maternity dens identified during pre-disturbance surveys must be avoided to the maximum extent feasible. If a maternity den cannot feasibly be avoided, the California Department of Fish and Wildlife and/or the United States Fish and Wildlife Service must be contacted to identify appropriate impact minimization measures prior to initiating any disturbance that would affect the den, including potential passive relocation by excavation before or after the rearing season.
- b. If any potential special status wildlife dens are identified during pre-disturbance surveys, the dens shall be marked and a 50-foot avoidance buffer shall be delineated using stakes and flagging or similar materials to prevent inadvertent damage to the potential den. If a potential den cannot feasibly be avoided, then the California Department of Fish and Wildlife and/or the U.S. Fish and Wildlife Service shall be contacted to identify appropriate impact minimization measures prior to initiating any disturbance that would affect the den.

MM 4.4-4

The pre-disturbance surveys shall determine whether active bat maternity roosts are located in or within 250 feet of any disturbance area. All active bat maternity roosts shall be avoided during breeding periods, including postponing disturbance activities if required, and to the maximum extent feasible at other times. If an active bat maternity roost location cannot feasibly be avoided by disturbance, the United States Fish and Wildlife Service and California Department of Fish and Wildlife must be contacted to identify appropriate impact minimization measures prior to initiating any disturbance that would affect the roost.

MM 4.4-5

For any cannabis establishment on a land zoned A and A-1 in the Desert Region, if pre-disturbance surveys identified Joshua trees or Joshua tree woodlands on the property, the project proponent applicant submit a Joshua Tree Preservation Plan. The Joshua Tree Preservation Plan may either be a stand alone document or it may be included as

part of a Habitat Restoration and Revegetation Plan. The plan shall identify the following:

- a. Specific efforts that will be made during construction activities to minimize vegetation removal and permanent loss at construction sites. If necessary, native vegetation should be flagged for protection. When non-native vegetation is removed or disturbed, then native vegetation shall be the replacement. The plan shall identify specific methods for avoiding Joshua tree woodlands and protected cactus.
- b. A Joshua tree woodland and cactus survey shall be conducted within areas proposed for disturbance as part of the overall Joshua Tree Preservation Plan. All Joshua tree woodlands and cactus within disturbance areas shall be mapped, and their condition recorded. Suitable candidates for translocation shall be identified and this strategy shall be employed over removal when feasible. The plan shall disclose the amount of acres of Joshua tree woodland to be removed based on final construction and operation activities. This quantification shall be used for compensation purposes. To compensate for the loss of Joshua tree woodlands, one of the following options, or a combination of both options, as approved by the Director of Kern County Planning and Natural Resources Department shall be required:

Option 1:

On-site or off-site preservation of Joshua tree woodland habitat shall occur on parcels within Kern County that contain at minimum the number of individual Joshua trees impacted by the project. The project applicant may mitigate all or part of the project's impacts to Joshua trees on-site, as follows: Delineate and designate one or more parcels for dedication for permanent conservation management; establish a conservation easement on those parcels, the easement to be held and managed by a suitable management entity as determined by the Director of the Kern County Planning and Natural Resources Department; prepare and implement a Joshua Tree Management Plan to maintain habitat conditions on the site in perpetuity; and provide a non-wasting endowment sufficient to implement the plan in perpetuity. The mitigation lands shall provide habitat at a 1:1 ratio for impacted lands, comparable to habitat to be impacted by the project (i.e., similar abundance and size of Joshua trees, similar dominant vegetation community, and similar levels of disturbance or habitat degradation). Suitable mitigation lands provided for other species may be used for Joshua tree woodland mitigation, at a 1:1 ratio. The Management Plan shall specify maintenance and monitoring requirements for each parcel, which shall include but shall not be limited to fencing and access control; signage; security and enforcement; weed control; control measures for feral animals or pets; native habitat enhancement; fire prevention and management; and other long-term habitat considerations as appropriate.

Option 2:

In lieu monetary funding. The project applicant may mitigate all or part of the project's impacts to Joshua tree woodlands by funding the acquisition and

management in perpetuity of Joshua tree woodland habitat or habitats similar to those that contain impacted Joshua trees on site. The in-lieu fee shall provide sufficient funds to acquire appropriate lands in the Antelope Valley in Kern or Los Angeles County to provide habitats containing Joshua trees at a 1:1 ratio for impacted lands, comparable to habitat to be impacted by the project (i.e., similar abundance and size of Joshua trees, similar dominant vegetation community, similar levels of disturbance or habitat degradation).

MM 4.4-6 Exclusion barriers or buffers may be used, where effective and feasible in the opinion of the qualified biologist, to avoid any unauthorized incidental take of Protected Species, and to minimize any incidental take of Sensitive Species, by separating the planned disturbance area from any locations where pre-disturbance surveys or previously conducted focused surveys detected the presence of Protected Species or Sensitive Species. All buffers must extend for a minimum of 50 feet from the nearest point of disturbance to avoid unauthorized take of protected species, and the barriers must prevent the potential migration of wildlife into the construction area and unlawful incidental take of any Protected Species during ground disturbance activities. The minimum buffer distance shall be increased if required to avoid unauthorized incidental take of any Protected Species as determined by a qualified biologist. Exclusion barriers, buffer distances, and other avoidance measures that may be implemented to avoid impacts to Protected Species or Sensitive Species must be consistent with the U.S. Fish and Wildlife Service and/or the California Department of Fish and Wildlife, and shall be implemented and overseen by the qualified biologist.

MM 4.4-7 A Worker Environmental Awareness Program shall be developed and implemented for all personnel that could access the site prior to commencing any disturbance activities. The program shall consist of an on-site or center presentation that will describe the locations and types of sensitive plant, wildlife, and sensitive natural communities (collectively known as Biological Resources) on and near the site, an overview of the laws and regulations governing the protection of Biological Resources, the reasons for protecting the Biological Resources, the specific protection and avoidance measures that are applicable to the site, and the identity of designated points of contact should questions or issues arise, including the qualified biologist. The program shall provide training to recognize, avoid and report to applicable qualified biologists any Biological Resources on the site.

- a. The Worker Environmental Awareness Program shall emphasize the need to avoid contact with onsite wildlife, and avoid entry into areas where Biological Resources have been identified based on pre-disturbance field surveys and to implement the buffer avoidance or other protection measures established by the U.S. Fish and Wildlife Service shall be identified California Department of Fish and Wildlife or required by the Biological Resource mitigation measures. The training shall emphasize the importance of not feeding or domesticating wildlife and the need to avoid any trash, microtrash, or potential food disposal onsite except in animal-proof

containers emptied daily to avoid attracting, or causing adverse impacts to special status wildlife.

- a. All on-site personnel must sign a statement verifying that they have completed the Worker Environmental Awareness Program, and that they understand and agree to implement the biological requirements for the worksite. If signed employee statements are not available, documentation may be provided by Worker Environmental Awareness Program training records, which shall be kept by the Applicant for a minimum of 5 years. Each Applicant shall maintain a list of all persons who have completed the training program, and shall provide the list to the County or to State and federal wildlife agency representatives upon request.

MM 4.4-8 During any facility construction or operation of a facility located adjacent to undeveloped A or A-1 zoned parcels, the project applicant shall continuously comply with the following provisions:

a. Construction Work Hours

The project applicant, in consultation with the qualified biologist, shall ensure that construction activities within 50 feet of the outside edge of the project footprint will be prohibited between sunset and sunrise, and all construction-related lighting will be turned off during that period, with the exception of lighting for maintenance, security patrols, and emergency (defined by an imminent threat to life or significant property) activities. Lighting for maintenance within 50 feet of the outside edge of the project footprint will be directed away from natural areas.

b. Flagging/Fencing/Demarcation

The project applicant, in consultation with the qualified biologist, shall designate the construction area and any buffer zones using highly visible materials in the field and review with the contractor in accordance with the final grading plan. State-jurisdictional channels or wetland/ riparian areas, or other sensitive habitat within 50 feet of the construction area, but outside the project property, will also be demarcated in the field and avoided.

c. Debris/Non-Native Vegetation/Pollution

The project applicant, in consultation with a qualified biologist, shall monitor construction and operation of facilities to ensure:

- 1) Fully covered trash receptacles that are animal-proof will be installed and used to contain all food, food scraps, food wrappers, beverage containers, and other miscellaneous trash. Trash contained within the receptacles will be removed at least once a week from the construction site.
- 2) No litter, construction materials, or debris will be discharged into State-jurisdictional waters.

- 3) All uses of weed and pest control compounds shall comply with the application restrictions mandated by the U.S. Environmental Protection Agency and the California Department of Pesticide Regulation.
- 4) Construction work areas shall be kept clean of debris, such as cable, trash, and construction materials. All construction/contractor personnel shall collect all micro trash and litter (anything shiny, such as broken glass), vehicle fluid containers, and food waste from the project area on a daily basis.
- 5) No construction material shall be stockpiled in the streambed, banks, or channels, except that native vegetation removed from the channel may be chipped and the chips used as mulch for disturbed sites in or near the work sites.
- 6) All disturbed invasive plants, such as tamarisk, shall be removed from the work site and not used in mulching, composting, etc. If weed biomass must be removed from the site to a designated disposal area, propagules shall be secured in a tarp (without holes or rips) and then carried to a vehicle. Biomass shall be properly wrapped to prevent plant parts from blowing away in transit, and vehicles carrying weed biomass shall be inspected prior to leaving the site to ensure that no plant parts are resting on the bumpers, tailgates, or other exposed areas.

d. Vehicle and Equipment Restrictions and Maintenance

The project applicant, in consultation with the qualified biologist, shall monitor construction to ensure:

- 1) Maximum construction vehicle speed will be 20 miles per hour (mph) within the project footprint. Nighttime construction should be minimized to the extent possible. However, if nighttime construction or construction-related activity (e.g., security patrols, equipment maintenance) is necessary, then the speed limit shall be 10 mph.
- 2) Vehicle operation within State-jurisdictional waters when surface water is present will be prohibited. Any equipment or vehicles driven and/or operated within or adjacent to a State-jurisdictional channel will be checked and maintained by the operator daily to prevent leaks of oil or other petroleum products that could be deleterious to aquatic life if introduced to the watercourse.
- 3) Vehicles and equipment access will be limited to the project footprint and ingress and egress on existing roads.
- 4) Staging and storage areas for spoils, equipment, materials, fuels, lubricants, and solvents will be located outside the State-jurisdictional channels and within the designated project footprint. Stationary equipment, such as motors, pumps, generators, compressors, and welders, located within or adjacent to State-jurisdictional waters shall be positioned over drip-pans or other containment. Prior to refueling and lubrication, vehicles and other equipment shall be moved away from the State-jurisdictional channels.

e. Erosion/Silt

The project applicant, in consultation with the qualified biologist shall monitor construction to ensure:

- 1) During construction activities, temporary erosion control devices, such as straw bales, silt fencing, and sand bags, shall be used to prevent siltation in State-jurisdictional areas. Coir rolls, erosion control mats or blankets, straw or fiber wattles, or similar erosion control products shall be composed of natural-fiber, biodegradable materials; photodegradable or other plastic erosion control materials shall be prohibited.
- 2) Silt settling basins installed during the construction process will be located away from areas of ponded or flowing water to prevent discolored, silt-bearing water from reaching areas of ponded or flowing water during normal flow regimes.

f. Other Restrictions on Construction Activities and Personnel

The project applicant, in consultation with the qualified biologist shall monitor construction to ensure:

- 1) During construction, no pets, such as cats or dogs, should be permitted on the project's construction sites.
- 2) No commercial hunting will be authorized or permitted on a portion of the project site under construction.
- 3) Any contractor, employee, or agency personnel who are responsible for inadvertently killing, injuring, or trapping a listed species (e.g., San Joaquin kit fox, blunt-nosed leopard lizard, desert tortoise) shall immediately report the incident to the project Lead Biologist. The project Lead Biologist shall contact the U.S. Fish and Wildlife Service (USFWS) (for federal Endangered Species Act (FESA) species) and California Department of Fish and Wildlife (CDFW) (for California Endangered Species Act (CESA) species) immediately in the case of a dead, injured, or entrapped listed species. The Sacramento USFWS Office and CDFW or other office as determined by the wildlife agency, shall be notified in writing within 3 working days of the accidental death or injury to a listed species during project-related activities. Notification must include the date, time, and location of the incident or of the finding of a dead or injured animal and any other pertinent information. To prevent inadvertent entrapment of Protected and Sensitive species (e.g., San Joaquin kit fox) during construction, all excavated, steep-walled holes or trenches more than 2 feet deep shall be covered with plywood or similar materials at the close of each working day, or be provided with one or more escape ramps constructed of earth fill or wooden planks. Before such holes or trenches are filled, they shall be thoroughly inspected for trapped Protected and Sensitive species. If trapped Protected and Sensitive species are observed, escape ramps or structures shall be installed immediately to allow escape. If

San Protected and Sensitive species are trapped, the USFWS and CDFW shall be contacted.

- 4) All pipes, culverts, or similar structures with a diameter of 4 inches or more that are stored at a construction site for one or more overnight periods shall be thoroughly inspected for Protected and Sensitive species before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If Protected and Sensitive species is discovered inside a pipe, the project biologist shall flush the species from the pipe. If Protected and Sensitive species is discovered, that section of pipe shall not be moved until the USFWS and/or CDFW has been consulted. If necessary, under the direct supervision of the project biologist, the pipe may be moved once to remove it from the path of construction activity until the species has escaped.

g. Biological Monitoring and Compliance Documentation

The project applicant, in consultation with the qualified biologist shall be responsible for maintaining a database and/or tracking the following during construction:

- 1) Document that required pre-construction surveys, avoidance, mitigation, and/or relocation efforts that have been implemented.
- 2) Document compliance with construction measures (b)-(f) above.
- 3) Document compliance with worker training.

MM 4.4-9

Prior to issuance of a site plan approval and in conjunction with a building or grading permit, if grading is required on-site, the project applicant shall submit a grading plan. Any application for a conditional use permit shall include a grading plan, if required. The grading plan shall identify:

- a. All areas where grading will result in permanent changes to the existing landscape.
- b. All areas where grading activities will be temporary during any construction activities.
- c. All fences installed on the project site will be a maximum of eight (8) feet in height, wire strand, and with a smooth bottom wire at least eighteen (18) inches from the ground to facilitate wildlife movement, except in the Desert Region for permanent exclusionary fencing for the desert tortoise. Fencing in conjunction with a retail cannabis store shall be as required under the conditions of the conditional use permit. A block wall shall be required if adjacent to any residentially designated, zoned, or established property.

MM 4.4-10

The following provisions shall appear as notes on any site development plans for cannabis establishments. Any application for a conditional use permit shall include the following provisions as notes on any site development plans:

- 1) Intentional feeding of Protected and Sensitive Species, including, but not limited to, California condor, bald and golden eagle, and San Joaquin kit fox, is prohibited.
- 2) Use of anticoagulants (used for rodent control) at the site shall be prohibited.

- 3) Exterior lighting shall adhere to dark sky principles and be fully shielded and directed downward in a manner that will prevent light spillage or glare and still maintain adequate lighting for safety and security.
- 4) Property owners shall keep trash in covered containers that are fitted with animal- and weather-resistant lids.

MM 4.4-11 The following additional measures shall be implemented regarding Protected and Sensitive Species:

- a. All vehicles shall observe a 20-mile-per-hour speed limit in all areas of disturbance and on unpaved roads unless otherwise posted. Off-road traffic outside of designated access routes is prohibited. Speed limit signs shall be posted in visible locations at the point of site entry and at regular intervals on all unpaved access roads.
- b. All disturbance activities, except emergency situations or drilling that may require continuous operations, shall only occur during daylight hours. Night time disturbance activity for drilling purposes shall use directed lighting, shielding methods, or reduced lumen intensity to avoid unnecessary visual disturbance to wildlife and to comply with applicable lighting mitigation measures.
- c. All food-related trash items and all forms of microtrash, such as wrappers, cans, bottles, bottle tops, and food scraps shall be disposed of in closed, animal proof containers and removed daily from the site.
- d. Excavations, spoils piles, access roadways, and parking and staging areas shall subject to dust control as set forth in the dust control mitigation measures.
- e. The use of herbicides, rodenticides, or fertilizers for vegetation control shall be restricted to those approved by the United States Fish and Wildlife Service and the California Department of Fish and Wildlife. No rodenticides shall be used on any site unless approved by the United States Fish and Wildlife Service, and the California Department of Fish and Wildlife, and shall observe label and other restrictions mandated by the United States Environmental Protection Agency, California Department of Food and Agriculture, and State and federal laws and regulations.
- f. No plants or wildlife shall be collected, taken, or removed from the site or any adjacent locations except as necessary for project-related vegetation removal or wildlife relocation by a qualified biologist and subject to all applicable permits and authorizations.
- g. All open trenches or excavations shall be covered at the end of each workday to prevent wildlife entrapment. If an excavation is too large to cover, escape ramps shall be installed at an incline ratio of no greater than 2:1 to. All trenches and pipes shall be inspected for the presence of wildlife each day prior to the commencement of work.

- h. All vertical tubes used in project construction and chain link fencing poles, shall be temporarily or permanently capped to avoid the entrapment and death of special-status wildlife and birds.
- i. If dead or injured special status wildlife are found on the project parcel, the animal shall be left in place and reported to the United States Fish and Wildlife Service and the California Department of Fish and Wildlife within 48 hours of discovery for rescue or salvage. Discovery of State or federal listed species that are injured or dead shall also be reported immediately via telephone and within 24 hours in writing, and with a copy to Kern County Planning and Natural Resources Department.
- j. Vehicle, equipment, and material storage must be limited to the project parcel. No construction or operational materials may be placed or stored outside of the planned disturbance area or stockpiled for future disposal. All concrete, asphalt, and building and equipment debris shall be removed from the site for recycling or proper disposal.
- k. No vehicles or construction equipment shall be parked within a wetland or waterbody/dry wash.
- l. Tracked vehicles and other construction equipment must be washed or maintained to be weed-free prior to entering and working within areas of new disturbance.
- m. All washing of trucks, paint, equipment, or similar activities should occur in areas where runoff is fully contained for collection and offsite disposal. Wash water may not be discharged from the site and shall be located at least 100 feet from any water body, or sensitive Biological Resources.
- n. Locate all extra work areas (such as staging areas and additional storage areas) at least 50 feet away from wetland boundaries or waterbody, except where the adjacent upland consists of cultivated or rotated cropland or other disturbed land.
- o. All areas that must be avoided as result of the pre-disturbance surveys, and areas where new disturbance will occur, shall be clearly delineated by fencing or staking and flagging and/or rope or cord.
- p. No firearms shall be allowed on any site.
- q. No pets shall be allowed on any site.
- r. No smoking may occur except in designated areas.

Level of Significance after Mitigation

No impact would occur with respect to Option A. Impacts regarding Option B would be significant and unavoidable.

Impact 4.4-2: Have a Substantial Adverse Effect on Any Riparian Habitat or Other Sensitive Natural Community Identified in Local or Regional Plans, Policies, Regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service

A substantial adverse effect on riparian habitat would occur if the project would result in a net loss of riparian habitat on the project site.

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A does not provide opportunities for commercial cannabis activities and thus would not result in an increase in the need of land for the cultivation, processing and packaging, and distribution and sale of cannabis. Therefore, Option A would not have a substantial adverse effect on any riparian habitat or other sensitive natural community. No impact would occur in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

Many of the open spaces throughout the project site (unincorporated Kern County) support native creeks and streams. The Kern River is the county's largest watershed system. Other creeks in the County that typically have water year-round include, but are not limited to, Poso Creek and El Paso Creek along with their tributaries. The County contains many ephemeral streams including, but not limited to Caliente, Tehachapi, San Emigdio, and Grapevine creeks are typically creeks with water until late in the season; however, in wet years, these creeks may have water year-round. In addition, the County contains many canyons, ravines, drainages and other topographical low points throughout the Valley, Mountain, and Desert regions that would potentially be considered jurisdictional areas.

As listed in Table 4.4-1 and described in Section 4.4.2, *Environmental Setting*, subheading *Special Status Species and Habitats*, there are more than 40 sensitive natural communities within Kern County. These sensitive communities are considered rare by CDFW and worthy of listing within the CNDDDB due to their limited distribution. Impacts to these habitats would contribute to the cumulative loss and/or degradation of habitats within the vicinity. In addition, USFWS-designated critical habitat is present within Kern County for six wildlife species (refer to Figure 4.4-2). These sensitive natural communities provide important habitat for the special-status plant and wildlife species found within Kern County; for a full list of species refer to Appendix H.

Future cannabis-related facilities and activities, such as removing vegetation for the construction of a new facility or for the outdoor cultivation of crops, would directly impact riparian areas or other sensitive communities and thus special-status plant and wildlife species. Impacts to these sensitive natural communities would be considered potentially significant and mitigation is required.

Indirect impacts resulting from implementing Option B include hydromodification; chemical releases such as oils and grease from vehicles that could degrade habitat and pesticides and fertilizers, including effects such as weakening native species and/or allowing establishment of non-native species in edge areas; habitat fragmentation; increased invasive plant species that may degrade habitat; and increased future cannabis-related cultivation activities could result in removal of vegetation and soil compaction, which could affect soil moisture, water penetration, surface flows, and erosion could degrade jurisdictional areas. These indirect impacts could degrade CDFW- and RWQCB-jurisdictional areas, other USGS stream features, alluvial plains, or other sensitive natural communities over the long-term and would be considered potentially significant and mitigation would be required.

The introduction of nonnative and invasive weed species is a special concern for native plant communities. Nonnative and invasive weeds pose a threat to the natural processes of plant community succession, fire frequency, biological diversity and species composition. Nonnative and invasive weeds can affect the persistence of some populations of special-status species by replacing the foraging base, altering habitat structure, or excluding a species by vegetative growth. The potential introduction or spread of nonnative and invasive weeds would be related to ground disturbance from future cannabis related facilities and activities, such as clearing and grading for construction of future facilities or for future outdoor cultivation; the use of vehicles, both construction and cultivation related; use of straw bales or wattles that contain seeds of non-native plant species; and increased use of properties containing future cannabis-related facilities. Weed seeds are often spread on equipment or clothing. This would provide many avenues for any

part of a plant that may generate a new individual plant to be carried into areas that previously were isolated from sources of nonnative weed seeds.

Typically, in areas where few exotic species occur, the characteristics of the existing topsoil structure, cryptogammic crusts, or the existing native vegetation prevent weed seeds from germinating. Once soil disturbance has occurred, the soil structure or native biotic components are affected such that these factors no longer preclude the establishment of noxious or invasive weeds. Following establishment, new populations of weeds are often extremely difficult to eradicate, especially in arid environments. It may take several years or decades to re-establish the native soil structure and biota.

As many nonnative weeds occurring in southern California are fast-growing plants adapted to high light conditions, the removal of canopy vegetation, either in woodlands or in scrub habitats, may release weed seeds present in the seed bank from dormancy and allow them to germinate and establish.

Direct impacts associated with the introduction of nonnative weeds could occur when nonnative weeds become established in an area. These invasive plant species can cause a permanent or long-lasting change to the environment by increasing vegetative cover, creating a dense layer that prevents native vegetation from germinating, altering the edaphic and hydrological conditions through nitrogen fixation, or may drain the water table. Nonnative weeds can create such an unfavorable environment for wildlife that associate, mutualistic species necessary for native plant life cycles, such as seed dispersers, fossorial mammals, or pollinators, are lost from the area.

Indirect impacts attributed to the colonization of nonnative weeds could include a gradual decrease in natural biodiversity as nonnative weed infestations may extirpate native plant populations. Implementation of Option B could include the facilitation of nonnative weed establishment and spread as a result of increased vehicular and human activities.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing before the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to the direct or indirect impacts to riparian habitat or other sensitive natural community would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Biological Resources

Refer to Impact 4.4-1, above, for a summary of applicable existing regulations and policies related to special status plant and wildlife species and biological resources. In addition, the following are also applicable.

1. Sections 1600 through 1616 of the California State Fish and Game Code requires project proponents to notify CDFW prior to any project that would divert, obstruct, or change the natural flow, bed, channel, or bank of any river, stream, or lake.
2. KCCP Land Use, Open Space and Conservation Element Section 1.10.6, Surface and Ground Water, Policy 44 prevents the degradation of the watershed.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

Implement Mitigation Measure MM 4.4-1 through MM 4.4-11, as described above, Mitigation Measure MM 4.1-5, as described in Section 4.1, *Aesthetics*, Mitigation Measures MM 4.2-1 and MM 4.2-2, as described in *Agriculture and Forest Resources*. Implement Mitigation Measures MM 4.3-1 through MM 4.3-5, as described in Section 4.3, *Air Quality*, Mitigation Measures MM 4.8-1 through MM 4.8-6, as described in Section 4.8, *Hazards and Hazardous Materials*, Mitigation Measure MM 4.9-1 through MM 4.9-5, as described in Section 4.9, *Hydrology and Water Quality*, and Mitigation Measure MM 4.11-1, as described in Section 4.11, *Noise*.

MM 4.4-12 No land disturbance activity in State or federally regulated wetlands and waters, shall occur unless the activity is specifically authorized by the issuance of permits or approvals as required by State and federal law. This provision is not intended to restrict survey activities.

Level of Significance after Mitigation

No impact would occur with respect to Option A. Impacts regarding Option B would be significant and unavoidable.

Impact 4.4-3: Have a Substantial Adverse Effect on Federally Protected Wetlands as Defined by Section 404 of the Clean Water Act (Including, but not Limited to, Marsh, Vernal Pool, Coastal, etc.) Through Direct Removal, Filling, Hydrological interruption, or Other Means

A substantial adverse effect to federally protected wetlands would occur if the proposed project would result in a net loss of federally protected wetlands within unincorporated Kern County.

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to

cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A does not provide opportunities for commercial cannabis activities and thus would not result in an increase in the need of land for the cultivation, processing and packaging, and distribution and sale of cannabis. Therefore, Option A would not have a substantial adverse effect on any federally protected wetlands. No impact would occur in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

Future cannabis-related activities could, depending on location relative to existing infrastructure, require construction of new or expanded facilities. These future facilities would be required to comply with federal, State, and local laws and regulations, including, but not limited to, Section 401 and/or Section 404 of the Clean Water Act, California Fish and Game Code 1600, KCGP, MBGP, and any applicable specific plan, HCP and/or NCCP. Compliance to federal, State, and local laws, regulations, and policies would reduce anticipated impacts related to future cannabis-related facilities located in close proximity to federally protected wetlands. Impacts are potentially significant.

Implementation of Mitigation Measures MM 4.9-1 through MM 4.9-5 would further reduce impacts of Option B as related to wetlands. In addition, permitting requirements for any impacts to these habitats would include permits for Section 404 of the Clean Water Act of 1972 (33 U.S.C. 1344) and the California Fish and Game Code Section 1602 Streambed Alteration Agreement. Compliance with any required mitigation measures ensure that potential impacts relating to wetlands would be reduced to insignificant levels.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing before the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial)

and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to the direct or indirect impacts federally protected wetlands would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Biological Resources

Refer to Impacts 4.4-1 and 4.4-2, above, for a summary of applicable existing regulations and policies related to jurisdictional waters and related biological resources.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

Implement Mitigation Measures MM 4.4-1 through 4.4-12, as described above, and Mitigation Measures 4.9-1 through 4.9-5, as described in Section 4.9, *Hydrology and Water Quality*.

Level of Significance

No impact would occur with respect to Option A. Impacts regarding Option B would be less than significant impact.

Impact 4.4-4: Interfere Substantially with the Movement of any Native Resident or Migratory Fish or Wildlife Species or with Established Native Resident or Migratory Wildlife Corridors, or Impede the Use of Native Wildlife Nursery Sites

Substantial interference with the movement of any native resident or migratory wildlife species or with resident or migratory wildlife corridors would occur if the project would prevent or hinder wildlife movement through established native resident or migratory wildlife corridors or habitat linkages. A substantial effect on wildlife nursery sites would occur if the project would prevent or hinder a wildlife species from using important sites that support reproductive activities (e.g., breeding, nesting, rearing of young).

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to

cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A does not provide opportunities for commercial cannabis activities and thus would not result in an increase in the need of land for the cultivation, processing and packaging, and distribution and sale of cannabis. Therefore, Option A would not interfere substantially with migratory wildlife corridors or wildlife nursery sites. No impact would occur in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

The length and width of wildlife movement corridors within Kern County have not been precisely determined and most correspond with major geographic features that are likely to facilitate species movement. The mountain ranges within the County form wildlife corridors because of the biogeographical linkage they provide between each other as well as between the Valley and Desert regions and the high-elevation forests. Waterways can also provide connectivity between habitats. The Valley and Desert regions have varying connectivity between natural habitat areas because of the amount of developed or agricultural land. Kern County also contains stopovers and traps for birds migrating along the Pacific Flyway.

Future commercial cannabis-related facilities and activities would affect wildlife in adjacent habitats by interfering with movement patterns or causing animals to temporarily avoid areas adjacent to future cannabis-related activities or construction of cannabis-related facilities due to noise and human activity. Noise, ground vibration, an increase in non-native animal species (including mesopredators and urban-related predators such as crows, ravens, skunks, raccoons, and red foxes) and pets, increased vehicle collisions, and increased human activity are all aspects of future cannabis-related activities that could affect wildlife movement. In general, nocturnal (i.e., active at night) wildlife would be affected less than diurnal (i.e., active during the day) species since future cannabis-related activities would occur primarily during daylight hours.

To reduce potential impacts, future cannabis-related facilities and activities should be designed to avoid disturbances to wildlife corridors and comply with Mitigation Measures MM 4.4-1 through

MM 4.4-12 as appropriate. Compliance with mitigation measures ensure that potential impacts to any wildlife corridor would be reduced to insignificant levels.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing for the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to the direct or indirect impacts to wildlife movement and corridors would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Biological Resources

Refer to Impacts 4.4-1 and 4.4-2, above, for a summary of applicable existing regulations and policies related to jurisdictional waters and related biological resources.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

Implement Mitigation Measures MM 4.4-1 though MM 4.4-12, as described above.

Level of Significance after Mitigation

No impact would occur with respect to Option A. Impacts regarding Option B would be less than significant.

Impact 4.4-5: Conflict with Any Local Policies or Ordinances Protecting Biological Resources, Such as a Tree Preservation Policy or Ordinance

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A does not provide opportunities for commercial cannabis activities and thus would not result in an increase in the need of land for the cultivation, processing and packaging, and distribution and sale of cannabis. Therefore, Option A would not conflict with any local policies or ordinance protecting biological resources. No impact would occur in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

The KCGP and other ordinances and the MBGP include policies that protect several biological resources as summarized in Section 4.4.3, *Regulatory Setting*, including special status plant and wildlife species, sensitive natural communities, wetlands, waters and riparian habitats and the Kern River corridor.

Section 1.10.10 of the KCGP provides policies and implementation measures for the conservation of oak woodlands and individual oak trees. These policies and measures generally require avoidance of oak tree impacts, and the implementation of other protection measures for sites that have more than 10 percent oak tree cover (oak woodlands) and sites that have less than 10 percent oak tree cover. There are over 750,000 acres of healthy oak woods in Kern County. The establishment of outdoor cultivation in a forest area or that creates the removal of oak trees or oak woodlands could result in erosion, interference with grazing operations, impacts to existing livestock operations and interference with conservation lands which are already protected in the mountain areas. Future cannabis-related activities and facilities that are located within oak woodland habitats or could directly impact any mature oak woodlands or mature oak trees would conflict the provisions of the KCGP. This would be considered a potentially significant impact.

Mitigation Measure MM 4.2-2 requires oak woodlands be replaced at a ratio of 1:1 net acreage for any cannabis related facility where land includes oak woodlands. Oak woodlands are defined in the KCGP Section 1.10.10, *Oak Tree Conservation*, as having a canopy cover by oak trees of ten percent (10%) or more of the parcel. Mitigation Measure MM 4.4-5 requires pre-disturbance surveys for Joshua trees and Joshua tree woodlands for cannabis related facilities on land zoned A and A-1 in the Desert Region. If Joshua trees or Joshua tree woodlands are identified, a Joshua

Tree Preservation Plan would be required. Therefore, Option B would not conflict with local policies or ordinances protecting biological resources. Impacts would be less than significant.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing for the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to conflicts with a local policy or ordinance protecting biological resources, including tree preservation policies or ordinances, would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Biological Resources

Refer to Impacts 4.4-1 and 4.4-2, above, for a summary of applicable existing regulations and policies related to jurisdictional waters and related biological resources.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

Implement Mitigation Measures MM 4.4-1 through MM 4.4-12, as described above, and Mitigation Measure MM 4.2-2, as described in Section 4.2, *Agriculture and Forest Resources*.

Level of Significance

No impact would occur with respect to Option A. Impacts regarding Option B would be less than significant.

Impact 4.4-6: Conflict with the Provisions of an Adopted Habitat Conservation Plan, Natural Communities Conservation Plan, or other Approved Local, Regional, or State Habitat Conservation Plan

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for

commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A does not provide opportunities for commercial cannabis activities and thus would not result in an increase in the need of land for the cultivation, processing and packaging, and distribution and sale of cannabis. Therefore, Option A would not conflict with an adopted HCP or NCCP. No impact would occur in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

As discussed in Section 4.4.2, *Environmental Setting*, the following HCPs and NCCPs have been approved within Kern County:

Valley HCPs:

- Draft Valley Floor HCP (currently under development)
- Chevron North American Exploration and Production Lokern HCP
- California Resources Corporation Elk Hills HCP
- Freeport-McMoRan Oil & Gas (formerly Nuevo-Torch then Plains Exploration and Production Company) HCP
- CRC Non-Unity HCP (formerly Occidental of Elk Hills, Inc. HCP)
- Aera Coles Levee Ecosystem Preserve HCP (previously Arco Western Energy HCP)
- Chevron Pipeline HCP
- Kern County Waste Facilities HCP
- Kern Water Bank HCP/NCCP
- Pacific Gas and Electric (PG&E) San Joaquin Valley Operations and Maintenance Program HCP
- Metropolitan Bakersfield HCP

- San Joaquin Field Division Aqueduct HCP

Mountain HCPs:

- Tejon Ranch Comprehensive Land Use and Conservation Agreement
- Tehachapi Uplands Multiple Species HCP

Desert HCPs/NCCPs:

- West Mojave Plan and West Mojave HCP on BLM land only.
- Desert Renewable Energy Conservation Plan a joint State and Federal NCCP (within BLM's California Desert Conservation Area)

Kern County is also covered by the following recovery plans:

- Recovery Plan for Upland Species of the San Joaquin Valley, California
- Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon
- California Condor Recovery Plan
- Pacific Bald Eagle Recovery Plan

Future cannabis-related activities could, depending on location relative to existing infrastructure, require construction of new or expanded facilities. Future activities and facilities would be required to comply with federal, State, and local laws and regulations, including, but not limited to, KCGP, MBGP, Kern County Code of Ordinances, and any applicable specific plan, HCP and/or NCCP. Mitigation Measure MM 4.4-13 would require that the project applicant provide evidence of compliance with the applicable adopted HCPs. Therefore, future development resulting from implementation of the proposed project would not conflict with any adopted HCPs and impacts would be less than significant.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing for the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to conflicts with a local policy or ordinance protecting biological resources, including an adopted HCP, NCCP, or a recovery plan, would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Biological Resources

Refer to Impacts 4.4-1 and 4.4-2, above, for a summary of applicable existing regulations and policies related to jurisdictional waters and related biological resources.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

MM 4.4-13 Prior to the issuance of any permit for a site plan, building or grading permit, or a site plan subject to a conditional use permit, the project applicant shall provide evidence to the Kern County Community and Natural Resources Department if applicable on private land that the project is in compliance with any applicable adopted Habitat Conservation Plans, or Natural Community Conservation Plans, applicable to the specific site and any specific requirements shall be incorporated into the site plan.

Level of Significance after Mitigation

No impact would occur with respect to Option A. Impacts regarding Option B would be less than significant.

Cumulative Setting, Impacts, and Mitigation Measures

Cumulative Setting

The geographic scope for cumulative impacts on biological resources includes both the KCGP and the regional growth plan and projections included in the Kern COG Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) approved in 2014, as defined in Section 3.7, *Cumulative Projects*. This is a large enough area to encompass any effects of the proposed project on biological resources that may combine with similar effects caused by other projects, and provides a reasonable context wherein cumulative actions could affect these resources. The cumulative analyses consider whether the proposed project, Option A or Option B, in combination with the past, present, and reasonably foreseeable projects, could cumulatively affect biological resources.

Cumulative Impacts and Mitigation Measures

Impact 4.4-7: Contribute to Cumulative Biological Resources Impacts

Proposed Project Option A

Option A of the proposed project would ban all medical and adult use cannabis-related activities other than what is allowed under Proposition 64. Option A does not provide opportunities for business development and thus would not result in an increase in the need for land for the cultivation, distribution and sale of cannabis. As discussed above, Option A would not have a substantial adverse effect on any candidate, sensitive, or special status species (Impact 4.4-1), on any riparian habitat or other sensitive natural community (Impact 4.4-2), and on federally protected wetlands (Impact 4.4-3). Option A would not interfere substantially with migratory wildlife corridors or wildlife nursery sites (Impact 4.4-4). Option A would not conflict with any local policies or ordinances protecting biological resources (Impact 4.4-5) or conflict with an adopted HCP or NCCP (Impact 4.4-6). Therefore, Option A would not contribute to cumulative

impacts when combined with past, present, or reasonably foreseeable projects. No impacts would occur in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis stores with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries.

Implementation of Option B would result in a significant impact on special status plant and wildlife species and riparian or other sensitive natural communities (Impacts 4.4-1 and 4.4-2). Future cannabis-related activities and facilities could remove vegetation that would then adversely impact special status plant and wildlife species as well as sensitive habitats and natural communities. Mitigation Measures MM 4.4-1 through MM 4.4-11 would reduce the severity of impacts; however, because the proposed project would potentially develop previously undeveloped lands, there could be a significant and unavoidable loss of habitat. Impacts to special status plants and wildlife species and sensitive habitats and natural communities, when combined with past, present, or reasonably foreseeable projects are often small on an individual project scale, but large on a combined scale. Therefore, Option B would contribute to cumulative impacts when combined with past, present, or reasonably foreseeable projects. Cumulative impacts would be significant.

Regarding wetlands (Impact 4.4-3), mitigation measures are recommended to ensure that any future cannabis-related activities and facilities would not have any significant effect on federally protected wetlands. Jurisdictional delineations would be required and acquire regulatory approvals and clearances from the federal and State agencies. Other projects in the cumulative area would be required to do the same. Therefore, Option B would not combine with those impacts of other past, present, and reasonably foreseeable future projects to result in a significant cumulative impact.

Regarding interference with wildlife movement and migration corridors, Option B has the potential to create disruption (Impact 4.4-4). Future cannabis-related activities and facilities could affect wildlife in adjacent habitats by interfering with movement patterns or causing animals to temporarily avoid areas adjacent to future cannabis-related activities due to noise and increased human activities. Mitigation Measures MM 4.4-1 through MM 4.4-11 would reduce impacts to wildlife movement and migration corridors. When considered cumulatively on a region-wide scale, disruption to wildlife movement and corridors would be significant.

Regarding local policies or ordinances protecting biological resources, Option B would be required to comply with the goals, policies, and implementation measures of the KCGP (which includes Section 1.10.10, *Oak Tree Conservation*), MBGP, applicable specific plans, some of which include oak tree and Joshua tree conservation policies (Impact 4.4-5). Therefore, Option B would not violate local policies or ordinances that protect biological resources, including oak woodlands and Joshua trees and Joshua tree woodlands. Compliance with the KCGP and specific plans policies, as well as implementation of mitigation measures, would reduce impacts

associated with implementing Option B. Option B would not contribute to cumulative impacts resulting in conflicts with a local policy or ordinance protecting biological resources when combined with past, present, or reasonably foreseeable projects.

Regarding adopted HCPs, NCCPs, or other approved local, regional, or State HCPs, Option B would not conflict with any adopted HCP in Kern County. Future cannabis-related activities and facilities would be required to comply with federal, State, and local laws and regulations, including, but not limited to, KCGP, MBGP, Kern County Code of Ordinances, and any applicable specific plan, HCP, NCCP, and recovery plan. Mitigation Measure MM 4.4-13 would require that the project applicant provide evidence of compliance with the applicable adopted HCP, NCCP, and/or applicable recovery plan. Therefore, Option B would not combine with those impacts of other past, present, and reasonably foreseeable future projects to result in a significant cumulative impact.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

Implement Mitigation Measures MM 4.4-1 through MM 4.4-13, as described above, Mitigation Measure MM 4.1-5, as described in Section 4.1, *Aesthetics*, Mitigation Measures MM 4.2-1 and MM 4.2-2, as described in Section 4.2, *Agriculture and Forest Resources*, Mitigation Measures MM 4.3-1 through MM 4.3-5, as described in Section 4.3, *Air Quality*, Mitigation Measures MM 4.8-1 through MM 4.8-6, as described in Section 4.8, *Hazards and Hazardous Materials*, Mitigation Measure MM 4.9-1 through MM 4.9-5, as described in Section 4.9, *Hydrology and Water Quality*, and Mitigation Measure MM 4.11-1, as described in Section 4.11, *Noise*.

Level of Significance after Mitigation

No cumulative impacts would occur with respect to Option A. Option B cumulative impacts associated with federally protected wetlands, wildlife corridors or native wildlife nursery sites, local policies or ordinances protecting biological resources, and adopted Habitat Conservation Plans would be less than significant. Option B cumulative impacts associated with the having a substantial adverse effect on candidate, sensitive, or special status species, as well as riparian habitat or other sensitive natural communities would be significant and unavoidable.

Section 4.5

Cultural and Tribal Cultural Resources

Section 4.5

Cultural and Tribal Cultural Resources

4.5.1 Introduction

This section of the Draft Environmental Impact Report (EIR) provides contextual background information on historical resources within Kern County (County), including the area's prehistoric, ethnographic, and historical settings. This section analyzes the potential impacts associated with the implementation of the Kern County Cannabis Land Use Ordinance Project (proposed project) on cultural resources, and identifies mitigation measures to address adverse impacts. This section is based on the cultural resource records searches, inventories, and County data.

For the purposes of the California Environmental Quality Act (CEQA), "historical resources" generally refer to cultural resources that have been determined to be significant, either by eligibility for listing in State or local registers of historical resources, or by determination of a lead agency (see definitions below). Historical resources can also include areas determined to be important to Native Americans that qualify as tribal cultural resources as defined in Public Resources Code (PRC) Section 21074 (sites, landscapes, historical, or archeological resources). Paleontological resources are also considered within this section.

Cultural Resources Terminology

Below are definitions of key cultural resources terms used in this section:

- **Alluvium:** a fine-grained sedimentary unit of soil consisting of mud, silt, and sand deposited by flowing water on flood plains, in river beds, and in estuaries.
- **Archaeological Site:** A site is defined by the National Register of Historic Places (NRHP) as the place or places where the remnants of a past culture survive in a physical context that allows for the interpretation of these remains. Archaeological remains usually take the form of artifacts (e.g., fragments of tools, vestiges of utilitarian, or non-utilitarian objects), features (e.g., remnants of walls, cooking hearths, or midden deposits), and ecological evidence (e.g., pollen remaining from plants that were in the area when the activities occurred). **Prehistoric archaeological sites** generally represent the material remains of Native American groups and their activities dating to the period before European contact. In some cases, prehistoric sites may contain evidence of trade contact with Europeans. **Ethnohistoric archaeological sites** are defined as Native American settlements occupied after the arrival of European settlers in California. **Historic archaeological sites** reflect the activities of nonnative populations during the Historic period.
- **Artifact:** An object that has been made, modified, or used by a human being.
- **Cultural Resource:** A cultural resource is a location of human activity, occupation, or use identifiable through field inventory, historical documentation, or oral evidence. Cultural resources include archaeological resources and built environment resources (sometimes known as historic architectural resources), and may include sites, structures, buildings, objects, artifacts, works of art, architecture, and natural features that were important in past human events. They may consist of physical remains or areas where significant human events

occurred, even though evidence of the events no longer remains. Cultural resources also include places that are considered to be of traditional cultural or religious importance to social or cultural groups.

- **Ecofact:** An object found at an archaeological site that has archaeological significance but has not been technologically altered, such as seeds, pollens, or shells.
- **Ethnographic:** Relating to the study of human cultures. “Ethnographic resources” represent the heritage resource of a particular ethnic or cultural group, such as Native Americans or African, European, Latino, or Asian immigrants. They may include traditional resource-collecting areas, ceremonial sites, value-imbued landscape features, cemeteries, shrines, or ethnic neighborhoods and structures.
- **Historic period:** The period that begins with the arrival of the first nonnative population and thus varies by area. In 1772, Commander Don Pedro Fages was the first white man to enter Kern County, initiating the historic period in the study area.
- **Historical resource:** This term is used for the purposes of CEQA and is defined in the CEQA Guidelines (§15064.5) as: (1) a resource listed in, or determined to be eligible for listing in the California Register of Historical Resources (CRHR); (2) a resource included in a local register of historical resources, as defined in Public Resources Code (PRC) §5020.1(k) or identified as significant in a historical resource survey meeting the requirements of PRC §5024.1(g); and (3) any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California by the lead agency, provided the lead agency’s determination is supported by substantial evidence in light of the whole record. Historical resources may also include tribal cultural resources including sites, features, places, cultural landscapes, sacred places, objects, and/or archeological resources with value to a California Native American Tribe per PRC §21074.
- **Holocene:** Of, denoting, or formed in the second and most recent epoch of the Quaternary period, which began 10,000 years ago at the end of the Pleistocene.
- **Isolate:** An isolated artifact or small group of artifacts that appear to reflect a single event, loci, or activity. Isolates typically lack identifiable context and thus have little interpretive or research value. Isolates are not considered to be significant under CEQA and do not require avoidance mitigation (CEQA Statute §21083.2 and CEQA Guidelines §15064.5).
- **Lithic:** Of or pertaining to stone. Specifically, in archaeology, lithic artifacts are chipped or flaked stone tools, and the stone debris resulting from their manufacture.
- **Native American sacred site:** An area that has been, or continues to be, of religious significance to Native American peoples, such as an area where religious ceremonies are practiced or an area that is central to their origins as a people.
- **Paleontological Resources (Fossils):** The physical remains of plants and animals preserved in soils and sedimentary rock units/formations. Paleontological resources contribute to the understanding of past environments, environmental change, and the evolution of life.

- **Pleistocene (Ice Age):** An epoch in the Quaternary period of geologic history lasting from 1.8 million to 10,000 years ago. The Pleistocene was an epoch of multiple glaciation, during which continental glaciers covered nearly one fifth of the earth's land.
- **Prehistoric period:** The era prior to 1772. The later part of the prehistoric period (post-1542) is also referred to as the protohistoric period in some areas, which marks a transitional period during which native populations began to be influenced by European presence resulting in gradual changes to their lifeways.
- **Quaternary Age:** The most recent of the three periods of the Cenozoic Era in the geologic time scale of the International Commission on Stratigraphy (ICS). It follows the Tertiary Period, spanning 2.588 ± 0.005 million years ago to the present. The Quaternary includes two geologic epochs: the Pleistocene and the Holocene Epochs.
- **Stratigraphy:** The natural and cultural layers of soil that make up an archaeological deposit, and the order in which they were deposited relative to other layers.
- **Unique Archaeological Resource:** This term is used for the purposes of CEQA and is defined in the CEQA Guidelines (§15064.5) as an archaeological artifact, object, or site, about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it either contains information needed to answer important scientific research questions; has a special and particular quality such as being the oldest of its type or the best available example of its type; or, is directly associated with a scientifically recognized important prehistoric or historic event or person.
- **Unique Paleontological Resource:** This term is defined as a fossil that meets one or more of the following criteria: (1) it provides information on the evolutionary relationships and developmental trends among organisms, living or extinct; (2) it provides data useful in determining the age(s) of the rock unit or sedimentary stratum, including data important in determining the depositional history of the region and the timing of geologic events therein; (3) it provides data regarding the development of biological communities or interaction between plant and animal communities; (4) it demonstrates unusual or spectacular circumstances in the history of life; or (5) the fossils are in short supply and/or in danger of being depleted or destroyed by the elements, vandalism, or commercial exploitation, and are not found in other geographic locations.

4.5.2 Environmental Setting

Prehistoric and Archaeological Setting

Late Pleistocene

Pre-Projectile Point Period (12,000+ BP)

Late Pleistocene archaeological sites, which may predate 12,000 years before present (BP), are often referred to as pre-Clovis, or pre-projectile point, period sites. These sites are viewed as controversial by many archaeologists because of doubts about identifications of artifacts and interpretations of contexts; circular logic or circumstantial evidence used to estimate age; or the use of still-experimental dating techniques. One of the best-documented studies supporting the Late Pleistocene period is Emma Lou Davis's 1978 work at China Lake, near Ridgecrest in eastern

California. Other examples include the Calico Early Man Site and the Manix Lake Lithic Industry, both of which are located in the Mojave Desert east of Barstow, California.

Paleoindian Period (Circa 12,000 BP to 10,000 BP)

The subsequent Paleoindian Period is recognized throughout the western United States by the presence of fluted projectile points, such as the well-known Clovis points, and associated artifacts. Recent calibrations of these radiocarbon dates and reevaluation of the existing Clovis date record indicate a revised Clovis period date range from 11,050 to 10,800 BP. Several sites associated with the shoreline at Pleistocene Lake China contained fluted points. Fluted points have been reported in the El Paso Mountains and Antelope Valley. In addition, hundreds of early concave base points were found along a past shoreline of Tulare Lake in association with human bone that has been dated to 13,800 to 9,400 BP.

Early Holocene

Lake Mojave Period (Circa 10,000 BP to 7,000 BP)

The quantity of archaeological remains in the western United States increases at the beginning of the Holocene Period, about 10,000 years BP. Evidence of this early use of the region has been revealed by discovery of characteristic large-stemmed and concave-base projectile points, as well as other distinctive flaked stone tools, around shorelines of Pleistocene dry lakes and in the foothills of the Sierra Nevada Mountains. The point types that are associated with this period are known as Lake Mojave and Silver Lake projectile points, named for the dry lakes where they were first found. A site near Buena Vista Lake yielded three crescents, a stemmed projectile point, and several small flaked stone tools. Animal bones indicated use of fish, waterfowl, freshwater mussels, and artiodactyls (probably deer and pronghorn antelope).

Middle Holocene

Pinto Period (Circa 7,000 BP to 4,000 BP)

Substantial evidence for human occupation of California first occurs during the middle Holocene, from roughly 7,000 to 4,000 BP. This period is known as the Early Horizon, and is sometimes alternatively referred to as the Early Millingstone along the Santa Barbara Channel. Evidence for an Early Horizon occupation of southern San Joaquin Valley is limited, and primarily consists of some early dates from the west side of Buena Vista Lake. While this indicates that the occupation of the west side of this lake, and thus portions of the Western Subarea, extends back for 7,000 or more years, it is clear overall that Early Horizon population density was low in interior south-central California. The Middle Holocene is characterized by the appearance of Pinto series projectile points in the Mojave Desert. Pinto points are smaller than Lake Mojave points, and their name derives from the Pinto Basin where they were first defined. The period is not well delineated because of a paucity of chronometric data and disagreement on the definition and dating of the Pinto series.

With the onset of the Middle Holocene, the climate became dryer and hotter throughout the deserts of the western United States. Sites dating to this time period exhibit diverse artifact assemblages, marked by the presence of both hunting tools and milling equipment. In addition, in the Valley, specialized fishing technology, including gorge hooks, composite bone hooks, and spears, is found in these sites, along with abundant fish bone. Settlement patterns changed in response to climatic

conditions with a move from lakeshore habitats, which became dry, to areas around streams, rivers, or springs.

Late Holocene

Gypsum Period (Circa 4,000/3,500 BP to 1,500 BP)

About 4,000 years ago, climatic conditions shifted again, this time to the cooler, moister conditions characterizing the Late Holocene. This period is characterized by the replacement of Pinto points with Gypsum and Elko series projectile points. In the Owens Valley region, at the same time period, Pinto points were replaced by Humboldt and Elko series projectile points.

An increase in population, trade, and social complexity is suggested during the Gypsum period, which corresponds with the more favorable climate conditions. The mortar and pestle appear to have been introduced during this period, which is hypothesized to mark the beginning of tree crop utilization, such as mesquite and oak. There was an increase in the use of seeds, including piñon, which is indicated by the presence of milling stones. However, hunting of a variety of fauna, including mountain sheep, remained an important part of the economy. This period is also marked by increased evidence of ritual activities as indicated by numerous rock art sites (e.g., Coso Range) and the discovery of split-twig figurines at Newberry Cave in the central Mojave Desert. The presence of split-twig figurines also suggests interaction with the Southwest culture area during this time period.

Rose Spring Period (Circa 1,500 to 1,000/600 BP)

Throughout the Great Basin, Elko and other dart-size points were replaced about 1,500 years ago with Rose Spring and Eastgate projectile points, often grouped together under the label Rosegate. This correlates with the introduction of the bow and arrow around AD 500 and may also mark the beginning of the Numic expansion.

In much of inland south-central California, the Carrizo Plain, and the Mojave Desert, a large-scale abandonment of sites occurred. However, along Buena Vista Lake, populations appear to have increased. The Tehachapi and southern San Joaquin Valley also experienced intensification rather than abandonment. The appearance of Rose Spring series projectile points marks the beginning of the Rose Spring Period in the Mojave Desert. Major villages and numerous other sites dating to this time period have been recorded in California. Many of these contain bedrock milling features and portable milling stones, along with marine shell artifacts and obsidian from extralocal sources, suggesting long-distance trade. Two sites exhibit architectural features distinct to this period; at Cantil, there was evidence of a wickiup-like structure, and the Koehn Lake site shows evidence of a pit house. Subsistence strategies during this time period appear to have shifted from one with a predominant focus on hunting of large game to one focused on utilization of a variety of plant resources, supplemented with some hunting of medium to small game such as lagomorphs and rodents.

Late Prehistoric Period (Circa 1,000 BP to Contact AD 1770)

The final time period is known as the Late Prehistoric in the Mojave Desert and known as the Upper Archaic in the San Joaquin Valley. The period began about 1,000 BP and lasted until historic contact. Desert Side-notched and Cottonwood series projectile points replaced the larger points from the previous period, and pottery first appeared in the form of Owens Valley brown ware. During this period, trade networks increased along the river corridors and mountain passes. Subsistence strategies

remained much the same from the Gypsum Period onward, with a focus on collection of plant resources, supplemented by hunting of medium to small animals.

Cooler, wetter conditions returned to the Valley (550 BC to AD 1,000) and Tulare, Buena Vista, and Kern Lakes filled with water. However, few sites dating to this period are known from the southern San Joaquin Valley, possibly because they were buried by later deposition. Two sites excavated at Buena Vista Lake in the 1930s date to the Upper Archaic period and have house floors and subsistence waste indicating exploitation of both aquatic and terrestrial environments. These sites have roasting pits, charmstones, bone strigils and bipoints, limpet shell ornaments, and *Olivella* half-shell and saucer beads. The cultures in place at the time of European contact developed during the Emergent Period (AD 1000 to the Historic Period). Sites are Buena Vista Lake from this period are villages with numerous house pits, triangular arrow points, and elaborate steatite industry, and potter.

San Joaquin Valley Archaeological Background

The dominant geomorphologic features of the region can be used to separate the Valley into three north-south longitudinal sectors: the alluvial slopes on the eastern side of the valley that are cut by numerous rivers and streams; the lakes (Tulare, Buena Vista, and Kern) with their associated system of streams and sloughs; and the treeless plains on the west side of the Valley.

Eastern Sector

The southern valley is a desert, by definition. The alluvial sediments of the eastern portion of the valley were incised by rivers and streams that descended from the Sierras. These watercourses tended to disseminate as they passed through this area, and formed the marshes that represent the boundary of the interior region of the valley. The trees, wildlife, and general riparian environment that accompanied the waterways provided a most suitable habitat for the native population. This eastern sector was typified by oak woodland, riparian, tree savanna, and prairie environmental zones.

Central Sector

The Spanish called the southern San Joaquin Valley "Los Tulares" due to the preponderance of bulrushes or tule reeds that grew in conjunction with the lakes, sloughs, and waterways of the area. The root word tulare is Spanish for "swamp with flags" and the Yokuts were known to the Spanish as "Tulare" (people of the tules). This area constitutes the second or central sector of the southern valley. Up until the latter part of the nineteenth century, the Kern River, which flows into the valley from the Sierra Nevada Mountains in a westerly and southwesterly direction, drained into Kern, Buena Vista, and Tulare lakes. All of these bodies of water were connected by an extensive network of streams and sloughs, only remnants of which can be found today.

Each of the lakes was very shallow and subject to dramatic increases or decreases in size depending on the yearly rainfall and the snowpack in the Sierra Nevada. A demonstration of this is the fact that, "the rise or fall of one foot in the level of the water in the lake might move the shoreline forward or backward a distance as great as two miles." In ancient times or during extremely wet periods, Kern and Buena Vista lakes probably were one lake of approximately eighty square miles in area and it is known that on occasion, such as in the notably wet years of 1890 and 1938, the entire area from the Tehachapi Mountains to present day Lemoore was almost completely covered with water.

The north end of Buena Vista Lake overflowed into Buena Vista Slough at an elevation of 295 feet above sea level and the south rim of Tulare Lake was at the 220-foot mark. This equates to a drop of only two feet per mile along the 40 miles that separate the two. According to the early Spanish travelers in the region, the valley could be transversed only at one spot, approximately six miles west of present day Buttonwillow, due to the marshy terrain. In 1862, a particularly wet year, the course of the Kern River was altered so that it bypassed the inlet to Kern Lake. As a result, Kern Lake began to recede and eventually dried. This desiccation was aided by the agricultural channelization of the Kern River that was beginning to take place. This channelization ultimately would be the demise of all the lakes in the southern San Joaquin Valley. Up until the 1860s, however, the abundance of aquatic and terrestrial resources in this sector attracted numerous aboriginal inhabitants who occupied the lakeshores and lands adjacent to the many streams and sloughs.

Western Sector

The western plain contained little water, no trees, and there may have been few human occupants in prehistoric times. Ethnographic accounts indicate that only a limited number of Tache Yokuts in the north and Tulamne Yokuts in the south inhabited the western sector. In addition to its relative desolation, this region was the closest to the coast and therefore the first to be impacted by the Spanish mission system. The few inhabitants of the plains were collected and either willingly or unwillingly transported to the Pacific Coast, and by 1800 the western sector was completely unoccupied.

Ethnographic Background

The native peoples of Kern County are of three major linguistic stocks and tribal groupings: the Yokuts of the San Joaquin Valley and foothills; the Chumash of the Coastal Ranges; and Shoshonean tribes, from the Uru-Aztekian language family, in parts of the Sierra Nevada Range and the eastern desert areas of Kern County.

The consensus among ethnographers is that the Yokuts occupied the entire San Joaquin Valley as well as the foothills of the western slope of the Sierra Nevada. Predicated on cultural and environmental differences, they are generally recognized as having three subgroups: the Southern Valley, Northern Valley, and Foothill Yokuts. Each was comprised of a number of distinct tribes or tribelets. The Southern Valley Yokuts ranged from just north of Tulare Lake to the southern end of the valley at the Tehachapi Mountains and from the lowest reaches of the southern Sierra Nevada and foothills of the Tehachapi Mountains on the east to the base of the Coastal Ranges on the west.

Yokuts Tribe

Ethnographers recognize three cultural-geographical divisions of Yokuts: Northern Valley, Southern Valley, and Foothills. Yokuts villages apparently extended up to, but not into, the mouths of the canyons on the northern and western fronts of the Tehachapi Mountains, well into the foothills and lower elevations of the Sierra Nevadas on the east, and to the crest of the Temblor Range on the west. The Yokut language belongs to the California Penutlan language family with at least 11 dialects among the Southern Valley branch. The distinction between the Northern Valley versus Southern Valley and Foothill Yokuts, aside from separate cultural adaptations to divergent environments, is primarily based on speaking distinct branches of the language.

The population of Yokuts tribes generally was in the hundreds, compared with the average American Indian tribe, which contained approximately two to four thousand members. The San Joaquin Valley floor was occupied by southern Valley Yokuts speakers, themselves divided into a series of autonomous “tribelets,” the boundaries of which are not well defined. North of the Buena Vista basin, and primarily on the eastern side of Buena Vista Slough, were found the Tuholu. Their home included the lower Kern River area and the complex consisting of Buena Vista, Bull, Jerry, and Goose Lake sloughs. Little is known about this group. They utilized the tule reeds that proliferated in the area for every conceivable purpose, including food, shelter, clothing, fuel, and transportation. The remaining three tribelets inhabiting the southern valley were located in the eastern sector.

Depending upon tribelet location, subsistence emphasized the acorn-bearing oak, with the addition of a wide variety of other plants, fish, and game, or the bountiful lacustrine resources found around lakeshore environments. As the Yokuts adapted to the abundance of subsistence resources, they developed a culture of comparatively greater material wealth and tended to live in large, more permanent settlements.

Interior Chumash

The territory of the Interior Chumash included portions of Kern, Los Angeles, San Luis Obispo, Santa Barbara and Ventura counties. The western and southwestern portions of Kern County Chumash territory are quite distinct from each other and will be divided into two subsections: 1) Temblor Range (Western Kern County); and 2) Coast Range and western tip of Tehachapi Mountains (South, Southwest Kern County). These two areas comprise the territory ascribed to the Interior Chumash with the Cuyama Chumash occupying the first area and the Castac Chumash occupying the latter area.

The interior Chumash lacked direct access to the marine resources that contributed to such unusually high population densities along the Santa Barbara coastline. Adaptation to the environment was, therefore, more closely tied to terrestrial resources, especially the acorn-bearing oak, with cultural patterns, in general, very similar to surrounding interior groups, such as the Yokuts. Notably, however, the interior Chumash are particularly renowned for their rock paintings or pictographs, important concentrations of which are located on the San Emigdio Ranch and the Carrizo Plain. The interior Chumash in this region most likely spoke Ventureño Chumash.

Tembliers (Cuyama Chumash)

The Temblers are a low-lying mountain range characterized as having little available water, game animals or abundant biotic resources. Apparently unchanged for a considerable amount of time, most portions of this region were generally unsuitable for settlement.

Some of the most impressive known sites in Cuyama territory are rock art sites where Chumash rock paintings reached their highest development. The pictograph style of the Chumash appears to have its origins with the petroglyphs of the Numic speaking peoples of the Great Basin who influenced Yokuts rock art styles and who in turn gave the Chumash their rock painting tradition. Most of the large sites are located in San Luis Obispo County; however, there are several pictograph sites in the Temblor Range portion of Kern County.

Coast Range (Castac Chumash)

The Castac (and Emigdiano) region extended from Castac Lake along the drainage of Pastoria Creek in the Tehachapi Mountains on the east, "on the north defined by a line drawn roughly from Grapevine to the Mount Abel Road and including all the north flowing streams from the Mount Abel-Tecuya Mountain Region." To the south their territory extends an unknown distance into Los Angeles County and on the west they border the Cuyama Chumash.

Kitanemuk

The Kitanemuk, along with the Kawaiisu, occupied the eastern/southern Sierra Nevada south of the Kern River and into the Tehachapi Mountains, and they also claimed a portion of the western Mojave Desert. During the Ethnographic period, neighboring groups included the Chumash to the west, the Southern Yokuts to the northwest, the Kawaiisu to the north, the Tataviam and Serrano to the south, and the Vanyume to the east. The notion of distinct cultural boundaries was foreign to the natives of the area, and overlapping of groups was customary. Kitanemuk maintained congenial interactions with other Serrano groups in the area, and with the Chumash to the west, the Tubatulabal to the north, and possibly the Kawaiisu. The Yokuts in the Central Valley and the Tataviam to the south, however, were considered enemies of the Kitanemuk.

Kitanemuk subsistence practices are not well known ethnographically, and are also hard to determine based on the archaeological record due to the lack of archaeological studies in the Tehachapis. Consequently, their material culture is also not well documented. Their general ecological adaptation and subsistence technology differed little from their neighbors the Chumash to the west and Yokuts to the north. Subsistence strategies from other sites in adjacent areas suggest that they would have focused on hunting and gathering of local plant and animal resources. The Kitanemuk likely exploited resources outside of their core area, with seasonal trips to the Antelope Valley floor. However, evidence for these movements is limited due to the types of tasks involved, such as temporary camps for hunting and the procurement of lithic sources and seasonal foods. Based on other groups in the area, a principal food source was likely acorns, which would have been supplemented with meat from large and small game, rodents, birds, and insects. Material culture attributed to the Kitanemuk include grinding stones, basketry, bowls, throwing sticks, bows and arrows, hunting blinds, nets, and other implements.

Kawaiisu

Information on the aboriginal life of the Kawaiisu is unsystematic and scattered in a number of papers. The Kawaiisu occupied a territory which included the southern end of the Sierra Nevada range and extended westward toward the San Joaquin Valley and eastward into the Mojave Desert. These tribal borders are vague and difficult to delineate. The core area for the Kawaiisu is said to have been the southern Sierra Nevada and Tehachapi Mountains.

Panamint Shoshone

The Little Lake Shoshone also called Coso or Panamint Shoshone, are only modestly treated within ethnographic accounts on Great Basin peoples. The territory of the Panamint Shoshone was a portion of the western Great Basin extending from the Sierra Nevada on the west to the Amargosa desert of Nevada on the east and from Owens Valley southward to an area in the south most likely shared with the Kawaiisu and other Southern Paiute groups. They would have occupied a small portion of northeastern Kern County.

Tuebatulabal

Tuebatulabal territory has been determined to include the region which was naturally drained by the Kern River including the area from the river's source near Mt. Whitney to the end of Kern Canyon northeast of Bakersfield. The eastern boundary runs along the Sierra Nevada crest south to Walker Pass and then along the crests of the Kiavah and Paiute Mountains southwest to the San Joaquin Valley. There has been some question concerning the Tuebatulabal-Kawaiisu border.

Historic Background

The first European to visit California was Spanish maritime explorer Juan Rodriguez Cabrillo in 1542. Cabrillo was sent north by the Viceroy of New Spain (Mexico) to look for the Northwest Passage. Cabrillo visited San Diego Bay, Catalina Island, San Pedro Bay, and the northern Channel Islands. The English adventurer Francis Drake visited the Miwok Native American group at Drake's Bay or Bodega Bay in 1579. Sebastian Vizcaino explored the coast as far north as Monterey in 1602. He reported that Monterey was an excellent location for a port.

Colonization of California began with the Spanish Portola land expedition. The expedition, led by Captain Gaspar de Portola of the Spanish army and Father Junipero Serra, a Franciscan missionary, explored the California coast from San Diego to the Monterey Bay Area in 1769. As a result of this expedition, Spanish missions to convert the native population, presidios (forts), and pueblos (towns) were established. The Franciscan missionary friars established 21 missions in Alta California (the area north of Baja California) beginning in 1769 and ending in 1823.

European exploration of the region by the Spanish began in the 1770s. In 1772, Pedro Fages crossed through Tejon Pass and arrived in the San Joaquin Valley searching for army deserters. Father Francisco Garcés, a Jesuit priest with the de Anza expedition, visited the vicinity in 1776. However, active exploration of the southern portion of the Central Valley did not occur until 1806 when several Spanish expeditions to California's interior were undertaken to extend Spain's sphere of influence. Lieutenant Francisco Ruiz, Father José María Zalvidea, and Alferez Gabriel Moraga all passed along Grapevine Creek (Canada de las Uvas) in 1806. In 1827, Jedediah Smith went through the region during his fur-trapping escapades. He was followed by John C. Frémont and his guides, Kit Carson and Alexis Godey, in 1830 and 1844 respectively.

Spanish explorers visited the southern end of the San Joaquin Valley in 1772, but its lengthy distance from the missions and presidios along the Pacific Coast delayed permanent settlement for many years, including during the Mexican period of control over the Californian region. In the 1840s, Mexican rancho owners along the Pacific Coast allowed their cattle to wander and graze in the San Joaquin Valley. The Mexican government granted the first ranchos in the southern part of the San Joaquin Valley in the early 1840s, but these did not result in permanent settlement. It was not until the annexation of California in 1848 that the exploitation of the southern San Joaquin Valley occurred.

Following the end of hostilities between Mexico and the United States in January 1847, the United States officially obtained California from Mexico through the Treaty of Guadalupe Hidalgo on February 2, 1848. In January 1849, the discovery of gold in Coloma, California, changed California forever. That following summer, when the gold strike was publicly announced, the seemingly overnight settlement of California by United States citizens began. The Mexican population of California was small and limited to the coasts and a few of southern California's interior valleys, but the Gold Rush tipped the balance against Native American communities throughout California, as many were decimated.

Gold was discovered on the upper Kern River in 1853, bringing miners and settlers to the area. Kern County was established in 1866, with portions of Los Angeles and Tulare counties set aside to form the new county. It was California's third-largest county, and the county seat was established at Havilah in 1866. The county seat was moved from Havilah to Bakersfield in 1874.

Kern County's history is closely associated with gold and other natural resources. Oil exploration, exploitation, and consumption are inextricably woven into the history of California and, in particular, Kern County. Today, Kern County is California's top oil-producing county, and accounts for one-tenth of the total national oil production. Three of the largest domestic oil fields are located in Kern County. The county is also home to the world's largest open pit mine, a borax extraction site located in the town of Boron.

Valley Region

While most of the San Joaquin Valley may be generally characterized as "open flats," outside of leveled fields and orchards it is better described as an uneven plain consisting of extensive alluvial fans, debris flows and over-bank deposits. Historically, the southern San Joaquin Valley was a swampy, marsh zone consisting of a series of shallow lakes interconnected by sloughs and channels, primarily fed by streams originating in the mountains to the east. When gold was discovered in the Sierra Nevada Mountains in eastern Kern County, the population of the area grew rapidly. Some new immigrants began ranching in the San Joaquin Valley to supply the miners and mining towns. Ranchers grazed cattle and sheep, and farmers dry-farmed or used limited irrigation to grow grain crops, leading to the creation of small agricultural communities throughout the valley.

The southern San Joaquin Valley became significant as a center of food production for this new influx of people in California. The expansive unfenced and principally public foothill spaces were well-suited for grazing both sheep and cattle. As the Sierra Nevada gold rush presented extensive financial opportunities, and ranchers introduced new breeds of livestock, consisting of cattle, sheep, and pig.

Following the passage of statewide 'No-Fence' laws in 1874, ranching practices began to decline, while farming expanded in the San Joaquin Valley in both large land holdings and smaller, subdivided properties. As the farming population grew, so did the demand for irrigation. Settlers began reclamation of swampland in 1866 and built small dams across the Kern River to divert water into the fields. By 1880, 86 different groups were taking water from the Kern River. Ten years later, 15 major canals provided water to thousands of acres in Kern County.

The San Joaquin Valley was dominated by agricultural pursuits until the oil boom of the early 1900s, which saw a shift in the region, as some reclaimed lands previously used for farming were leased to oil companies. The shift of the San Joaquin Valley towards oil production did not halt the continued growth of agriculture. The Great Depression of the 1930s brought with it the arrival of great number of migrants from the drought-affected Dust Bowl region looking for agricultural labor.

The beginning of oil industry development in the southern San Joaquin Valley began on the western side, with the first oil well drilled in 1877 and the first wooden oil derrick raised in 1887. By 1899, there were three oilfields established: (1) on the west side of the valley; (2) McKittrick and Midway-Sunset; and (3) with Kern River on the northeast of Bakersfield. The establishment of the western oilfields was greatly aided by the extension of the rail line to McKittrick in 1893. Thus, the

expansion of the railways into the southern San Joaquin Valley was directly tied to, and symbiotic with, the drilling and production of the oil industry.

Mountain Region

The mountain areas, from east to west, include the Sierra Nevada Mountains, Tehachapi Mountains, San Emigdio Range, Temblor Range, and parts of the Coast Range. The elevation of these mountain ranges average between 4,000 and more than 8,000 feet above mean sea level (amsl); the highest point in the County is 8,831 feet amsl at the summit of Mount Pinos. The primary north-south transit and communication corridor historically follows the general alignment of Interstate 5 (I-5). Oak Creek Pass was the only route through the Tehachapi Mountains between the San Joaquin Valley and the Mojave until the railroad was built through the Tehachapi Pass in 1876 (OHP, 2017a).

A U.S. Army survey party was sent to the area in 1853 to search for possible railway routes that would connect the San Joaquin and Antelope Valleys. Fort Tejon was established soon thereafter in Grapevine Canyon on the west end of the Tehachapi Mountains. This signaled the opening of Euro-American settlement into the San Joaquin Valley and Tehachapi Mountains. The first stage line began operation soon after Fort Tejon was established in 1854. The most utilized stagecoach route closest to the project site went from El Monte and Los Angeles all the way to Tehachapi or the San Joaquin Valley, via Willow Springs. The route crossed San Fernando Pass (also known as Beale's Cut) through San Francisquito Canyon where there was a way station for the travelers. The journey continued to Elizabeth Lake where another station was located. At this point, the stagecoach route split to the north and to the east. Travelers going to the San Joaquin Valley continued to the west from Elizabeth Lake over the Tejón Pass, following the south edge of the Antelope Valley, all the way to the San Joaquin Valley.

Agriculture is a major industry in the mountain region. Historically, the Tehachapi area has been known for fruit orchards, primarily apple, pear and peach, cattle ranching and more recently, ostrich ranching, sod and organic farming.

Desert Region

The Mojave Desert province is wedged between the Garlock Fault and the San Andreas Fault, which have uplifted the surrounding mountains relatively rapidly, isolating the Mojave Desert from the Pacific Coast and creating the interior drainage basins of the western Mojave Desert, such as the Antelope Valley. The west end of the Antelope Valley is defined by the Tehachapi and San Gabriel Mountains, forming the v-shaped basin of the western Mojave Desert.

Euro-American prospectors were drawn to the western Mojave Desert in the late nineteenth century by the mining potential of the Antelope Valley. Copper was first discovered in the area in 1884. Throughout the 1890s, the Antelope Valley experienced a series of successive rushes though the high costs associated with milling and transporting ore and the scarcity of water limited the success of these endeavors. One of the largest booms in the Antelope Valley occurred in 1894 following the discovery of gold by Ezra M. Hamilton at Tropico Hill north of Rosamond. After Hamilton's initial discovery, other miners found gold in the western Mojave Desert at Standard Hill and Soledad Mountain. Mining towns such as Randsburg and Oro Grande were established in the Antelope Valley during this period with Rosamond, Barstow, and Mojave serving as major suppliers for the mining operations.

Euro-American settlers were also drawn to the western Mojave Desert by the agricultural potential of the area. In the late 1880s and early 1890s, rainfall was unusually plentiful, and farms in the Antelope Valley produced large crops of wheat, barley, and other grains. A number of irrigation districts were established at this time, which provided water for the cultivation of a variety of fruit and nut trees. A severe drought between 1894 and 1904 devastated a number of these newly established farms and forced many settlers to abandon their land. An agricultural resurgence occurred in the Antelope Valley following the end of the drought. This resurgence was spurred by the introduction of gasoline-powered pumps, which enabled farmers to dig shallow wells for irrigation agriculture rather than relying solely on artesian water sources. The use of these pumps not only allowed for the replanting of crops that had previously thrived, but also enabled the large-scale cultivation of alfalfa, which by 1920 was the Antelope Valley's major crop.

The first stage line began operation soon after Fort Tejon was established in 1854. Travelers heading to Tehachapi generally took the north route from Elizabeth Lake, which continued north to Willow Springs. Willow Springs was an important way station for the travelers and had been used by Native Americans before the stagecoach routes, the pioneers, and the teamsters took advantage of it. Today, what remains of the Willow Springs station is part of an adobe wall and the spring itself. The route continued to the Oak Creek Station and crossed the Oak Creek Pass to Tehachapi.

The construction of the Southern Pacific Railway across Antelope Valley began in the mid-1800s, as part of an inland route running between San Francisco and Los Angeles, and was completed in 1876. The rail line changed in Antelope Valley from an isolated region to a magnet for settlers. The Southern Pacific Railroad established a number of communities in the area at this time, including Rosamond, Lancaster, and Mojave.

The military arrived in the western Mojave Desert in 1928 when the dry lake bed near Muroc became an area for general aviation practices. In 1942, the facility was named Army Air Base, Muroc Lake, which later became Muroc Air Force Base in 1948. In 1949, the base was renamed Edwards Air Force Base. As agriculture declined in importance in the 1950s, the expansion of Edwards Air Force Base and the establishment of Air Force Plant 42, a federally owned military aerospace facility, transformed Antelope Valley into a hub of military aircraft design, testing, and production.

Population boomed in the area throughout the following decades with increased housing prices in the region resulting in the valley becoming a bedroom community to the Greater Los Angeles area. The 1980s and 1990s were marked by periods of rapid growth with the development of major housing tracts dramatically increasing the population of both Palmdale and Lancaster. Since 2000, Antelope Valley has continued to expand as residential developments, small businesses, and light industry gradually replace the remaining agricultural fields and native desert scrub land.

Paleontological Setting

Paleontological resources are the mineralized (fossilized) remains of prehistoric plants and animals and the mineralized impressions (trace fossils) left as indirect evidence of the form and activity of such organisms. These resources are located within sedimentary rocks or alluvium and are considered to be nonrenewable.

During the Quaternary age, several large and small lakes occupied the southern portion of the San Joaquin Valley. The present surface extent of these lakes is reflected in the remnants of Buena

Vista Lake, Kern Lake, and Tulare Lake. In the past, these lakes fluctuated in size with climate changes. Wet seasons resulted in expansion of lakes; droughts resulted in the shrinking of the lakes. During the Pleistocene age (1.8 million years to 10,000 years ago) there was a diverse assemblage of large and small animals living along the shores of these lakes. As a result, lake deposits in this area have produced the remains of numerous species of extinct animals such as elephants, camels, sloths, horses, a variety of rodents, turtles and amphibians.

Igneous and metamorphic rocks result from the solidification of magma (molten rock) in environments that cause magma creation. As magma reaches the surface as lava, contact with biological organisms usually results in their destruction; as such, there is no plant or animal material present to fossilize. Therefore, there is no potential for encountering fossils in the igneous rocks in the Tehachapi Mountains. However, older Quaternary deposits along the base of the mountains may contain significant fossil vertebrate remains. In addition, younger Quaternary deposits in the valleys and drainages also have the potential to contain significant vertebrate fossils.

Kern County is rich in paleontological resources. Of particular note is the Maricopa and McKittrick Brea Tar Pits, the Bean Hills Petrified Forest and Shark Tooth Hill at Round Mountain. The latter is a source of many aquatic animals. This fossil assemblage, called the Sharktooth Hill Local Fauna, is comprised of more than one hundred species of sharks, rays, bony fish, turtles, birds and mammals, including terrestrial species from the adjacent Miocene land mass (south of where Bakersfield currently is located). The "Round Mountain Silt Formation" covers approximately 110 square miles. The Sharktooth Hill Bonebed is a single, relatively thin, but widespread horizon -- this fossil producing layer is only 6-18" thick (with some exceptions). It has been correlated with the Barstovian North American Land Mammal Age, and is approximately 13 and 15 million years old.

Native American Consultation

In accordance with Assembly Bill (AB) 52, and the California Tribal Consultation guidelines, the appropriate native groups were provided copies of the Notice of Preparation (NOP) and Initial Study (IS) on January 24, 2017. In addition, the County has sent four (4) AB 52 letters to tribal contacts that have requested consultation. As of the publishing of this EIR, one comment letter was received from Twenty-Nine Palms Band of Mission Indians requesting a copy of this EIR and concerns regarding the potential of impacts to resources, depending on specific development locations, as the project area is adjacent to the Chemehuevi Traditional Use Area. No other comments have been received with respect to the proposed project's potential impacts on Native American places, features, and objects.

4.5.3 Regulatory Setting

Federal

As explained in Section 3.2, *Regulatory History and Background*, even though cannabis is “decriminalized” under State law, and even with the U.S. Department of Justice (USDOJ) issuance of memoranda guiding federal law enforcement related to cannabis activities within jurisdictions that have legalized cannabis, cannabis activities continue to be illegal at the federal level and subject to the prosecutorial discretion of the federal government.

Section 106 of the National Historic Preservation Act (NHPA)

Archaeological resources are protected through the National Historic Preservation Act (NHPA) of 1966, as amended (54 USC 300101 et seq.); and its implementing regulation, Protection of Historic Properties (36 CFR Part 800), the Archaeological and Historic Preservation Act of 1974, and the Archaeological Resources Protection Act of 1979. The NHPA authorized the expansion and maintenance of the National Register of Historic Places (NRHP), established the position of State Historic Preservation Officer (SHPO), and provided for the designation of State Review Boards, set up a mechanism to certify local governments to carry out the purposes of the NHPA, assisted Native American tribes to preserve their cultural heritage, and created the Advisory Council on Historic Preservation (AHP). Prior to implementing an “undertaking” (e.g., issuing a federal permit), Section 106 of the NHPA requires federal agencies to consider the effects of the undertaking on historic properties and to afford the AHP and the SHPO a reasonable opportunity to comment on any undertaking that would adversely affect properties eligible for listing in the National Register of Historic Places (NRHP). As indicated in Section 101(d)(6)(A) of the NHPA, properties of traditional religious and cultural importance to a tribe are eligible for inclusion in the NRHP. Under the NHPA, a resource is considered significant if it meets the NRHP listing criteria at 36 Code of Federal Regulations (CFR) 60.4.

In addition, the NHPA (16 USC 470 et seq.) provides for the survey, recovery, and preservation of significant paleontological data when such data may be destroyed or lost due to a federal, federally licensed, or federally funded project.

National Register of Historic Places (NRHP)

The NRHP was established by the NHPA of 1966, as “an authoritative guide to be used by federal, State, and local governments, private groups, and citizens to identify the Nation’s cultural resources and to indicate what properties should be considered for protection from destruction or impairment” (CFR 36 Section 60.2). The NRHP recognizes both historic-period and prehistoric archaeological properties that are significant at the national, State, and local levels.

To be eligible for listing in the NRHP, a resource must be significant in American history, architecture, archaeology, engineering, or culture. A property (districts, sites, buildings, structures, and objects of potential significance) is eligible for the NRHP if it is significant under one or more of the following four established criteria:

- **Criterion A:** It is associated with events that have made a significant contribution to the broad patterns of our history.
- **Criterion B:** It is associated with the lives of persons who are significant in our past.
- **Criterion C:** It embodies the distinctive characteristics of a type, period, or method of construction; represents the work of a master; possesses high artistic values; or represents a significant and distinguishable entity whose components may lack individual distinction.
- **Criterion D:** It has yielded, or may be likely to yield, information important in prehistory or history.

Cemeteries, birthplaces, or graves of historic figures; properties owned by religious institutions or used for religious purposes; structures that have been moved from their original locations; reconstructed historic buildings; and properties that are primarily commemorative in nature are not considered eligible for the NRHP unless they satisfy certain conditions. In general, a resource must

be at least 50 years of age to be considered for the NRHP, unless it satisfies a standard of exceptional importance.

In addition to meeting the criteria of significance, a property must have *integrity*. Integrity is defined as “the ability of a property to convey its significance.” The NRHP recognizes seven qualities that, in various combinations, define integrity. To retain historic integrity a property must possess several, and usually most, of these seven aspects. Thus, the retention of the specific aspects of integrity is paramount for a property to convey its significance. The seven factors that define integrity are location, design, setting, materials, workmanship, feeling, and association.

Native American Graves Protection and Repatriation Act of 1990

The Native American Graves Protection and Repatriation Act (NAGPRA) of 1990 sets provisions for the intentional removal and inadvertent discovery of human remains and other cultural items from federal and tribal lands. It clarifies the ownership of human remains and sets forth a process for repatriation of human remains and associated funerary objects and sacred religious objects to the Native American groups claiming to be lineal descendants or culturally affiliated with the remains or objects. It requires any federally funded institution housing Native American remains or artifacts to compile an inventory of all cultural items within the museum or with its agency and to provide a summary to any Native American tribe claiming affiliation.

Paleontological Resources Preservation Act

This act aims to manage and protect paleontological resources on federal land, using scientific principles and expertise, and to develop plans for inventorying, monitoring, and deriving the scientific and educational use of such resources.

West Mojave Plan

The project site falls within the area covered by the Bureau of Land Management (BLM) West Mojave Plan (WMP), whose conservation program is intended to apply to both public and private lands but was never adopted or completed for private land. The WMP adopted on BLM public land is an attempt to define a regional strategy for conserving 58 plants and animals. In addition, the WMP an amendment to the California Desert Conservation Area (CDCA) Plan, which recognizes the importance of paleontological, prehistoric, and historic resources and places of cultural and religious value to Native Americans. The WMP’s goals related to cultural resources include the following:

- Conduct an inventory of cultural resources to the fullest extent possible to expand knowledge of these resources
- Protect and preserve to the greatest extent possible representative samples of these resources
- Give full consideration to these resources during land use planning and management decisions
- Manage to maintain and enhance resource values
- Ensure that BLM’s activities avoid inadvertent damage to cultural resources
- Achieve proper data recovery where adverse impacts cannot be avoided

The CDCA Plan also states that Native American values will be considered in all CDCA land use and management decisions. The WMP has not been adopted for privately owned lands; however,

the proposed project would be consistent with these goals even though they do not apply to the proposed project.

State

California Environmental Quality Act (CEQA)

CEQA is the principal statute governing environmental review of projects occurring in the State and is codified at Public Resources Code (PRC) Section 21000 et seq. CEQA requires lead agencies to determine if a proposed project would have a significant effect on the environment, including significant effects on historical or archaeological resources.

Under CEQA (PRC Section 21084.1), a project that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment. The CEQA Guidelines (14 California Code of Regulations [CCR] 15064.4) recognizes that historical resources include:

1. A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the CRHR;
2. A resource included in a local register of historical resources, as defined in PRC Section 5020.1(k) or identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g); and
3. Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California by the lead agency, provided the lead agency's determination is supported by substantial evidence in light of the whole record.

The fact that a resource does not meet the three criteria outlined above does not preclude the lead agency from determining that the resource may be a historical resource as defined in PRC Sections 5020.1(j) or 5024.1.

If a lead agency determines that an archaeological site is a historical resource, the provisions of PRC Section 21084.1 of CEQA and 14 CCR 15064.4 of the CEQA Guidelines apply. If a project may cause a substantial adverse change (defined as physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired) in the significance of a historical resource, the lead agency must identify potentially feasible measures to mitigate these effects (14 CCR 15064.4(b)(1), 15064.4(b)(4)).

If an archaeological site does not meet the historical resource criteria contained in the CEQA Guidelines, then the site may be treated as a unique archaeological resource in accordance with the provisions of PRC Section 21083. As defined in PRC Section 21083.2 of CEQA, a unique archaeological resource is an archaeological artifact, object, or site for which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- Contains information needed to answer important scientific research questions and there is a demonstrable public interest in that information;

- Has a special and particular quality such as being the oldest of its type or the best available example of its type; or,
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.

If an archaeological site meets the criteria for a unique archaeological resource as defined in PRC Section 21083.2, then the site is to be treated in accordance with the provisions of PRC Section 21083.2, which states that if the lead agency determines that a project would have a significant effect on unique archaeological resources, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place (PRC Section 21083.1(a)). If preservation in place is not feasible, mitigation measures shall be required.

The CEQA Guidelines note that if an archaeological resource is neither a unique archaeological nor a historical resource, the effects of the project on those resources shall not be considered a significant effect on the environment (14 CCR 15064.4(c)(4)).

California Register of Historical Resources (CRHR)

Created in 1992 and implemented in 1998, the California Register of Historical Resources (CRHR) as “an authoritative guide in California to be used by State and local agencies, private groups, and citizens to identify the State’s historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change.” Certain properties, including those listed in or formally determined eligible for listing in the NRHP and California Historical Landmarks numbered 770 and higher, are automatically included in the CRHR. Other properties recognized under the California Points of Historical Interest program, identified as significant in historical resources surveys or designated by local landmarks programs, may be nominated for inclusion in the CRHR. A resource, either an individual property or a contributor to a historic district, may be listed in the CRHR if the State Historical Resources Commission (SHRC) determines that it meets one or more of the following criteria, which are modeled on NRHP criteria:

- **Criterion 1.** It is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage.
- **Criterion 2.** It is associated with the lives of persons important in our past.
- **Criterion 3.** It embodies the distinctive characteristics of a type, period, region, or method of construction; represents the work of an important creative individual; or possesses high artistic values.
- **Criterion 4.** It has yielded, or may be likely to yield, information important in history or prehistory.

Furthermore, under PRC 5024.1, 14 CCR, Section 4852(c), a cultural resource must retain integrity to be considered eligible for the CRHR. Specifically, it must retain sufficient character or appearance to be recognizable as a historical resource and convey reasons of significance. Integrity is evaluated with regard to retention of such factors as location, design, setting, materials, workmanship, feeling, and association. Cultural sites that have been affected by ground-disturbing activities, such as grazing and off-road vehicle use, often lack integrity because they have been directly damaged or removed from their original location, among other changes.

Typically, a prehistoric archaeological site in California is recommended eligible for listing in the CRHR based on its potential to yield information important in prehistory or history (Criterion 4).

Important information includes chronological markers such as projectile point styles or obsidian artifacts that can be subjected to dating methods or undisturbed deposits that retain their stratigraphic integrity. Sites such as these have the ability to address research questions.

California Historical Landmarks (CHLs)

California Historical Landmarks (CHLs) are buildings, structures, sites, or places that have anthropological, cultural, military, political, architectural, economic, scientific or technical, religious, experimental, or other value and that have been determined to have statewide historical significance by meeting at least one of the criteria listed below. The resource also must be approved for designation by the County Board of Supervisors (or the city or town council in whose jurisdiction it is located); be recommended by the SHRC; and be officially designated by the Director of California State Parks. The specific standards now in use were first applied in the designation of CHL #770. CHLs #770 and above are automatically listed in the CRHR.

To be eligible for designation as a landmark, a resource must meet at least one of the following criteria:

- It is the first, last, only, or most significant of its type in the State or within a large geographic region (Northern, Central, or Southern California);
- It is associated with an individual or group having a profound influence on the history of California; or
- It is a prototype of, or an outstanding example of, a period, style, architectural movement or construction or is one of the more notable works or the best surviving work in a region of a pioneer architect, designer, or master builder.

California Points of Historical Interest

California Points of Historical Interest are sites, buildings, features, or events that are of local (city or county) significance and have anthropological, cultural, military, political, architectural, economic, scientific or technical, religious, experimental, or other value. Points of historical interest designated after December 1997 and recommended by the SHRC are also listed in the CRHR. No historic resource may be designated as both a landmark and a point. If a point is later granted status as a landmark, the point designation will be retired. In practice, the point designation program is most often used in localities that do not have a locally enacted cultural heritage or preservation ordinance.

To be eligible for designation as a point of historical interest, a resource must meet at least one of the following criteria:

- It is the first, last, only, or most significant of its type within the local geographic region (city or county);
- It is associated with an individual or group having a profound influence on the history of the local area; or
- It is a prototype of, or an outstanding example of, a period, style, architectural movement or construction or is one of the more notable works or the best surviving work in the local region of a pioneer architect, designer, or master builder.

Native American Heritage Commission (NAHC)

PRC Section 5097.91 established the Native American Heritage Commission (NAHC), the duties of which include inventorying of places of religious or social significance to Native Americans and identifying known graves and cemeteries of Native Americans on private lands. PRC Section 5097.98 specifies a protocol to be followed when the NAHC receives notification of a discovery of Native American human remains from a county coroner.

California Public Records Act

Sections 6254(r) and 6254.10 of the California Public Records Act were enacted to protect archaeological sites from unauthorized excavation, looting, or vandalism. Section 6254(r) explicitly authorizes public agencies to withhold information from the public relating to “Native American graves, cemeteries, and sacred places maintained by the Native American Heritage Commission.” Section 6254.10 specifically exempts from disclosure requests for “records that relate to archaeological site information and reports, maintained by, or in the possession of the Department of Parks and Recreation, the State Historical Resources Commission, the State Lands Commission, the NAHC, another State agency, or a local agency, including the records that the agency obtains through a consultation process between a Native American tribe and a State or local agency.”

California Health and Safety Code, Sections 7050 and 7052

Health and Safety Code, Section 7050.5, declares that, in the event of the discovery of human remains outside of a dedicated cemetery, all ground disturbance must cease and the county coroner must be notified. Section 7052 establishes a felony penalty for mutilating, disinterring, or otherwise disturbing human remains, except by relatives.

California Penal Code, Section 622.5

The California Penal Code, Section 622.5, provides misdemeanor penalties for injuring or destroying objects of historic or archaeological interest located on public or private lands, but specifically excludes the landowner.

Public Resources Code, Section 5097.5

PRC Section 5097.5 defines as a misdemeanor the unauthorized disturbance or removal of archaeological, historic, or paleontological resources located on public lands.

Senate Bill (SB) 18

Senate Bill 18 (SB 18), which went into effect January 1, 2005, requires local governments (city and county) to consult with Native American tribes before making certain planning decisions and to provide notice to tribes at certain key points in the planning process. The intent is to “provide California Native American tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to, cultural places.”

The purpose of involving tribes at these early planning stages is to allow consideration of cultural places in the context of broad local land use policy, before individual site-specific, project-level, land use designations are made by a local government. The consultation requirements of SB 18 apply to general plan or specific plan processes proposed on or after March 1, 2005.

According to the *Tribal Consultation Guidelines: Supplement to General Plan Guidelines* published by the Governor's Office of Planning and Research, the following are the contact and notification responsibilities of local governments:

- Prior to the adoption or any amendment of a general plan or specific plan, a local government must notify the appropriate tribes (on the contact list maintained by the Native American Heritage Commission [NAHC]) of the opportunity to conduct consultations for the purpose of preserving, or mitigating impacts to, cultural places located on land within the local government's jurisdiction that is affected by the proposed plan adoption or amendment. Tribes have 90 days from the date on which they receive notification to request consultation, unless a shorter timeframe has been agreed to by the tribe (Government Code Section 65352.3).
- Prior to the adoption or substantial amendment of a general plan or specific plan, a local government must refer the proposed action to those tribes that are on the NAHC contact list and have traditional lands located within the city or county's jurisdiction. The referral must allow a 45-day comment period (Government Code Section 65352). Notice must be sent regardless of whether prior consultation has taken place. Such notice does not initiate a new consultation process.
- Local government must send a notice of a public hearing, at least ten (10) days prior to the hearing, to tribes who have filed a written request for such notice (Government Code Section 65092).

In accordance with Senate Bill 18 and the California Tribal Consultation guidelines, the appropriate native groups were consulted with respect to the project's potential impacts on Native American places, features, and objects. As of the writing of this report, Staff has not received any comments from consulted tribes in regards to the department's SB 18 request. Staff notes consultation with appropriate Native American groups per Senate Bill 18 requirements has occurred.

Assembly Bill (AB) 52

AB 52, which went into effect on July 1, 2015, requires CEQA lead agencies to engage in early consultation with California Native American Tribes on all projects. AB 52 creates a new CEQA resource: Tribal Cultural Resources, which include sites, features, places, cultural landscapes, sacred place, objects, or archeological resources with cultural value to a California Native American Tribe that is listed or eligible for listing in the national, California or local registers.

AB 52 requires lead agencies to consider whether a project may cause a substantial adverse change in the significance of a Tribal Cultural Resource and to consider a tribe's cultural values when determining the appropriate environmental assessment, impacts and mitigation. AB 52 can draw upon SB 18's guidelines and can be completed in tandem.

AB 52 applies to projects with a Notice of Preparation (NOP) or notice of a Negative Declaration or Mitigated Negative Declaration issued on or after July 1, 2015. Revisions to the CEQA Guidelines were adopted in 2016 in order to: (1) separate the consideration of paleontological resources from Tribal Cultural Resources and update the relevant sample questions and (2) add consideration of Tribal Cultural Resources with relevant sample questions.

Paleontological Resources

Consideration of paleontological resources is required by CEQA (see Appendix G of the CEQA Guidelines). Other State requirements for paleontological resource management are found in PRC Chapter 1.7, Section 5097.5, Archaeological, Paleontological, and Historical Sites. This statute specifies that State agencies may undertake surveys, excavations, or other operations as necessary on State lands to preserve or record paleontological resources.

No State or local agencies have specific jurisdiction over paleontological resources. No State or local agency requires a paleontological collecting permit to allow for the recovery of fossil remains discovered as a result of construction-related earth moving on State or private land in a project site.

Local

Kern County General Plan (KCGP)

The project would be subject to applicable policies and measures of the KCGP. The Land Use, Open Space, and Conservation Element of the KCGP include the following policies and implementation measures related to cultural resources that would apply to the project. The KCGP contains additional policies, goals, and implementation measures that are more general in nature. Therefore, they are not listed below, but, as stated in Chapter 2, Introduction, all policies, goals, and implementation measures in the KCGP are incorporated by reference.

Chapter 1. Land Use, Open Space, and Conservation Element

Section 1.10.3. Archaeological, Paleontological, Cultural, and Historical Preservation Policy

- **Policy 25.** The County will promote the preservation of cultural and historic resources that provide ties with the past and constitute a heritage value to residents and visitors.

Implementation Measures

- **Implementation Measure K.** Coordinate with the California State University, Bakersfield's Archaeology Inventory Center.
- **Implementation Measure L.** The County shall address archaeological and historical resources for discretionary projects in accordance with CEQA.
- **Implementation Measure M.** In areas of known paleontological resources, the County should address the preservation of these resources where feasible.
- **Implementation Measure N.** The County shall develop a list of Native American organizations and individuals who desire to be notified of proposed discretionary projects. This notification will be accomplished through the established procedures for discretionary projects and CEQA documents.
- **Implementation Measure O.** On a project-specific basis, the County Planning Department shall evaluate the necessity for the involvement of a qualified Native American monitor for grading or other construction activities on discretionary projects that are subject to a CEQA document.

Metropolitan Bakersfield General Plan (MBGP)

The Metropolitan Bakersfield General Plan (MBGP), a joint effort between the Kern County Planning Department and the City of Bakersfield Planning Division, was last adopted on December 11, 2007. The MBGP includes both city and unincorporated County lands. The MBGP describes the community's physical development as well as its economic, social and environmental goals and is currently undergoing an update. Project-related development on unincorporated lands within the MBGP Planning Area would be subject to the following applicable policies and implementation measures of the MBGP, with respect to cultural resources.

Chapter 2. Land Use Element

Policies

- **Policy 104.** As part of the environmental review procedure, an evaluation of the significance of paleontological, archaeological, and historical resources and the impact of proposed development on those resources shall be conducted and appropriate mitigation and monitoring included for development projects.
- **Policy 105.** Development on land containing known archaeological resources (i.e., high sensitivity areas) shall utilize methodology set forth, as described necessary by a qualified archaeologist, to locate proposed structures, paving, landscaping, and fill dirt in such a way as to preserve these resources undamaged for future generations when it is the recommendation of a qualified archaeologist that said resources be preserved in situ.
- **Policy 106.** The preservation of significant historical resources shall be encouraged by developing and implementing incentives such as building and planning application permit fee waivers, Mills Act contracts, grants and loans, implementing the State Historic Building Code and other incentives as identified in the City's Historic Preservation Ordinance.
- **Policy 107.** The preservation of significant historical resources shall be promoted and other public agencies or private organizations shall be encouraged to assist in the purchase and/or relocation of sites, buildings, and structures deemed to be of historical significance.

Kern County Specific Plans

Kern County has adopted 39 Specific Plans, 10 Rural Community Plans, and 14 Interim Rural Community Plan Maps. The Specific Plans and Rural Community Plans are intended to be an amplification of the goals and policies of the KCGP and are, therefore, consistent therewith. Interim Rural Community Plan Maps are areas where a specific plan has not been formally adopted, thus the goals and policies of the KCGP govern these areas. Future commercial cannabis cultivation, processing/packaging, and sales activities that would be authorized under the proposed project that would be located within the boundary of an adopted Specific Plan would be regulated according to County zoning.

4.5.4 Impacts and Mitigation Measures

This section describes the methodology used in conducting the impact analysis for cultural and tribal cultural resources, the thresholds of significance used in assessing impacts to cultural and tribal cultural resources, and the assessment of impacts to cultural and tribal cultural resources, including relevant mitigation measures.

Methodology

This analysis is based on the county-wide cultural and paleontological information that is publicly available. The evaluation of the project's potential effects on significant cultural resources is at the program level. This EIR sets forth research criteria and report content needed to enable a project-level evaluation of resource occurrences. Any individual projects resulting from this proposed project would be required to undergo a separate CEQA evaluation pertaining to project-specific details and would be required to adhere to the research criteria and report content set forth herein.

Pertaining to tribal cultural resources, the NOP/IS was sent to the appropriate groups (refer to Appendix A of this EIR) and the County has sent four AB 52 letters to tribal contacts that have requested consultation with respect to the proposed project's potential impacts on Native American places, features, and objects. As mentioned above, one comment letter has been received with respect to the proposed project's potential impacts on Native American places, features, and objects.

Development Standards Related to Cultural and Tribal Cultural Resources

Option A

Option A of the proposed project would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Therefore, no development standards are identified in the proposed Zoning Ordinance; refer to Appendix B for specific wording of the proposed ordinance under Option A.

Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, testing, and retail cannabis stores with mobile delivery facilities. Development standards provided in the proposed Zoning Ordinance, that pertain to cultural and tribal cultural resources include, but are not limited to, the following (refer to Appendix C for specific working of the proposed ordinance under Option B):

- All cannabis facilities must be 0.5 mile from any school, park, day care center or youth center.
- The applicant must demonstrate compliance with all applicable mitigation measures prior to the issuance of a grading or building permit for any future cannabis related facility.

Thresholds of Significance

The Kern County CEQA Implementation Document and Kern County Environmental Checklist state that a project would normally be considered to have a significant impact if it would:

- Cause a substantial adverse change in the significance of a historical resource, as defined in CEQA Guidelines Section 15064.5;
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5;
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature;
- Disturb any human remains, including those interred outside of formal cemeteries;

- Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code (PRC) Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is:
 - Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC Section 5020.1(k); or
 - A resource determined by the lead agency in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 52024.1. In applying the criteria set forth in subdivision (c) of PRC Section 52024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe.

Section 21083.2(g) of CEQA further defines “unique archaeological resource” for purposes of determination as to whether a project may have a significant effect on archaeological resources. As used in this section “unique archaeological resource” means an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information;
- Has a special and particular quality such as being the oldest of its type or the best available of its type; or
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.

CEQA does not define a unique paleontological resource but for purposes of this EIR, a paleontological resource or site is considered “unique” where it meets any of the following criteria:

- It is the best example of its kind locally or regionally;
- Illustrates a geologic principle;
- Provides a critical piece of paleobiological data;
- Encompasses any part of a “type locality” of a fossil or rock unit/formation;
- Contains a unique or particularly unusual assemblage of fossils;
- Occupies a unique position stratigraphically; and/or
- Occupies a unique position, proximally, distally or laterally within a rock unit/formation’s extent or distribution.

According to CEQA Guidelines, California Code of Regulations (CCR) Title 14, 15064.5, a project with an effect that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment (CCR Title 14, 15064.5(b)). The guidelines further state that a substantial adverse change in the significance of a resource means the physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historic resource would be materially impaired. Actions that would materially impair the significance of a historical resource are any actions that would demolish or adversely alter those physical characteristics of a historical resource that convey its

historical significance and qualify it for inclusion in the CRHR or in a local register or survey that meet the requirements of PRC Sections 5020.1(k) and 5024.1(g).

Project Impacts

Impact 4.5-1: Cause a Substantial Adverse Change in the Significance of a Historical or Archaeological Resource as Defined in Section 15064.5

As discussed in Section 4.5.2, *Environmental Setting*, Kern County is rich in prehistoric and historic activities that result in the presence of historical and archaeological resources. The County supports a number of resources that are listed on the NRHP, CRHR, and other lists, as well as resources that are eligible for listing. The National Park Service (NPS) National Register of Historic Places Program identifies 25 sites listed on the NRHP and 4 sites listed on the National Historic Landmarks in Kern County (NPS, 2016, 2015a, and 2015b). The California State Parks (CSP) Office of Historic Preservation (OHP) identifies 47 California State Historical Landmark sites and 11 California Points of Historical Interest within Kern County (OHP, 2017b). Additionally, the California Historical Resources Information System (CHRIS) Southern San Joaquin Valley Information Center (SSJVIC) is the primary repository for resource records and study reports for Fresno, Kern, Kings, Madera, and Tulare counties. The SSJVIC maintains the records regarding the confidential locations of the sites listed on, or eligible for, the CRHR.

The KCGP, MBGP, 39 Specific Plans, and 10 Rural Community Plans provide goals and policies aimed at protecting historical and archaeological resources within the County.

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Ground disturbing activities could result from individuals planting up to six plants; however, cannabis-related activities for personal use would be similar to a personal garden, and is would not result in an adverse change in the significance of a historical or archaeological resource. Impacts resulting from Option A would be less than significant.

Per Proposition 64, plants shall be kept within the person's private residence, or upon the grounds of that private residence (e.g. in an outdoor garden area), are in a locked space, and are not visible by normal unaided vision from a public place. Therefore, the implementation of Option A would result in ground disturbing activities that could encounter buried archaeological resources. This would be similar to a personal garden, and individual cultivation of up to six plants would not result

in an adverse change in the significance of buried historical or archaeological resources. Impact would be less than significant under Option A.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis stores with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 square feet (ft^2) of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft^2 of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

Option B would provide updated standards and conditions for future commercial medical and adult use cannabis activities and facilities. Future ground disturbing activities associated with Option B would occur at outdoor cultivation sites or in areas where new structures are constructed. In addition, ground disturbing activities may also occur at sites where existing structures need improvements in order to house commercial cannabis cultivation, processing/packaging, or sales operations. The implementation of Option B could result in future activities that would potentially impact historical and archaeological resources. The incorporation of mitigation measures for project-specific impacts would address the potential risk from direct impacts, as well as secondary or accidental impacts, on a project by project basis. Without mitigation, impacts resulting from Option B would be significant and Mitigation Measures MM 4.5-1 through MM 4.5-3 are provided to reduce these potential impacts to a less than significant level.

The implementation of Option B would result in project-specific activities that have the potential to encounter buried significant archaeological resources (including human remains) that were not identified during required project-specific archaeological surveys. Mitigation Measures MM 4.5-2 and MM 4.5-3 would reduce potential impacts on unknown archaeological resources to a less than significant level.

Potential adverse impacts on cultural resources as a result of the implementation of the proposed project include, but are not limited to, being directly destroyed or indirectly impacted by construction equipment and project-related vehicles, unauthorized collection of cultural resources by project personnel, as well as amateur and commercial collectors who would have access to the area, and vandalism. Implementation of Mitigation Measures MM 4.5-1 through MM 4.5-3 would reduce the potential impacts of Option B on cultural resources to a less than significant level.

Certain future cannabis-related activities and facilities would require processing a Conditional Use Permit (CUP) and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing before the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that

are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to the direct or indirect impacts to cultural resources would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Historical and Archaeological Resources

1. Section 106 of the NHPA and NRHP protect archaeological and historical resources through guidelines, processes, and providing criteria that must be met to determine a resources significance.
2. The West Mojave Plan guides the protection and preservation of historical and archaeological resources.
3. CEQA and the CRHR protect archaeological and historical resources through guidelines, processes, and providing criteria that must be met to determine a resources significance.
4. California Public Records Act protects archaeological sites from unauthorized excavation, looting, or vandalism.
5. KCGP Land Use, Open Space and Conservation Element Section 1.10.3, Archaeological, Paleontological, Cultural, and Historical Preservation, Policy 25 and Implementation Measures K, L, M, N, and O promote the preservation of historical and archaeological resources.
6. MBGP Land Use Element Policies 104, 105, 106, and 107 relate to the preservation of historical and archaeological resources.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

MM 4.5-1 Applications for site plan review for any cannabis related establishment, including but not limited to cultivation, processing and packaging, distribution, and testing, or application for a conditional use permit shall require the following materials:

- a. Have an archival records search completed by a qualified archaeologist. This record search shall include an examination of the California Historical Resources Information Files at the Southern San Joaquin Valley Information Center, California State University, Bakersfield, and a search of the Native American Heritage Commission Sacred Lands Files, Sacramento. The project applicant may rely on a previously performed records search for subsequent ground disturbing activities, if available.

- b. Consult with Kern County Planning and Natural Resources Department Staff to conduct tribal consultation to identify any tribal cultural resources within or adjacent to the project site.
- c. Implement either of the following options:
 1. If an application site plan is within a section that has experienced 100 percent previous ground-surface disturbance, as indicated by agricultural, industrial or urban uses, and the records searches indicate that the parcel has been previously surveyed and no cultural or tribal cultural resources are known on it, no further cultural resources studies shall be required. All other application locations shall be subject to intensive (100 percent) pedestrian ground-surface survey (Phase I survey/Class III inventory) by qualified archaeologists. The project applicant may rely on a previously performed ground surface survey for subsequent ground disturbing activities; or
 2. If an application location has not been previously surveyed based on the records search information, an intensive (100 percent) pedestrian ground-surface survey (Phase I survey/Class III inventory) by qualified archaeologists shall be required.
- d. All prehistoric/Native American archaeological sites, whether identified during the records searches or during the intensive survey, shall be demarcated by a qualified archaeologist, fenced by the project applicant, and preserved in place.
- e. Historical archaeological sites that are potentially eligible for listing in the National Register of Historic Places shall be evaluated by a qualified archaeologist and must meet the requirements of the National Historic Preservation Act of 1966 in order to qualify. Qualifying sites, structures and equipment that are identified during the records search or field survey shall be fenced and preserved in open-space, removed and curated, or treated using appropriate data recovery procedures.

MM 4.5-2 Prior to the issuance of grading or building permits or as part of any application for a conditional use permit, and for the duration of construction activities, a Construction Worker Environmental and Cultural Awareness Training Program shall be provided to all construction personnel prior to commencing work at the project site. The training shall be prepared and conducted by the qualified archaeologist, defined as an archaeologist meeting the Secretary of the Interior's Standards for professional archaeology. The training may be in the form of a video. The training may be discontinued when ground disturbance is completed or suspended, but must resume when ground-disturbing activities resume. A sticker shall be placed on hard hats indicating that the worker has completed the cultural training program. Construction personnel shall not be permitted to operate equipment within the construction area unless they have attended the training and are wearing hard hats with the required sticker. A copy of the training transcript and/or training video, as well as a list of the names of all personnel who attended the training and copies of the signed acknowledgement forms shall be submitted

to the Kern County Planning and Natural Resources Department. The purpose of the Cultural Awareness Training Program shall be to inform construction personnel of the types of cultural resources that may be encountered during construction, and to bring awareness to personnel of actions to be taken in the event of a cultural resources discovery. This may include: a discussion of applicable cultural resources statutes, regulations and related enforcement provisions; an overview of the prehistoric and historic environmental setting and context, as well as current cultural information regarding local tribal groups; samples or visuals of artifacts that might be found in the project area; and a discussion of what prehistoric and historic archaeological deposits look like at the surface and when exposed during construction. The cultural training program shall include instruction that in the event cultural resources are unearthed during ground-disturbing activities, the project operator shall cease any ground disturbing activities within 100 feet of the find until it can be evaluated by a qualified archaeologist. The cultural training program shall also indicate that the qualified archaeologist shall be empowered to halt or redirect ground-disturbing activities away from the vicinity of the find until the qualified archaeologist has evaluated the find, determined whether the find is culturally sensitive, and designed an appropriate short-term and long term treatment plan.

- MM 4.5-3** The project proponent shall continuously comply with the following: In the event that unanticipated cultural or tribal cultural resources are encountered during the course of grading or construction, the project operator/contractor shall cease any ground disturbing activities within 50 feet of the find. Cultural and/or tribal cultural resources may include prehistoric archaeological materials such as flaked and ground stone tools and debris, shell, bone, ceramics, and fire-affected rock, as well as historic materials such as glass, metal, wood, brick, or structural remnants. A qualified archaeologist shall evaluate the resource and recommend appropriate treatment measures, as appropriate.

Per California Environmental Quality Act Guidelines Section 15126.4(b)(3), project redesign and preservation in place shall be the preferred means to avoid impacts to significant historical resources. Consistent with CEQA Guidelines Section 15126.4(b)(3)(C), if resources cannot be avoided, additional treatment measures shall be developed in consultation with Kern County, and may include testing and evaluation or data recovery excavation. Kern County shall consult with appropriate Native American representatives in determining appropriate treatment for unearthed cultural resources if the resources are prehistoric or Native American in nature. The qualified archaeologist shall prepare a report documenting evaluation and/or additional treatment of the resource. A copy of the report shall be provided to the Kern County Planning and Natural Resources Department and to the Southern San Joaquin Valley Information Center.

Level of Significance after Mitigation

Impacts to known and unknown historical and archaeological sites would be less than significant with respect to Option A. Regarding Option B, impacts to known and unknown historical and archaeological sites would be less than significant.

Impact 4.5-2: Directly or Indirectly Destroy a Unique Paleontological Resource or Site or Unique Geologic Feature

As mentioned previously, Kern County is rich in paleontological resources. Igneous and metamorphic rocks result from the solidification of magma (molten rock) in environments that cause magma creation. As magma reaches the surface as lava, contact with biological organisms usually results in their destruction; as such, there is no plant or animal material present to fossilize. Therefore, there is no potential for encountering fossils in the igneous rocks in the Tehachapi Mountains. However, older Quaternary deposits along the base of the mountains may contain significant fossil vertebrate remains. In addition, younger Quaternary deposits in the valleys and drainages also have the potential to contain significant vertebrate fossils. Lake deposits have produced the remains of numerous species of extinct animals such as elephants, camels, sloths, horses, a variety of rodents, turtles and amphibians.

The University of California Museum of Paleontology (UCMP) maintains paleontological collections and records for California as well as the United States and other parts of the world. UCMP identifies 38,048 known paleontological resources within Kern County (UCMP, 2017). As mentioned previously, some of the larger paleontological resources include the Maricopa and McKittrick Brea Tar Pits, the Bean Hills Petrified Forest and Shark Tooth Hill at Round Mountain.

The KCGP, MBGP, 38 Specific Plans, and 10 Rural Community Plans provide goals and policies aimed at protecting natural and cultural resources, including paleontological resources, within the County.

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

Similar to the impacts discussed in Impact 4.5-1, Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Ground disturbing activities could result from individuals planting up to six plants; however, cannabis-related activities for personal use would be similar to a personal garden, and is would not result in an adverse change in the significance of a paleontological resource or unique geologic feature. Impacts from Option A on paleontological resources and unique geological features would be less than significant.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within

unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

Ground disturbing activities associated with the future commercial cannabis cultivation, processing/packaging, distribution, and sales facilities of Option B would occur at outdoor cultivation sites or in areas where new structures are constructed. In addition, ground disturbing activities may also occur at sites where existing structures need improvements in order to house commercial cannabis cultivation, processing and packaging, distribution, or sales operations. The implementation of Option B could result in future activities that would impact paleontological resources. The incorporation of mitigation measures for project-specific impacts would address the potential risk from direct impacts, as well as secondary or accidental impacts, on a project by project basis. Mitigation measures are provided to reduce these impacts to a less than significant level.

The implementation of Option B would result in project-specific activities that have the potential to encounter buried significant paleontological resources that were not previously identified during required project-specific paleontological surveys. Mitigation measures would reduce impacts to unknown archaeological resources to a less than significant level.

Potential adverse impacts on paleontological resources include, but are not limited to, being directly impacted and destroyed by construction equipment and project-related vehicles, exposure during construction that may subject any potentially fossil-bearing units to increased weathering and erosion, unauthorized collection of fossils by project personnel, as well as amateur and commercial collectors who would have access to the area, and vandalism. Implementation of mitigation measures would address these potentially adverse impacts and would reduce the impacts to paleontological resources to a less than significant level.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing before the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to the direct or indirect impacts to paleontological resources would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Paleontological Resources and Unique Geologic Features

1. The NHPA provides survey, recovery, and preservation guidance for paleontological resources.
2. The West Mojave Plan guides the protection and preservation of paleontological resources.
3. CEQA provides survey, excavation, and operations guidelines to preserve and record paleontological resources.
4. KCGP Land Use, Open Space and Conservation Element Section 1.10.3, Archaeological, Paleontological, Cultural, and Historical Preservation, Policy 25 and Implementation Measures K, L, M, N, and O promote the preservation of paleontological resources.
5. MBGP Land Use Element Policies 104, 105, 106, and 107 relate to the preservation of historical and archaeological resources.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

MM 4.5-4 Prior to the issuance of grading permits, the project applicant shall retain a qualified paleontologist to carry out all mitigation measures related to paleontological resources. Prior to the start of any ground disturbing activities, the qualified paleontologist shall conduct a Paleontological Resources Awareness Training program for all construction personnel working on the project. This may be conducted in conjunction with the required archaeological resources training. The training shall include an overview of potential paleontological resources that could be encountered during ground disturbing activities to facilitate worker recognition, avoidance, and subsequent immediate notification to the qualified paleontologist for further evaluation and action, as appropriate; and penalties for unauthorized artifact collecting or intentional disturbance of paleontological resources.

MM 4.5-5 Prior to initiating ground disturbance activities for an activity for which a conformity review is required, a project applicant shall:

- a. Have an paleontological records search completed by a qualified paleontologist. This record search shall include an examination of the Natural History Museum of Los Angeles County and the University of California Museum of Paleontology. The project applicant may rely on a previously performed records search for subsequent ground disturbing activities, if available.
- b. Implement either:
 1. If an application site plan is within a section that has experienced 100 percent previous ground-surface disturbance, as indicated by agricultural, industrial or urban uses, and the records searches indicate that the parcel has been

previously surveyed and no paleontological resources or unique geological features are known on it, no further paleontological resources studies shall be required. All other application locations shall be subject to intensive (100 percent) pedestrian ground-surface survey by qualified paleontologist. The project applicant may rely on a previously performed ground surface survey for subsequent ground disturbing activities; or

2. If an application location has not been previously surveyed based on the records search information, an intensive (100 percent) pedestrian ground-surface survey by qualified paleontologists shall be required.
- c. All paleontological sites, whether identified during the records searches or during the intensive survey, shall be demarcated by a qualified paleontologist, fenced by the project applicant, and preserved in place.

MM 4.5-6 Prior to the issuance of grading permits, the project applicant shall retain a qualified paleontologist to prepare a Worker Environmental and Paleontological Awareness Program training, all construction personnel shall be trained regarding the recognition of possible buried paleontological resources and protection of paleontological resources during construction, prior to the initiation of construction or ground-disturbing activities. Training shall inform construction personnel of the procedures to be followed upon the discovery of paleontological materials. All personnel shall be instructed that unauthorized collection or disturbance of fossils is unlawful.

MM 4.5-7 If, during the paleontological resources survey, the project applicant's paleontologist identifies paleontological resources, then a Paleontological Resource Monitoring and Mitigation Plan shall be prepared for implementation during construction and operations. The Plan shall be submitted to the Kern County Planning and Natural Resources Department for review prior to the start of grading or construction and shall include the following:

- a. Procedures for the discovery, recovery, and salvage of paleontological resources encountered during construction, if any, in accordance with standards for recovery established by the Society of Vertebrate Paleontology;
- b. Identification and mapping of specific areas of high and undetermined paleontological potential that will be monitored during construction;
- c. Verification that the project proponent has an agreement with a recognized museum repository (e.g., the San Diego Natural History Museum or the University of California Museum of Paleontology), for the disposition of recovered fossils and that the fossils shall be processed (e.g., cleaned, repaired, identified, catalogued) prior to submittal to the repository as required by the repository; and
- d. Field activities shall be documented in a complete set of the daily monitoring logs that shall be kept on-site throughout the earthmoving activities. The logs shall be made available for inspection and shall be keyed to a location map to indicate the area monitored, the date, the assigned personnel, and the results of the monitoring activities, including rock unit encountered, fossil specimens recovered, and associated specimen data, as well as corresponding geologic and

geographic site data. Within 90 days of the completion of the paleontological monitoring, a monitoring report, with an appended, itemized inventory of specimens, shall be submitted to Kern County.

MM 4.5-8 If, during the paleontological resources survey, the project applicant's paleontologist identifies paleontological resources and a Paleontological Resource Monitoring and Mitigation Plan is prepared, then prior to the commencement of construction activities, the project applicant shall retain a qualified paleontologist to implement the approved Paleontological Resource Monitoring and Mitigation Plan as follows:

- a. Monitoring shall occur during ground-disturbing activities in areas identified as having deposits with a high or undetermined paleontological potential rating, either at the surface or at depth (greater than 3 to 5 feet below natural ground surface). Monitoring shall consist of inspection of sedimentary exposures for contained fossil remains, and appropriate documentation of observed geologic and stratigraphic features in field notes and photographs.
- b. In the event fossils are discovered, fossils determined to be significant shall be salvaged using appropriate methods. If salvage of a large or unusually productive fossil discovery is warranted, earthmoving activities shall be diverted temporarily around the fossil site, and a recovery crew shall be mobilized to remove the material as quickly as possible. The paleontological monitor shall photograph and draw stratigraphic profiles of relevant cut surfaces, and if appropriate take samples for analysis of microfossils, dating, or other specified purposes, in accordance with the research design. Once the fossil discovery or an appropriate representative sample (as determined by the Project Paleontologist) of the fossil discovery has been salvaged, earthmoving activities may resume in the discovery area.
- c. All recovered specimens deemed significant shall undergo preparation and curation into a museum repository, in accordance with the standards of the repository. All preparation and curation tasks may be carried out by a qualified paleontologist, or submitted to a laboratory acceptable to the selected museum. Preparation shall include repair and cleaning of specimens to a point of identification, including, if appropriate, screenwashing of sediments to recover smaller fossil remains. Specimens shall be sorted into species lots, and identified to the lowest reasonable taxonomic level. Specimens shall then be curated into a museum repository. In accordance with museum repository standards, curation may involve cataloguing of species lots, painting of species lot numbers on individual specimens, and organizational tasks. If appropriate and in agreement with the research design, samples shall be submitted to a laboratory, acceptable to the selected museum, for dating, microfossil analysis, pollen analysis, and/or other suitable analyses.

Level of Significance after Mitigation

Impacts would be less than significant with respect to Option A. Impacts would be less than significant with respect to Option B.

Impact 4.5-3: Disturb any Human Remains, including those Interred outside of Formal Cemeteries

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

Option A of the proposed project would ban all medical and adult use cannabis-related activities other than what is allowed under Proposition 64. Thus, under Option A, ground disturbance and individual private residences could result from the cultivation of up to six plants, similar to other gardening activities. While any ground disturbing activities could encounter buried human remains, it is unlikely that individual cultivation activities, or gardening, of up to six plants on a private residential property would encounter buried human remains. Residential areas are previously disturbed from construction, as well as from individual landscaping, gardening, maintenance, home improvement, and other personal residence activities. Therefore, areas where individual cultivation would occur upon the grounds of a private residence have a low probability of encountering unknown human remains. Thus, impacts from Option A on buried human remains would be less than significant.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

Option B of the proposed project would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis stores with mobile delivery. Future ground disturbing activities from farming/cultivation and potential construction activities could encounter buried human remains that were not identified during

required field surveys per Mitigation Measures MM 4.5-1 and MM 4.5-5. This could result in damage to unknown, buried human remains. Therefore, Mitigation Measure MM 4.5-9 contains procedures for recording and treating any human remains that are discovered during project-specific activities resulting from the implementation of the proposed project. Mitigation Measure MM 4.5-9 requires that these items be protected, preserved and treated in accordance with applicable laws, regulations and guidelines. With the implementation of mitigation measures, impacts would be less than significant in this regard.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing for the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing, packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to the direct or indirect impacts to human remains would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Human Remains

1. Section 106 of the NHPA and NRHP protect archaeological and historical resources, including human remains, through guidelines, processes, and providing criteria that must be met to determine a resources significance.
2. Native American Grave Protection and Repatriation Act sets provisions for the intentional removal and inadvertent discovery of human remains and clarifies the ownership of human remains.
3. The West Mojave Plan guides the protection and preservation of historical and archaeological resources, including human remains.
4. CEQA and the CRHR protect human remains through guidelines, processes, and providing criteria that must be met to determine a resources significance.
5. Public Resources Code 5097.91 and 5097.98 relate to the NAHC, tribal cultural resources, Native American human remains, and guidance on inventory and preservation of these resources.
6. California Health and Safety Code Sections 7050 and 7052 requires that all work stop, the remains not be disturbed and the discovery of human remains be reported to the County coroner.
7. KCGP Land Use, Open Space and Conservation Element Section 1.10.3, Archaeological, Paleontological, Cultural, and Historical Preservation, Policy 25 and Implementation Measures K, L, M, N, and O promote the preservation of cultural resources.

8. MBGP Land Use Element Policies 104, 105, 106, and 107 relate to the preservation of cultural resources.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

Implement Mitigation Measures MM 4.5-1 and MM 4.5-8, as described above.

- MM 4.5-9** The project proponent shall continuously comply with the following: If human remains are uncovered during ground disturbing activities, the project proponent shall immediately halt work and contact the Kern County Coroner to evaluate the remains, and follow the procedures and protocols set forth in Section 15064.5 (e)(1) of the CEQA Guidelines. The Kern County Planning and Natural Resources shall be contacted immediately after the Kern County Coroner. All construction activities onsite shall cease. If the County coroner determines that the remains are Native American, the Native American Heritage Commission shall be notified, in accordance with Health and Safety Code Section 7050.5, subdivision (c), and Public Resources Code 5097.98 (as amended by AB 2641). No further construction activity shall occur until consultation is complete with the most likely descendent, the Coroner and the Kern County Planning and Natural Resources staff. Authorization to resume construction shall only be given by the County after concurrence with the most likely descendent and shall include implementation of all appropriate measures to protect any possible burial sites or human remains.

Level of Significance after Mitigation

Impacts would be less than significant with respect to Option A. Regarding Option B, impacts would be less than significant.

Impact 4.5-4: Cause a Substantial Adverse Change in the Significance of a Tribal Cultural Resource, Defined in PRC Section 21074, that is Listed or Eligible for Listing in the California Register of Historical Resources, or in a Local Register of Historical Resources as Defined in PRC Section 5020.1(k)

As of the publishing of this EIR, one comment letter was received from Twenty-Nine Palms Band of Mission Indians requesting a copy of this EIR and concerns regarding the potential of impacts to resources, depending on specific development locations, as the project area is adjacent to the Chemehuevi Traditional Use Area. No other comments have been received with respect to the proposed project's potential impacts on Native American places, features, and objects. As discussed in Section 4.5.2, *Environmental Setting*, the native peoples of Kern County are of three major linguistic stocks and tribal groupings: the Yokuts of the San Joaquin Valley and foothills; the Chumash of the Coastal Ranges; and Shoshonean tribes, from the Uru-Aztek language family, in parts of the Sierra Nevada Range and the eastern desert areas of Kern County. These three major linguistic stocks and tribal groupings within Kern County generally include: Yokuts, Chumash, Interior Chumash, Kawaiisu, Kitanemul, Panamint Shoshone, and Tuebatulabal Tribes.

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

Option A of the proposed project would ban all medical and adult use cannabis-related activities other than what is allowed under Proposition 64. Thus, under Option A, ground disturbance and individual private residences could result from the cultivation of up to six plants, similar to other gardening activities. While any ground disturbing activities could encounter unknown tribal cultural resources, it is unlikely that individual cultivation activities, or gardening, of up to six plants on a private residential property would encounter such resources. Residential areas are previously disturbed from construction, as well as from individual landscaping, gardening, maintenance, home improvement, and other personal residence activities. Therefore, areas where individual cultivation would occur upon the grounds of a private residence have a low probability of encountering tribal cultural resources. Thus, Option A would not result in an adverse change in the significance of a tribal cultural resource and impacts would be less than significant.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing and packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

Option B of the proposed project would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution and retail cannabis stores with or without mobile delivery. Future ground disturbing activities from farming/cultivation and potential construction activities could disturb unknown tribal cultural resources that were not identified during required field surveys and required tribal consultation per Mitigation Measures MM 4.5-1. Mitigation Measure MM 4.5-2 requires cultural resources awareness training, including tribal cultural resources, be provided to all construction workers, when applicable at the project-level, to ensure that tribal cultural resources are protected, preserved and treated in accordance with applicable

laws, regulations and guidelines. Mitigation Measures MM 4.5-1 and MM 4.5-3 further protect unknown tribal cultural resources during ground disturbing activities. Therefore, with the implementation of mitigation measures, Option B would not cause a substantially adverse change to a significant cultural resource and impacts are less than significant.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing before the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to the direct or indirect impacts to tribal cultural resources would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Tribal Cultural Resources

1. Section 106 of the NHPA and NRHP protect tribal cultural resources through guidelines, processes, and providing criteria that must be met to determine a resources significance.
2. Native American Grave Protection and Repatriation Act sets provisions for the intentional removal and inadvertent discovery of human remains and clarifies the ownership of human remains.
3. The West Mojave Plan guides the protection and preservation of tribal cultural resources.
4. CEQA and the CRHR protect tribal cultural resources through guidelines, processes, and providing criteria that must be met to determine a resources significance.
5. Public Resources Code 5097.91 and 5097.98 relate to the NAHC, tribal cultural resources, Native American human remains, and guidance on inventory and preservation of these resources.
6. SB 18 and AB 52 relate to Native American Tribal consultation and preservation of tribal cultural resources.
7. KCGP Land Use, Open Space and Conservation Element Section 1.10.3, Archaeological, Paleontological, Cultural, and Historical Preservation, Policy 25 and Implementation Measures K, L, M, N, and O promote the preservation of tribal cultural resources.
8. MBGP Land Use Element Policies 104, 105, 106, and 107 relate to the preservation of tribal cultural resources.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

Implement Mitigation Measures MM 4.5-1 through MM 4.5-3, as described above.

Level of Significance after Mitigation

Impacts would be less than significant with respect to Option A. Regarding Option B, impacts would be less than significant.

Impact 4.5-5: Cause a Substantial Adverse Change in the Significance of a Tribal Cultural Resource, Defined in PRC Section 21074, that is a Resource Determined by Kern County to be Significant Pursuant to Criteria Set Forth in PRC Section 5024.1(c)

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

Under Option A, ground disturbance and individual private residences could result from the cultivation of up to six plants, similar to other gardening activities. While any ground disturbing activities could encounter unknown tribal cultural resources, it is unlikely that individual cultivation activities, or gardening, of up to six plants on a private residential property would encounter such resources. Residential areas are previously disturbed from construction, as well as from individual landscaping, gardening, maintenance, home improvement, and other personal residence activities. Therefore, areas where individual cultivation would occur upon the grounds of a private residence have a low probability of encountering tribal cultural resources. Thus, Option A would not result in an adverse change in the significance of a tribal cultural resource and impacts would be less than significant.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in

closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

Option B of the proposed project would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis stores with or without mobile delivery. Future ground disturbing activities from farming/cultivation and potential construction activities could disturb unknown tribal cultural resources that were not identified during required field surveys and required tribal consultation per Mitigation Measures MM 4.5-1. Mitigation Measure MM 4.5-2 requires cultural resources awareness training, including tribal cultural resources, be provided to all construction workers, when applicable at the project-level, to ensure that tribal cultural resources are protected, preserved and treated in accordance with applicable laws, regulations and guidelines. Mitigation Measures MM 4.5-1 and MM 4.5-3 further protect unknown tribal cultural resources during ground disturbing activities. Therefore, with the implementation of mitigation measures, Option B would not cause a substantially adverse change to a significant cultural resource and impacts are less than significant.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing before the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing, packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to the direct or indirect impacts to tribal cultural resources would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Tribal Cultural Resources

Refer to Impact 4.5-4, above, for a summary of applicable existing regulations and policies related to tribal cultural resources.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

Implement Mitigation Measures MM 4.5-1 through MM 4.5-3, as described above.

Level of Significance after Mitigation

Impacts would be less than significant with respect to Option A. Regarding Option B, impacts would be less than significant.

Cumulative Setting, Impacts, and Mitigation Measures

Cumulative Setting

The geographic scope for cumulative impacts is defined in Section 3.7, *Cumulative Projects*, and includes both the KCGP and the regional growth plan and projections included in the Kern COG Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) approved in 2014. With respect to cultural and tribal cultural resources, the geographic scope of analysis is bounded by the County line and includes the KCGP implementation. This is a large enough area to encompass any effects of the proposed project on historical, archaeological, paleontological, and tribal cultural resources that may combine with similar effects caused by other projects, and provides a reasonable context wherein cumulative actions could affect these resources.

For historical, archaeological, paleontological, and tribal cultural resources, impacts are site-specific and not generally subject to cumulative impacts unless multiple projects impact a common resource or an affected resource extends offsite, such as a larger historic town site or district. The cumulative analyses for historical, archaeological, paleontological, and tribal cultural resources considers whether the proposed project, Option A or Option B, in combination with the past, present, and reasonably foreseeable projects, could cumulatively affect any common cultural or paleontological resources.

Cumulative Impacts and Mitigation Measures

Impact 4.5-6: Contribute to Cumulative Cultural Resources Impacts

Potential historical, archaeological, and paleontological impacts are considered and evaluated on a project-level specific basis.

Proposed Project Option A

Option A of the proposed project would ban all medical and adult use cannabis-related activities other than what is allowed under Proposition 64. Thus, under Option A, ground disturbance and individual private residences could result from the cultivation of up to six plants, similar to other gardening activities. While any ground disturbing activities could encounter historical, archaeological, paleontological, and/or tribal cultural resources, it is unlikely that individual cultivation activities, or gardening, of up to six plants on a private residential property would encounter such resources. Residential areas are previously disturbed from construction, as well as from individual landscaping, gardening, maintenance, home improvement, and other personal residence activities. Therefore, areas where individual cultivation would occur upon the grounds of a private residence have a low probability of encountering historical, archaeological, paleontological, and/or tribal cultural resources. Thus, Option A in combination with past, present, and reasonable foreseeable project in the County would not result in an adverse change in the significance of a historical, archaeological, paleontological, and/or tribal cultural resources and cumulative impacts would be less than significant.

Proposed Project Option B

Option B of the proposed project would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis stores with or without mobile delivery. Each incremental development resulting from the implementation of Option B in combination with other past, present, and reasonably foreseeable projects in the County would be required to comply with all applicable State, federal, and County regulations concerning preservation, salvage, or handling of cultural and paleontological resources, including compliance with required mitigation. However, due to the Option B's potential to encounter unknown historical, archaeological, paleontological, buried human remains, and/or tribal cultural resources, Option B would have the potential to cause a considerable contribution in combination with impacts from past, present, or reasonably foreseeable projects to result in a significant and unavoidable cumulative impact to historic and archaeological resources.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

Implement Mitigation Measures MM 4.5-1 through MM 4.5-9, as described above.

Level of Significance after Mitigation

Cumulative impacts would be less than significant under Option A. Cumulative impacts would be significant and unavoidable under Option B.

Section 4.6

Geology and Soils

Section 4.6

Geology and Soils

4.6.1 Introduction

This section of the Environmental Impact Report (EIR) describes regional geologic and soil characteristics of the project site and the potential geology and soil impacts associated with the implementation of the proposed Kern County Cannabis Land Use Ordinance Project (proposed project). A description of the environmental setting (affected environment) is presented below in Section 4.6.2, *Environmental Setting*, including discussion of the geologic setting (soils and geologic formations; faults and seismic history) and geologic and seismic hazards (slope stability; soil hazards; faults and seismicity; strong ground shaking; fault rupture; and, liquefaction). The regulatory setting applicable to geology and soils is presented in Section 4.6.3, *Regulatory Setting*, while the project impacts and associated mitigation measures are analyzed in Section 4.6.4, *Impacts and Mitigation Measures*. Additional descriptions of erosion and sediment impacts on surface water (e.g., turbidity) and mitigation, as appropriate, are presented in Section 4.9, *Hydrology and Water Quality*.

4.6.2 Environmental Setting

Regional Setting

The project site encompasses all of Kern County, approximately 8,202 square miles, and contains a diverse geography of valley areas (San Joaquin Valley), mountainous areas (Tehachapi Mountains, Sierra Nevada Mountains, San Emigdio Mountains, and Coast Ranges), and desert areas (Mojave Desert, Indian Wells Valley, Antelope Valley). The project site is divided into three geographic regions in order to facilitate detailed analysis: Valley Region, Mountain Region, and Desert Region. These three geographic regions are characterized by six physiographic provinces: the Great Valley within the Valley Region; the Coast Range, the Transverse Range, and the Sierra Nevada Range within the Mountain Region; and the Mojave Desert and the Basin and Range Provinces within the Desert Region. The project site includes all areas within unincorporated Kern County.

Geomorphic Provinces

Valley Region

Great Valley Province

The Great Valley Geomorphic Province of California is an alluvial plain, about 50 miles wide and 400 miles long, between the Coast Ranges and Sierra Nevada. The Great Valley is drained by the Sacramento and San Joaquin rivers, which join and enter San Francisco Bay. The southern part of the Great Valley is the San Joaquin Valley. The San Joaquin Valley is a sediment-filled basin over 65 million years of age. Sediments within the valley were deposited in a forearc basin that formed near the base of the Sierra Nevada Mountains and the accretionary coast range during a period of subduction. During the Quaternary period, sea levels receded, and the inland sea became a valley that was partially formed by tectonic forces of the San Andreas Fault. Subsequently, terrestrial sediments filled the valley from the adjacent highlands. Erosion and deposition of such sediments continue to occur as a present-day condition. The valley sediments vary in depth from tens of feet along the margins of the basin to thousands of feet near the Central Valley. The Quaternary alluvial sediments

vary from coarse-grained fanglomerates to fine-grained playa deposits from the surrounding hills and mountains.

Streams flowing westerly from the Sierra Nevada Mountains have eroded and deposited materials into the trough, forming alluvial fans at the surface. The largest of these within the County is the Kern River fan, covering approximately 300 square miles of the valley and made up of sand, silt and clay deposits. The Kern River flood plain is incised into the upper part of the fan, north of downtown Bakersfield, and spreads out across the broad, flat lower fan to the southwest. Continental sediment deposits in the San Joaquin Valley range from Pliocene to Holocene in age. Alluvial deposits along the west side of the valley, which are derived from the Coast Ranges, are assigned to the Tulare Formation. Continental deposits along the east side of the valley in Kern County were derived from the Sierra Nevada, and are assigned to the Kern River Formation.

Mountain Region

Coast Ranges Province

The Coast Range Province lies to the west of the Great Valley Province and is also oriented northwest/southwest. It consists of several mountain ranges, including the Temblor Range, which extends for 70 miles from the northwest corner of Kern County southeastward along the county border to the San Emigdio Mountains near Cienaga Canyon and south of Maricopa. These mountains form the southern boundary of the San Joaquin Valley. Sedimentary (tertiary) and volcanic rocks are exposed along the northern margin. Molten (crystalline igneous) and metamorphic (formed through heat and pressure) rocks comprise the core of this range as it was mainly formed through volcanic activity and uplift. This range provides the western geomorphic boundary of Kern County.

Transverse Range Province

Only a small portion of the Transverse Range Province is represented in Kern County. These areas include land along the southern County line near Frazier Park and a small portion of Tejon Ranch. This province is unique in that it contains ranges that trend generally east-west, instead of the more traditional general trend of north-south.

Sierra Nevada Range Province

The Sierra Nevada Province is a large block of the earth's crust, which has been uplifted along a series of faults at its eastern base and depressed along its western edge. The southern part of the Sierra Nevada batholith within Kern County is composed predominantly of granitic rocks of Mesozoic age. Crystalline, igneous, and metamorphic rocks form the core of the Tehachapi Mountains at the southern end of the Sierra Nevada Province. Tertiary sedimentary and volcanic rocks are exposed in the foothills. Earthquakes resulting from displacements along the White Wolf fault within this range attest to the ongoing structural deformation of this area.

Desert Region

Mojave Desert Province

The Mojave Desert Province is a large block of the earth's crust between the San Andreas and Garlock faults. The Mojave Desert Province contains a wide variety of rock types ranging in age from pre-Cambrian to Holocene. The Garlock fault coincides with the northern boundary between the Mojave Desert Province and the Sierra Nevada and Great Basin Provinces. This fault extends northeast from

the San Andreas Fault and forms a sharp contact between different geomorphic units, stratigraphic sequences, and structural features. The Garlock Fault is a straight, northeast trending zone of high angle faults along which movements have been predominantly left lateral.

Basin and Range Province

The Basin and Range Province is characterized by northwesterly trending faults with predominantly vertical displacement. The El Paso Range, a northeasterly trending range that is bordered on the south by the Garlock Fault, delineates the southerly most extent of this province in Kern County. These mountain ranges expose great varieties and thicknesses of pre-Cambrian through Cenozoic rock units.

Geologic Setting

Kern County is a geologically complex and diverse area and is impacted by compressional forces created as the North American and Pacific tectonic plates slide past one another along the San Andreas fault, located at the western boundary of the project site. Plate tectonic forces and other geomorphic activity associated with the gradual westward rotation and elevation of the batholithic core of the Sierra Nevada create fractures or faults in the earth's crust to accommodate compressional strain. Earthquakes are produced in and near the project site from sudden movements along these faults, generating ground motion when the accumulated stress within the rocks is released as waves of seismic energy.

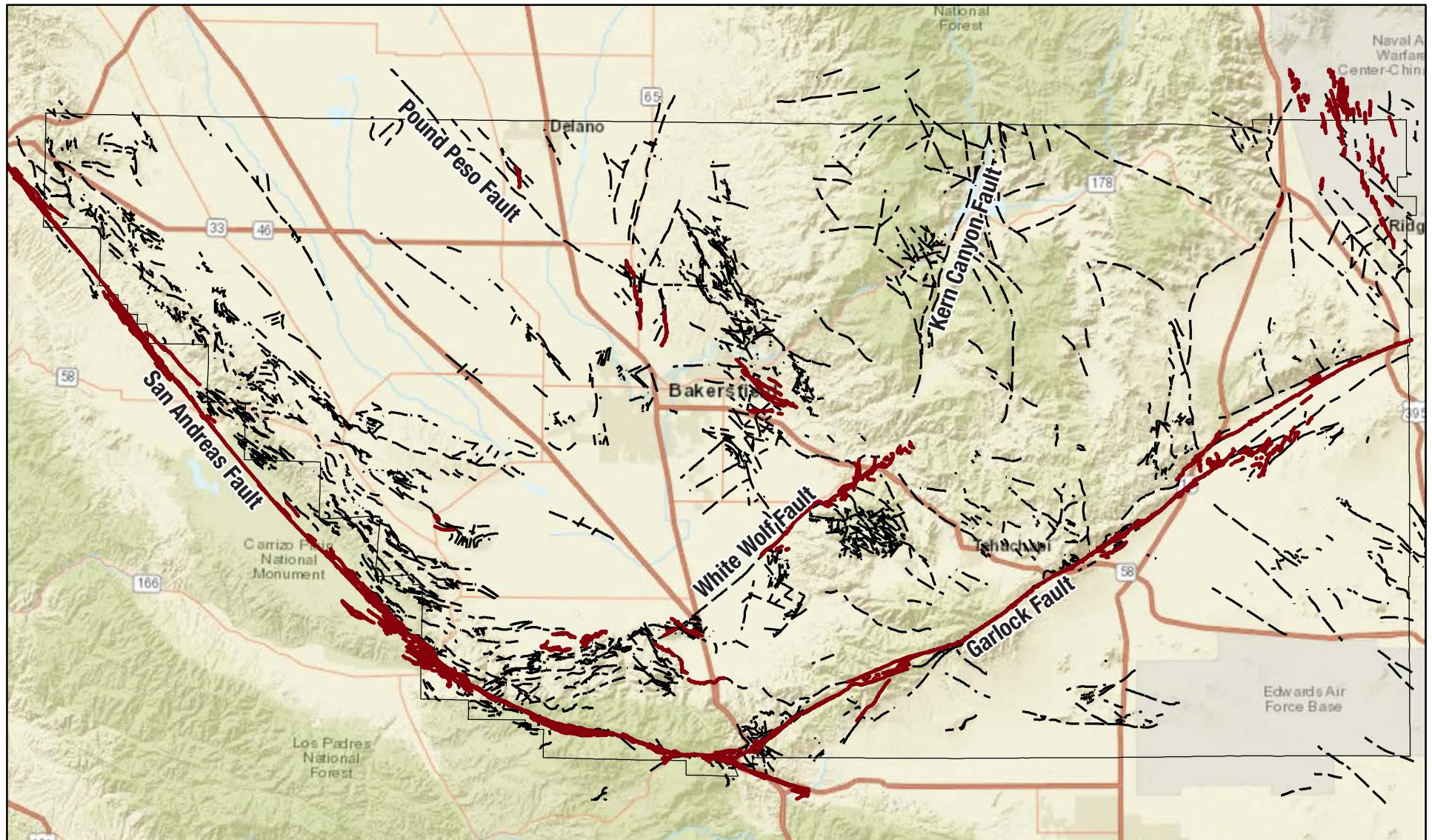
Faults and Seismic History

A fault is a fracture in the crust of the earth along which land on one side has moved relative to land on the other side. Most faults are the result of repeated displacement over a long period of time. A fault is the line on the earth's surface that defines the fault.

An active fault is defined by the State Mining and Geology Board as one that has had "surface displacement within Holocene times (approximately the last 11,000 years)." This definition does not mean that faults that lack evidence of surface displacement within Holocene times are necessarily inactive. A fault may be presumed to be inactive based on satisfactory geologic evidence; however, the evidence necessary to prove inactivity is sometimes difficult to obtain and locally may not exist. A potentially active fault is one that shows evidence of surface displacement during Quaternary time (the last 1.6 million years).

The Alquist-Priolo Earthquake Fault Zoning Act, passed in 1972, is primarily intended to prevent the construction of buildings used for human occupancy on the surface trace of active faults. The Act addresses only the hazard of surface fault rupture but no other earthquake hazards. The law requires the State Geologist to establish regulatory zones, known as Earthquake Fault Zones, around the surface traces of active faults and to issue appropriate maps.

The project site is located in a seismically active area, as is most of California, and therefore, could be subjected to future seismic shaking during earthquakes generated by any one of several surrounding active faults. There are numerous geologic fractures in the earth's crust within Kern County, as shown in Figure 4.6-1, *Kern County Faults*, with the San Andreas Fault being the most prominent. The San Andreas and Garlock faults intersect near Frazier Park; at this intersection, a westward bend in San Andreas Fault has created a zone of north-south compression resulting in the uplift of the Transverse Ranges. Descriptions of some of the major faults within the County are provided below.



Legend

- Alquist Priolo
- - - Faults
- Kern County Limits

KERN COUNTY CANNABIS LAND USE ORDINANCE PROJECT EIR
AMENDMENT TO TITLE 19 – KERN COUNTY ZONING
ORDINANCE FOCUSED ON CHAPTER 19.120 (CANNABIS LAND USE REGULATION)

Kern County Faults

Figure 4.6-1

San Andreas Fault

The San Andreas fault is a classic “strike-slip” transform fault that is caused by the movement of the North American and the Pacific tectonic plates along a 650-mile point of contact extending from the Mendocino Escarpment on the north to the Imperial Valley on the south. The eastern Pacific Plate is generally trending north along the fault at a rate of two inches per year. The San Andreas Fault trends nearly north, primarily along the western foot of the Temblor Range. The San Andreas Fault trace bends to the east in the Tehachapi Mountains and continues in a more easterly direction along the San Gabriel and San Bernardino mountains. The northerly movement of the Pacific Plate creates significant compressional forces at the bend, including in the vicinity of Frazier Park in the Mountain Region.

The segment of the San Andreas Fault within Kern County is relatively short compared with its total length; however, it is an important segment because it breaks from the system’s predominantly 350-degree trending direction between San Luis Obispo County and Los Angeles County. Geologists consider this fault as having the potential to generate an earthquake of magnitude 8.3 on the Richter scale, which is designated as the maximum credible earthquake. This is an active fault and capable of causing damage in the County. Areas along this fault have been designated by the State as Alquist-Priolo Special Studies Zones.

Several historic earthquakes occurring along the San Andreas Fault have produced significant seismic shaking. The most notable example was the January 9, 1857, Fort Tejon earthquake, one of the largest earthquakes ever recorded in the United States. The Fort Tejon earthquake produced a surface rupture more than 200 miles long along the San Andreas Fault, from Cholame to the north to the Cajon Pass area to the south. The earthquake was estimated to be magnitude 7.9 on the Richter scale, and strong shaking caused by the earthquake was reported to have lasted at least one minute.

White Wolf Fault

The White Wolf fault is a 45-mile-long southeast dipping, left-lateral, oblique, reverse fault that traverses the southeastern end of the San Joaquin Valley, from approximately the intersection of Interstate 5 (I-5) and State Route (SR) 99 near Wheeler Ridge to northeast of Caliente. This fault is generally located eight miles south of downtown Bakersfield. On July 21, 1952, the White Wolf fault ruptured, producing an earthquake of magnitude 7.5 and, subsequently, an extensive sequence of aftershocks. Although a surface rupture formed along only 17 miles of the surface trace of this fault, a rupture probably occurred along most of its length. The magnitude 7.5 earthquake in 1952 is the only recorded rupture along the White Wolf fault in historic time. Significant features caused by the fault are the valley at the junction of SR-58 and SR-223 (sometimes called White Wolf Valley), and the Arvin cutoff along SR-223. This fault has been designated by the State as an Alquist-Priolo Special Studies Zone.

Garlock Fault

The Garlock fault is an active high-angle shear zone with predominant strike-slip movement that extends from its point of intersection with the San Andreas Fault near Lebec eastward toward Death Valley. It is one of the most obvious geologic features in Southern California, clearly marking the northern boundary of the area known as the Mojave Desert Province, or Mojave Block, as well as the southern end of the Sierra Nevada and the valleys of the westernmost Basin and Range Province. The most recent recorded earthquake was a magnitude 5.7 event near Mojave on July 11, 1992, believed to have been triggered by the Landers earthquake just two weeks earlier. Areas along this fault have been designated by the State as Alquist-Priolo Special Studies Zones.

Breckenridge-Kern Canyon Fault

The Breckenridge-Kern Canyon fault is located in the southern Sierra Nevada Mountains. It trends northward from the north end of Walker Basin to the north of Mount Whitney, a distance of approximately 100 miles. Uncertainty exists as to the degree of activity of this fault system and its classification. It is designated by the State as an active system with a potential maximum credible earthquake of magnitude 8.0. Areas along this fault have been designated by the State as Alquist-Priolo Special Studies Zones.

Pond Poso Creek Fault

The Pond Poso Creek Fault is located nine miles north of Oildale. It trends in a northwesterly direction and is a normal fault that dips to the south. The Pond Poso Fault consists of four parallel breaks, forming a zone approximately two-thirds of a mile wide. This fault is designated as active with a maximum credible earthquake of magnitude 7.0. Areas along the Pond Poso Fault have been designated by the State as Alquist-Priolo Special Studies Zones.

Other Faults

Other faults of capable of movement and damage are found in Kern County and include, but not limited to, the following:

- Kern Valley Fault
- Kern Front Fault
- Edison Fault
- Buena Vista Fault
- Round Mountain Fault
- Wheeler Ridge Fault
- Greeley Fault
- Big Pine Fault
- Owens Valley Fault
- Pleito Fault
- Cottonwood Fault
- Tylerhorse Fault
- Randsburg-Mojave Fault

Soils

Soil surveys of the County conducted by the United States Department of Agriculture Natural Resource Conservation Service (USDA-NRCS) have divided the county into four regions (Northwest, Southwest, Northeast, and Southeast). The project site encompasses all four soil survey regions and contains more than 430 different soil types in the Soil Survey Geographic database for Kern County. The Soil Survey Geographic database contains information about soil as collected by the National Cooperative Soil Survey over the course of a century. This information is gathered by visual observations of the soil, and taking soil samples to be analyzed in laboratories. Soil maps outline areas, referred to as Map Units, which describe soils and other components that have unique properties, interpretations, and productivity. The County contains soils that range from well drained alluvium to poorly drained clay, and include soils that could be expansive.

Kern County soils include those that can pose hazardous, such as expansive soils and soils with naturally occurring asbestos. Expansive soils, typically clay soils, are generally fine-grained,

cohesive clay soils, that expand when moisture is added, tend to lose their ability to support foundations of structures. The weight of these structures squeezes the water-saturated clays laterally from under the foundations. As a result, the structures could collapse or become uninhabitable. Some soils have the potential to contain naturally occurring asbestos. Naturally occurring asbestos occurs in ultramafic rocks such as dunites, periodotites, pyroxenites, horblendites and serpentines.

Geologic Hazards

Strong Ground Shaking

Seismicity is the geographic and historical distribution of earthquakes, including their frequency, intensity, and distribution. Geologic hazards include surface rupture, ground shaking, liquefaction, landslides, subsidence, expansive soils, and soil erosion. As described above, the western and the southern end of the San Joaquin Valley is bordered by major active fault systems, making Kern County a historically active seismic area. The Kern County General Plan (KCGP) provides fault locations as well as policies and implementation measures related to geologic hazards. Because of the numerous geologic fractures in the earth's crust within the San Joaquin Valley area, all development on the valley floor in Kern County is subject to geologic hazards.

Strong ground shaking from an earthquake can result in damage associated with landslides, ground lurching, structural damage, and liquefaction. Given the high seismicity of the southern San Joaquin Valley region, moderate to severe ground shaking associated with earthquakes on faults can be expected throughout Kern County.

Induced Seismicity

The majority of earthquakes that occur each year throughout the world are the result of natural causes. Naturally occurring earthquakes generally are the result of the buildup of stresses caused by the lateral or vertical movement of blocks or plates moving and the subsequent buildup and release of energy. However, some earthquakes are the result of human activity and are called induced-seismic events or induced earthquakes. Human activities that can result in induced seismic events include injection and withdrawal of fluids, impoundment of reservoirs, mining and controlled explosions (including underground). Hydraulic fracturing is also capable of producing induced seismic events. Hydraulic fracturing involves the injection of fluid and propellant into a targeted formation in an effort to fracture the rock and allow for fluid flow (i.e., oil or natural gas). Generally, hydraulic fracturing generates seismic events with a less than 2.0 magnitude. However, when faults are present, larger seismic events are possible.

Fault Rupture

Surface ruptures are the result of movement along an existing fault, which breaks through the land surface. There are numerous faults throughout the project site and surface ruptures are present at many of these locations. Surface rupture may occur suddenly as the result of an earthquake or may be more gradual due to fault creep (slow displacement along a fault).

Liquefaction

Liquefaction occurs when saturated, loose materials (e.g., sand or silty sand) are weakened and transformed from a solid to a near-liquid state due to increased pore water pressure. The increase in pressure is caused by strong ground motion from an earthquake. Liquefaction-related phenomena can

include lateral spreading, ground oscillation, flow failure, loss of bearing strength, subsidence, and buoyancy effects.

Seismic ground shaking of relatively loose, granular soils that are saturated or submerged can cause the soils to liquefy and temporarily behave as a dense fluid. Liquefaction is caused by a sudden temporary increase in pore water pressure due to seismic densification or other displacement of submerged granular soils. Liquefaction most often occurs in areas underlain by young alluvium where the groundwater table is higher than 50 feet below the ground surface.

The soil formations throughout much of the County, especially in the desert area of eastern Kern County and the Central Valley area of western Kern County, are comprised of thick, unconsolidated, coarse-textured alluvial sediments composed of gravel, sand and silt of granitic composition. Due to the great depth to groundwater in the desert area, liquefaction does not present a major potential hazard within the eastern Kern County area.

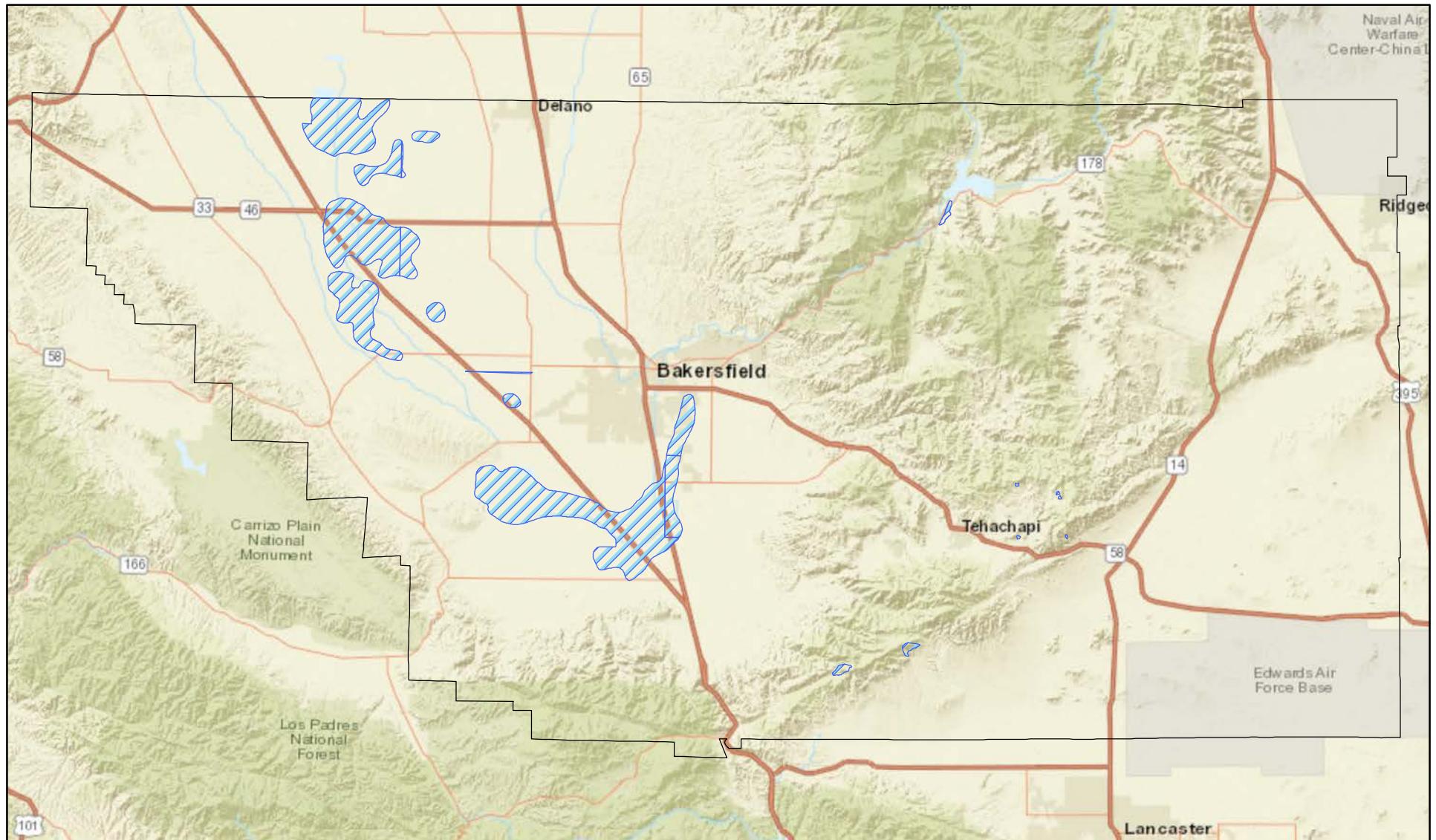
Although not the only factor in determining liquefaction potential, areas of high groundwater are located throughout the central portion of the project site. Some areas of the Central Valley contain shallow ground water as identified on the Seismic Hazard Atlas and the KCGP land use maps and depicted on Figure 4.6-2, *Shallow Groundwater Areas within Kern County*. In addition, the areas around Lake Isabella, Frazier Park/Cuddy Valley and the Tehachapi mountains also contain high groundwater due to soils conditions, faulting and natural spring activity. These are areas that could be impacted by liquefaction during seismic activity.

Lateral Spreading

Lateral spreading is a potential hazard commonly associated with liquefaction where extensional ground cracking and settlement occur as a response to lateral migration of subsurface liquefiable material. These phenomena typically occur adjacent to free faces such as slopes and creek channels.

Landslides

Landslides commonly occur in connection with other major natural disasters such as earthquakes, volcanic eruptions, wildfires, and floods; landslides also are caused by other factors such as strength of underlying material surface and groundwater conditions, surface vegetation, and seasonal rainfall. Landslides are associated with areas of steep slopes generally greater than 30 percent. Slopes greater than 30 percent are present along the eastern and southern boundaries of the Eastern Subarea and along the western boundary of the Western Subarea. Figure 4.6-3, *Kern County Landslide Areas*, depicts the areas of landslides within Kern County. Slope stability depends upon slope steepness and the strength of the underlying material. Developments on slopes over 30 percent are regulated according to Kern County Zoning Ordinance, Chapter 19.88, *Hillside Development*. Table 4.6-1 shows the types of landslides and the environment in which they occur.



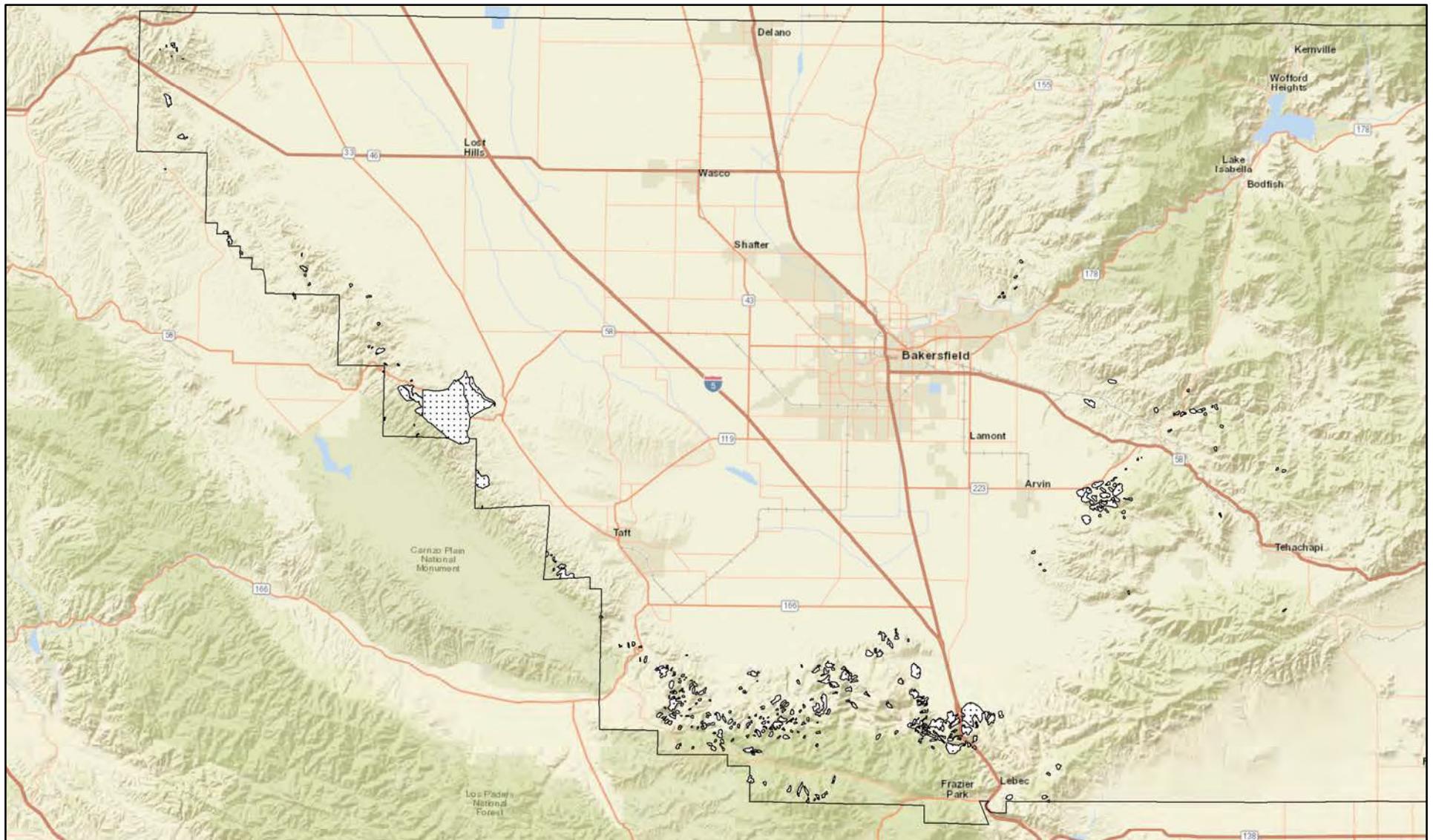
Legend

- Shallow Groundwater
- Kern County Limits

KERN COUNTY CANNABIS LAND USE ORDINANCE PROJECT EIR
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ORDINANCE FOCUSED ON CHAPTER 19.120 (CANNABIS LAND USE REGULATION)

Shallow Groundwater Areas within Kern County



Legend

- Landslide Locations
- Kern County Limits

KERN COUNTY CANNABIS LAND USE ORDINANCE PROJECT EIR
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ORDINANCE FOCUSED ON CHAPTER 19.120 (CANNABIS LAND USE REGULATION)

Kern County Landslide Areas

Table 4.6-1. Geologic Environments Likely to Produce Earthquake-Induced Landslides

Landslide Type	Type of Material	Minimum Slope	Remarks
Rock falls	Rocks weakly cemented, intensely fractured, or weathered; contain conspicuous planes of weakness dipping out of slope or contain boulders in a weak matrix.	40 degrees (°) 1.2:1 84%	Particularly common near ridge crests and on spurs, ledges, artificially cut slopes, and slopes undercut by active erosion.
Rock slides	Rocks weakly cemented, intensely fractured, or weathered; contain conspicuous planes of weakness dipping out of slope or contain boulders in a weak matrix.	35° 1.4:1 70%	Particularly common in hillside flutes and channels, on artificially cut slopes, and on slopes undercut by active erosion. Occasionally reactivate preexisting rockslide deposits.
Rock Avalanches	Rocks intensely fractured and exhibiting one of the following properties: significant weathering, planes of weakness dipping out of slope, weak cementation, or evidence of previous landsliding.	25° 2.1:1 47%	Usually restricted to slopes of greater than 500 feet (150 m) relief that have been undercut by erosion. May be accompanied by a blast of air that can knock down trees and structures beyond the limits of the deposited debris.
Rock slumps	Intensely fractured rocks, pre-existing rock slump deposits, shale, and other rocks containing layers of weakly cemented or intensely weathered material.	15° 3.7:1 27%	
Rock block slides	Rocks having conspicuous bedding planes or similar planes of weakness dipping out of slopes.	15° 3.7:1 27%	
Soil falls	Granular soils that are slightly cemented or contain clay binder.	40 1.7:1 84%	Particularly common on stream-banks, terrace faces, coastal bluffs, and artificially cut slopes.
Disrupted soil slides	Loose, unsaturated sands.	15° 3.7:1 27%	
Soil avalanches	Loose, unsaturated sands.	25° 2.1:1 47%	Occasionally reactivate preexisting soil avalanche deposits.
Soil slumps	Loose, partly to completely saturated sand or silt; uncompacted or poorly compacted manmade fill composed of sand, silt, or clay, preexisting soil slump deposits.	10° 5.7:1 18%	Particularly common on embankments built on soft, saturated foundation materials, in hillside cut-and-fill areas, and on river and coastal flood plains.

Table 4.6-1. Geologic Environments Likely to Produce Earthquake-Induced Landslides

Landslide Type	Type of Material	Minimum Slope	Remarks
Soil block slumps	Loose, partly or completely saturated sand or silt; uncompacted or slightly compacted manmade fill composed of sand or silt, bluffs containing horizontal or subhorizontal layers or loose, saturated sand or silt.	5° 11:1 8.7%	Particularly common in areas of preexisting landslides along river and coastal flood plains, and on embankments built of soft, saturated foundation materials.
Low earth flows	Stiff, partly to completely saturated clay and preexisting earth-flow deposits.	10° 5.7:1 18%	
Soil lateral spreads	Loose, partly or completely saturated silt or sand, uncompacted or slightly compacted manmade fill composed of sand.	0.3° 190:1 0.5%	Particularly common on river and coastal flood plains, embankments built on soft, saturated foundation materials, delta margins, sand dunes, sand spits, alluvial fans, lakeshores and beaches.
Rapid soil flow	Saturated, uncompacted or slightly compacted manmade fill composed of sand or sandy silt (including hydraulic fill earth dams and tailings dams); loose, saturated granular soils.	2.3° 25:1 4.0%	Includes debris flows that typically originate in hollows at heads of streams and adjacent hillsides; typically travel at tens of miles per hour or more and may cause damage miles from the source area.
Subaqueous landslides	Loose, saturated granular soils.	0.5° 115:1 0.9%	Particularly common on delta margins.
Soil avalanches	Loose, unsaturated sands.	25° 2.1:1 47%	Occasionally reactivate preexisting soil avalanche deposits.
Soil slumps	Loose, partly to completely saturated sand or silt; uncompacted or poorly compacted manmade fill composed of sand, silt, or clay, preexisting soil slump deposits.	10° 5.7:1 18%	Particularly common on embankments built on soft, saturated foundation materials, in hillside cut-and-fill areas, and on river and coastal flood plains.
Soil block slumps	Loose, partly or completely saturated sand or silt; uncompacted or slightly compacted manmade fill composed of sand or silt, bluffs containing horizontal or subhorizontal layers or loose, saturated sand or silt.	5° 11:1 8.7%	Particularly common in areas of preexisting landslides along river and coastal flood plains, and on embankments built of soft, saturated foundation materials.
Low earth flows	Stiff, partly to completely saturated clay and preexisting earth-flow deposits.	10° 5.7:1 18%	

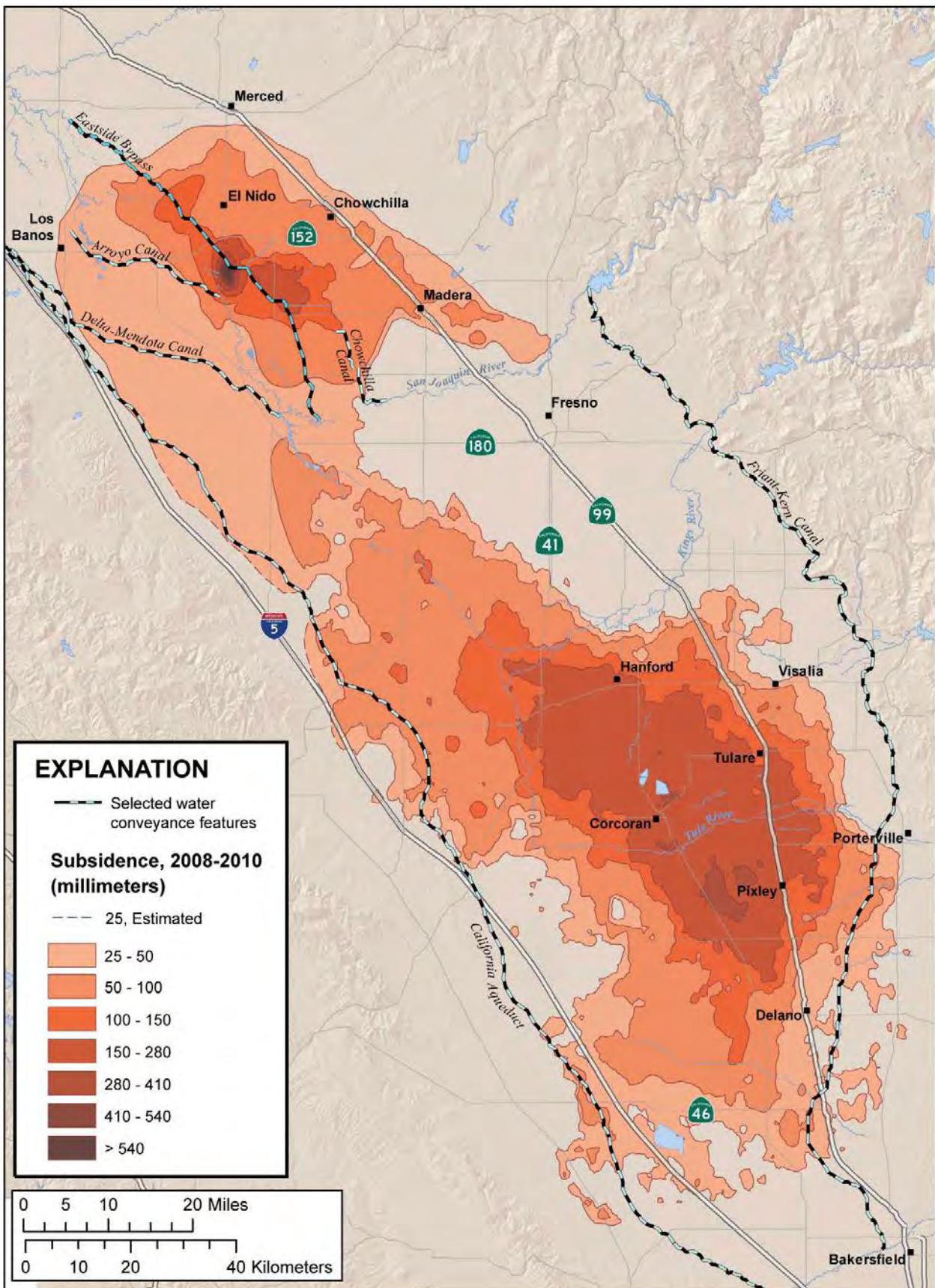
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Soil lateral spreads	Loose, partly or completely saturated silt or sand, uncompacted or slightly compacted manmade fill composed of sand.	0.3° 190:1 0.5%	Particularly common on river and coastal flood plains, embankments built on soft, saturated foundation materials, delta margins, sand dunes, sand spits, alluvial fans, lakeshores and beaches.
Rapid soil flow	Saturated, uncompacted or slightly compacted manmade fill composed of sand or sandy silt (including hydraulic fill earth dams and tailings dams); loose, saturated granular soils.	2.3° 25:1 4.0%	Includes debris flows that typically originate in hollows at heads of streams and adjacent hillsides; typically travel at tens of miles per hour or more and may cause damage miles from the source area.
Subaqueous landslides	Loose, saturated granular soils.	0.5° 115:1 0.9%	Particularly common on delta margins.

Land Subsidence

Land subsidence is the gradual, local settling or shrinking of the earth's surface with little or no horizontal motion. Subsidence is normally the result of gas, oil, or water extraction; hydro-compaction; and/or peat oxidation and not the result of landslide or ground failure. Land subsidence is occurring throughout the County; however, the majority of the subsidence is within the San Joaquin Valley.

Groundwater withdrawal has been primarily used for agricultural purposes. Beginning in the 1920s, farmers relied on groundwater supply. Over time, the overpumping caused groundwater levels to decline and aquifer stems to compact, which resulted in land subsidence that became permanent loss of aquifer-stem storage capacity. By 1970, land subsidence had occurred in an approximately 5,200-square -mile area of the San Joaquin Valley, approximately half of the Valley. Within this area, some locations experienced as much as 28 feet in land subsidence. More recently, reduced surface-water availability during 1976 and 1977, 1986 to 1992, 2007 to 2009, and 2012 to 2015 caused by drought conditions resulted in increased groundwater pumping in the San Joaquin Valley, declines in water-levels to near historic lows, and renewed aquifer compaction (USGS, 2017). Land subsidence from 2008 to 2010 along the California Aqueduct, within Kern County, ranges from approximately 25 millimeters (mm, less than 1 foot) to as much as approximately 280 mm (11 feet) (USGS, 2017); refer to Figure 4.6-4, *Land Subsidence in the San Joaquin Valley*.



KERN COUNTY CANNABIS LAND USE ORDINANCE PROJECT EIR
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Land Subsidence in the San Joaquin Valley

Soil Erosion

Soil erosion occurs when surface materials are worn away from the earth's surface due to land disturbance and/or natural factors such as wind and precipitation. The potential for soil erosion is determined by characteristics including texture and content, surface roughness, vegetation cover, and slope grade and length. Wind erosion typically occurs when fine-grained non-cohesive soils are exposed to high velocity winds, while water erosion tends to occur when loose soils on moderate to steep slopes are exposed to high-intensity storm events. Erosion induced by seismic activity occurs on gentle to steep slopes covered by unconsolidated sediments. This geologic hazard is aggravated by landslides, fissures, tilting and offset along a fracture zone. It could become a significant hazard in many areas of the County.

Erosion is an ongoing process that continues within the County, primarily within existing drainage channels and washes where periodic flooding and sedimentation (transport) occur during and following periods of intense rainfall. Continued erosion is anticipated where development structures are located within or adjacent to areas subject to flooding and/or surface water flow. The potential for erosion is considered to be moderate to high within or adjacent to stream channels and washes within the project site, as well as within areas of the County that see high velocity winds.

Soil Expansion

Soils that expand and contract in volume ("shrink-swell" pattern) are considered to be expansive and may cause damage to aboveground infrastructure as a result of density changes that shift overlying materials. Fine-grain clay sediments are most likely to exhibit shrink-swell patterns in response to changing moisture levels.

Dam Failure

Isabella Dam

Isabella Dam, which is located approximately 40 miles northeast of Bakersfield, has a capacity to hold 570,000 acre feet of water. This dam, which is earth filled, is approximately 185 feet high and 1,725 feet long, and is built near a major earthquake fault.

If an earthquake were to occur in the vicinity, it could result in a break in the dam. This could, under certain conditions, cause the entire lake storage to be released, which would result in flooding 60 square miles of Metropolitan Bakersfield. Estimates of the time (hours) after dam failure when serious flooding may occur at given locations are illustrated in Figure 4.1-2. The chances of the dam failing entirely, with the lake at capacity, were judged as one day in 10,000 years.

Brite Valley Dam

Brite Valley Dam, located about 3 1/4 miles southwest of the City of Tehachapi in Brite Valley, impounds a reservoir of 1,900 acre-feet when filled to capacity. The main rolled earth-fill dam is 48 feet high and 3,970 feet long. It acts as a holding reservoir for water pumped from the California Aqueduct through pipeline, for distribution through an irrigation system.

Should the dam fail for any reason, the water would flow downstream along State Highway 202, crossing this highway and flowing into cropland and orchards in the Cummings Valley as shown in Figure 4.1-3.

Haiwee Dam

Haiwee Dam, located in Inyo County at an elevation of 3,587 feet adjacent to Highway 395, impounds a reservoir of 58,525 acre-feet when filled to capacity. It is an earth-filled dam 81 feet high, with a 16-foot emergency spillway. It acts as a control reservoir at the head of the Los Angeles Department of Water and Power (LADWP) aqueduct and supplies LADWP's waterpower to the Rose Spring Power Plant.

Should the dam fail for any reason, the water would flow in a south, southeasterly direction through Inyo County and end up in dry China Lake in Kern and San Bernardino Counties. In addition, the Naval Weapons Center's Rocket Sled Test Track and the northwest portion of the main runway of Armitage Field, north of the Naval Weapons Center complex, might experience minor flooding.

4.6.3 Regulatory Setting

Geologic resources and geotechnical hazards are governed primarily by local jurisdictions. The conservation elements and seismic safety elements of city and county general plans contain policies for the protection of geologic features and avoidance of hazards.

The California Environmental Quality Act (CEQA) is the major environmental statute that guides the design and construction of projects on non-federal lands in California. This statute sets forth a specific process of environmental impact analysis and public review. In addition, the project proponent must comply with other applicable State and local applicable statutes, regulations and policies. Relevant and potentially relevant statutes, regulations, and policies are discussed below.

Federal

As explained in Section 3.2, *Regulatory History and Background*, even though cannabis is “decriminalized” under State law, and even with the U.S. Department of Justice (USDOJ) issuance of memoranda guiding federal law enforcement related to cannabis activities within jurisdictions that have legalized cannabis, cannabis activities continue to be illegal at the federal level and subject to the prosecutorial discretion of the federal government.

Uniform Building Code

Development standards require a project to comply with the appropriate seismic design criteria found in the Uniform Building Code (UBC), adequate design for drainage facilities, and preconstruction soil and grading studies. Although seismic design standards have been established to reduce many of the structural problems that occur during major earthquakes, the UBC was revised in 1998 as follows:

- Upgrade the level of ground motion used in the seismic design of buildings;
- Add site amplification factors based on local soil conditions; and
- Improve the way ground motion is applied in detailed design.

Some jurisdictions continue to refer to the UBC, including Kern County. The UBC defines different regions of the United States, categorizing them by Seismic Zones 1 through 4, with Zone 1 having the least seismic potential and Zone 4 having the highest seismic potential. Kern County lies within Seismic Zone 4.

Clean Water Act (CWA)

The Clean Water Act (CWA) (33 U.S.C. Section 1251 et seq.), formally the Federal Water Pollution Control Act of 1972, was enacted with the intent of restoring and maintaining the chemical, physical, and biological integrity of the waters of the United States. The CWA requires states to set standards to protect, maintain, and restore water quality through the regulation of point source and certain non-point source discharges to surface water. Those discharges are regulated by the National Pollutant Discharge Elimination System (NPDES) permit process (CWA Section 402). Projects that disturb one or more acre of land are required to obtain NPDES coverage under the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (General Permit), State Water Resources Control Board Order No. 2009-0009-DWQ. The General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP), which includes Best Management Practices (BMPs) to protect storm water runoff. Requirements of the Federal CWA and associated SWPPP requirements are described in further detail in Section 4.9, *Hydrology and Water Quality*.

Earthquake Hazards Reduction Act

The National Earthquake Hazards Reduction Program (NEHRP) was established by the U.S. Congress when it passed the Earthquake Hazards Reduction Act of 1977, Public Law (P.L.) 95–124. At the time of its creation, Congress' stated purpose for NEHRP was "to reduce the risks of life and property from future earthquakes in the United States through the establishment and maintenance of an effective earthquake hazards reduction program." Congress recognized that earthquake-related losses could be reduced through improved design and construction methods and practices, land use controls and redevelopment, prediction techniques and early-warning systems, coordinated emergency preparedness plans, and public education and involvement programs. Since NEHRP's creation, it has become the federal government's coordinated long-term nationwide program to reduce risks to life and property in the United States that result from earthquakes. Four basic NEHRP goals are as follows:

- Develop effective practices and policies for earthquake loss reduction and accelerate their implementation
- Improve techniques for reducing earthquake vulnerabilities of facilities and systems
- Improve earthquake hazards identification and risk assessment methods, and their use
- Improve the understanding of earthquakes and their effects.

Congress has recognized that several key federal agencies can contribute to earthquake mitigation efforts. Today, there are four primary NEHRP agencies:

- Federal Emergency Management Agency (FEMA) of the Department of Homeland Security.
- National Institute of Standards and Technology (NIST) of the Department of Commerce (NIST is the lead NEHRP agency).
- National Science Foundation (NSF).
- USGS of the Department of the Interior.

Congress completed a review of NEHRP, resulting in the NEHRP Reauthorization Act of 2004, PL 108–360. PL 108–360 directed that NEHRP activities be designed to develop effective measures for earthquake hazard reduction; promote the adoption of earthquake hazards reduction measures by government agencies, standards and codes organizations, and others involved in planning and building infrastructure; improve the understanding of earthquakes and their effects through interdisciplinary research; and, develop, operate, and maintain both the Advanced National Seismic System (ANSS) and the George E. Brown, Jr. Network for Earthquake Engineering Simulation (NEES). In a major new initiative, PL 108–360 also directed that NEHRP support development and application of performance-based seismic design (PBSD).

State

The Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act (Alquist-Priolo Act) was passed in 1972 to regulate development and construction of buildings intended for human occupancy to avoid the hazard of surface fault rupture. Under the Alquist-Priolo Act, the California State Geologist identifies areas that are at risk of surface fault rupture. The primary purpose of the Alquist-Priolo Act is to prevent the construction of buildings used for human occupancy on the surface trace of active faults. An active fault is defined by the State Mining and Geology Board (SMGB) as one which has “had surface displacement within Holocene time (about the last 11,000 years).” The CGS, previously known as the California Division of Mines and Geology (CDMG), has compiled Special Publication 42 – Fault Rupture Hazard Zones (CGS, 2007) that delineates and defines active fault traces and zones that require specific studies to address rupture hazards with respect to “structure[s] for human occupancy.” Any project that involves the construction of buildings or structures for human occupancy is subject to the Alquist-Priolo Act, and any structures for human occupancy must be located at least 50 feet from any active fault.

Seismic Hazards Mapping Act (the Act) of 1990

In accordance with Public Resources Code, Chapter 7.8, Division 2, the CGS, formerly CDMG, is directed to delineate Seismic Hazard Zones through the Seismic Hazards Zonation Program. The purpose of the Act is to reduce the threat to public health and safety and to minimize the loss of life and property by identifying and mitigating seismic hazards, such as those associated with strong ground shaking, liquefaction, landslides, other ground failures, or other hazards caused by earthquakes. Cities, counties, and State agencies are directed to use seismic hazard zone maps developed by CGS in their land-use planning and permitting processes. In accordance with the Seismic Hazards Mapping Act, site-specific geotechnical investigations must be performed prior to permitting most urban development projects within seismic hazard zones.

California Building Code (CBC 2016)

The State of California provides minimum standards for building design through the California Building Code (CBC). The CBC is based on the UBC, which is used widely throughout the United States (generally adopted on a state-by-state or district-by-district basis), and has been modified for conditions within California. Starting in 1989, revised editions of California Code of Regulations (CCR) Title 24 has been published in its every three years. The current version of the California Building Code became effective January 1, 2017. Local agencies must ensure that development in their jurisdictions complies with guidelines contained in the CBC. Cities and counties can, however, adopt building standards beyond those provided in the code.

Local

Kern County General Plan (KCGP)

The policies, goals, and implementation measures in the KCGP applicable to geology and soils as related to the proposed project are provided below. The KCGP contains additional policies, goals, and implementation measures that are more general in nature. Therefore, they are not listed below, but, as stated in Chapter 2, *Introduction*, all policies, goals, and implementation measures in the KCGP are incorporated by reference.

Chapter 1. Land Use, Open Space, and Conservation Element

Section 1.3 Physical and Environmental Constraints

Goals

- **Goal 1.** To strive to prevent loss of life, reduce personal injuries, and property damage, minimize economic and social diseconomies resulting from natural disaster by directing development to areas, which are not hazardous.

Policies

- **Policy 1.** Kern County will ensure that new developments will not be sited on land that is physically or environmentally constrained (Map Code 2.1 [Seismic Hazard], Map Code 2.2 [Landslide], Map Code 2.3 [Shallow Groundwater], Map Code 2.5 [Flood Hazard], Map Codes from 2.6 – 2.9, Map Code 2.10 [Nearby Waste Facility], and Map Code 2.11 [Burn Dump Hazard]) to support such development unless appropriate studies establish that such development will not result in unmitigated significant impact.
- **Policy 3.** Zoning and other land use controls will be used to regulate and, in some instances, to prohibit development in hazardous areas.
- **Policy 6.** Regardless of percentage of slope, development on hillsides will be sited in the least obtrusive fashion, thereby, minimizing the extent of topographic alteration required and reducing soil erosion while maintaining soil stability.
- **Policy 7.** Ensure effective slope stability, wastewater drainage, and sewage treatments in areas with steep slopes are adequate for development.

Implementation Measures

- **Implementation Measure A.** Adopt requirements and procedures in zoning, subdivision, and site development regulations and building criteria for Seismic Hazard designated areas.
- **Implementation Measure B.** A seismic analysis may be required for those areas in Kern County, which are susceptible to landslides.
- **Implementation Measure D.** Review and revise the County's current Grading Ordinance as needed to ensure that its standards minimize permitted topographic alteration and soil erosion while maintaining soil stability.
- **Implementation Measure E.** Development proposed in areas with steep slopes (Map Code 2.4) will be reviewed for conformity to Chapter 19.88 Hillside Development Ordinance or Chapter 19.52 Special Planning (SP) District to ensure that appropriate soil stability, drainage, and sewage treatment will result.

- **Implementation Measure N.** Applicants for new discretionary development should consult with the appropriate Resource Conservation District and the California Regional Water Quality Control Board regarding soil disturbances issues.

Section 1.9 Resource

Policies

- **Policy 11.** Minimize the alteration of natural drainage areas. Require development plans to include necessary mitigation to stabilize runoff and silt deposition through utilization of grading and flood protection ordinances.

Chapter 4. Safety Element

Section 4.1 Introduction

Goals

- **Goal 1.** Minimize injuries and loss of life and reduce property damage.
- **Goal 2.** Reduce economic and social disruption resulting from earthquakes, fire, flooding, and other geologic hazards by assuring the continuity of vital emergency public services and functions.
- **Goal 3.** Assist in the allocation of public resources in Kern County to develop information regarding geologic, fire, and flood safety hazards and to develop a systematic approach toward the project of public health, safety, and welfare from such hazards.
- **Goal 4.** Create an awareness of the residents in Kern County through the dissemination of information about geologic, fire, and flood safety hazards.

Section 4.2 General Policies and Implementation Measures, Which Apply to More Than One Safety Constraint

Policies

- **Policy 1.** That the County's program of identification, mapping, and evaluating the geologic, fire, flood safety hazard areas, and significant concentrations of hydrogen sulfide in oilfield areas, presently under way by various County departments, be continued.
- **Policy 2.** Those hazardous areas, identified as unsuitable for human occupancy, are guided toward open space uses, such as agriculture, wildlife habitat, and limited recreation.
- **Policy 3.** That the County government encourage public support of local, State, and federal research programs on geologic, fire, flood hazards, valley fever, plague, and other studies so that acceptable risk may be continually reevaluated and kept current with contemporary values.
- **Policy 5.** The adopted Kern County, California Multi-Hazard Mitigation Plan is incorporated by reference. This multi-jurisdictional plan, approved in compliance with the "Disaster Mitigation Act of 2000, provides long-term planning to reduce the impacts of future disasters."

Implementation Measures

- **Implementation Measure A.** All hazards (geologic, fire, and flood) should be considered whenever a Planning Commission or Board of Supervisor's action could involve the establishment of a land use activity susceptible to such hazards.

- **Implementation Measure B.** The Safety Element should be reviewed and comprehensively revised every five years, or whenever substantially new scientific evidence becomes available.
- **Implementation Measure C.** Require detailed site studies for ground shaking characteristics, liquefaction potential, dam failure inundation, flooding potential, and fault rupture potential as background to the design process for critical facilities under County discretionary approval.
- **Implementation Measure D.** Require seismic review prior to major addition, renovation, or increase in occupancy of buildings.
- **Implementation Measure F.** The adopted multi-jurisdictional Kern County, California Multi-Hazard Mitigation Plan, as approved by FEMA, shall be used as a source document for preparation of environmental documents pursuant to CEQA, evaluation of project proposals, formulation of potential mitigation, and identification of specific actions that could, if implemented, mitigate impacts from future disasters and other threats of public safety.

Section 4.3 Seismically Induced Surface Rupture, Ground Shaking, and Ground Failure

Policies

- **Policy 1.** The County shall require development for human occupancy to be placed in a location away from an active earthquake fault in order to minimize safety concerns.

Implementation Measures

- **Implementation Measure A.** Known geologic hazards within the area of a proposed subdivision should be referenced on the final subdivision map.
- **Implementation Measure B.** Require geological and soils engineering investigations in identified significant geologic hazard areas in accordance with the Kern County Code of Building Regulations.
- **Implementation Measure C.** The fault zones designated in the Kern County Seismic Hazard Atlas should be considered significant geologic hazard areas. Proper precautions should be instituted to reduce seismic hazard, whenever possible in accordance with State and County regulations.
- **Implementation Measure D.** Detailed geologic investigations shall be conducted in conformance with guidelines of the California Geological Survey for all discretionary permits and construction designed for human occupancy in an Alquist-Priolo Earthquake Fault Zone.
- **Implementation Measure E.** Revise building codes and zoning ordinances to prohibit construction of buildings for human occupancy within 50 foot of the trace of an active fault. For critical facilities, the setback should be at least 300 feet.
- **Implementation Measure F.** Reflect the location of active faults in zoning and subdivision approvals, through low-density zoning designations, and through locations of lot lines and public ways to allow adequate flexibility in placement of buildings, such that active fault traces can be avoided.
- **Implementation Measure K.** Encourage and support local, State, and federal research programs for delineation of geologic and seismic hazards so that acceptable risk may be continually re-evaluated and kept current with state-of-the-art information and contemporary values.
- **Implementation Measure L.** Require seismic review prior to major addition, renovation, or increase in occupancy of buildings.

Section 4.5 Landslides, Subsidence, Seiche, and Liquefaction

Policies

- **Policy 1.** Determine the liquefaction potential at sites in areas of shallow groundwater (Map Code 2.3) prior to discretionary development and determine specific mitigation to be incorporated into the foundation design, as necessary, to prevent or reduce damage from liquefaction in an earthquake.
- **Policy 2.** Route major lifeline installations around potential areas of liquefaction or otherwise protect them against significant damage from liquefaction in an earthquake.
- **Policy 3.** Reduce potential for exposure of residential, commercial, and industrial development to hazards of landslide, land subsidence, liquefaction, and erosion.

Implementation Measures

- **Implementation Measure B.** Require liquefaction investigations in all areas of high groundwater potential and appropriate foundation design to mitigate potential damage to buildings on sites with liquefaction potential.
- **Implementation Measure C.** Develop and maintain maps, at an appropriate scale, showing the location of all geologic hazards, including active faults, Alquist-Priolo Earthquake Fault Zones, 100-year flood hazard boundary, the extent of projected dam failure inundation and time arcs, depth of inundation, land subsidence, slope failure and earthquake-induced landslides, high groundwater, and liquefaction potential.
- **Implementation Measure D.** Discretionary actions will be required to address and mitigate impacts from inundation, land subsidence, landslides, high groundwater areas, liquefaction and seismic events through the CEQA process. County general plan policies and ordinances that apply.

Section 4.8 Critical Facilities and Hazardous Buildings

Policies

- **Policy 3.** Require that the siting and development of critical facilities under discretionary approval be supported by documentation through hazard investigations relating to site selection, preconstruction site investigations, and application of the most current professional standards for seismic design.

Implementation Measures

- **Implementation Measure I.** Detailed geologic investigations shall be conducted in conformance with guidelines of the California Geological Survey for all construction designed for human occupancy in an Alquist-Priolo Earthquake Fault Zone.
- **Implementation Measure K.** Reflect the location of active faults in zoning and subdivision approvals, through low-density zoning designations, and through locations of lot lines and public ways to allow adequate flexibility in placement of buildings such that active fault traces can be avoided.
- **Implementation Measure L.** Require that plans and permits for installation of major lifeline components such as highways, utilities, and petroleum or chemical pipelines to incorporate design features to accommodate potential fault movement in areas of active faults without prolonged disruption of essential service or threat to health and safety.

Kern County Specific Plans

Kern County has adopted 39 Specific Plans, 10 Rural Community Plans, and 14 Interim Rural Community Plan Maps. The Specific Plans and Rural Community Plans are intended to be an amplification of the goals and policies of the KCGP and are, therefore, consistent therewith. Interim Rural Community Plan Maps are areas where a specific plan has not been formally adopted, thus the goals and policies of the KCGP govern these areas. Future commercial cannabis cultivation, processing/packaging, and sales activities that would be authorized under the proposed project that would be located within the boundary of an adopted Specific Plan would be regulated according to County zoning.

Kern County Building and Construction Ordinance (Title 17 of the Kern County Code of Ordinances)

Chapter 17.08 Kern County Building Code

All construction in Kern County is required to conform to the Kern County Building Code (Chapter 17.08, Building Code, of the Ordinance Code of Kern County). Kern County has adopted the CBC, 2016 Edition, with some modifications and amendments. The entire County is in Seismic Zone 4, a designation previously used in the UBC to denote the areas of highest risk to earthquake ground motion. California has established an Unreinforced Masonry program that details seismic safety requirements for Zone 4. Seismic provisions associated with Seismic Zone 4 have been adopted.

Chapter 17.28 of Kern County Grading Code

The purpose of the Kern County Grading Code is to safeguard life, limb, property, and the public welfare by regulating grading on private property. All requirements of the Kern County Grading Code will be applied during implementation of the project. All required grading permit(s) shall be obtained prior to commencement of construction activities. Sections of the Grading Code that are particularly relevant to geology and soils are provided below.

Section 17.28.140 Erosion Control

- A. Slopes. The faces of cut and fill slopes shall be prepared and maintained to control against erosion. This control may consist of effective planting. The protection for the slopes shall be installed as soon as practicable and prior to calling for final approval. Where cut slopes are not subject to erosion due to the erosion-resistant character of the materials, such protection may be omitted.
- B. Other Devices. Where necessary, check dams, cribbing, riprap or other devices or methods shall be employed to control erosion and provide safety.
- C. Temporary Devices. Temporary drainage and erosion control shall be provided as needed at the end of each work day during grading operations, such that existing drainage channels would not be blocked. Dust control shall be applied to all graded areas and materials and shall consist of applying water or another approved dust palliative for the alleviation or prevention of dust nuisance. Deposition of rocks, earth materials or debris onto adjacent property, public roads or drainage channels shall not be allowed.

Section 17.28.170 Grading Inspection

- A. General. All grading operations for which a permit is required shall be subject to inspection by the building official. Professional inspection of grading operations and testing shall be provided by the civil engineer, soils engineer and the engineering geologist retained to provide such

- services in accordance with Subsection 17.28.170(E) for engineered grading and as required by the building official for regular grading.
- B. Civil Engineer. The civil engineer shall provide professional inspection within such engineer's area of technical specialty, which shall consist of observation and review as to the establishment of line, grade and surface drainage of the development area. If revised plans are required during the course of the work they shall be prepared by the civil engineer.
 - C. Soils Engineer. The soils engineer shall provide professional inspection within such engineer's area of technical specialty, which shall include observation during grading and testing for required compaction. The soils engineer shall provide sufficient observation during the preparation of the natural ground and placement and compaction of the fill to verify that such work is being performed in accordance with the conditions of the approved plan and the appropriate requirements of this chapter. Revised recommendations relating to conditions differing from the approved soils engineering and engineering geology reports shall be submitted to the permittee, the building official and the civil engineer.
 - D. Engineering Geologist. The engineering geologist shall provide professional inspection within such engineer's area of technical specialty, which shall include professional inspection of the bedrock excavation to determine if conditions encountered are in conformance with the approved report. Revised recommendations relating to conditions differing from the approved engineering geology report shall be submitted to the soils engineer.
 - E. Permittee. The permittee shall be responsible for the work to be performed in accordance with the approved plans and specifications and in conformance with the provisions of this Code, and the permittee shall engage consultants, if required, to provide professional inspections on a timely basis. The permittee shall act as a coordinator between the consultants, the contractor and the building official. In the event of changed conditions, the permittee shall be responsible for informing the building official of such change and shall provide revised plans for approval.
 - F. Building Official. The building official may inspect the project at the various stages of the work requiring approval to determine that adequate control is being exercised by the professional consultants.
 - G. Notification of Noncompliance. If, in the course of fulfilling their responsibility under this chapter, the civil engineer, the soils engineer, or the engineering geologist finds that the work is not being done in conformance with this chapter or the approved grading plans, the discrepancies shall be reported immediately in writing to the permittee and to the building official. Recommendations for corrective measures, if necessary, shall also be submitted.
 - H. Transfer of Responsibility. If the civil engineer, the soils engineer, or the engineering geologist of record is changed during the course of the work, the work shall be stopped until:
 - 1. The civil engineer, soils engineer, or engineering geologist, has notified the building official in writing that they will no longer be responsible for the work and that a qualified replacement has been found who will assume responsibility.
 - 2. The replacement civil engineer, soils engineer, or engineering geologist notifies the building official in writing that they have agreed to accept responsibility for the work.

Kern County Multi-Hazard Mitigation Plan

The 2005 Kern County Multi-Hazard Mitigation Plan (MHMP) describes natural hazards and impacts (including those resulting from earthquakes, landslides, and soil hazards) that threaten communities,

and establishes mitigation goals and strategies. Information contained in the MHMP could also be used to help guide and coordinate mitigation activities and local policy decisions for future land use decisions. The MHMP divides the County into three regions, Valley, Mountain, and Desert.

The governing federal law requires that the MHMP be reviewed and updated within five years in order to continue to be eligible for mitigation grant project funding. The County released a Comprehensive Update in September 2012 for its Kern Multi Jurisdiction Hazard Mitigation Plan.

Metropolitan Bakersfield General Plan (MBGP)

The Metropolitan Bakersfield General Plan (MBGP), a joint effort between the Kern County Planning Department and the City of Bakersfield Planning Division, was last adopted on December 11, 2007. The MBGP includes both city and unincorporated County lands. The MBGP describes the community's physical development as well as its economic, social and environmental goals and is currently undergoing an update. Project-related development on unincorporated lands within the MBGP Planning Area would be subject to the following applicable policies and implementation measures of the MBGP, with respect to geology and soils.

Chapter V. Conservation Element

C. Soils and Agriculture

Policies

- **Policy 7.** Land use patterns, grading, and landscaping practices shall be designed to prevent soil erosion while retaining natural watercourses when possible.
- **Policy 12.** Prohibit premature removal of ground cover in advance of development and require measures to prevent soil erosion during and immediately after construction.

Chapter VIII. Safety Element

Goals

- **Goal 1.** Substantially reduce the level of death, injury, property damage, economic, and social dislocation and disruption of vital services that would result from earthquake damage.
- **Goal 2.** Ensure the availability and effective response of emergency services following an earthquake.
- **Goal 3.** Prepare the planning area for effective response to, and rapid, beneficial recovery from, an earthquake.
- **Goal 4.** Prevent loss of life from the failure of critical facilities in an earthquake and ensure the continued functioning of essential facilities following a disaster.
- **Goal 5.** Protect essential lifelines and prevent casualties and major social and economic disruption due to liquefaction in an earthquake.
- **Goal 6.** Provide a continuously improving data base and reference source for evaluation of seismic and geologic hazards.
- **Goal 7.** Protect land uses from the risk of dam failure inundation, including assurances that the functional capabilities of essential facilities are available in the event of a flood; hazardous materials are not released; effective measures for mitigation of dam failure inundation are incorporated into the design of critical facilities; and the rapid and orderly evacuation of populations in the inundation area will occur.

Policies

- **Policy 8.** Require seismic review of other potentially hazardous buildings upon any change in their use or occupancy status.
- **Policy 9.** Adopt and maintain high standards for seismic performance of buildings, through prompt adoption and careful enforcement of the most current seismic standards of the Uniform Building Code.
- **Policy 10.** Prohibit development designed for human occupancy within 50 feet of a known active fault and prohibit any building from being placed astride an active fault.
- **Policy 11.** Require site-specific studies to locate and characterize specific fault traces within an Alquist-Priolo Earthquake Fault Zone for all construction designed for human occupancy.
- **Policy 12.** Design significant lifeline installations such as highways, utilities and petrochemical pipelines that cross an active fault, to accommodate potential fault movement without prolonged disruption of an essential service or creating a threat to health and safety.
- **Policy 13.** Determine the liquefaction potential at sites in areas of high groundwater prior to development and determine specific mitigation to be incorporated into the foundation design, as necessary to prevent or reduce damage from liquefaction in an earthquake.
- **Policy 14.** Route major lifeline installations around potential liquefaction areas or otherwise protect them against significant damage from liquefaction in an earthquake.
- **Policy 15.** Compile information on areas of potential hazards and field information developed as part of CEQA investigations and geologic reports and keep geologic reviews and policy development current and accessible for use in report preparation.
- **Policy 16.** Encourage and support local, State and federal research program for delineation of geologic and seismic hazards so that acceptable risk may be continually reevaluated and kept current with state-of-the-art information and contemporary values.
- **Policy 18.** Design discretionary critical facilities located within the potential inundation area for dam failure in order to mitigate the effects of inundation on the facility; promote orderly shut-down and evacuation (as appropriate); and prevent on-site hazards from affecting building occupants and the surrounding communities in the event of dam failure.
- **Policy 19.** Design discretionary facilities in the potential dam inundation area used for the manufacture, storage or use of hazardous materials to prevent on-site hazards from affecting surrounding communities in the event of inundation.
- **Policy 20.** Require emergency response structures that are within the plan area and are subject to Building Department review to adhere to the most current seismic standards adopted as part of the Uniform Building Code.

Implementation Measures

- **Implementation Measure 2.** Require detailed site studies for ground shaking characteristics, liquefaction potential, dam failure inundation and flooding potential, and fault rupture potential as background to the design process for critical facilities under city and County discretionary approval.
- **Implementation Measure 3.** Require structures that are within the plan area and are subject to Building Department review to adhere to the most current seismic standards adopted as part of the UBC.

- **Implementation Measure 16.** Require plans and permits for installation of major lifeline components such as for highways, utilities, and petroleum or chemical pipelines to incorporate design features to accommodate potential fault movement in areas of active faults without prolonged disruption of an essential service or threat to health and safety.
- **Implementation Measure 17.** Require liquefaction investigations in all areas of high groundwater potential and appropriate foundation designs to mitigate potential damage to buildings on sites with liquefaction potential.
- **Implementation Measure 18.** Develop specific guidelines for the collection of data for determination of liquefaction potential at a site.
- **Implementation Measure 21.** Compile maps showing the location of all geologic hazards, including active faults, Alquist-Priolo earthquake fault zones, 100-year flood hazard, extent of projected dam failure inundation and time arcs, depth of inundation, land subsidence, slope failure and earthquake-induced landslides, high groundwater and liquefaction potential.
- **Implementation Measure 22.** Compile information on areas of potential hazard. Field information developed as part of CEQA investigations and geologic reports by the city/county geologists should be kept current and accessible for use in report preparation, geologic reviews, and policy development.
- **Implementation Measure 23.** Update the County's Seismic Hazards Atlas as necessary.
- **Implementation Measure 24.** Encourage and support local, State, and federal research programs for delineation of geologic and seismic hazards so that acceptable risks may be continually reevaluated and kept current with state-of-the-art information and contemporary values.
- **Implementation Measure 26.** Develop procedures for the discretionary review of critical facilities proposed in an area of potential dam inundation. Approvals shall include requirements that emergency shut-down and facility evacuation plans be developed, maintained, and exercised for each facility, and the potential effects of inundation on essential facility functions and the safety of occupants and the community in general are addressed.
- **Implementation Measure 28.** Incorporate specific plans for the sequential and orderly evacuation of the potential dam inundation area into emergency response plans.
- **Implementation Measure 29.** Maintain effective disaster response and earthquake response plans and update on a regular basis.
- **Implementation Measure 30.** Require the city and county to maintain effective mutual aid agreements for fire, police, medical response, emergency morgue, mass care, heavy rescue, and other functions as appropriate
- **Implementation Measure 31.** Require emergency response plans and disaster exercise scenarios to include contingencies for the problems listed below; earthquake response exercises shall be conducted at least once a year.
 - Rupture of any active fault within 40 miles of Bakersfield.
 - Collapse of 50 buildings or more, including some mid-rise structures, some essential facilities, and numerous un-reinforced masonry buildings.
 - Ground rupture and attendant property damage due to pockets of liquefaction in areas of high groundwater.
 - Complete evacuation of the potential inundation area.
 - Many aftershocks, continuing for many weeks or months.

4.6.4 Impacts and Mitigation Measures

This section describes the methodology used in conducting the CEQA impact analysis for geology and soils; the thresholds of significance used in assessing impacts to geology and soils; and the assessment of impacts to geology and soils, including relevant mitigation measures.

Methodology

This analysis is based on the county-wide geology and soil information that is publicly available. The evaluation of the proposed project's potential effects with respect to geology and soils is at the program level. This EIR sets forth research criteria and report content needed to enable a project-level evaluation of resource occurrences. Any individual projects resulting from this proposed project would be required to adhere to the research criteria and report content set forth herein and could be required to undergo a separate CEQA evaluation pertaining to project-specific details.

Development Standards Related to Geology and Soils

Option A

Option A of the proposed project would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Therefore, no development standards are identified in the proposed Zoning Ordinance; refer to Appendix B for specific wording of the proposed ordinance under Option A.

Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, testing, and retail cannabis stores with mobile delivery facilities. Development standards provided in the proposed Zoning Ordinance, that pertain to geology and soils include, but are not limited to, the following (refer to Appendix C for specific working of the proposed ordinance under Option B):

- The applicant must demonstrate compliance with all applicable mitigation measures prior to the issuance of a grading or building permit for any future cannabis related facility.
- The applicant shall submit a Stormwater Pollution Prevention Plan that includes best management practices to prevent construction pollutants from contacting stormwater.
- For cultivation (indoor and outdoor) and processing and packaging facilities, recycled water use is required.

Thresholds of Significance

The Kern County CEQA Implementation Document and Kern County Environmental Checklist state that a project would have a significant impact with regard to Geology and Soils if it would:

- Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42;

- Strong seismic ground shaking;
- Seismic-related ground failure, including liquefaction; or,
- Landslides;
- Result in substantial soil erosion or loss of topsoil;
- Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse;
- Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property; or,
- Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.

Project Impacts

Impact 4.6-1: Expose People or Structures to Substantial Adverse Effects, Including the Risk of Loss, Injury, or Death Involving the Rupture of a Known Earthquake Fault

Kern County is located in Seismic Zone 4, which is a designation previously used in the UBC to denote the areas of the highest risk to earthquake ground motion mainly due to the many faults located throughout the County (refer to Figure 4.6-1). As a result, the proposed project would be subject to future seismic shaking and strong ground motion in the event of a major earthquake because of regional seismic activity.

Proposed Project Option A

Option A would result in no commercial medical and recreational cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A does not provide opportunities for business development and thus would not result in an increase in residents or employees within the County, as discussed in detail in Section 4.12, *Population and Housing*. Therefore, Option A would not result in exposing people or structures to substantial adverse effects involving the rupture of a known earthquake fault. Existing residences and businesses would continue to have the same exposure to fault rupture as existing conditions. No impact would occur in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and recreational cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 square feet (ft^2) of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft^2 of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently more than 20 retail cannabis stores with mobile delivery (refer to Figure 3-3) in operation and Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

Future cannabis-related activities that would be authorized under Option B are not anticipated to result in a substantial population increase, as further explained in Section 4.12, *Population and Housing*. As a result, the proposed project would not substantially affect the number of residents or employees within the County. Thus, Option B would not result in the exposure of people or structures to substantial adverse effects involving the rupture of a known earthquake fault. Impacts would be less than significant in this regard.

Future cannabis-related activities could, depending on location relative to existing infrastructure, require construction of new or expanded facilities. These future facilities would be required to comply with federal, State, and local laws and regulations, including, but not limited to, the most recent UBC, the most recent CBC (CCR Title 24), Alquist-Priolo Act, KCGP, MBGP, and the Kern County Building Code (Chapter 17.08). Compliance to federal, State, and local laws, regulations, and policies would reduce anticipated impacts related to future cannabis-related facilities located in close proximity of earthquake faults. Implementation of Mitigation Measures MM 4.6-1 through MM 4.6-3 would further reduce impacts of Option B as related to earthquake fault rupture hazards. As a result, impacts would be less than significant.

Certain future cannabis-related activities and facilities would require processing a Conditional Use Permit (CUP) and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing before the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to the exposure of people or structures to substantial adverse effects, including the risk of loss, injury, or death involving the rupture of a known earthquake fault would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Known Earthquake Faults

1. The UBC, CBC, and Kern County Building and Construction Ordinance provide seismic design criteria to reduce potential for structural problems occurring during major earthquakes.
2. The Alquist-Priolo Act's primary purpose is to prevent construction of buildings used for human occupancy on surface trace or active faults.
3. KCGP Lane Use, Open Space, and Conservation Element, Section 1.3, Physical and Environmental Constraints, Goal 1; Policies 1 and 3; and Implementation Measures A and B guide locations of development and facilities within hazardous areas, including geologic hazards.
4. KCGP Safety Element, Section 4.1, Introduction, Goals 1, 2, 3, and 4 relate to education and guide public resources within hazardous areas, including geologic hazards.
5. KCGP Safety Element, Section 4.2, General Policies and Implementation Measures, Which Apply to More than One Safety Constraint, Policies 1, 2, 3, and 5; and Implementation Measures A, B, C, D, and F relate to development and reviews for buildings and structures within hazardous areas, including geologic hazards.
6. KCGP Safety Element, Section 4.3, Seismically Induced Surface Rupture, Ground Shaking, and Ground Failure, Policy 1 and Implementation Measures A through F, K, and L guide development of structures for human occupancy and provides review requirements for buildings and structures within hazardous areas, including geologic hazards.
7. KCGP Safety Element, Section 4.8, Critical Facilities and Hazardous Buildings, Policy 3 and Implementation Measures I, K, and L relate to the County's discretionary approvals of development of buildings and structures within hazardous areas, including geologic hazards.
8. MBGP Safety Element, Seismic, Goals 1, 2, 3, 4, and 6; Policies 8 through 12, 15, and 16; and Implementation Measures 2, 3, 16, 21, 22, 23, 24, 26, 29, 30, and 31 relate to development and reviews for buildings and structures within hazardous areas, including geologic hazards.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

MM 4.6-1 Prior to the issuance of any permit, such as grading permits or as a condition of approval on a conditional use permit, the project applicant shall comply with the following regulations (as applicable) and confirm compliance in its Site Plan Conformity Review application documentation:

- a. Alquist-Priolo Earthquake Fault Zoning Act.
- b. California Building Code.
- c. Uniform Building Code.
- d. Additionally, the project applicant shall:

1. Avoid placement of structures intended for human occupancy on or within 50 feet of any active faults designated and mapped pursuant to the Alquist-Priolo Earthquake Fault Zoning Act where the fault breaks the surface.
2. Have a professional geologist prepare a fault rupture hazard evaluation according to guidelines in California Geological Survey Special Publication 42, 2007 for new developments with structures that are intended for human occupancy.
3. Ensure that active fault trace placement restrictions are in place for all permanent tanks and storage reservoirs used to store, treat, or transport hazardous materials or materials that are considered pollutants to surface water and groundwater, located in an Earthquake Fault Zone.

MM 4.6-2 Prior to the issuance of any permit, such as grading permits or as a condition of approval on a conditional use permit, for structures, the project applicant shall:

- a. For existing structures, the project applicant shall comply with applicable seismic risk protection measures in the California Building Code, as confirmed with building permit plans submitted to the Kern County Public Works Department for review and approval.
- b. For new structures, the project applicant shall provide site plans that confirm that all structures designed for human occupancy shall be designed to withstand substantial ground shaking in accordance with applicable California Building Code seismic design standards and Kern County Building Code.

MM 4.6-3 The project applicant shall include in all approved new commercial building development plans, a soils and geology review to determine if a geologic hazard reports will be required for the project by Kern County Public Works. Such a required report shall include:

- Seismic Report to identify any necessary additional seismic safety design improvements for infrastructure and habitable structures;
- Landslide Hazards Report, in the Mountain Region, to define the extent of the landslide hazards and specific appropriate geotechnical improvements required;
- Debris Flow Report to define the extent of the debris flow hazards and specify appropriate geotechnical improvements; and
- Liquefaction-Collapsible Soil Report to define the extent potential for localized liquefaction, collapsible or expansive soils hazards, and shall specify appropriate geotechnical improvements.

Level of Significance after Mitigation

No impact would occur with respect to Option A. Impacts regarding Option B would be less than significant.

Impact 4.6-2: Expose People or Structures to Substantial Adverse Effects, Including the Risk of Loss, Injury, or Death Involving Strong Seismic Ground Shaking

Given the high seismicity of region, moderate to severe ground shaking associated with earthquakes on the faults can be expected throughout Kern County. As a result, the project site would likely

experience strong ground shaking resulting from moderate to strong earthquakes during the lifetime of the proposed project, under Option A and Option B.

Proposed Project Option A

Option A would result in no commercial medical and recreational cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A does not provide opportunities for business development and thus would not result in an increase in residents or employees within the County, as discussed in detail in Section 4.12, *Population and Housing*. Therefore, Option A would not result in exposing people or structures to substantial adverse effects involving the strong seismic ground shaking. Existing residences and businesses would continue to have the same exposure to strong seismic ground shaking as existing conditions. No impact would occur in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and recreational cannabis cultivation, processing and packaging, distribution, and retail cannabis stores with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently more than 20 retail cannabis stores with mobile delivery (refer to Figure 3-3) in operation and Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of ordinance under Option B).

Future cannabis-related activities that would be authorized under Option B are not anticipated to result in a substantial population increase, as further explained in Section 4.12, *Population and Housing*. As a result, the proposed project would not substantially affect the number of residents or employees within the County. Thus, Option B would not result in the exposure of people or structures to substantial adverse effects involving strong seismic ground shaking. Impacts would be less than significant in this regard.

Future cannabis-related activities could, depending on location relative to existing infrastructure, require construction of new or expanded facilities. These future cannabis-related facilities would be required to comply with federal, State, and local laws and regulations, including, but not limited to, the most recent

UBC, the most recent CBC (CCR Title 24), Alquist-Priolo Act, KCGP, MBGP, and the Kern County Building Code (Chapter 17.08). Compliance to federal, State, and local laws, regulations, and policies would reduce anticipated impacts related to strong seismic ground shaking by requiring future cannabis-related facilities to be built to withstand seismic ground shaking. Implementation of Mitigation Measures MM 4.6-1 through MM 4.6-3 would further reduce impacts of Option B as related to earthquake fault rupture hazards. As a result, impacts would be less than significant.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing for the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to the exposure of people or structures to substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Strong Seismic Ground Shaking

Refer to Impact 4.6-1, above, for a summary of applicable existing regulations and policies related to strong seismic ground shaking.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

Implement Mitigation Measures MM 4.6-1 through MM 4.6-3, as described above.

Level of Significance

No impact would occur with respect to Option A. Impacts regarding Option B would be less than significant.

Impact 4.6-3: Expose People or Structures to Substantial Adverse Effects, Including the Risk of Loss, Injury, or Death Involving Seismic-Related Ground Failure, Including Liquefaction

Liquefaction occurs when saturated, loose materials (e.g., sand or silty sand) are weakened and transformed from a solid to a near-liquid state as a result of increased pore water pressure. The increase in pressure is caused by strong ground motion from an earthquake. A site's susceptibility to liquefaction is a function of depth, density, groundwater level, and magnitude of an earthquake. For liquefaction to occur, the soil must be saturated (i.e., shallow groundwater) and relatively loose. The surface effects of liquefaction can cause structural distress or failure due to ground settlement, lurching, loss of bearing capacity in the foundation soils, and the buoyant rise of buried structures or utilities, and development of lateral spreads. Liquefaction typically occurs in areas underlain by young alluvium where the groundwater table is higher than 50 feet below ground surface (bgs); refer to Figure

4.6-2 for information regarding locations within the County of shallow groundwater. It should be noted that while Figure 4.6-2 depicts known areas of shallow groundwater, groundwater levels can fluctuate between wet and dry years, as well as from site to site and proximity to surface water features.

Proposed Project Option A

Option A would result in no commercial medical and recreational cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A does not provide opportunities for business development and thus would not result in an increase in residents or employees within the County, as discussed in detail in Section 4.12, *Population and Housing*. Therefore, Option A would not result in exposing people or structures to substantial adverse effects involving the seismic-related ground failure, including liquefaction. Existing residences and businesses would continue to have the same expose to seismic-related ground failure, including liquefactions, as existing conditions. No impact would occur in this regard.

Proposed Project Option B

As shown in Figure 4.6-2, the majority of the shallow groundwater areas are located within the Valley Region. The soil formations throughout much of the Valley Region are comprised of thick, unconsolidated, coarse-textured alluvial sediments composed of gravel, sand and silt of granitic composition. Due to the varying depths to groundwater in the Valley Region, liquefaction presents a potential hazard.

Within the Mountain Region, the areas around Lake Isabella, Frazier Park/Cuddy Valley and the Tehachapi Mountains also contain high groundwater due to soil conditions, faulting and natural spring activity (refer to Figure 4.6-2). The soil formations within the Mountain Region are variable and thus, liquefaction presents a potential hazard.

Within the Desert Region, the depth to groundwater is typically greater than 50 feet bgs, and the Desert Region does not have any mapped shallow groundwater areas; however, there could be localized shallow groundwater areas within the Desert Region. The soil formations throughout much of the Desert Region are comprised of thick, unconsolidated, coarse-textured alluvial sediments composed of gravel, sand and silt of granitic composition. Due to the typical depths to groundwater in the Desert Region, liquefaction does not present a major potential hazard within the eastern Kern County area.

Option B would update standards and conditions for future commercial medical and recreational cannabis cultivation, processing and packaging, distribution, and retail cannabis stores with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging,

and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

Future cannabis-related activities that would be authorized under Option B are not anticipated to result in a substantial population increase, as further explained in Section 4.12, *Population and Housing*. As a result, the proposed project would not substantially affect the number of residents or employees within the County. Thus, Option B would not result in the exposure of people or structures to substantial adverse effects involving seismic-related ground failure, including liquefaction. Impacts would be less than significant in this regard.

Future cannabis-related activities could require construction of new or expanded facilities. These future cannabis-related facilities would be required to comply with federal, State, and local laws and regulations, including, but not limited to, the most recent UBC, the most recent CBC (CCR Title 24), Alquist-Priolo Act, KCGP, MBGP, and the Kern County Building Code (Chapter 17.08). Compliance to federal, State, and local laws, regulations, and policies would reduce anticipated impacts involving seismic-related ground failure, including liquefaction. Implementation of Mitigation Measures MM 4.6-1 through MM 4.6-6 would further reduce impacts of Option B as related to seismic-related ground failure, including liquefaction. As a result, impacts would be less than significant.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing for the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to the exposure of people or structures to substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefactions, would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Seismic-Related Ground Failure including Liquefaction

Refer to Impact 4.6-1, above, for a summary of applicable existing regulations and policies related to seismic-related ground failure including liquefaction. In addition, the following are also applicable.

1. KCGP Safety Element, Section 4.5, Landslides, Subsidence, Seiche, and Liquefaction, Policies 1 through 3, and Implementation Measures B, C, and D guide development of buildings and structures and provides review requirements for buildings and structures within hazardous areas, including hazards of landslides, land subsidence, liquefaction, and erosion.

2. MBGP Safety Element, Seismic (in addition to those identified under Impact 4.6-1), Policies 13 and 14 and Implementation Measures 17 and 18 relate to development and reviews for buildings and structures within hazardous areas, including liquefaction.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

Implement Mitigation Measures MM 4.6-1 through MM 4.6-3, as described above.

MM 4.6-4 Prior to a site plan approval for new structures in an area of landslide hazards, specifically within the Mountain Region, the project applicant shall retain a qualified geologic/geotechnical consultant to perform focused geotechnical studies (Landslide Hazards Report) to define the extent of the landslide hazards and specify appropriate geotechnical improvements to be made, such as but not limited to landslide repairs, buttresses or other site specific designs necessary to avoid the hazards.

MM 4.6-5 Prior to a site plan approval for new structures in an area subject to landslide and debris flow hazards, the project applicant shall retain a qualified geologic/geotechnical consultant to perform focused geotechnical studies (Debris Flow Report) to define the extent of the debris flow hazards and specify appropriate geotechnical improvements to be made, such as but not limited to a combination of avoidance of high hazard areas, construction of earthen berms designed to deflect flows to open space areas or to impound debris, or by construction of appropriately-sized debris retention basins that will intercept debris flows at the edges of proposed development.

MM 4.6-6 Prior to a site plan approval for new structures in an area subject to collapsible soils, the project applicant shall retain a qualified geologic/geotechnical consultant to perform focused geotechnical studies (Liquefaction-Collapsible Soil Report) to define the extent potential for localized liquefaction, collapsible or expansive soils hazards, and shall specify appropriate geotechnical improvements to be made, such as but not limited to a combination of avoidance of high hazard areas, removal and replacement of susceptible soils with engineered fill, or by presoaking and/or surcharge preloading of collapsible soils to induce densification prior to construction of improvements.

Level of Significance after Mitigation

No impact would occur with respect to Option A. Impacts regarding Option B would be less than significant.

Impact 4.6-4: Expose People or Structures to Substantial Adverse Effects, Including the Risk of Loss, Injury, or Death Involving Landslides

Proposed Project Option A

Option A would result in no commercial medical and recreational cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for

amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A does not provide opportunities for business development and thus would not result in an increase in residents or employees within the County, as discussed in detail in Section 4.12, *Population and Housing*. Therefore, Option A would not result in exposing people or structures to substantial adverse effects involving landslides. Existing residences and businesses would continue to have the same exposure to landslides as existing conditions. No impact would occur in this regard.

Proposed Project Option B

According to the current KCGP Safety Element Section, small landslides are common in the County's mountain areas as loose material moves naturally down slope or fires have caused loss of soil-stabilizing vegetative cover. As shown in Figure 4.6-3, the majority of the landslide hazard areas are located within the Mountain Region. While there may be localized areas of landslide hazard within the Valley and Desert Regions, those areas typically do not experience landslide events. Strong shaking has the potential for activating landslides on hillsides; slope failures on creek banks; and, tension cracking in areas underlain by loose, low-density soil, such as extensive fill. Typical landslide hazard areas are as shown on Figure 4.6-3, above, and are generally found within the Mountain Region. Landslides that become reactivated are likely to shed large earthflows and debris flows to the toe of the mountain front and adjacent land. Debris flow hazards are present to a variable degree within the project area. The highest-level debris flow hazards occur at the mouths of incised alluvial fan channels.

Option B would update standards and conditions for future commercial medical and recreational cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

Future cannabis-related activities that would be authorized under Option B are not anticipated to result in a substantial population increase, as further explained in Section 4.12, *Population and Housing*. As a result, the proposed project would not substantially affect the number of residents or employees within the County. Thus, Option B would not result in the exposure of people or structures to substantial adverse effects involving landslides. Impacts would be less than significant in this regard.

Future cannabis-related activities could require construction of new or expanded facilities. These future cannabis-related facilities would be required to comply with federal, State, and local laws and regulations, including, but not limited to, the most recent UBC, the most recent CBC (CCR Title 24), Alquist-Priolo Act, KCGP, MBGP, and the Kern County Building Code (Chapter 17.08). Compliance to federal, State, and local laws, regulations, and policies would reduce anticipated impacts involving landslides. Implementation of Mitigation Measures MM 4.6-1 through MM 4.6-6 would further reduce impacts of Option B as related to landslides.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing for the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to the exposure of people or structures to substantial adverse effects, including the risk of loss, injury, or death involving landslides, would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Landslides

Refer to Impacts 4.6-1 and 4.6-3, above, for a summary of applicable existing regulations and policies related to landslides. In addition, the following are also applicable.

1. KCGP Lane Use, Open Space, and Conservation Element, Section 1.3, Physical and Environmental Constraints (in addition to those identified under Impact 4.6-1), Policies 6 and 7; and Implementation Measures D, E, and N guide locations of development and facilities within hazardous areas, including areas with potential landslide and erosion concerns.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

Implement Mitigation Measure MM 4.6-1 through MM 4.6-6, as described above.

Level of Significance after Mitigation

No impact would occur with respect to Option A. Impacts regarding Option B would be less than significant.

Impact 4.6-5: Result in Substantial Soil Erosion or Loss of Topsoil

Proposed Project Option A

Option A would result in no commercial medical and recreational cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for

amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A would result in no commercial medical and adult-use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Ground disturbing activities could result from individuals planting up to six plants; however, this would be similar in scale to a personal garden, and would not result in an increase in substantial soil erosion or loss of top soil.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and recreational cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

Future cannabis-related activities could require construction of new or expanded facilities. Construction of these future cannabis-related facilities could loosen on-site soils or remove stabilizing vegetation and expose areas of loose soil. These areas, if not properly stabilized during construction, could be subject to increased soil loss and erosion by wind and storm water runoff. Within the project site, erosion is an ongoing process that would continue primarily within high wind areas and within existing drainage channels and washes where periodic flooding and sedimentation occur during and following periods of intense rainfall. Due to the presence of high wind areas and streams, washes and drainage channels throughout the County, the potential for erosion is considered to be moderate to high; however, as described in Section 4.9, *Hydrology and Water Quality*, the placement of project infrastructure would not be expected to result in substantial erosion related to storm water runoff. Compliance with the Federal CWA, as well as regulations of the State Water Resources Control Board (SWRCB), a Stormwater Pollution Prevention Plan (SWPPP), which would include future project site-specific best management practices (BMPs) for erosion and sediment control, would be prepared for future cannabis-related site specific development. In addition, Mitigation Measures MM 4.9-1 through MM 4.9-5 would also reduce the potential for soil loss and erosion by wind and storm water runoff.

These future cannabis-related facilities would be required to comply with federal, State, and local laws and regulations, including, but not limited to, the most recent UBC, the most recent CBC (CCR Title

24), Alquist-Priolo Act, KCGP, MBGP, and the Kern County Building Code (Chapter 17.08). Compliance to federal, State, and local laws, regulations, and policies would reduce anticipated impacts involving landslides. Implementation of Mitigation Measures MM 4.6-1 through MM 4.6-6 would further reduce impacts of Option B as related to substantial soil erosion and loss of topsoil.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing before the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to the exposure of people or structures to substantial adverse effects, including substantial soil erosion or loss of topsoil, would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Erosion and Loss of Top Soil

Refer to Impacts 4.6-1, 4.6-3, and 4.6-4, above, for a summary of applicable existing regulations and policies related to landslides. In addition, the following are also applicable.

1. KCGP Lane Use, Open Space, and Conservation Element, Section 1.9, Resource, Policy 11 requires development to mitigated for erosion concerns.
2. MBGP Conservation Element, Soils and Agriculture, Policies 7 and 12 relate to preventing soil erosion.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

Implement Mitigation Measures MM 4.6-1 through MM 4.6-6, as described above, and Mitigation Measures MM 4.9-1 through MM 4.9-5, as described in Section 4.9, *Hydrology and Water Quality*.

MM 4.6-7 All site plans and applications for a Conditional Use Permit shall submit a preliminary drainage plan and, if required, a flood study, to the Kern County Public Works that complies with all requirements of the Kern County Code.

Level of Significance

No impact would occur with respect to Option A. Impacts regarding Option B would be less than significant.

Impact 4.6-6: Be Located on a Geologic Unit or Soil That Is Unstable, or That Would Become Unstable as a Result of the Project, and Potentially Result in On- or Off-site Landslide, Lateral Spreading, Subsidence, Liquefaction, or Collapse

Proposed Project Option A

Option A would result in no commercial medical and recreational cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Therefore, Option A would not result in placing structures on unstable geologic units that have the potential to result in on- or off-site landslides, lateral spreading, subsidence, liquefaction, or collapse. Existing residences and businesses would continue to have the same exposure to unstable geologic units as existing conditions. Impacts would be less than significant in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and recreational cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

Future cannabis-related activities could require construction of new or expanded facilities. These future facilities could be located on unstable geologic units or soils that have the potential to result in on- or off-site landslides, lateral spreading, subsidence, liquefaction, or collapse. These future cannabis-related facilities would be required to comply with federal, State, and local laws and regulations, including, but not limited to, the most recent UBC, the most recent CBC (CCR Title 24), Alquist-Priolo Act, KCGP, MBGP, and the Kern County Building Code (Chapter 17.08). Compliance to federal, State, and local laws, regulations, and policies would reduce anticipated impacts involving landslides. Implementation

of Mitigation Measures MM 4.6-1 through MM 4.6-7 and MM 4.9-1 through MM 4.9-5 would further reduce impacts of Option B as related to unstable geologic units or soils.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing for the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to being located on a geologic unit or soil that is unstable and would result in on- or off-site landslides, lateral spreading, subsidence, or liquefaction, or collapse, would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to unstable Geologic Soils or Units

Refer to Impacts 4.6-1 through 4.6-5, above, for a summary of applicable existing regulations and policies related to landslides.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

Implement Mitigation Measures MM 4.6-1 through MM 4.6-7, as described above, and Mitigation Measures MM 4.9-1 through MM 4.9-5, as described in Section 4.9, *Hydrology and Water Quality*.

Level of Significance after Mitigation

Impacts regarding Option A would be less than significant. Impacts regarding Option B would be less than significant.

Impact 4.6-7: Be Located on Expansive Soil, as Defined in Table 18-1-B of the Uniform Building Code (1994), Creating Substantial Risks to Life or Property

Proposed Project Option A

Option A would result in no commercial medical and recreational cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A does not provide opportunities for business development and thus would not result in an increase in residents or employees within the County, as discussed in detail in Section 4.12, *Population and Housing*. Therefore, Option A would not result in exposing people or structures to substantial adverse effects involving expansive soils. Existing residences and businesses would continue to have the same exposure to expansive soils as existing conditions. No impact would occur in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and recreational cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of proposed ordinance under Option B).

Future cannabis-related activities could require construction of new or expanded facilities. These future facilities could be located on expansive soils. These future cannabis-related facilities would be required to comply with federal, State, and local laws and regulations, including, but not limited to, the most recent UBC, the most recent CBC (CCR Title 24), Alquist-Priolo Act, KCGP, MBGP, and the Kern County Building Code (Chapter 17.08). Compliance to federal, State, and local laws, regulations, and policies would reduce anticipated impacts involving expansive soils. Implementation of Mitigation Measures MM 4.6-1 through MM 4.6-7 would further reduce impacts of Option B as related to expansive soils.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing for the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to the exposure of people or structures to expansive soils, would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Expansive Soils

Refer to Impacts 4.6-1, 4.6-3, and 4.6-4, above, for a summary of applicable existing regulations and policies related to landslides.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

Implement Mitigation Measures MM 4.6-1 through MM 4.6-7, as described above.

Level of Significance after Mitigation

No impact would occur with respect to Option A. Impacts regarding Option B would be less than significant.

Impact 4.6-8: Have Soils Incapable of Adequately Supporting the Use of Septic Tanks or Alternative Wastewater Disposal Systems Where Sewers Are Not Available for the Disposal of Wastewater

Proposed Project Option A

Option A would result in no commercial medical and recreational cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Ground disturbing activities could result from individuals planting up to six plants; however, this would be similar in scale to a personal garden, and would not result in the need for septic tanks or alternative wastewater disposal systems. Existing residences and businesses would continue to have the same exposure to soils capable of supporting septic tanks or other alternative wastewater disposal systems as existing conditions. Therefore, impacts to people or structures resulting from Option A would be less than significant.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and recreational cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and/or relocating, dispensaries that opened before and any illegally opened after the moratorium and are

currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of proposed ordinance under Option B).

Future cannabis-related activities could require construction of new or expanded facilities. These future facilities could be located on soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems. These future cannabis-related facilities would be required to comply with federal, State, and local laws and regulations, including, but not limited to, the most recent UBC, the most recent CBC (CCR Title 24), Alquist-Priolo Act, KCGP, MBGP, and the Kern County Building Code (Chapter 17.08). Compliance to federal, State, and local laws, regulations, and policies would reduce anticipated impacts involving expansive soils. Implementation of Mitigation Measures MM 4.6-1 through MM 4.6-7 would further reduce impacts of Option B as related to soil capability of supporting alternative wastewater disposal systems.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing before the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems, would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Soils that Support Septic or Alternative Waste and Wastewater Systems

Refer to Impacts 4.6-1, 4.6-3, and 4.6-4, above, for a summary of applicable existing regulations and policies related to landslides.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

Implement Mitigation Measures MM 4.6-1 through MM 4.6-7, as described above.

Level of Significance after Mitigation

No impact would occur with respect to Option A. Impacts regarding Option B would be less than significant.

Cumulative Setting Impacts and Mitigation Measures

Cumulative Setting

The geographic scope for cumulative impacts on recreational resources includes both the KCGP and the regional growth plan and projections included in the Kern COG Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) approved in 2014, as defined in Section 3.7, *Cumulative Projects*. This is a large enough area to encompass any effects of the proposed project on recreational resources that may combine with similar effects caused by other projects, and provides a reasonable context wherein cumulative actions could affect these resources. The cumulative analyses consider whether the proposed project, Option A or Option B, in combination with the past, present, and reasonably foreseeable projects, could cumulatively affect geology and soils.

Cumulative Impacts and Mitigation Measures

Impact 4.6-9: Contribute to Cumulative Geologic and Soils Impacts

Proposed Project Option A

Option A of the proposed project would ban all commercial medical and adult use cannabis-related activities other than what is allowed for personal use under Proposition 64. Option A would not result in an increase in residents or employees within the County. As discussed above, Option A would not result in exposing people or structures to potentially adverse effects, including risk of loss, injury or death, involving fault rupture (Impact 4.6-1), strong seismic ground shaking (Impact 4.6-2), groundfailure including liquefaction (Impact 4.6-3), landslides (Impact 4.6-4), and substantial erosion control or loss of topsoil (Impact 4.6-5). Additionally, Option A would not result in placing projects within unstable geologic units or soils (Impact 4.6-6), expansive soils (Impact 4.6-7), and would not put facilities on soils incapable of supporting place septic tanks or alternative wastewater disposal systems (Impact 4.6-8). Therefore, Option A would not contribute to cumulative impacts when combined with past, present, or reasonably foreseeable projects.

Proposed Project Option B

Future commercial medical and adult use cannabis-related activities under Option B would have a workforce comprised of local Kern County residents and is not anticipated to result in a substantial population increase. With regard to Option B's potential to expose people or structures to hazards associated with the rupture of a known earthquake fault or from strong seismic ground shaking (Impacts 4.6-1 and 4.6-2), damage to on-site structures and facilities could occur from direct rupture of a fault in the project site. In the event of such an earthquake, structural damage to buildings and other associated facilities from the project could potentially impact those residing and working at the project site; however, the project would be required to site project facilities outside of fault traces and to construct project facilities in conformance with relevant building codes, which would minimize placement of structures in active faults zones. As such, when combined with similar impacts of past, present, or reasonably foreseeable projects, impacts resulting from the project are not expected to result in a significant cumulative impact.

With regard to Option B's potential to expose people or structures to hazards associated with seismic-related ground failure, including liquefaction (Impact 4.6-3), it is possible that ground rupture and/or failure could occur in the project site, and that such an event could result in the exposure of people to seismic-related events or in the damage to future cannabis-related facilities and structures; however, such

an impact would be site-specific, and would be reduced to less-than-significant levels with the implementation of mitigation measures. Therefore, this potential impact would not be expected to combine with similar impacts of past, present, or reasonably foreseeable projects to result in a cumulative impact.

Regarding Option B's potential to expose people or structures to hazards associated with landslides (Impact 4.6-4), future cannabis-related activities could result in construction of new or expanded facilities. These future cannabis-related facilities would be required to comply with federal, State, and local laws and regulations, including, but not limited to, the most recent UBC, the most recent CBC (CCR Title 24), Alquist-Priolo Act, KCGP, MBGP, and the Kern County Building Code (Chapter 17.08). Compliance to federal, State, and local laws, regulations, and policies would reduce anticipated impacts involving landslides. Implementation of Mitigation Measures MM 4.6-1 through MM 4.6-6 would further reduce impacts of Option B as related to landslides however, such an impact would be site-specific, and would be reduced to less-than-significant levels with the implementation of mitigation measures. Therefore, this potential impact would not be expected to combine with similar impacts of past, present, or reasonably foreseeable projects to result in a cumulative impact.

Regarding Option B's potential to result in substantial soil erosion or loss of topsoil (Impact 4.6-5), the potential for erosion is considered to be moderate to high within high wind areas and within or adjacent to stream channels and washes. Option B of the proposed project would require future cannabis-related facilities that require construction to implement a SWPPP, which would include site-specific BMPs for erosion and sediment control, reducing potential cumulative impacts to a less-than-significant level.

With regard to Option B's potential to place future cannabis-related buildings and support infrastructure on soil that is unstable or expansive (Impact 4.6-6 and Impact 4.6-7), future cannabis-related activities could require construction of new or expanded facilities. These future facilities could be located on soil that is unstable or expansive. These future cannabis-related facilities would be required to comply with federal, State, and local laws and regulations, including, but not limited to, the most recent UBC, the most recent CBC (CCR Title 24), Alquist-Priolo Act, KCGP, MBGP, and the Kern County Building Code (Chapter 17.08). Compliance to federal, State, and local laws, regulations, and policies would reduce anticipated impacts involving landslides. Implementation of Mitigation Measures MM 4.6-1 through MM 4.6-6 would further reduce impacts of Option B as related to unstable or expansive soils however, such an impact would be site-specific, and would be reduced to less-than-significant levels with the implementation of mitigation measures. Therefore, this potential impact would not be expected to combine with similar impacts of past, present, or reasonably foreseeable projects to result in a cumulative impact.

All future projects would be subject to review in separate environmental documents and required to conform to the KCGP and would be designed to comply with applicable building codes and structural improvement requirements, siting requirements, and setback requirements. Additionally, all such projects would be required to mitigate seismic hazards and provide appropriate engineering design measures to ensure soil stability. Thus, the cumulative impacts of past, present, and reasonably foreseeable future projects would be less than cumulatively considerable. With the incorporation of Mitigation Measures MM 4.6-1 through MM 4.6-7 and Mitigation Measures MM 4.9-1 through MM 4.9-5, as described in Section 4.9, *Hydrology and Water Quality*, Option B would not contribute to a cumulative impact related to geology and soils, including seismic hazards. Option B's incremental impacts can be sufficiently mitigated. Therefore, Option B's incremental effect on geology and soils is not cumulatively considerable with incorporation of mitigation measures and would be considered less than significant.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing before the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to the geology and soils would be considered and mitigated during the CUP process.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

Implement Mitigation Measure MM 4.6-1 through MM 4.6-7, as described above, and Mitigation Measures MM 4.9-1 through MM 4.9-5, as described in Section 4.9, *Hydrology and Water Quality*.

Level of Significance after Mitigation

Impacts would be less than significant with respect to Option A. Cumulative impacts regarding Option B would be less than significant.

Section 4.7

Greenhouse Gas Emissions

Section 4.7

Greenhouse Gas Emissions

4.7.1 Introduction

This Draft Environmental Impact (EIR) section evaluates the greenhouse gas (GHG) emissions impacts of the Kern County Cannabis Land Use Ordinance Project (proposed project) and the consistency of the proposed project with relevant plans and programs that are applicable to Kern County (County). The impact assessment is based upon a review of relevant literature and technical reports that include, but are not limited to, information and guidelines by the California Air Resources Board (CARB), the United States Environmental Protection Agency (U.S. EPA), and the applicable provisions of the California Environmental Quality Act (CEQA).

4.7.2 Environmental Setting

GHGs and climate change are a cumulative global issue. Global climate change is an international phenomenon, and the regulatory background and scientific data are changing rapidly. The CARB and the U.S. EPA regulate GHG emissions within the State of California and the United States, respectively. While the CARB has the primary regulatory responsibility within California for GHG emissions, local agencies can also adopt policies for GHG emission reduction.

CARB has divided California into regional air basins according to topographic drainage features. The western portion of the County is located in the San Joaquin Valley Air Basin (SJVAB) and the eastern portion of the County is located in the Mojave Desert Air Basin (MDAB). The San Joaquin Valley Air Pollution Control District (SJVAPCD) administers the SJVAB. The Eastern Kern Air Pollution Control District (EKAPCD) administers the Kern County portion of the MDAB.

Climate Change

In the early 1960s, scientists recognized that carbon dioxide (CO_2) levels in the atmosphere were rising every year. It was also noted that several other gases, including methane (CH_4) and nitrous oxides (N_2O) were also increasing. Levels of these gases have increased by approximately 40 percent since large-scale industrialization began around 150 years ago, according to the U.S. EPA. After numerous computer-simulated model runs on the effects of these increases in the atmosphere, it was concluded that the rising concentrations almost always resulted in an increase of average global temperature. Rising temperatures may, in turn, produce changes in weather, sea levels and land use patterns, commonly referred to as “climate change” (U.S. Energy Information Administration [EIA], 2017). There is general scientific consensus that climate change is occurring and that human activity contributes in some measure (perhaps substantially) to that change. Man-made emissions of GHGs, if not sufficiently curtailed, are likely to contribute further to continued increases in global temperatures.

According to the CARB Scoping Plan Update, the characteristics of climate change -- sea level rise, agriculture, snowpack and water supply, forestry, wildfire risk, public health, and electricity demand and supply -- could affect all aspects of this proposed project (CARB, 2014). Additionally, climate change could produce compounding impacts. For instance, in the San Francisco Bay Delta, heightened sea levels and high river inflows from warmer storms would place levee systems in greater jeopardy of flooding. Extreme events, such as heat waves, wildfires, and flooding, could increase in frequency and duration (CARB, 2014).

Greenhouse Gases (GHGs)

Constituent gases that trap heat in the earth's atmosphere are called GHGs, analogous to the way a greenhouse retains heat. GHGs play a critical role in earth's radiation budget by trapping infrared radiation emitted from the earth's surface, which would otherwise escape into space. Without the natural heat-trapping effect of GHGs, the earth's surface would be about 34°F cooler. This natural phenomenon, known as the "greenhouse effect," is therefore responsible for maintaining a habitable climate. However, anthropogenic emissions of these GHGs in excess of natural ambient concentrations are responsible for the augmentation of the "greenhouse effect," and have led to a trend of unnatural warming of the earth's natural climate known as global warming.

The standard definition of GHGs includes six substances identified in the Kyoto Protocol –CO₂, CH₄, N₂O, hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆) – plus chlorofluorocarbons and other chlorine or bromine-containing gases phased out under the Montreal Protocol. CO₂ is undoubtedly the most important GHG, and collectively CO₂, CH₄, and N₂O amount to 80 percent of the total radiative forcing from well-mixed GHGs (CARB, 2014).

Many chemical compounds found in the Earth's atmosphere act as GHGs, which allow sunlight to enter the atmosphere freely. When sunlight strikes the Earth's surface, some of it is reflected back towards space as infrared radiation (heat). GHGs absorb this infrared radiation and trap the heat in the atmosphere. Over time, the amount of energy sent from the sun to the Earth's surface should be about the same as the amount of energy radiated back into space, leaving the temperature of the Earth's surface roughly constant. Many gases exhibit these "greenhouse" properties. Principal GHGs include CO₂, CH₄, N₂O, ozone (O₃), and water vapor (H₂O). Some GHGs, such as CO₂, CH₄, and N₂O, can occur naturally and are emitted into the atmosphere through natural processes and human activities. Of these gases, CO₂ and CH₄ are emitted in the greatest quantities from human activities. Man-made GHGs, which have a much greater heat-absorption potential than CO₂, include fluorinated gases, such as hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF₆), and nitrogen trifluoride (NF₃), which are associated with certain industrial products and processes. These gases prevent heat from escaping to space.

The principal GHGs resulting from human activity that enter and accumulate in the atmosphere are listed below.

- **Carbon Dioxide (CO₂):** CO₂ is the most abundant GHG in the Earth's atmosphere after water vapor. CO₂ enters the atmosphere through the burning of fossil fuels (oil, natural gas, and coal), solid waste, trees and wood products, and chemical reactions (e.g., the manufacture of cement). CO₂ is removed from the atmosphere (or "sequestered") when it is absorbed by plants as part of the biological carbon cycle. CO₂ absorbs terrestrial infrared radiation that would otherwise escape to space and has an atmospheric lifetime of up to 200 years; therefore, it is a more important GHG than water vapor, which has an atmospheric residence time of only a few days. CO₂ provides the reference point for the GWP of other gases, with the GWP of CO₂ being equal to 1.
- **Methane (CH₄):** CH₄ is emitted during the production and transport of coal, natural gas, and oil. CH₄ emissions also result from livestock and agricultural practices and the decay of organic waste in municipal solid waste landfills. The chemical lifetime of CH₄ in the atmosphere is 12 years. CH₄ is about 21 times more powerful at warming the atmosphere than CO₂ (a GWP of 21).

- **Nitrous Oxide (N₂O):** N₂O is emitted during agricultural and industrial activities as well as during combustion of fossil fuels and solid waste. N₂O has a long atmospheric lifetime (120 years) and heat-trapping effects about 310 times more powerful than CO₂ on a per-molecule basis (a GWP of 310).
- **Chlorofluorocarbons (CFCs):** CFCs are gases formed synthetically by replacing all hydrogen atoms in CH₄ or ethane with chlorine and/or fluorine atoms. CFCs are nontoxic, nonflammable, insoluble, and chemically un-reactive in the troposphere (the level of air at the earth's surface). CFCs have no natural source but were first synthesized in 1928. It was used for refrigerants, aerosol propellants, and cleaning solvents. Because of the discovery that they are able to destroy stratospheric ozone, an ongoing global effort to halt their production was undertaken and has been extremely successful, so much so that levels of the major CFCs are now remaining steady or declining. However, their long atmospheric lifetimes mean that some of the CFCs will remain in the atmosphere for over 100 years.
- **Sulfur Hexafluoride (SF₆):** SF₆ is an extremely potent greenhouse gas. SF₆ is very persistent, with an atmospheric lifetime of more than a thousand years. Thus, a relatively small amount of SF₆ can have a significant long-term impact on global climate change. SF₆ is human-made, and the primary user of SF₆ is the electric power industry. Because of its inertness and dielectric properties, it is the industry's preferred gas for electrical insulation, current interruption, and arc quenching (to prevent fires) in the transmission and distribution of electricity. SF₆ is used extensively in high-voltage circuit breakers and switchgear, and in the magnesium metal casting industry.
- **Hydrofluorocarbons (HFCs):** HFCs are synthesized chemicals that are used as a substitute for CFCs. Out of all the GHGs; HFCs are one of three groups with the highest GWP. HFCs are synthesized for applications such as automobile air conditioners and refrigerants.
- **Perfluorocarbons (PFCs):** PFCs have stable molecular structures and do not break down through the chemical processes in the lower atmosphere. Because of their molecular stability, PFCs have very long lifetimes, between 10,000 and 50,000 years. The two main sources of PFCs are primary aluminum production and semiconductor manufacture.

GHGs, in most cases, have both natural and anthropogenic sources. Natural mechanisms already exist as part of the “carbon cycle” for removing GHGs from the atmosphere (often called land or ocean sinks). Levels of GHGs, due to the increase in anthropogenic sources, have exceeded the normal rates of natural absorption. This has resulted in increased atmospheric concentrations of GHGs and potentially human-induced global warming.

Climate change, by its nature, is a cumulative impact resulting from innumerable GHG sources around the world. For this reason, global solutions are required to truly address the impacts of climate change. The U.S. EPA and CARB regulate GHG emissions nationally and within the State of California, respectively. While CARB has the primary regulatory responsibility within California, local agencies can also adopt policies for GHG emission reduction. The SJVAPCD and EKAPCD are responsible local agencies for the proposed project. A description of local policies for GHG reductions is provided below in Section 4.7.3, *Regulatory Setting*.

GHG Emission Levels

According to the World Resources Institute (WRI), in 2011 total worldwide GHG emissions were estimated to be approximately 43,816 million metric tons of carbon dioxide equivalent

(MMT CO_2e) and GHG emissions per capita worldwide was 6.29 metric tons of CO 2e (MTCO 2e) (WRI, 2016). These emissions exclude GHG emissions associated with the land use, land-use change, and forestry sector and bunker fuels. The WRI reports that in 2011, total GHG emissions in the United States were approximately 5,671 MMT CO_2e , with average GHG emissions per capita of 18.2 MMT CO_2e (WRI, 2016). WRI Reports that in 2013, the total GHG emissions, excluding land use change and forestry, for the world was approximately 34,389 MTCO 2e and for the United States was approximately 5,156 MTCO 2e (WRI, 2017).

Statewide GHG Inventories

According to CARB, California's total gross 2014 GHG emissions were 441.5 MMT CO_2e (CARB, 2016b and 2016c); 84 percent of the emissions were in the form of CO $_2$. The transportation sector is 37 percent of that total and industrial sources make up another 24 percent. Electrical generation sources provide 10 percent from in-state sources and 10 percent from imports. The current GHG emissions inventory for the State (2016 edition) covers years 2000 to 2014. The emission estimates are statewide estimates that rely on State, regional or national data sources, and on aggregated facility-specific emission reports. Tables 4.7-1 and 4.7-2 show the GHG emissions inventory by GHG and economic sector for the period 2005-2014.

Table 4.7-1. Statewide Greenhouse Gas Emissions Inventory										
GHG	GHG Emissions (MMT CO_2e)									
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
CO $_2$	421.4	417.2	422.2	418.4	389.2	379.9	375.2	380.2	376.0	372.4
CH $_4$	36.6	37.2	39.4	39.7	39.3	39.9	40.0	40.3	39.5	39.8
N $_2\text{O}$	14.1	13.8	13.6	13.4	12.8	12.9	12.9	12.9	12.7	12.2
SF $_6$	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2
Other	7.4	8.0	8.7	9.6	10.6	12.1	13.4	14.6	15.8	17.0
Total GHG	479.8	476.5	484.2	481.4	452.3	445.0	441.7	448.3	444.3	441.5

Source: CARB, 2016b and 2016c
 Note: GHG emissions are weighted using the IPCC Assessment Report 4 (AR4)
 Key: CH $_4$ = methane; CO $_2$ = carbon dioxide; CO 2e = carbon dioxide equivalent; GHG = greenhouse gas; MT = metric tons;
 MMT = million metric tons; N $_2\text{O}$ = nitrous oxide; SF $_6$ = sulfur hexafluoride

Table 4.7-2. Statewide Greenhouse Gas Emissions Inventory by Economic Sector										
Economic Sector	GHG Emissions (MMT CO_2e)									
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Transportation	187.1	187.0	187.1	176.2	169.5	166.2	162.9	162.9	161.5	163.0
Industrial	103.9	101.6	98.6	99.3	97.3	100.9	100.8	101.1	103.8	104.2
Electric Power (in-state and imports)	108.2	104.8	114.2	120.4	101.6	90.6	88.3	95.3	89.8	88.4
Agriculture	34.5	35.6	36.2	36.4	34.1	34.9	35.9	36.8	35.4	36.1
Residential/	45.36	46.5	47.2	49.3	49.1	51.6	53.1	51.4	53.1	49.0

Table 4.7-2. Statewide Greenhouse Gas Emissions Inventory by Economic Sector										
Economic Sector	GHG Emissions (MMTCO ₂ e)									
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Commercial										
Unspecified	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.8
Total GHG Emissions	479.8	476.5	484.2	481.4	452.3	445.0	441.7	448.3	444.3	441.5

Source: CARB, 2016b and 2016bc
Note GHG emissions are weighted using the IPCC Fourth Assessment Report (AR4).
Key: CO₂e = carbon dioxide equivalent; GHG = greenhouse gas; MT = metric tons; MMT = million metric tons

Kern County GHG Inventory

In 2012, the SJVAPCD prepared a communitywide GHG inventory for all of Kern County (SJVAAPCD, 2012). Year 2005 was used as the base year; GHG emissions were estimated to be 27 MMTCO₂e. The Fossil Fuel Industry sector represented 40 percent of the 2005 total, followed by the Electricity Consumption sector at 22 percent. GHG emissions from electricity generation in Kern County were included in the County-wide GHG emissions, but not added in the totals. The County's 2005 GHG emissions, not including subtraction of sequestration sectors, are presented in Table 4.7-3.

Table 4.7-3. 2005 Kern County Baseline Greenhouse Gas Emissions		
Category	GHG Emissions (MMTCO ₂ e)	Percent of Total
Electricity Production	13,002,127	(*)
Electricity Consumption	6,039,114	22%
Residential/Commercial/Industrial Combustion	1,281,498	5%
Transportation	4,569,913	17%
Fossil Fuels Industry	10,928,153	40%
Industrial Processes	1,852,124	7%
Waste Management	120,494	< 1%
Agriculture Fugitives	2,024,470	7%
Forestry and Land Use	11,028	< 1%
Other Sources	218,823	1%
Total	27,045,617	

Source: SJVAPCD, 2012
(*) The Kern County Communitywide GHG emissions inventory included emissions from electricity production for completeness purposes only, this sector was not included in further descriptions of the County's emissions.
Key: CO₂e = carbon dioxide equivalent; GHG = greenhouse gas; MMT = million metric tons

4.7.3 Regulatory Setting

In 1988, the United Nations established the Intergovernmental Panel on Climate Change (IPCC) to evaluate the impacts of global warming and to develop strategies that nations could implement to curtail global climate change. In 1992, the United Nations Framework Convention on Climate Change (UNFCCC) established an agreement with the goal of controlling GHG emissions, including CH₄. As a result, the Climate Change Action Plan was developed to address the reduction of GHGs in the United States. The plan consists of more than 50 voluntary programs. Additionally, the Montreal Protocol was originally signed in 1987 and substantially amended in 1990 and 1992. The Montreal Protocol stipulates that the production and consumption of compounds that deplete ozone in the stratosphere (chlorofluorocarbons [CFCs], halons, carbon tetrachloride, and methyl chloroform) were phased out by 2000 (methyl chloroform was phased out by 2005).

Global warming and climate change have received substantial public attention for more than 20 years. The United States Global Change Research Program was established by the Global Change Research Act of 1990 to enhance the understanding of natural and human-induced changes in the Earth's global environmental system, to monitor, understand and predict global change, and to provide a sound scientific basis for national and international decision making. Even so, analytical tools have not been developed to determine the effect on worldwide global warming from a particular increase in GHG emissions, or the resulting effects on climate change in a particular locale. The scientific tools needed to evaluate the impacts that a specific project may have on the environment are even farther in the future.

Federal

U.S. Environmental Protection Agency (U.S. EPA)

On April 2, 2007, in *Massachusetts v. EPA*, 549 U.S. 497 (2007), the Supreme Court found that GHGs are air pollutants covered by the Clean Air Act (CAA). The Court held that the U.S. EPA must determine whether emissions of GHGs from new motor vehicles cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare. On April 17, 2009, the Administrator signed proposed endangerment and cause or contribute findings for GHGs under Section 202(a) of the CAA. The U.S. EPA found that six GHGs in combination endanger both the public health and the public welfare of current and future generations. The U.S. EPA also found that the combined emissions of these GHGs from new motor vehicles and new motor vehicle engines contribute to the GHG pollution that endangers public health and welfare under CAA section 202(a). These findings became effective on January 14, 2010.

Specific GHG Regulations that the U.S. EPA has adopted to date are as follows:

40 CFR Part 98. Mandatory Reporting of Greenhouse Gases Rule

This rule requires mandatory reporting of GHG emissions for facilities that emit more than 25,000 MTCO₂e emissions per year. CO₂e is a quantity that describes, for a given mixture and amount of GHG, the amount of CO₂ that would have the same GWP, when measured over a specified timescale (generally, 100 years). It is also a measure for comparing CO₂ with other GHGs (which generally have a higher GWP), based on the amount of those other gases multiplied by the appropriate GWP factor, commonly expressed as MTCO₂e. CO₂e is calculated by multiplying the metric tons of gas by the appropriate GWP. Additionally, reporting of emissions is required for owners of SF₆- and PFC-insulated equipment when the total nameplate capacity of these insulating

gases is above 17,280 pounds. The proposed project would not be expected to trigger GHG reporting according to the rule; however, GHG emissions of the proposed project are quantified in this Environmental Impact Report (EIR).

40 CFR Part 52. Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule

The U.S. EPA mandated application of the Prevention of Significant Deterioration (PSD) requirements to facilities whose stationary source CO₂e emissions exceed 75,000 tons per year.

National Climate Action Plan

In June 2013, the President enacted a national Climate Action Plan (Plan) that consisted of a wide variety of executive actions and had three pillars discussed below (EOP 2013).

Cut Carbon in America – The Plan consists of actions to help cut carbon by deploying clean energy such as cutting carbon from power plants, promoting renewable energy, and unlocking long-term investment in clean energy innovation.

Prepare the United States for Impacts of Climate Change – The Plan consists of actions to help prepare for the impacts through building stronger and safer communities and infrastructure by supporting climate resilient investments, supporting communities and tribal areas as they prepare for impacts, and boosting resilience of building and infrastructure; protecting the economy and natural resources by identifying vulnerabilities, promoting insurance leadership, conserving land and water resources, managing drought, reducing wildfire risks, and preparing for future floods; and using sound science to manage climate impacts.

Lead International Efforts – The Plan consists of actions to help the United States lead international efforts through working with other countries to take action by enhancing multilateral engagements with major economies, expanding bilateral cooperation with major emerging economies, combating short-lived climate pollutants, reducing deforestation and degradation, expanding clean energy use and cutting energy waste, global free trade in environmental goods and services, and phasing out subsidies that encourage wasteful use of fossil fuels and by leading efforts to address climate change through international negotiations.

In June of 2014, the Center for Climate and Energy Solutions (C2ES) published a one-year review of progress in implementation of the Plan (C2ES, 2014). The C2ES found that the administration had made marked progress in its initial implementation. Notable areas of progress included steps to limit carbon pollution from power plants; improve energy efficiency; reduce CH₄ and HFC emissions; help communities and industry become more resilient to climate change impacts; and end U.S. lending for coal-fired power plants overseas.

Greenhouse Gas Endangerment Findings

As of January 14, 2010, the U.S. EPA's finding that six GHGs, taken in combination, endanger the public health and the public welfare of current and future generations became effective. The U.S. EPA also found that the combined emissions of these GHGs from new motor vehicles and new motor vehicle engines contribute to the GHG pollution that endangers public health and welfare under CAA Section 202(a). Subsequently, federal agencies have adopted specific GHG-related regulations and initiatives, including:

Transportation/Mobile Sources

U.S. EPA and National Highway Traffic Safety Administration Standards to Cut Greenhouse Gas Emissions and Fuel Use for New Motor Vehicles: coordinated steps to enable the production of a new generation of clean vehicles.

Renewable Fuel Standard Program: transportation fuel sold in the United States is required to contain a minimum volume of renewable fuel.

Stationary Sources

Carbon Pollution Standards for Power Plants: In September 2013, the U.S. EPA proposed a rule to reduce carbon emissions from new power plants. On June 2, 2014, the U.S. EPA issued a proposal to cut carbon pollution from existing power plants (the “Clean Power Plan”). U.S. EPA’s May 2015 “Unified Agenda” indicates that both of these rules are expected to be issued in August 2015.

Final Greenhouse Gas Tailoring Rule: On May 13, 2010, the U.S. EPA set GHG emissions thresholds to define when permits under the New Source Review PSD and Title V Operating Permit programs are required for new and existing industrial facilities. This final rule “tailors” the requirements of these CAA permitting programs to limit covered facilities to the nation’s largest GHG emitters: power plants, refineries, and cement production facilities.

Timing of Applicability of the PSD Permitting Program to GHGs: On March 29, 2010, the U.S. EPA completed its reconsideration of the December 18, 2008, memorandum entitled “EPA’s Interpretation of Regulations that Determine Pollutants Covered by Federal Prevention of Significant Deterioration (PSD) Permit Program” (the so-called “Johnson memo”). The final action confirmed that GHGs become covered under the PSD program on January 2, 2011, when the cars rule took effect.

In June 2014, the U.S. Supreme Court ruled that the U.S. EPA cannot classify facilities as major PSD or Title V sources based solely on its GHG emissions meeting the major source threshold. However, the Supreme Court said that the U.S. EPA could continue to require that PSD permits, required due to criteria pollutant emissions, contain Best Available Control Techniques (BACT) limits for GHG emissions. This ruling struck down Step 2 of the Tailoring Rule but kept in effect Step 1 (U.S. EPA, 2014).

Emissions Reporting

GHG Reporting Program: This program collects reported GHG emissions from facilities that emit more than 25,000 MTCO₂e emissions per year. Additionally, reporting of emissions is required for owners of SF₆- and PFC-insulated equipment when the total nameplate capacity of these insulating gases is above 17,280 pounds. The Petroleum and Natural Gas Systems source category consists of onshore production; offshore production; natural gas processing; natural gas transmission; underground natural gas storage; natural gas distribution; liquefied natural gas import and export terminals; and liquefied natural gas storage equipment.

Notification Requirements for Gas Well Completions (40 CFR Parts 60 and 63): Air pollution standards established by the U.S. EPA under the New Source Performance Standard, Final Rule August 16, 2012, for oil and gas production require companies to provide notifications of natural gas well completions. The U.S. EPA expects to use the notifications required by the 2012 standards and ongoing technical studies through 2014 to make a foundation for determining how best to

require additional control of methane and other air pollutants from the oil and gas sector, including completions and associated gas from ongoing production and hydraulically fractured oil wells.

State

Assembly Bill (AB) 1493

On July 22, 2002, Governor Gray Davis signed Assembly Bill (AB) 1493, also known as the Pavley Regulations or the Clean Car Standards. AB 1493 required the State to develop and adopt regulations that achieve the maximum feasible and cost-effective reduction of GHG emissions emitted by passenger vehicles and light-duty trucks. Subsequent regulations were adopted by CARB in September 2004.

The regulations were threatened by automaker lawsuits and were stalled by the U.S. EPA's initial denial to allow California to implement GHG standards for passenger vehicles. The U.S. EPA later granted California the authority to implement GHG emission reduction standards for new passenger cars, pickup trucks and sport utility vehicles on June 30, 2009. On September 24, 2009, the CARB adopted amendments to the Pavley regulations that reduce GHG emissions in new passenger vehicles from 2009 through 2016.

Executive Order S-3-05 – Statewide Emission Reduction Targets

EO S-3-05 was established by Governor Arnold Schwarzenegger in June 2005. EO S-3-05 establishes statewide emission reduction targets through the year 2050:

- by 2010, reduce GHG emissions to 2000 levels;
- by 2020, reduce GHG emissions to 1990 levels; and
- by 2050, reduce GHG emissions to 80% below 1990 levels.

Executive Order S-1-07

Issued on January 18, 2007, Executive Order S-1-07 sets a declining Low Carbon Fuel Standard for GHG emissions measured in CO₂e grams per unit of fuel energy sold in California. The target of the Low Carbon Fuel Standard is to reduce the carbon intensity of California passenger vehicle fuels by at least 10 percent by 2020. The carbon intensity measures the amount of GHG emissions in the lifecycle of a fuel, including extraction/feedstock production, processing, transportation, and final consumption, per unit of energy delivered. CARB adopted the implementing regulation in April 2009. The regulation is expected to increase the production of biofuels, including those from alternative sources, such as algae, wood, and agricultural waste. In addition, the Low Carbon Fuel Standard would drive the availability of plug-in hybrid, battery electric, and fuel-cell power motor vehicles. The Low Carbon Fuel Standard is anticipated to lead to the replacement of 20 percent of the fuel used in motor vehicles with alternative fuels by 2020.

Executive Order Executive Order B-30-15 – 2030 Statewide Emission Reduction Target

EO B-30-15 was signed by Governor Jerry Brown Jr. on April 29, 2015. This EO establishes an interim statewide GHG reduction target of 40 percent below 1990 levels by 2030, which is necessary to guide regulatory policy and investments in California in the midterm, and put California on the most cost-effective path for long-term emission reductions. Under this EO, all State agencies with jurisdiction over sources of greenhouse gas emissions will need to continue to develop and implement emissions reduction programs to reach the State's 2050 target and attain a

level of emissions necessary to avoid dangerous climate change. According to CARB's Scoping Plan Update, this EO is in line with the scientifically established levels needed in the United States to limit global warming below 2°C - the warming threshold at which scientists say there will likely be major climate disruptions such as super droughts and rising sea levels (CARB, 2014).

Assembly Bill (AB) 32

AB 32, also known as the California Global Warming Solutions Act of 2006, was established to mandate the quantification and reduction of GHGs to 1990 levels by the year 2020. The law establishes periodic targets for reductions, and requires certain facilities to report emissions of GHGs annually. The legislation authorizes CARB to reduce emissions from certain sectors that contribute the most to statewide emissions of GHGs.

The AB 32 Scoping Plan identifies the strategies for achieving the maximum technologically feasible and cost-effective GHG reductions by 2020, and to maintain and continue reductions beyond 2020. The scoping plan includes a range of GHG emission reduction actions, which include direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, market-based mechanisms such as a Cap-and-Trade system, and an AB 32 cost of implementation fee regulation to fund the program. The initial scoping plan was approved at the CARB Board hearing on December 12, 2008. CARB approved the First Update to the Scoping Plan in May 2014.

Senate Bill (SB) 97

Senate Bill (SB) 97, enacted in August 2007, required the Office of Planning and Research (OPR) to develop guidelines for the mitigation of GHG emissions or effects related to releases of GHG emissions. On April 13, 2009, OPR submitted proposed amendments to the California Natural Resources Agency (CNRA), in accordance with SB 97, regarding analysis and mitigation of GHG emissions. Formal rulemaking was conducted in 2009 prior to adopting the amendments.

As part of the guidelines, OPR recommends that CARB set statewide thresholds of significance and emphasized the need to have a consistent threshold available to analyze projects. The draft guidelines also noted that the analyses should be based on the best available information. As directed by SB 97, the CNRA adopted amendments to the State CEQA Guidelines for GHG emissions on December 30, 2009. On February 16, 2010, the Office of Administrative Law approved the amendments and filed them with the Secretary of State for inclusion in the California Code of Regulations. The amendments became effective on March 18, 2010.

Other Mobile Source Reduction Requirements

Several other State provisions address the GHG emissions reduction targets set by CARB for mobile sources, including trucks, passenger vehicles, trains, and ships. These measures include:

- Low Carbon Fuel Standard (EO S-01-07)
- Advanced Clean Cars Program
- SmartWay Truck Efficiency Regulation
- AB 32 Cap-and-Trade Program as applicable to transportation fuel suppliers (beginning January 1, 2015)
- SB 375 (Land Use Planning) including the development of a Sustainable Communities Strategy as part of a Metropolitan Planning Organization's Regional Transportation Plan.

In particular, SB 375 requires the Air Resources Board to set regional targets for GHG emission reductions from passenger vehicles and light duty trucks, and requires each regional Metropolitan Planning Organization (MPOs) to adopt a Sustainable Communities Strategy (SCS) into its regional transportation plan that would allow the region to meet its GHG emission reduction target. The Kern County Council of Governments adopted the SCS for Kern County as part of its Regional Transportation Plan (RTP) in 2014. The RTP and SCS incorporate forecasted development patterns, modeling and measures designed to integrate land use and transportation planning to reduce local and regional GHG emissions. Oil and gas resources, as well as other land uses, are components of the SCS. While SB 375 does not require local governments to amend their General Plans to implement the SCS, it provides incentives for them to do so. Implementation of SB 375 is expected to substantially reduce GHG emissions in the County and throughout the State.

California Air Pollution Control Officers Association (CAPCOA)

The California Air Pollution Control Officers Association (CAPCOA) is the association of air pollution control officers representing all 35 air quality agencies throughout California. CAPCOA is not a regulatory body, but it has been an active organization in providing guidance in addressing the CEQA significance of GHG emissions and climate change as well as other air quality issues. The GHG analysis set forth in this report has been informed, in part, by the expertise and methodologies described in the following documents published by CAPCOA: (1) CEQA & Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act (CAPCOA, 2008); and (2) Quantifying Greenhouse Gas Mitigation Measures: A Resource for Local Government to Assess Emission Reductions from Greenhouse Gas Mitigation Measures (CAPCOA, 2010). The methodologies used in this GHG analysis are consistent with the CAPCOA guidelines

California Environmental Quality Act (CEQA)

There are a variety of statewide rules and regulations which have been implemented or are in development in California which mandate the quantification or reduction of GHGs. Under CEQA, an analysis and mitigation of emissions of GHGs and climate change in relation to a project is required where it has been determined that a project will result in a significant addition of GHGs. Certain Air Pollution Control Districts (APCDs) have proposed their own thresholds of significance and /or best performance standards. Section 4.7.4, *Thresholds of Significance*, below, presents the CEQA GHG thresholds applied for the proposed project.

California Code of Regulations Title 24

Title 24 of the California Code of Regulations was established in 1978, and serves to enhance and regulate California's building standards. While not initially promulgated to reduce GHG emissions, Part 6 of Title 24 specifically establishes energy efficiency standards for residential and non-residential buildings constructed in the State of California in order to reduce energy demand and consumption. Part 6 is updated periodically to incorporate and consider new energy efficiency technologies and methodologies. The current version of the California Building Code became effective January 1, 2017. Local agencies must ensure that development in their jurisdictions complies with guidelines contained in the California Building Code. Cities and counties can, however, adopt building standards beyond those provided in the code.

Air Districts

Eastern Kern Air Pollution Control District (EKAPCD)

The EKAPCD has regulatory authority over the air emissions from the eastern part of the County in MDAB. On March 8, 2012, the EKAPCD adopted *Addendum to CEQA Guidelines Addressing GHG Emission Impacts For Stationary Source Projects When Serving As Lead CEQA Agency*; which outlined the EKAPCD's Project-Specific CEQA significance thresholds for GHG emissions (EKAPCD, 2012):

- If project is exempt from CEQA due to either a statutory or categorical exemption, no further analysis under CEQA is required.
- Project-Specific GHG Emissions must be quantified if the project is not exempt from CEQA.
- Project is considered to have a less than significant impact or not have a cumulatively considerable impact on GHG emissions if it meets one of the following conditions:
 1. Project-Specific GHG emissions are less than 25,000 tons per year (tpy);
 2. Project demonstrates to EKAPCD that it is in compliance with State GHG reduction plan such as AB 32 or future federal GHG reduction plan if it is more stringent than State plan;
 3. Project GHG emissions will be mitigated to a less than significant impact if GHGs can be reduced by at least 20 percent below Business-As-Usual (BAU) through implementation of one or more of the following strategies:
 - a. Compliance with a Best Performance Standard (BPS) as set forth in Section VI of this Policy;
 - b. Compliance with GHG Offset as detailed in Section VI of this Policy;
 - c. Compliance with an Alternative GHG Reduction Strategy as discussed in Section VII of this Policy.
- If none of the above is met the project will be deemed significant and an EIR will be required.

San Joaquin Valley Air Pollution Control District (SJVAPCD)

The SJVAPCD does not regulate GHG emissions directly through its permitting responsibilities for stationary sources. Thus, there are no SJVAPCD rules or regulations related to GHGs. The SJVAPCD, however, effects reductions of GHGs from new and modified stationary sources when acting as a Lead Agency for CEQA. The SJVAPCD implements its GHG policies and reviews whether new or modified stationary sources will implement best performance standards (BPS). In 2009, the SJVAPCD reviewed potential GHG significance thresholds and approaches, ranging from quantification of a project's GHG impacts without a recommended significance threshold to a zero threshold to specific significance thresholds for different kinds of projects (e.g., residential, mixed use, industrial, plans).

On December 17, 2009, the SJVAPCD Governing Board adopted *Guidance for Valley Land-Use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA* (SJVAPCD, 2009). The guidance recommends the following hierarchy for evaluating a project's impact with respect to its GHG emissions:

Projects complying with an approved GHG emission reduction plan or GHG mitigation program, which avoids or substantially reduces GHG emissions within the geographic area in which the project is located would be determined to have a less than significant individual and cumulative impact for GHG emissions. Such plans or programs must be specified in law or approved by the Lead Agency with jurisdiction over the affected resource and supported by a CEQA compliant environmental review document adopted by the Lead Agency. Projects complying with an approved GHG emission reduction plan or GHG mitigation program would not be required to implement Best Performance Standards (BPS).

Projects implementing BPS would not require quantification of project specific GHG emissions. The guidance recommends, “Projects requiring preparation of an Environmental Impact Report for any other reason would require quantification of project specific GHG emissions.” This assessment for the proposed project does include quantification of the proposed project’s construction and operational GHG emissions. Consistent with the CEQA Guidelines, such projects would be determined to have a less than significant individual and cumulative impact for GHG emissions.

Projects not implementing BPS would require quantification of project specific GHG emissions and demonstration that project specific GHG emissions would be reduced or mitigated by at least 29 percent, compared to business as usual (BAU), including GHG emission reductions achieved since the 2002–2004 baseline period. Projects achieving at least a 29 percent GHG emission reduction compared to BAU would be determined to have a less than significant individual and cumulative impact for GHG (SJVAPCD, 2009).

For development projects, BPS would include project design elements, land use decisions, and technologies that reduce GHG emissions. While the SJVAPCD has adopted BPS for several types of stationary sources (e.g., boilers), it has not developed BPS for land development projects. Projects implementing any combination of BPS, and/or demonstrating a total 29 percent reduction in GHG emissions from BAU, would be determined to have a less than significant individual and cumulative impact on global climate change (SJVAPCD, 2015b).

Local

Kern County General Plan (KCGP)

The policies, goals, and implementation measures in the KCGP applicable to GHGs as related to the proposed project are provided in Chapter 4.3, *Air Quality*, of this EIR. Some of the listed policies, goals, and implementation measures would indirectly impact GHG emissions through the reduction of fossil fuel use. The KCGP contains additional policies, goals, and implementation measures that are more general in nature. Therefore, they are not listed below, but, as stated in Chapter 2, Introduction, all policies, goals, and implementation measures in the KCGP are incorporated by reference.

Chapter 1: Land Use, Open Space, and Conservation Element

Section 1.10.2 Air Quality

Policies

- **Policy 18:** The air quality implications of new discretionary land use proposals shall be considered in approval of major developments. Special emphasis will be placed on

minimizing air quality degradation in the desert to enable effective military operations and in the valley region to meet attainment goals.

- **Policy 19:** In considering discretionary projects for which an environmental impact report must be prepared pursuant to the California Environmental Quality Act, the appropriate decision-making body, as part of its deliberations, will ensure that:
 - a) All feasible mitigation to reduce significant adverse air quality impacts have been adopted; and
 - b) The benefits of the proposed project outweigh any unavoidable significant adverse effects on air quality found to exist after inclusion of all feasible mitigation. This finding shall be made in a statement of overriding considerations and shall be supported by factual evidence to the extent that such a statement is required pursuant to the California Environmental Quality Act.
- **Policy 21:** The County shall support air districts' efforts to reduce PM₁₀ and PM_{2.5} emissions.
- **Policy 22.** Kern County shall continue to work with the San Joaquin Valley Unified Air Pollution Control District and the Kern County Air Pollution Control District toward air quality attainment with federal, State, and local standards.
- **Policy 23.** The County shall continue to implement the local government control measures in coordination with the Kern Council of Governments and the San Joaquin Valley Unified Air Pollution Control District.

Implementation Measures

- **Measure F:** All discretionary permits shall be referred to the appropriate air district for review and comment.
- **Measure G:** Discretionary development projects involving the use of tractor-trailer rigs shall incorporate diesel exhaust reduction strategies, including, but not limited to:
 - a. Minimizing idling time, and
 - b. Electrical overnight plug-ins.
- **Measure H:** Discretionary projects may use one or more of the following to reduce air quality effects:
 - a. Pave dirt roads within the development,
 - b. Pave outside storage areas,
 - c. Provide additional low volatile organic compound-producing trees on landscape plans,
 - d. Use alternative fuel fleet vehicles or hybrid vehicles,
 - e. Use emission control devices on diesel equipment,
 - f. Develop residential neighborhoods without fireplaces or with the use of Environmental Protection Agency-certified low-emission natural gas fireplaces,
 - g. Provide bicycle lockers and shower facilities on-site,
 - h. Increase the amount of landscaping beyond what is required in the Zoning Ordinance (Chapter 19.86),
 - i. Use and develop park-and-ride facilities in outlying areas, and
 - j. Other strategies that may be recommended by the local Air Pollution Control Districts.

- **Measure J:** The County should include PM₁₀ control measures as conditions of approval for subdivision maps, site plans, and grading permits.

Metropolitan Bakersfield General Plan (MBGP)

The MBGP, a joint effort between the Kern County Planning Department and the City of Bakersfield Planning Division, was last adopted on December 11, 2007. The MBGP includes both city and unincorporated County lands. The MBGP describes the community's physical development as well as its economic, social and environmental goals and is currently undergoing an update. Project-related development on unincorporated lands within the MBGP Planning Area would be subject to the following applicable policies and implementation measures of the MBGP, with respect to GHG emissions.

Chapter II. Land Use Element

Policies

- **Policy 100.** Encourage the use of reflective roofing material and other measures that reduce the “heat island effect.”

Chapter V. Conservation Element

Air Quality

Goals

- **Goal 1.** Promote air quality that is compatible with health, well-being, and enjoyment of life by controlling point sources and minimizing vehicular trips to reduce air pollutants.
- **Goal 2.** Continue working toward attainment of federal, State, and local standards, as enforced by the San Joaquin Valley Air Pollution Control District.
- **Goal 4.** Reduce the amount of vehicular emissions in the Planning Area.

Policies

- **Policy 1.** Comply and promote SJVAPCD control measures regarding Reactive Organic Gases (ROG). Such measures are focused on (a) steam-driven well vents, (b) pseudo-cyclic wells, (c) natural gas processing plant fugitives, (d) heavy oil test stations, (e) light oil production fugitives, (f) refinery pumps and compressors, and (g) vehicle inspection and maintenance.
- **Policy 2.** Encourage land uses and land use practices that do not contribute significantly to air quality degradation.
- **Policy 10.** Implement the Transportation System Management Program for the Metropolitan Bakersfield to improve traffic flow, reduce vehicle trips, and increase street capacity.
- **Policy 12.** Encourage the use of mass transit, carpooling, and other transportation options to reduced vehicle miles traveled.
- **Policy 13.** Consider establishing priority parking areas for carpoolers in projects with relatively large number of employees to reduce vehicle miles traveled.

In conjunction with the MBGP Update efforts, City staff is securing additional funding to develop a CCAP for the Metropolitan Bakersfield Update. Local Sustainable Planning will be the focus for the CCAP. CCAP will be Bakersfield’s mechanism for county-wide and region-wide efforts for addressing SB 375, provide community-wide sustainability, and implementing AB 32 GHG

emission reduction targets. The CCAP will include energy efficiency and conservation strategies for long-term land use planning. Even though the Bakersfield CCAP is unfinished, the advancement of renewable energy is often a cornerstone for climate action strategies.

Kern County Specific Plans

Kern County has adopted 39 Specific Plans, 10 Rural Community Plans, and 14 Interim Rural Community Plan Maps. The Specific Plans and Rural Community Plans are intended to be an amplification of the goals and policies of the KCGP and are, therefore, consistent therewith. Interim Rural Community Plan Maps are areas where a specific plan has not been formally adopted, thus the goals and policies of the KCGP govern these areas. Future commercial cannabis cultivation, processing/packaging, and sales activities that would be authorized under the proposed project that would be located within the boundary of an adopted Specific Plan would be regulated according to County zoning.

Kern Council of Governments (Kern COG)

2014 Regional Transportation Plan (RTP) / Sustainable Communities Strategy (SCS)

The Kern Council of Governments (Kern COG) 2014 RTP includes an SCS component in accordance with SB 375, the Sustainable Communities and Climate Protection Act of 2008 (Kern COG, 2014a). The Kern COG Board of Directors adopted its first SCS on June 19, 2014, and made a determination that, if implemented, the SCS would achieve the per capita passenger vehicle GHG emissions targets established by the board of directors. The 2020 target is a 5 percent per capita reduction and the 2035 target is a 10 percent per capita reduction from the 2005 base year. Kern COG submitted its adopted SCS and GHG determination to CARB for review on June 4, 2015. On July 24, 2015, CARB accepted the determination that the Kern COG 2014 SCS, if implemented, would achieve the region's per capita GHG emission reduction targets for 2020 and 2035.

The SCS strives to reduce air emissions from passenger vehicle and light-duty truck travel by better coordinating transportation expenditures with forecasted development patterns and, if feasible, help meet CARB GHG targets for the region. SB 375 requires CARB to develop regional GHG emission reduction targets for passenger vehicles. CARB is to establish targets for the automobile and light-duty truck sector for 2020 and 2035 for each region covered by one of the State's 18 metropolitan planning organizations. Regional metropolitan planning organizations are responsible for preparing an SCS within their RTP. The key purpose of SB 375 and the Kern COG SCS is to reduce per capita emissions originating from passenger vehicles and light-duty trucks. Accordingly, the 2014 RTP:

- Describes sources of emissions in the Kern region, 2020 and 2035 emission reduction targets established by CARB for the San Joaquin Valley, and modeling techniques used to estimate and forecast emissions
- Identifies statewide strategies to reduce transportation-related emissions and their anticipated effect within the Kern region
- Identifies regional strategies that complement the SCS by reducing emissions in other sectors (e.g., energy consumption)
- Quantifies the effect of policies and programs in the RTP that reduce transportation-related emissions in the region and

- Compares the emissions reductions anticipated with implementation of the SCS with the regional targets. (Kern COG, 2014a)

The GHG emission targets for lowering emissions in the San Joaquin Valley, as set by CARB and approved by the Kern COG Board of Directors, call for a 5 percent reduction in per capita emissions from passenger vehicles and light trucks by 2020 and a 10 percent reduction by 2035 through land use and transportation planning. Based on the analysis of strategies included in the SCS, CO₂ emissions are anticipated to be 14.1 percent lower than 2005 levels by 2020 and 16.6 percent lower by 2035, exceeding the targets established by CARB in 2010 (Kern COG, 2014a, 2014b, 2016).

Kern County Climate Action Plan

Kern County has not adopted a GHG reduction plan or climate action plan as of this publication of this EIR.

Kern Sustainable Communities Strategy

The SCS is a part of the 2014 RTP developed by the Kern Council of Governments. The SCS (Kern COG, 2014a) strives to reduce air emissions from passenger vehicle and light duty truck travel by better coordinating transportation expenditures with forecasted development patterns and, if feasible, help meet CARB GHG targets for the region (Kern COG, 2014 a, 2014b, and 2016). The SCS does not regulate the use of land nor does it supersede the land use authority of the cities or county within the region.

One goal of the SCS is to “Quantify the reduction in GHG emissions projected to be achieved by the SCS and set forth the difference, if any, between the amount of that reduction and the target for the region established by CARB.” CARB set targets for lowering GHG emissions in the San Joaquin Valley from 2005 levels by 5 percent for passenger vehicles and light trucks by 2020, and a reduction of 10 percent from 2005 to 2035 through land use and transportation planning. SCS strategies are expected to reduce GHG emissions from 2005 levels by 14.1 percent by 2020 and 16.6 percent by 2035, thus exceeding the targets set by CARB.

Some of the SCS proposals to reduce GHG emissions from vehicles include:

- Construct new transit lines;
- Expand bus and passenger rail service;
- Promote carpooling and vanpooling;
- Implement employer-based trip reduction strategies;
- Promote walking and biking; and
- Implement intelligent transportation systems (ITS)/traffic management.

4.7.4 Impacts and Mitigation Measures

This section describes the methodology used in conducting the impact analysis for GHG emissions, the thresholds of significance used in assess impacts to GHG emission, and the assessment of impacts to GHG emissions. Measures to mitigate (i.e., avoid, minimize, rectify, reduce, eliminate, or compensate for) significant impacts accompany each impact discussion, where applicable.

Methodology

This GHG assessment was prepared pursuant to Kern County's *Guidelines for Preparing an Air Quality Assessment for Use in Environmental Impact Reports* (2006), the San Joaquin Valley Air Pollution Control District's (SJVAPCD) *Guidance for Assessing and Mitigating Air Quality Impacts (GAMAQI)* (SJVAPCD, 2015b), EKAPCD's *Guidelines for Implementation of the California Environmental Quality Act of 1970* (EKAPCD, 1999), EKAPCD Policy, *Addendum to CEQA Guidelines Addressing GHG Emission Impacts for Stationary Source Projects When Serving As Lead CEQA Agency* (EKAPCD, 2012), the California Environmental Quality Act (CEQA) (Public Resources Code 21000 to 21177) and CEQA Guidelines (California Code of Regulations Title 14, Division 6, Chapter 3, Sections 15000 – 15387).

The proposed project's GHG emissions were quantitatively estimated using CalEEMod Version 2016.3.1 for mobile and area sources for each of the proposed project activities (CAPCOA, 2016). All input assumptions, adjustments to the model's defaults, and methods applications are also described in Section 4.3, *Air Quality*.

The proposed project was assessed as if all construction occurred in one year in one air basin, to simulate absolute worst-case construction-related GHG emissions. Full buildout proposed project operations were assessed to being Year 2018; two full buildout scenarios were estimated: all development located in SJVAB and then all developed located in MDAB. To simulate the full buildout in one year, the proposed project activity emissions were estimated in a reasonable increment by air basin, as follows:

SJVAB

- 525,000 ft² of indoor cultivation
- 1 acre of outdoor cultivation
- 10,000 ft² of processing, packaging, and distribution
- One retail cannabis store

MDAB

- 25,000 ft² of indoor cultivation
- 1 acre of outdoor cultivation
- 10,000 ft² of processing, packaging, and distribution
- One retail cannabis store

The proposed project's construction and operational GHG emissions were estimated using the CalEEMod program for the above defined scenarios. The model was adjusted to represent the land use scenarios defined above as well as trip generation rates defined in Section 4.15, *Transportation and Traffic*. All other CalEEMod defaults were applied. The modeled construction and operations output emissions were then multiplied by the following appropriate factors to then assess full buildout conditions:

- 25,000 ft² of indoor cultivation x 80 = 2,000,000 ft²
- 1 acre of outdoor cultivation x 150 = 150 acres
- 10,000 ft² of processing, packaging, and distribution x 50 = 500,000 ft²
- One retail cannabis store x 40 = 40 retail cannabis store

Although full buildout conditions will realistically span both the SJVAB and MDAB, assuming all proposed project activities in one or the other air basin simulates the absolute worst case conditions. This approach allows proposed project emissions to be separately assessed according to the unique CEQA threshold of significance as established by SJVACPD and EKAPCD.

The proposed project's construction emissions were summed and then annualized over a 30-year period; this annualized construction emission estimate was then added to the proposed project's operations emissions estimates. The proposed project's operations-related GHG emissions were estimated from vehicular traffic, area sources (landscaping maintenance), electrical generation, natural gas consumption, water supply and wastewater treatment, and solid waste.

Operational GHG emissions were also estimated for Business as Usual (BAU) scenarios. BAU emissions were calculated based on the proposed project activities using 2005 regulations and technologies included as part of the CalEEMod defaults.

Climate change related impacts are global in nature and generated by both direct and indirect proposed project activities. Additionally, BAU emissions (reflecting emission levels from the 2002-2004 years as required in AB 32) were estimated and cumulative GHG emission impact were considered.

Development Standards Related to Hazards and Hazardous Materials

Option A

Option A of the proposed project would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Therefore, no development standards are identified in the proposed Zoning Ordinance; refer to Appendix B for specific wording of the proposed ordinance under Option A.

Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, testing, and retail cannabis stores with or without mobile delivery facilities. Development standards provided in the proposed Zoning Ordinance, that pertain to greenhouse gas emissions include, but are not limited to, the following (refer to Appendix C for specific working of the proposed ordinance under Option B):

- All cannabis facilities must be 0.5 mile from any school, park, day care center or youth center.
- The applicant must demonstrate compliance with all applicable mitigation measures prior to the issuance of a grading or building permit for any future cannabis related facility.
- Future cannabis related facilities shall be equipped with an effective odor control system which at all times must prevent unreasonable interference with neighbors' use and enjoyment of their property. The odor control system shall: consist of one or more fans; utilize an alternative method or technology to achieve equal to or greater odor mitigation than provided by the fan system; and the system must be maintained in working order and in use.
- For future cannabis related facilities, if construction is required, debris and waste generated would be recycled to the extent feasible.

- For cannabis cultivation (indoor and outdoor), processing and packaging, and distribution facilities, on-site energy shall be provided or offset with a solar photovoltaic system; small wind generators may be used only in appropriate areas of Eastern Kern County.
- For cultivation (indoor and outdoor), processing and packaging, and distribution facilities, recycled water use is required.
- No cannabis shall be smoked on the premises of a future cannabis related facility.

Thresholds of Significance

The Kern County CEQA Implementation Document and Kern County Environmental Checklist, as amended by the California Natural Resources Agency and adopted by the Office of Administrative Law on February 16, 2010, state that a project would have significant impacts on GHG emissions if it would:

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or
- Conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Kern County has not developed a quantitative threshold of significance for GHG emissions, but a project found to contribute to a net decrease in GHG emissions and found to be consistent with the adopted implementation of the CARB Climate Change Scoping Plan is presumed to have less-than-significant GHG emission impacts (CARB, 2014).

As indicated in Section 4.7.3, *Regulatory Setting*, the SJVAPCD has adopted guidance documents for assessing and mitigating GHG impacts on global climate change. Rather than establishing specific numeric thresholds of significance (as in the case of criteria pollutant emissions), the SJVAPCD guidance utilizes a tiered approach to assess cumulative impacts on global climate change. First, a project can demonstrate compliance with an approved GHG emissions reduction program (such as CARB's statewide GHG Cap-and-Trade Program). Second, a project can demonstrate implementation of BPS to reduce GHG emissions. Finally, a project can demonstrate achievement of a 29 percent reduction in GHG emissions from BAU.

SJVAPCD's CEQA Cap-and-Trade Policy also recommends that projects that are required to comply with CARB's GHG Cap-and-Trade Program be determined to have a less than cumulatively significant impact on global climate change. This policy is included in the SJVAPCD's December 2009 CEQA GHG policies (described above) and its March 19, 2015 Final "Guidance for Assessing and Mitigating Air Quality Impacts" which states that a project whose emissions have been reduced or mitigated consistent with the California Global Warming Solutions Act of 2006 (AB 32) should be considered to have a less than significant impact on global climate change (SJVAPCD, 2015).

EKAPCD's GHG emissions reduction apply specifically to air permitting projects. Because the proposed project activities would very likely not trigger air permits in EKACPD (for most buildout scenarios), the proposed project analysis in MDAB applies the SJVAPCD guidance:

- "quantification of project specific GHG emissions. Projects implementing Best Performance Standards or achieving at least a 29 percent GHG emission reduction compared to Business as

Usual (BAU) would be determined to have a less than significant individual and cumulative impact for GHG.”

The 29 percent below BAU threshold was recently evaluated by the California Supreme Court in “Center for Biological v. California Department of Fish and Wildlife” (November 30, 2015, Case No. 217763), involving the Newhall development project in Los Angeles County (Newhall). The Court determined that the Newhall Ranch development project’s CEQA GHG analysis did not adequately substantiate the conclusion that the GHG cumulative impacts would be less than significant because there was insufficient information in the record to show the linkage between the statewide GHG reduction target established by CARB in AB 32’s scoping plan, and how this statewide target should be applied to individual land use projects. The Court affirmed that the BAU calculations and methodology used in Newhall were correct, and remanded the case to the appellate court for further proceedings on the linkage between the statewide AB 32 target and the Newhall project. Unlike SJVAPCD, which is the expert air agency for the San Joaquin Valley including the Proposed project site, the expert air agency for Los Angeles County had not developed a GHG CEQA Guidance document that included thresholds of significance. In the Court’s final ruling, it offered the following guidance for appropriate consideration of GHG in project EIRs:

1. Lead agencies can use the comparison to BAU methodology if they determine what reduction a particular project must achieve in order to comply with statewide goals,
2. Project design features that comply with regulations to reduce emissions may demonstrate that those components of emissions are less than significant, and
3. Lead agencies could also demonstrate compliance with locally adopted climate plans, or could apply specific numerical thresholds developed by some local agencies.

The SJVAPCD’s adopted *Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA* includes a specific numerical GHG threshold to determine significance of a project (SJVAPCD, 2009), and would be applied as allowed by the California Supreme Court (November 30, 2015, Case No. 217763).

Project Impacts

Impact 4.7-1: Generate Greenhouse Gas Emissions, Either Directly or Indirectly, That May Have a Significant Impact on the Environment

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain medical dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on cannabis-related activities.

Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A does not provide opportunities for commercial cannabis activities and thus would not result in an increase in the need of land for the cultivation, processing and packaging, and distribution and sale of cannabis.

Under Option A, it is anticipated that existing medical dispensaries required to immediately cease operations would eventually become other businesses. It is not anticipated that these structures would be demolished. However, future businesses using structures from the closed dispensaries could result in demolition or renovation activities. Demolition and renovation would generate some amount of GHG emissions; however, at this time, it is unknown and speculative to determine the number of structures that would undergo demolition or renovation as a result of new businesses opening after dispensaries have closed. Therefore, while the amount of potential GHG emissions from the potential demolition or renovation cannot now be quantified and is therefore unknown, potential new businesses using closed dispensary structures would be required to obtain appropriate permits from Kern County and other regulatory agencies and potential GHG emissions would be considered at that time.

Under Option A, the closing of the existing medical dispensaries would result in customer trips being displaced to cities within the County that would allow for the sale of cannabis products or to outside the County. For the purposes of this analysis, it is assumed that customers would leave Kern County in order to obtain cannabis products. Option A would generate operational GHG emissions from mobile sources. Table 4.7-4, *Option A – Estimated Annual Operational Mobile Source Greenhouse Gas Emissions, Operational Year 2018*, presents operational GHG emissions for year 2018, which includes ordinance implementation and associated operational GHG emissions of the proposed project. Additional technical information regarding GHG emissions is presented in Appendix G of this EIR.

Table 4.7-4. Option A - Estimated Annual Operational Mobile Source Greenhouse Gas Emissions, Operational Year 2018

Year 2018	CO ₂ e (MT/Year)			
	CO ₂	CH ₄	N ₂ O	Total
SJVAB	78,092	3.43	0	78,178
MDAB	78,092	3.43	0	78,178

Source: Insight Environmental Consultants, 2017.
MT – metric tons; CO₂ – carbon dioxide; CH₄ – methane; N₂O – nitrous oxide; CO₂e – carbon dioxide equivalent

As shown in Table 4.7-4, above, the proposed project would generate 78,178 MTCO₂e in the SJVAB and the MDAB. As discussed above under *Thresholds of Significance*, the SJVAPCD's guidance for determining significance of proposed project-generated GHG emissions under CEQA, a project would not result in a significant impact if it would result in at least a 29 percent reduction from BAU. There are currently no enforceable feasible mitigation measures related to customers traveling to future retail cannabis stores that are located outside of the County's jurisdiction. Therefore, option A would not provide a 29 percent reduction from BAU. Option A would have a substantial adverse effect on operations-related GHG emissions. This impact would be potentially significant.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within

unincorporated Kern County, would result in the development of up to 2,000,000 square feet (ft^2) of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft^2 of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, retail cannabis stores that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

Construction

Any construction of the proposed project would result in GHG emissions primarily associated with use of off-road construction equipment, on-road hauling and vendor (material delivery) trucks, and worker vehicles. GHG emissions associated with temporary construction activities were quantified using CalEEMod. Appendix G of this EIR presents the CalEEMod output files which include a detailed depiction of the construction schedule—including information regarding phasing, equipment used during each phase, haul trucks, vendor trucks, and worker vehicles.

Table 4.7-5, *Option B – Summary of Estimated Construction Greenhouse Gas Emissions*, presents annual construction emissions for the year 2017 by air basin. This assumes the worst case scenario that all construction activities occur in one year in one air basin. Construction-related emissions presented in Table 4.7-5 include emissions from on-site and off-site sources. On-site sources of GHG emissions include off-road equipment, and off-site sources include hauling and vendor trucks and worker vehicles. Emissions from on-site and off-site sources are combined for the purposes of this analysis. As unmitigated and mitigated GHG emissions were the same for all scenarios analyzed, one table is presented below to summarize proposed project-generated GHG emissions.

Table 4.7-5. Option B – Summary of Estimated Construction Greenhouse Gas Emissions

Year 2017	MT/Year			
	CO ₂	CH ₄	N ₂ O	Total CO ₂ e
SJVAB				
Indoor Cultivation	6,110.04	1.54	0	6,148.40
Outdoor Cultivation	16,564.97	3.60	0	16,654.79
Processing & Packaging	3,467.50	0.94	0	3,490.95
Retail cannabis store	2,670.43	0.74	0	2,689.01
Total				28,983.15
MDAB				
Indoor Cultivation	6,110.04	1.54	0	6,148.40
Outdoor Cultivation	16,564.97	3.60	0	16,654.79
Processing & Packaging	3,467.50	0.94	0	3,490.95
Retail cannabis store	2,670.43	0.74	0	2,689.01
Total				28,983.15

Source: Insight Environmental Consultants, 2017.
Notes: MT – metric tons; CO₂ – carbon dioxide; CH₄ – methane; N₂O – nitrous oxide; CO₂e – carbon dioxide equivalent

As shown in Table 4.7-5, the proposed project would generate a total of approximately 28,983 MT CO₂e in SJVAB and 28,983 MT CO₂e in MDAB during construction of the proposed project in the year 2017.

Operation

Operation of the proposed project would result in GHG emissions from vehicular traffic, area sources (landscaping maintenance), electrical generation, natural gas consumption, water supply and wastewater treatment, and solid waste. The proposed project's development strategies, which include a comprehensive GHG and energy reduction requirements, which were not accounted for in the trip generation and VMT assumptions in the transportation impact study, energy consumption or the GHG quantitative analysis. Therefore, GHG emissions included in the CalEEMod impact assessment are very conservative.

Table 4.7-6, *Option B – Estimated Annual Operational Plus Annualized Construction Project Greenhouse Gas Emissions, Operational Year 2018 Buildout*, presents annual operational emissions in the year 2018, which includes full buildout and associated operational emissions of the proposed project in addition to the annualized construction emissions over 30 years.

Table 4.7-6. Option B – Estimated Annual Operational Plus Annualized Construction Project Greenhouse Gas Emissions, Operational Year 2018 Buildout							
Year 2017	CO ₂ e (MT/Year)						
	Area	Energy	Mobile	Waste	Water	Construction ¹	Total
SJVAB							
Indoor Cultivation	0.04	7,500.31	8,917.54	1,247.20	1,360.42	204.95	19,230.46
Outdoor Cultivation	0.00	1,969.16	2,853.50	467.70	692.85	555.16	6,538.36
Processing & Packaging	0.01	1,875.08	6,985.79	311.80	340.11	116.37	9,629.15
Retail cannabis store	0.00	3,981.22	19,108.38	1,158.48	182.53	89.63	24,520.25
Total							59,918.22
MDAB							
Indoor Cultivation	0.04	3,347.12	8,917.54	1,247.20	2,555.21	204.95	16,272.06
Outdoor Cultivation	0.00	575.57	2,853.50	467.70	736.19	555.16	5,188.12
Processing & Packaging	0.01	836.78	6,985.79	311.80	638.80	116.37	8,889.55
Retail cannabis store	0.00	3,239.83	19,108.38	1,158.48	349.16	89.63	23,945.49
Total							54,295.21
Source: Insight Environmental Consultants, 2017.							
Notes: 1) Construction emissions annualized over 30 years.							
MT – metric tons; CO ₂ – carbon dioxide; CH ₄ – methane; N ₂ O – nitrous oxide; CO ₂ e – carbon dioxide equivalent							

The estimated operational GHG emissions under the BAU in 2005 in comparison to the proposed project operations at 2018 as well as the percent reduction of proposed project emissions as compared to the 2005 BAU for both the SJVAB and MDAB is shown in Table 4.7-6, *Comparison of Estimated Annual Operational 2005 Business as Usual and Option B Greenhouse Gas*

Emissions. As shown in Table 4.7-7, estimated annual operational GHG emissions would generate an approximate 4.8 to 5.25 percent reduction from BAU.

Table 4.7-7. Comparison of Estimated Annual Operational 2005 Business as Usual and Option B Greenhouse Gas Emissions			
	2005 BAU CO ₂ e (MT/Year)	2018 Proposed Project CO ₂ e (MT/Year)	Project Percent Reduction From Business-As-Usual
SJVAB			
Indoor Cultivation	20,018.96	19,025.51	4.96
Outdoor Cultivation	6,047.31	5,983.20	1.06
Processing & Packaging	10,291.03	9,512.78	7.56
Retail cannabis store	25,550.96	24,430.62	4.38
Total	61,908.25	58,952.11	4.78
MDAB			
Indoor Cultivation	17,060.56	16,067.11	5.82
Outdoor Cultivation	4,697.06	4,632.96	1.36
Processing & Packaging	9,551.43	8,773.18	8.15
Retail cannabis store	24,976.20	23,855.86	4.49
Total	56,285.24	53,329.11	5.25

Source: Insight Environmental Consultants, 2017.
Notes: MT – metric tons; CO₂ – carbon dioxide; CH₄ – methane; N₂O – nitrous oxide; CO₂e – carbon dioxide equivalent

As discussed above under *Thresholds of Significance*, the SJVAPCD's guidance for determining significance of proposed project-generated GHG emissions under CEQA, a project would not result in a significant impact if it would result in at least a 29 percent reduction from BAU. The proposed project would result in a 5 to 5.5 percent reduction in GHGs from BAU, which is less than the reduction from BAU than the 29 percent established as the SJVAPCD's threshold of significance. In accordance with SJVAPCD policy, the proposed project's GHG emissions would therefore be considered potentially significant and therefore cumulatively considerable.

Implementation of Mitigation Measures MM 4.7-1 through MM 4.7-3 would minimize GHG emissions associated with proposed project operations. The emission reductions associated with the measures listed in Mitigation Measure MM 4.7-1 have not been quantified in CalEEMod. For example, CalEEMod uses default motor vehicle emission factors that reflect compliance with the Pavley motor vehicle standards and the Low Carbon Fuel Standard. Adjustments were made to the CO₂ emission factors for generation of electricity to reflect the requirements of SB X1 2 and SB 350, which require increasing levels of renewable energy in utility energy supplies; accordingly, the CO₂ emission factors and GHG emissions would decrease with each deadline in these statutes. Water-related measures in Mitigation Measure MM 4.7-1 were accounted for in CalEEMod. The measures listed in Mitigation Measure MM 4.7-1 would also minimize the proposed project's operational emissions. The potential emission reductions, however, have not been quantified. In part, the extent to which some measures would apply to the proposed project is unknown (e.g., whether high-GWP refrigerants be used by proposed project businesses). In addition, the current emission modeling tools (e.g., CalEEMod) do not reflect some measures, such as the U.S. EPA/NHTSA standards and the Advanced Clean Cars Program.

The reduction in energy consumption and associated emissions is not directly proportional to the extent that Title 24 requirements are exceeded; that is, the reduction is less than the 25 percent improvement above Title 24 requirements. The degree of reduction for generation of electricity also

reflects future requirements of the Renewal Portfolio Standard in that a higher percentage of renewable energy in the serving utilities energy mix would reduce the GHG emissions per unit of electricity used (e.g., kilowatt-hour) and the corresponding GHG emission reduction on a mass basis would be less.

Based on these considerations, the proposed project would generate GHG emissions, either directly or indirectly, that could have a potentially significant impact on the environment.

Certain future cannabis-related activities and facilities would require processing a Conditional Use Permit (CUP) and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing before the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to creating significant GHG impacts to the region would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to the Generation of Greenhouse Gas Emissions

1. EKAPCD's *Addendum to CEQA Guidelines Addressing GHG Emission Impacts For Stationary Source Projects When Serving As Lead CEQA Agency*
2. SJVAPCD's *Guidance for Valley Land-Use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA*.
3. Kern COG 2014 *Regional Transportation Plan (RTP) / Sustainable Communities Strategy (SCS)*
4. KCGP Land Use, Open Space, and Conservation Element, Section 1.10.2, Air Quality, Policies 18, 19, 21, 22, and 23 related to air quality plans and emissions.
5. MBGP Land Use Element, Policy 100; and Chapter V, Conservation Element, Air Quality, Goals 1, 2, and 3; and Policies 1, 2, 10, 12, and 13 as related to emissions and emissions as a result of vehicle miles traveled.
6. Kern Sustainable Communities Strategy.

Mitigation Measures

Options A and B

MM 4.7-1 The project applicant would be required to comply with all applicable State and San Joaquin Valley Air Pollution Control District (SJVAPCD) Rules and Regulations or East Kern Air Pollution Control District regulations including, but not limited to:

- a) Pavley Motor Vehicle Standards (AB 1493)
- b) Low Carbon Fuel Standard (California Code of Regulations, Title 17, Division 3, Chapter 1, Subchapter 10, Article 4, Subarticle 7, Section 95480 et seq.)
- c) Title 24 (part 6 [Energy Code] and part 11 [CALGreen Code]) of the California Code of Regulations

- d) Renewable Portfolio Standard (SB X1 2 and SB 350)
- e) Solid Waste Diversion (AB 341) and statewide reduction in potable urban water usage of 25 percent relative to water use in 2013 (Executive Order B-29-15)
- f) Model Water Efficient Landscape Ordinance (MWELO) (California Code of Regulations, Title 23, Division 2, Chapter 2.7)
- g) Kern County Code of Ordinances – Landscaping Requirements and Water Efficient Landscaping (Kern County Code of Ordinances, Title 19, Chapter 19.86, Sections 19.86.050 and 19.86.060)
- h) California Water Code (California Code of Regulations, Division 6, Part 2.10, Sections 10910–10915)
- i) U.S. EPA and NHTSA GHG and CAFE standards for passenger cars, light-duty trucks, and medium-duty passenger vehicles (75 FR 25324–25728 and 77 FR 62624–63200) and for medium- and heavy-duty vehicles (76 FR 57106–57513)
- j) Advanced Clean Cars Program (California Code of Regulations, Title 13, Division 3, Chapter 1, Articles 1, 2, 6 (parts); Chapter 2, Articles 1, 2.1, 2.3, 2.4 (parts); Chapter 4.4 (parts); Chapter 8 (parts).
- k) Under Inflated Vehicle Tires (California Code of Regulations, Title 17, Division 3, Chapter 1, Subchapter 10, Article 4, Subarticle 8, Section 95550 et seq.)
- l) Heavy-Duty Vehicle Greenhouse Gas Emission Reduction Regulation (California Code of Regulations, Title 17, Division 3, Chapter 1, Subchapter 10, Article 4, Subarticle 1, Section 95300 et seq.)
- m) Management of High Global Warming Potential Refrigerants for Stationary Sources (California Code of Regulations, Title 17, Division 3, Chapter 1, Subchapter 10, Article 4, Subarticle 5.1, Section 95380 et seq.)
- n) Small Containers of Automotive Refrigerant (California Code of Regulations, Title 17, Division 3, Chapter 1, Subchapter 10, Article 4, Subarticle 5, Section 95360 et seq.)
- o) High-Global Warming Potential Greenhouse Gases in Consumer Products (California Code of Regulations, Title 17, Division 3, Chapter 1, Subchapter 8.5, Article 2).

Option B

Implement Mitigation Measure 4.3-5, as described in Section 4.3, *Air Quality*.

MM 4.7-2 Prior to the approval of a site plan, issuance of a grading or building permit, or as on site plans for applications for a conditional use permit, the project applicant shall provide details to the Kern County Planning and Natural Resources Department that the following menu of greenhouse gas emissions reduction measures are being implemented in conformance with the Kern County Cannabis Land Use Ordinance. Building design standards shall be made conditions of approval of any commercial/industrial site plan.

- 1) Designate at least two locations with adequate pedestrian, bicycle, and parking facilities for off-site transit connection service.

- 2) Implement energy-efficient design practices such as high-performance glazing, Energy Star compliant systems and appliances, radiant heat roof barriers, insulation on all pipes, programmable thermostats, solar access, and sealed ducts.
 - 3) Prohibit use of chlorofluorocarbon refrigerants in commercial buildings.
 - 4) Ensure recycling of construction debris and waste through administration by an on-site recycling coordinator and presence of recycling/separation area.
 - 5) Implement a water wise program that includes all feasible measures to reduce indoor water use and associated energy use (e.g., for interior fixtures, require tankless water heaters and low-flow plumbing and fixtures).
- MM 4.7-3** The site plan for any cultivation, processing and packaging facility, testing, or retail cannabis operation applying for a conditional use permit shall demonstrate that the parking areas for cannabis facilities are equipped with electric vehicle charging stations that provide charging opportunities to 7.5 percent of the total number of required parking spaces.

Level of Significance After Mitigation

Impacts would be significant and unavoidable with respect to Option A. Impacts regarding Option B would be significant and unavoidable.

Impact 4.7-2: Conflict with an Applicable Plan, Policy or Regulation Adopted for the Purpose of Reducing the Emissions of Greenhouse Gases

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain medical dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A does not provide opportunities for commercial cannabis activities and thus would not result in an increase in the need of land for the cultivation, processing and packaging, and distribution and sale of cannabis.

EKAPCD's GHG emissions reduction apply specifically to air permitting projects. Because the proposed project activities would very likely not trigger air permits in EKACPD (for most buildup scenarios), the proposed project analysis in MDAB applies the SJVAPCD guidance. Under the SJVAPCD's CEQA thresholds for GHG, a project would not have a significant GHG impact if it is consistent with an applicable plan to reduce GHG emissions, and a CEQA-compliant analysis was completed for the GHG reduction plan. Kern COG's Regional Transportation Plan/Sustainable

Communities Strategy (RTP/SCS) is an applicable plan adopted for the purpose of reducing GHGs from the land use and transportation sectors in Kern County, and was adopted after completion of a programmatic Environmental Impact Report. CARB approved the RTP/SCS in 2015. Option A is consistent with the 2014 RTP/SCS. The proposed SCS document includes a Map of Forecasted Development Patterns – Kern Region 2035. Option A, the closing of all the existing medical dispensaries, is found to be consistent with the existing RTP/SCS zones for industrial and retail activities previously evaluated in the 2014 RTP/SCS.

Additionally, Table 4.7-8, *Project Consistency with Scoping Plan Greenhouse Gas Emission Reduction Strategies* (presented below under Option B), demonstrates consistency with all feasible Scoping Plan emission reduction strategies.

Therefore, Option A would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs and no mitigation is required. This impact would be less than significant.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, retail cannabis stores that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

Under the SJVAPCD's CEQA thresholds for GHG, a project would not have a significant GHG impact if it is consistent with an applicable plan to reduce GHG emissions, and a CEQA-compliant analysis was completed for the GHG reduction plan. Kern COG's RTP/SCS is an applicable plan adopted for the purpose of reducing GHGs from the land use and transportation sectors in Kern County, and was adopted after completion of a programmatic Environmental Impact Report. CARB approved the RTP/SCS in 2015. The proposed project could result in a significant impact due to a conflict with an applicable plan, policy or regulation if it would be inconsistent with the adopted Kern COG RTP/SCS. Therefore, the proposed project could have a potential conflict with the RTP/SCS if it were to be found inconsistent based on a qualitative assessment of the proposed project's consistency with Kern COG's SCS policies.

The proposed Kern County Cannabis Land Use Ordinance is consistent with the 2014 RTP/SCS. The proposed SCS document includes a Map of Forecasted Development Patterns – Kern Region 2035. All proposed project development would be allowed within existing zones for industrial and retail activities previously evaluated in the 2014 RTP/SCS.

The 2014 RTP/SCS presents a range of transit, transportation demand management road projects, pricing, and land use strategies that the Kern COG, transit agencies, local governments, and the SJVAPCD can implement consistent with the SCS. Of particular importance is a land use strategy to be implemented by local governments to locate housing “closer to employment/shopping areas”. The proposed project would not interfere with any of these policies.

In regards to consistency with Executive Order B-30-15 (goal of reducing GHG emissions to 40 percent below 1990 levels by 2030) and Executive Order S-3-05 (goal of reducing GHG emissions to 80 percent below 1990 levels by 2050), there are no established protocols or thresholds of significance for that future year analysis. However, CARB forecasts that compliance with the current Scoping Plan puts the State on a trajectory of meeting these long-term GHG goals, although the specific path to compliance is unknown. As discussed above, the proposed project is consistent with the GHG emission reduction measures in the Scoping Plan and would not conflict with the State’s trajectory toward future GHG reductions. In addition, since the specific path to compliance for the State in regards to the long-term goals will likely require development of technology or other changes that are not currently known or available, specific additional mitigation measures for the proposed project would be speculative and cannot be identified at this time. Furthermore, the proposed project is consistent with the Kern COG RTP/SCS, which establishes targets for passenger vehicle GHG emissions for 2020 and 2035 as approved by CARB in 2015. The proposed project’s consistency would assist in meeting the County’s contribution to GHG emission reduction targets in California. With respect to future GHG targets under the executive orders, CARB has also made clear its legal interpretation that it has the requisite authority to adopt whatever regulations are necessary, beyond the AB 32 horizon year of 2020, to meet Executive Order S-3-05’s 80 percent reduction target in 2050; this legal interpretation by an expert agency provides evidence that future regulations will be adopted to continue the State on its trajectory toward meeting these future GHG targets.

Table 4.7-8, *Project Consistency with Scoping Plan Greenhouse Gas Emission Reduction Strategies*, demonstrates consistency with all feasible Scoping Plan emission reduction strategies.

Table 4.7-8. Project Consistency with Scoping Plan Greenhouse Gas Emission Reduction Strategies			
Scoping Plan Measure	Measure Number	Option A Project Consistency	Option B Project Consistency
<i>Transportation Sector</i>			
Advanced Clean Cars	T-1	The future business's employees would purchase vehicles in compliance with CARB vehicle standards that are in effect at the time of vehicle purchase.	The proposed project's employees would purchase vehicles in compliance with CARB vehicle standards that are in effect at the time of vehicle purchase.
Low Carbon Fuel Standard	T-2	Motor vehicles driven by the future business's employees would use compliant fuels.	Motor vehicles driven by the proposed project's employees would use compliant fuels.
Regional Transportation-Related GHG Targets	T-3	Not applicable to this proposed project.	Not applicable to this proposed project.
Vehicle Efficiency Measures 1. Tire Pressure 2. Fuel Efficiency Tire Program 3. Low Friction Oil	T-4	Motor vehicles driven by the future business's employees would maintain proper tire pressure when their vehicles are serviced. Future business's employees would replace tires in compliance with CARB	Motor vehicles driven by the proposed project's employees would maintain proper tire pressure when their vehicles are serviced. The proposed project's employees would replace tires in compliance with

Table 4.7-8. Project Consistency with Scoping Plan Greenhouse Gas Emission Reduction Strategies

Scoping Plan Measure	Measure Number	Option A Project Consistency	Option B Project Consistency
4. Solar Reflective Automotive Paint and Window Glazing		<p>vehicle standards that are in effect at the time of vehicle purchase.</p> <p>Motor vehicles driven by the future business's employees would use low friction oils when their vehicles are serviced.</p> <p>The future business's employees would purchase vehicles in compliance with CARB vehicle standards that are in effect at the time of vehicle purchase.</p>	<p>CARB vehicle standards that are in effect at the time of vehicle purchase.</p> <p>Motor vehicles driven by the proposed project's employees would use low friction oils when their vehicles are serviced.</p> <p>The proposed project's employees would purchase vehicles in compliance with CARB vehicle standards that are in effect at the time of vehicle purchase.</p>
Ship Electrification at Ports (Shore Power)	T-5	Not applicable.	Not applicable.
Goods Movement Efficiency Measures 1. Port Drayage Trucks 2. Transport Refrigeration Units Cold Storage Prohibition 3. Cargo Handling Equipment, Anti-Idling, Hybrid, Electrification 4. Goods Movement Systemwide Efficiency Improvements 5. Commercial Harbor Craft Maintenance and Design Efficiency 6. Clean Ships 7. Vessel Speed Reduction	T-6	<p>Transport Refrigeration Units and heavy-duty trucks potentially associated with the future business's industrial and retail land uses would be in compliance with CARB standards that are in effect at the time of purchase.</p> <p>Measures related to ports and marine vessels are not applicable.</p>	<p>Transport Refrigeration Units and heavy-duty trucks potentially associated with the proposed project's industrial and retail land uses would be in compliance with CARB standards that are in effect at the time of purchase.</p> <p>Measures related to ports and marine vessels are not applicable.</p>
Heavy-Duty Vehicle GHG Emission Reduction 1. Tractor-Trailer GHG Regulation 2. Heavy Duty Greenhouse Gas Standards for New Vehicle and Engines (Phase I)	T-7	Heavy-duty trucks associated with the future business's industrial and retail land uses would be in compliance with CARB standards that are in effect at the time of purchase.	Heavy-duty trucks associated with the proposed project's industrial and retail land uses would be in compliance with CARB standards that are in effect at the time of purchase.
Medium- and Heavy-Duty Vehicle Hybridization Voucher Incentive Project	T-8	Not applicable	The proposed project would not conflict with the Medium- and Heavy-Duty Vehicle Hybridization Voucher Incentive Project.
High-Speed Rail	T-9	Not applicable.	Not applicable.
<i>Electricity and Natural Gas Sector</i>			
Energy Efficiency Measures (Electricity)	E-1	Under Option A, Kern County would require any future businesses to include energy efficiency and electricity generation development conditions through high efficiency technology and	The proposed project includes energy efficiency and electricity generation development conditions through high efficiency technology and development of solar energy systems and other

Table 4.7-8. Project Consistency with Scoping Plan Greenhouse Gas Emission Reduction Strategies

Scoping Plan Measure	Measure Number	Option A Project Consistency	Option B Project Consistency
		development of solar energy systems and other renewable energy technologies. In addition, all future proposed developments would be required to exceed 2013 Title 24 energy requirements on a time-dependent valuation basis by at least 25%, as outlined in 24 CCR 6. A menu of the energy efficiency design elements, along with other design considerations and options, would be made available to builders, developers, and property owners as part of the internal design review process. Each developer, builder, or property owner would be required to incorporate the design elements that make the most sense for their particular development project in order to meet the energy reduction requirement.	renewable energy technologies. In addition, all proposed project development is required to exceed 2013 Title 24 energy requirements on a time-dependent valuation basis by at least 25%, as outlined in 24 CCR 6. A menu of the energy efficiency design elements, along with other design considerations and options, would be made available to builders, developers, and property owners as part of the internal design review process. Each developer, builder, or property owner must incorporate the design elements that make the most sense for their particular development project in order to meet the energy reduction requirement.
Energy Efficiency (Natural Gas)	CR-1	Under Option A, Kern County would require any future businesses to comply with energy efficiency standards for natural gas appliances and other devices at the time of building construction (where applicable). In addition, all future development projects would be required to exceed 2013 Title 24 energy requirements on a time-dependent valuation basis by at least 25%, as outlined in 24 CCR 6. A menu of the energy efficiency design elements, along with other design considerations and options, would be made available to builders, developers, and property owners as part of the internal design review process. Each developer, builder, or property owner must incorporate the design elements that make the most sense for their particular development project in order to meet the energy reduction requirement.	The proposed project will comply with energy efficiency standards for natural gas appliances and other devices at the time of building construction (where applicable). In addition, all development on the project site is required to exceed 2013 Title 24 energy requirements on a time-dependent valuation basis by at least 25%, as outlined in 24 CCR 6. A menu of the energy efficiency design elements, along with other design considerations and options, would be made available to builders, developers, and property owners as part of the internal design review process. Each developer, builder, or property owner must incorporate the design elements that make the most sense for their particular development project in order to meet the energy reduction requirement.
Solar Water Heating (California Solar Initiative Thermal Program)	CR-2	Under Option A, Kern County would require future development projects to include energy efficiency development conditions including requirements for electricity generation through solar energy systems and other renewable energy technologies, including solar hot water systems, when applicable.	The proposed project includes energy efficiency development conditions including requirements for electricity generation through solar energy systems and other renewable energy technologies, including solar hot water systems.

Table 4.7-8. Project Consistency with Scoping Plan Greenhouse Gas Emission Reduction Strategies			
Scoping Plan Measure	Measure Number	Option A Project Consistency	Option B Project Consistency
Combined Heat and Power	E-2	Not applicable.	Not applicable.
Renewable Portfolios Standard (33% by 2020)	E-3	Under Option A, Kern County would require future development projects to increase the use of renewable energy sources and thereby to reduce the GHG emissions resulting from increased electricity consumption.	The electricity used by the proposed project will benefit from reduced GHG emissions resulting from increased use of renewable energy sources.
Senate Bill 1 Million Solar Roofs (California Solar Initiative, New Solar Home Partnership, Public Utility Programs) and earlier solar programs	E-4	<ul style="list-style-type: none"> • Not applicable. 	<p>The County vision includes a commitment to incorporating active solar energy systems, such as photovoltaic installations and solar hot water systems, to provide an efficient and renewable source of energy that minimizes the need for conventional heating mechanisms and supplemental energy sources. The proposed project incorporates and promotes renewable energy technologies:</p> <ul style="list-style-type: none"> • Connection to local renewable power sources and utility providers • Community amenity buildings equipped with active solar energy systems. • Active solar dryers installed for the water reclamation plant.
<i>Water Sector</i>			
Water Use Efficiency	W-1	Under Option A, Kern County would require future developments to include all feasible water use efficiency development conditions that would reduce water and energy use (e.g., for interior fixtures, require tank-less water heaters and low flow plumbing).	<p>The proposed project that includes all feasible water use efficiency development conditions that would reduce water and energy use (e.g., for interior fixtures, require tank-less water heaters and low flow plumbing).</p> <p>For optimum water efficiency, the irrigation system would be designed to match plant type, utilize drip or subsurface irrigation wherever possible, apply water at agronomic rates. In addition, irrigation system design would conform to the hydrozones of the landscape design plan. "Smart" controllers, such as weather-based irrigation controllers or other self-adjusting irrigation controllers, would be required for all irrigation systems and must be able to accommodate all aspects of the landscape and irrigation design plans.</p>
Water Recycling	W-2	Under Option A, Kern County would require all future developments to include water and wastewater	The proposed project water and wastewater development conditions requires water efficiency to the extent

Table 4.7-8. Project Consistency with Scoping Plan Greenhouse Gas Emission Reduction Strategies

Scoping Plan Measure	Measure Number	Option A Project Consistency	Option B Project Consistency
		development conditions to require water efficiency to the extent possible for indoor and outdoor cultivation operations. Otherwise, additional water recycling is not applicable.	possible for indoor and outdoor cultivation operations. Otherwise, additional water recycling is not applicable.
Water System Energy Efficiency	W-3	Not applicable.	The proposed project's water and wastewater development conditions incorporates efficient water system and a reduction in GHG emissions.
Reuse Urban Runoff	W-4	Not applicable.	Not applicable.
Renewable Energy Production	W-5	Not applicable.	The proposed project promotes renewable energy technologies and commits to incorporation of renewable energy production as feasible. See discussion under Measure E-4.
<i>Green Buildings</i>			
1. State Green Building Initiative: Leading the Way with State Buildings (Greening New and Existing State Buildings)	GB-1	Under Option A, Kern County would require future development to be constructed in compliance with State or local green building standards in effect at the time of building construction.	The proposed project would be required to be constructed in compliance with State or local green building standards in effect at the time of building construction.
2. Green Building Standards Code (Greening New Public Schools, Residential and Commercial Buildings)	GB-1	Under Option A, Kern County would require future development to meet green building standards that are in effect at the time of design and construction.	The proposed project's buildings would meet green building standards that are in effect at the time of design and construction.
3. Beyond Code: Voluntary Programs at the Local Level (Greening New Public Schools, Residential and Commercial Buildings)	GB-1	Under Option A, Kern County would require future development to be constructed in compliance with local green building standards in effect at the time of building construction.	The proposed project would be required to be constructed in compliance with local green building standards in effect at the time of building construction.
4. Greening Existing Buildings (Greening Existing Homes and Commercial Buildings)	GB-1	Under Option A, Kern County would require future development applications within the closed dispensaries to meet retrofit green standards.	Applicable for existing buildings only. Not applicable for the proposed project except as future standards may become applicable to existing buildings.
<i>Industry Sector</i>			
Energy Efficiency and Co-Benefits Audits for Large Industrial Sources	I-1	Under Option A, future development applicants will be required to implement energy efficiency development standards to reduce impacts of industrial electricity demands on the regional utility suppliers.	Proposed project applicants will be required to implement energy efficiency development standards to reduce impacts of industrial indoor grow light electricity demands on the regional utility suppliers.
Oil and Gas Extraction GHG Emission Reduction	I-2	Not applicable.	Not applicable.
GHG Emissions Reduction from Natural Gas Transmission and Distribution	I-3	Not applicable.	Not applicable.
Refinery Flare Recovery Process Improvements	I-4	Not applicable.	Not applicable.

Table 4.7-8. Project Consistency with Scoping Plan Greenhouse Gas Emission Reduction Strategies			
Scoping Plan Measure	Measure Number	Option A Project Consistency	Option B Project Consistency
Work with the local air districts to evaluate amendments to their existing leak detection and repair rules for industrial facilities to include methane leaks.	I-5	Not applicable based on anticipated land uses for the closed dispensary locations.	Not applicable based on anticipated industrial uses.
<i>Recycling and Waste Management Sector</i>			
Landfill Methane Control Measure	RW-1	Not applicable for the proposed project, Option A.	Not applicable for the proposed project, Option B.
Increasing the Efficiency of Landfill Methane Capture	RW-2	Not applicable for the proposed project, Option A.	Not applicable for the proposed project, Option B.
Mandatory Commercial Recycling	RW-3	Under Option A, Kern County would require future developments the proposed project would comply with all State regulations related to solid waste generation, storage, and disposal, including the California Integrated Waste Management Act as amended. During construction, all wastes would be recycled to the maximum extent possible as required by proposed project conditions.	During both construction and operation of the proposed project, the proposed project would comply with all State regulations related to solid waste generation, storage, and disposal, including the California Integrated Waste Management Act as amended. During construction, all wastes would be recycled to the maximum extent possible as required by proposed project conditions.
Increase Production and Markets for Compost and Other Organics	RW-3	Not applicable.	Not applicable.
Anaerobic/Aerobic Digestion	RW-3	Not applicable.	Not applicable.
Extended Producer Responsibility	RW-3	Not applicable.	Not applicable.
Environmentally Preferable Purchasing	RW-3	Not applicable.	Not applicable.
<i>Forests Sector</i>			
Sustainable Forest Target	F-1	Not applicable.	Not applicable.
<i>High GWP Gases Sector</i>			
Motor Vehicle Air Conditioning Systems: Reduction of Refrigerant Emissions from Non-professional Servicing	H-1	Under Option A, future development employees would be prohibited from performing air conditioning repairs and required to use professional servicing.	The proposed project's employees would be prohibited from performing air conditioning repairs and required to use professional servicing.
SF ₆ Limits in Non-utility and Non-semiconductor Applications	H-2	Not applicable.	Not applicable.
Reduction of Perfluorocarbons in Semiconductor Manufacturing	H-3	Not applicable.	Not applicable.
Limit High GWP Use in Consumer Products	H-4	Under Option A, future development employees would use consumer products that would comply with the regulations that are in effect at the time of manufacture.	The proposed project's employees would use consumer products that would comply with the regulations that are in effect at the time of manufacture.

Table 4.7-8. Project Consistency with Scoping Plan Greenhouse Gas Emission Reduction Strategies			
Scoping Plan Measure	Measure Number	Option A Project Consistency	Option B Project Consistency
Air Conditioning Refrigerant Leak Test During Vehicle Smog Check	H-5	Under Option A, future development employees would comply with the leak test requirements during smog checks.	Motor vehicles driven by the proposed project's employees would comply with the leak test requirements during smog checks.
Stationary Equipment Refrigerant Management Program – Refrigerant Tracking/Reporting/Repair Program	H-6	Under Option A, If the future development project's industrial land uses include cold storage refrigeration systems that include more than 50 pounds of high-GWP refrigerant, the tenant of that land use would be required to conduct periodic leak inspections, promptly repair leaks, and keep service records on site; additionally, the tenant would register the refrigeration system and submit annual refrigerant use reports.	If the proposed project's industrial land uses include cold storage refrigeration systems that include more than 50 pounds of high-GWP refrigerant, the tenant of that land use would be required to conduct periodic leak inspections, promptly repair leaks, and keep service records on site; additionally, the tenant would register the refrigeration system and submit annual refrigerant use reports.
Stationary Equipment Refrigerant Management Program – Specifications for Commercial and Industrial Refrigeration	H-6	Under Option A, If the future development proposed project's industrial land uses include refrigeration, then the proposed stationary equipment would meet the specifications outlined in Measure H-6, to the extent applicable and feasible.	If the proposed project's industrial land uses include refrigeration, then the proposed stationary equipment would meet the specifications outlined in Measure H-6, to the extent applicable and feasible.
SF ₆ Leak Reduction Gas Insulated Switchgear	H-6	Not applicable.	Not applicable.
<i>Agriculture Sector</i>			
Methane Capture at Large Dairies	A-1	Not applicable.	Not applicable.

As such, the proposed project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs and no mitigation is required. This impact would be less than significant.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing before the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to conflicting with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Greenhouse Gas Emission Plans

Refer to Impact 4.7-1, above, for a summary of applicable existing regulations and policies related to GHGs.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

No mitigation measures are required.

Level of Significance

Impacts would be less than significant with respect to Option A. Impacts regarding Option B would be less than significant.

Cumulative Setting Impacts and Mitigation Measures

Cumulative Setting

Under AB 32, the CARB, which is the agency in charge of regulating sources of emissions of GHGs in California, has been tasked with adopting regulations for reduction of GHG emissions. The effects of this proposed project are evaluated based not upon the quantity of emissions, but rather on whether the proposed project implements reduction strategies identified in AB 32, the Governor's Executive Order S-3-05, or other strategies to help toward reducing GHGs to the level proposed by the governor. If so, it could reasonably follow that the proposed project would not result in a significant contribution to the cumulative impact of global climate change.

EKAPCD's GHG emissions reduction apply specifically to air permitting projects. Because the proposed project activities would very likely not trigger air permits in EKACPD (for most buildout scenarios), the proposed project analysis in MDAB applies the SJVAPCD guidance. Under the SJVAPCD's CEQA thresholds for GHG, a project would not have a significant GHG impact if it is consistent with an applicable plan to reduce GHG emissions, and a CEQA-compliant analysis was completed for the GHG reduction plan. Kern Council of Government's (COG's) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) is an applicable plan adopted for the purpose of reducing GHGs from the land use and transportation sectors in Kern County, and was adopted after completion of a programmatic Environmental Impact Report. CARB approved the RTP/SCS in 2015.

Cumulative Impacts and Mitigation Measures

Impact 4.7-3: Cumulative Greenhouse Gas Emissions Impacts

Global climate change is a cumulative impact, and there are currently no established thresholds for assessing whether the GHG emissions of a project would be considered a cumulatively considerable contribution to global climate change. While the both Option A and Option B for the proposed project would not result in a 29 percent reduction from BAU, many measures incorporated in the analysis are regional or statewide in nature and do not provide a mechanism that guarantees GHG emission reductions on a cumulative basis. In addition, Kern County does not have the jurisdictional authority to control the various cumulative sources of GHGs in the County, or the GHG emissions from sources around the globe, which all contribute to climate change. Although many other agencies with the necessary jurisdiction are currently taking action to reduce GHG emissions, the County cannot assure that these measures would ultimately be implemented or

sufficient to address climate change. The proposed project's GHG emissions would be considered cumulatively considerable.

Mitigation Measures

Option A

Implement Mitigation Measures MM 4.7-1, as described above.

Option B

Implement Mitigation Measures MM 4.7-1 through MM 4.7-3, as described above.

Level of Significance

Cumulative impacts would be considered significant and unavoidable with respect to Option A. Cumulative GHG emissions resulting from Option B would be considered significant and unavoidable.

Section 4.8

Hazards and Hazardous Materials

Section 4.8

Hazards and Hazardous Materials

4.8.1 Introduction

This Draft Environmental Impact Report (EIR) section describes the affected environment and regulatory setting related to hazards and hazardous materials. It also describes the impacts of hazards and hazardous materials that would result from implementation of the Kern County Cannabis Land Use Ordinance Project (proposed project). The regulatory setting applicable hazards and hazardous materials is presented in Section 4.8.3, *Regulatory Setting*, while the project impacts and associated mitigation measures are analyzed in Section 4.8.4, *Impacts and Mitigation Measures*.

4.8.2 Environmental Setting

Project Site

The project site encompasses all of Kern County, approximately 8,202 square miles, and contains a diverse geography of valley areas (San Joaquin Valley), mountainous areas (Tehachapi Mountains, Sierra Nevada Mountains, San Emigdio Mountains, and Coast Ranges), and desert areas (Mojave Desert, Indian Wells Valley, Antelope Valley). The project site is divided into three geographic regions in order to facilitate analysis: Valley Region, Mountain Region, and Desert Region. The project site includes all areas within unincorporated Kern County.

Hazardous Materials and Waste

A hazardous material is any substance that, because of its quantity, concentration, or physical or chemical properties, may pose a hazard to human health and the environment. Under Title 22 of the California Code of Regulations (CCR), the term “hazardous substance” refers to both hazardous materials and hazardous wastes. Both of these are classified according to four properties: (1) toxicity; (2) ignitability; (3) corrosiveness; and, (4) reactivity (CCR Title 22, Chapter 11, and Article 3). A hazardous material is defined in CCR, Title 22 as:

...A substance or combination of substances which, because of its quantity, concentration, or physical, chemical or infectious characteristics, may either (1) cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or (2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported or disposed of or otherwise managed (CCR, Title 22, Section 66260.10).

Hazardous materials in various forms can cause death, serious injury, long-lasting health effects, and damage to buildings, homes, and other property. Hazards to human health and the environment can occur during production, storage, transportation, use, or disposal of hazardous materials.

The general hazardous waste classifications utilized by the Kern County Waste Management District (WMD) are:

- Non-hazardous solid waste, which consists mostly of household garbage, commercial wastes, agricultural waste, and litter.

- Special waste, which is any waste that requires special handling, including infectious waste, pesticide containers, sewage sludge, oilfield waste, household hazardous waste, and asbestos waste.
- Designated waste, which is a waste that consists of or contains pollutants that could be released at concentrations in excess of applicable water quality objectives and standards or hazardous waste that has been granted a variance from hazardous waste management requirements.
- Hazardous waste, which is a waste that, because of its quantity, concentration, physical, chemical, or infectious characteristics, may either: (a) cause or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitating reversible illness; or (b) pose a substantial present or potential hazard to human health or the environment when improperly managed.
- Industrial wastes, which are hazardous and non-hazardous by-products produced by oil and gas extraction, pesticide, paper, petrochemical, rubber, plastics, electronics, and other industries.

The Kern County WMD provides environmentally safe management of solid waste and is responsible for operating seven landfills, five transfer stations, and three bin sites throughout the County. The WMD operates two special waste facilities and provides information to the residents of Kern County regarding recycling and ways to reduce waste. In addition, the WMD oversees the operation of several wastewater treatment facilities. These two special waste facilities are: (1) Clean Harbors, located on LoKern Road west of Buttonwillow; and (2) McKittrick Waste, located on State Route (SR) 58 west of SR-33 in McKittrick (refer to Section 4.16, *Utilities and Public Services*, for a detailed discussion and list of all landfills that serve the County for solid waste).

Hazardous materials could be shipped to, through, or from Kern County via truck, rail, and pipeline. Individual companies or operators use different suppliers or services companies that could produce materials locally or transport them from wholesalers throughout the country or world.

The transportation of hazardous materials within the State of California is subject to various federal, State, and local regulations. It is illegal to transport explosives or inhalation hazards on any public highway not designated for that purpose, unless the use of the highway is required to permit delivery or the loading of such materials (California Vehicle Code Sections 31602[b] and 32104[a]). The California Highway Patrol (CHP) designates through routes to be used for the transportation of hazardous materials. Transportation of hazardous materials is restricted to these routes, except in cases where travel branching from these routes is required to deliver or receive hazardous materials. Information on CHP requirements and regulatory authority is provided in Section 4.8.3, *Regulatory Setting*, below.

Air Traffic and Military Aviation

There are more than 300 public, private, and military airports, balloonports, gliderports, heliports, and ultraflight flightparks within a 100-mile radius of the City of Bakersfield (AirNav, 2017a). Of these, more than 20 are private airports and airstrips; the majority of these are in the Valley Region, with approximately 5 in the Mountain Region and approximately 4 in the Desert Region. The Kern County Airport Land Use Compatibility Plan (ALUCP) identifies 18 airports as follows:

- **Valley Region** – Bakersfield Municipal Airport, Meadows Field Airport, Shafter-Minter Field, Wasco-Kern County Airport, Delano Municipal Public Airport, Elk Hills-Buttonwillow Airport, Poso-Kern County Airport, and Lost Hills-Kern County Airport;
- **Mountain Region** – Taft-Kern County Airport, Tehachapi Municipal Airport, Mountain Valley Airport, and Kern Valley Airport; and
- **Desert Region** – Mojave Air and Space Port Airport, Rosamond Skypark Airport, California City Municipal Airport, and InyoKern Airport.

The Desert Region also contains two military aviation facilities: China Lake Naval Air Weapons Station (NAWS) and Edwards Air Force Base (AFB). Both military facilities are principal bases for research and development, and testing and evaluation for air warfare and missile weapons systems. In support of these activities, many varied aircraft utilize the airfield facilities. In addition, a restricted area known as Join Service Restricted R-2508 Complex is a large area of restricted airspace which is greatly limited to civilian aircraft and only after obtaining prior permission. It encompasses 20,000 square miles of electronically surveilled ranges permitting unrestricted flight tests from near ground level to near space at various locations. The R-2508 Complex covers portions of Kern, Inyo, Mono, Los Angeles, San Bernardino, and Tulare counts and a small portion of the State of Nevada.

Agricultural Activities

As described in detail in Section 4.2, *Agriculture and Forest Resources*, the County contains active agricultural uses which include the production of grapes, almonds, citrus, milk, and cattle. In general, agricultural chemicals in use today are applied in diluted concentrations and, when used properly, degrade relatively quickly; however, older pesticides have the potential to remain in the soil for many years. Overspray from the surrounding agricultural land uses may occur within the County. Pesticide overspray is defined as applying pesticide beyond the boundaries of the target areas. Pesticide drift, like overspray, often implies a lack of due care on the part of the pesticide applicator. Drift is defined as the movement of pesticide in air currents or by diffusion onto property beyond the boundaries of the target area. Consequently, pesticides, herbicides, rodenticides, and associated metals may be present in near-surface soils at residual concentrations.

Cannabis Activities

As with any agricultural crop, there are hazardous materials involved with commercial cannabis cultivation, processing and packaging, distribution, and retail cannabis store and mobile delivery activities. These materials include, but are not limited to, pesticides, herbicides, rodenticides, fungicides, fertilized, petroleum products (mainly diesel), propane, heavy metals, and carbon dioxide (CO₂). However, the hazardous materials from cannabis production are nowhere near as salient a part of the overall policy framework for cannabis as, for example, the explosive and toxic hazards of methamphetamine, or the environmental costs of large-scale agriculture, mining, metallurgy, and other industries. As with other topics related to commercial cannabis, information on hazardous materials varies depending on the material. While there is a plethora of information related to pesticides and rodenticides, other hazardous materials and their uses with cannabis-related activities are not as well documented. Many of the most harmful practices in cannabis-related activities arise from a lack of information among regulators and the secret nature of the industry. In addition, illegal cannabis activities tend to use hazardous materials in greater concentrations and with more frequency than legal cannabis cultivation (BOTEC, 2013).

Cultivation Activities

The majority of the hazardous materials used for cannabis cultivation are similar to those used for other agricultural crops. Cannabis requires a nitrogen-rich growing medium. Soil-grown crops require fewer fertilizer inputs than hydroponic crops. Potting soil, amendments, and fertilizers contain nutrients, particularly nitrogen and phosphorous.

Cannabis, similar to other agricultural plants, has pest pressures, predominately, mildews, mites and aphids. As a result, growers of cannabis are inclined to use pesticides, herbicides, rodenticides, and fungicides to control or mitigate these pest problems.

At present time, there are no pesticides registered specifically for use on cannabis, and the use of pesticides on cannabis plants has not been reviewed for safety, human health effects, or environmental impacts. Under California law, the only pesticide products not illegal to use on cannabis are those that contain an active ingredient that is exempt from residue tolerance requirements and either registered and labeled for a broad enough use to include use on cannabis or exempt from registration requirements as a minimum risk pesticide under Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) Section 25(b) and the California Code of Regulations, Title 3, Section 6147, as outlined in Section 4.8.3, *Regulatory Setting*.

Indoor cultivation in warehouses or other structures, not greenhouses, require specific lighting in order for the plants to grow properly. Different bulb types contain different hazardous materials which include fluorescent, compact fluorescent, high-pressure sodium, mercury vapor and metal halide lamps. If the material in the lamps exceeds the toxicity level for mercury or any other heavy metals, used or waste lamps are regulated as a hazardous waste. High-Intensity Discharge (HID) bulbs are not recyclable and each HID bulb contains approximately 30 milligrams (mg) of mercury, which is a neurotoxin and is recognized as extremely toxic. Another hazard common in cannabis indoor cultivation is the presence of ultrafine particles and excessive levels of carbon dioxide (CO_2). Cultivators typically use industrial grade propane powered burners to purposely produce elevated levels of CO_2 to promote plant growth. The propane burners also inadvertently produce large quantities of ultrafine particles and carbon monoxide (CO).

Processing

The extraction and concentration of THC and other cannabinoids from cannabis plant leaves and buds to produce highly concentrated oils, honeys, and waxes is often achieved through a variety of extraction processes and solvents. For commercial cannabis processing, there are several extraction methods; however, CO_2 , alcohol, heat presses, ice water extractions, liquid nitrogen, or dry ice processes are typically used. Butane (C_4H_{10}) can be used as well; however, this solvent is generally used during illegal processing. In California, the legislature passed Assembly Bill (AB) 2679 on September 29, 2016, which amended Section 11362.775 of the Health and Safety Code and established rules for the manufacture of oils, waxes, and other concentrates used for producing cannabis products.

Butane is an extremely flammable compressed gas that may explode when heated, and may cause suffocation by displacing oxygen in the air if released in an enclosed area. The management of compressed gases is regulated by federal, State, and often local regulations. The National Fire Protection Association (NFPA) provides guidelines in NFPA 58: Liquefied Petroleum Gas Code (2017 Edition) that encompasses the design, construction, installation, and operation of Liquid

Petroleum-Gas systems, including piping, equipment, containers, venting, and highway transportation of Liquid Petroleum-Gas.

The byproducts of cannabis manufacturing, including processing, extraction and quality assurance testing, can be subject to hazardous waste requirements. Local Certified Unified Program Agencies (CUPAs) generally enforce generator requirements and other hazardous materials management provisions. The CUPA for County of Kern is the Environmental Health Services Division.

Wildfires

Kern County is susceptible to fires, especially within those areas where development occurs adjacent to wildlands, including grasslands and forest lands. Historically, the County has experienced many wildland fires which continue to be a major threat to residents, visitors, and businesses, particularly during the dry and hot summer weather. The potential for fire hazards increases as the population grows and the demand for housing and businesses increases, particularly in the urban interface areas.

Fire plays an important role in many ecosystems throughout the County, for chaparral and closed-cone conifer ecosystems for seed germination, reduction of underbrush, soil nutrition, and for water supply. The diversity of each species' response to fire as well as the variety of fire intervals and fire intensities contribute to the overall biodiversity of Kern County. Such diversity, variation, and changes due to wildland fires are important components of the Valley Region, Mountain Region, and Desert Region ecosystems.

The historic reduction in fire activity has produced forests which are denser, generally contain smaller trees, and have a dense understory which all contribute to an increased fuel load. Historic reduction in fire to the more open grassland ecosystems have resulted in increases of non-native species and higher densities of vegetation, also resulting in increased fuel loads. An increase in fuel, coupled with efficient suppression of low and moderate intensity fires, has led to an increase in general fire sensitivity throughout the County, as well as the State.

Typical causes of fires include arson, sparks from brush-clearing and equipment, lightning, improperly maintained campfires, smoking, and children playing with matches. In addition to the threat to human safety and personal property, fire hazards could impact the environment (including water supply), infrastructure, and local economy. Wildland fires could cause bridges and roads to become impaired, while power and telephone lines could be downed or damaged. The water supply and wildlife habitat could become polluted when rains erode fire-damaged land, carrying soil and sediment into waterways. In addition, in the past, the damage caused by fires has affected tourism, especially since so much of the area's tourist attractions are outdoors and water-related.

Weather components such as temperature, relative humidity, wind, and lightning also affect the potential for wildfire. High temperatures and low relative humidity dry out the fuels that feed the wildfire creating a situation where fuel will more readily ignite and burn more intensely. Wind is the most treacherous weather factor. The greater a wind, the faster a fire will spread, and the more intense it will be.

Fire Hazard Severity Zones (FHSZs) are areas of significant fire hazards based on fuels, terrain, weather, and other relevant factors that have been mapped by the California Department of Forestry and Fire Protection (CAL FIRE) under the direction of (Public Resources Code [PRC] 4201-4204 and Government Code 51175-89). FHSZs are ranked from moderate to very high and are categorized fire protection as within a Federal Responsibility Area (FRA) under the jurisdiction of a

federal agency, within a State Responsibility Area (SRA) under the jurisdiction of CAL FIRE, or within a Local Responsibility Area (LRA) under the jurisdiction of a local agency. The County contains areas with “Moderate,” “High,” and “Very High” fire threat ratings, and the majority of the County outside of the Valley Region lies within an SRA as shown in Figure 4.8-1, *Fire Hazard Severity Zones in State Responsibility Area*. CAL FIRE implements wildfire planning and protection for the SRA (CAL FIRE, 2007). CAL FIRE determined that Kern County has no “Very High” FHSZs in LRA, therefore Kern County does not have a final LRA map of FHSZs (CAL FIRE, 2008); the draft LRA map is provided in Figure 4.8-2, *Draft Fire Severity Zones in Local Responsibility Area*. Unzoned LRAs present low risk for wildfire ignitions and fire spread, and are provided protection by the Kern County Fire Department (KCFD).

As illustrated in Figures 4.8-1 and 4.8-2, the fire hazard within the County varies by physiographic region; the Mountain Region is rated generally high to very high, while the areas transitioning between regions (the foothills) are rated generally moderate. The Valley Region has less fuel and is unzoned, and under KCFD jurisdiction. Fire intensities and rates of spread increase as slope increases due to the tendency of heat from a fire to rise via convection. The areas of the County designated as high FHSZs are largely in the foothills of the Mountain Region (refer to Figure 4.8-1). The vegetation in the moderate FHSZs is largely grazed grasslands. Areas designated as moderate FHSZs include terrain and fuels that are transitioning between the Valley Region and Mountain Region or between the Mountain Region and Desert Region. Wildfires may occur, but are considered manageable. The vegetation in the high FHSZs is typically more forested areas with denser vegetation, steeper slopes, and larger fuel loads. Fires occurring in the high FHSZs are typically more aggressive than in the moderate FHSZs.

Oil and Gas

The primary mineral resource currently under development in Kern County is oil. The primary mineral resource currently under development in Kern County is oil. Kern County is within District 4 of the California Department of Oil, Gas and Geothermal Resources (DOGGR). As depicted in Figure 4.8-3, *Oil Fields within Kern County*, the oil industry is located within the western portion of the County, in the Valley Region and the western Mountain Region.

Natural Gas Transmission Lines

Natural Gas transmission lines are used to transport natural gas via a network of mostly underground lines. There are existing natural gas transmission mains that traverse the County. They are large pipelines designed to serve large service areas and are generally under high pressure.

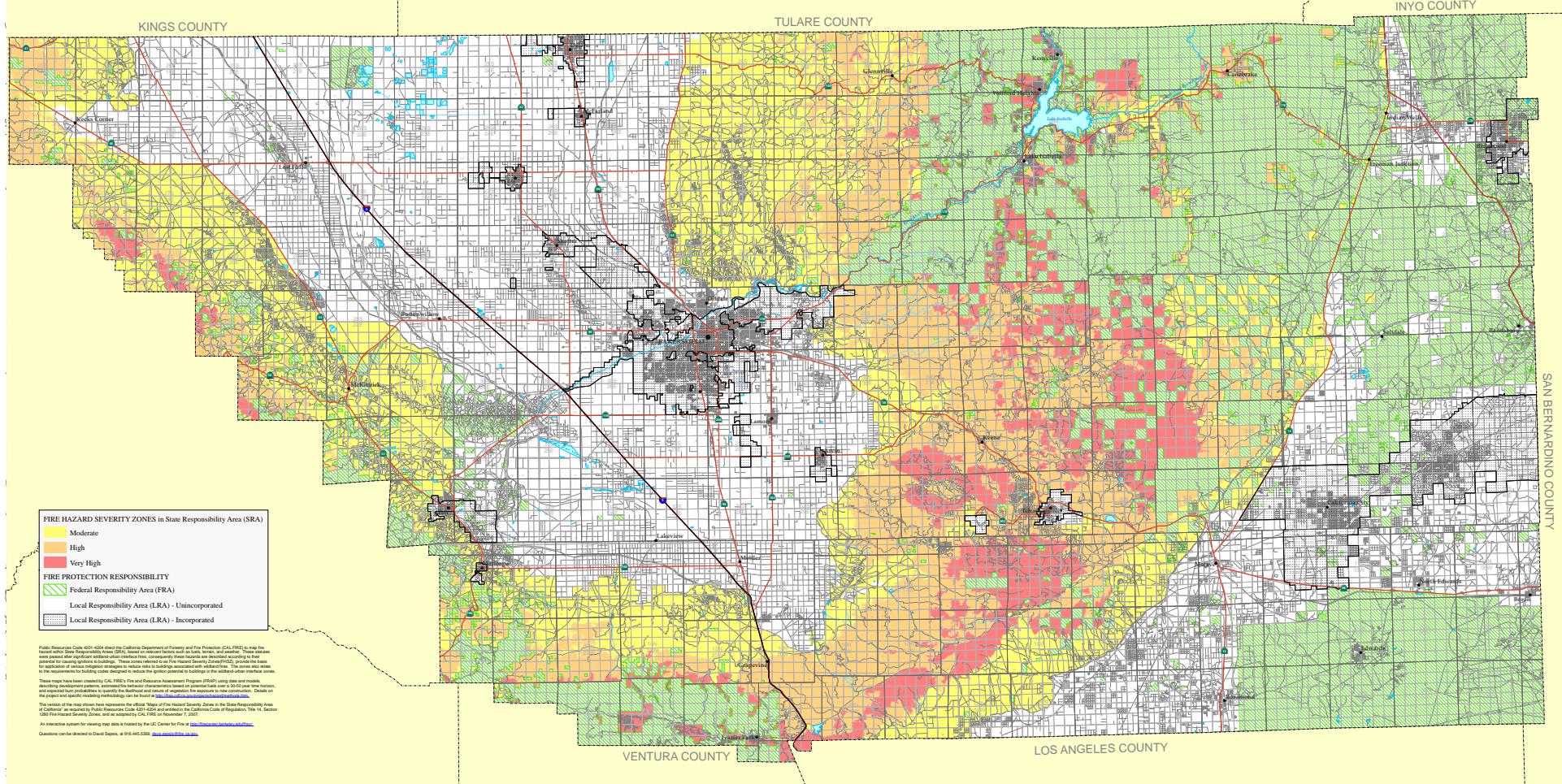
Oil Wells

Abandoned oil wells are present in some areas of the County as some areas have gone out of production. Former sumps, tank settings, buried flow lines, and other facilities associated with the abandoned wells may be uncovered during future site grading.

Crude oil is not considered a hazardous material by federal and State agencies; however, constituents of crude oil are recognized as potentially hazardous and toxic. Soils contaminated with crude oil may be encountered during grading.

FIRE HAZARD SEVERITY ZONES IN SRA

Adopted by CAL FIRE on November 7, 2007

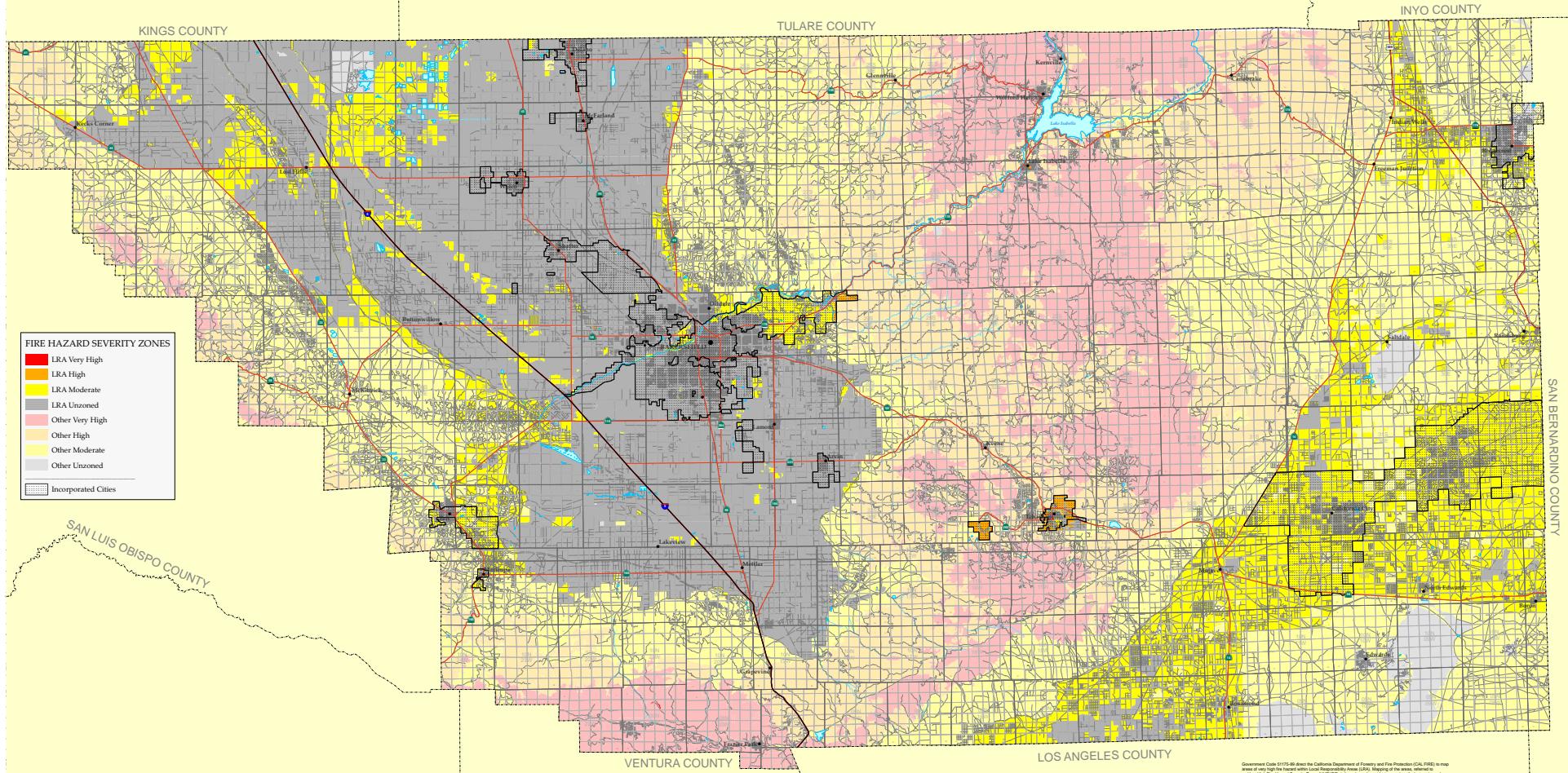


KERN COUNTY CANNABIS LAND USE ORDINANCE PROJECT EIR
AMENDMENT TO TITLE 19 – KERN COUNTY ZONING

ORDINANCE FOCUSED ON CHAPTER 19.120 (CANNABIS LAND USE REGULATION)

Fire Hazard Severity Zones in State Responsibility Area

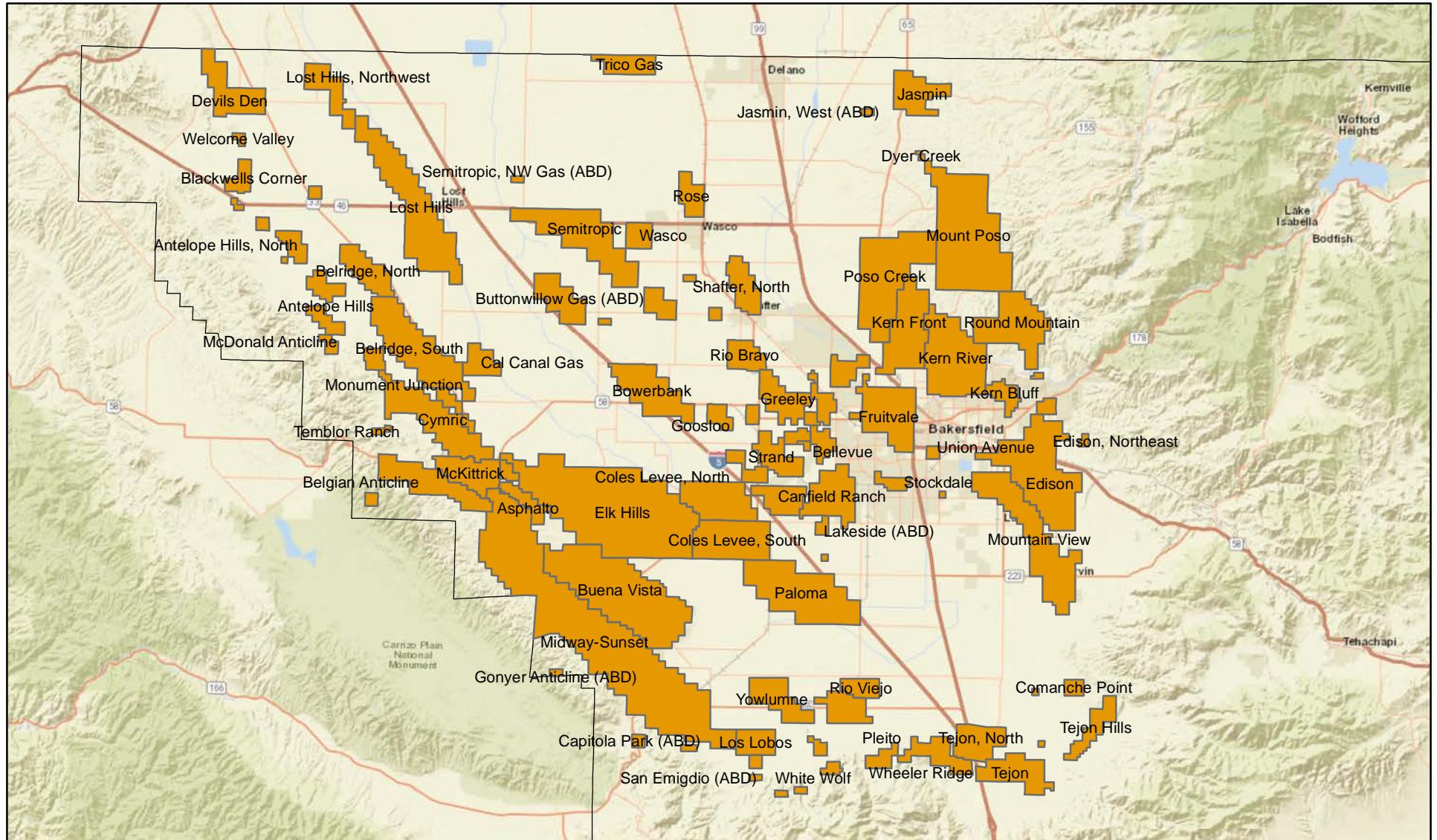
DRAFT FIRE HAZARD SEVERITY ZONES IN LRA



KERN COUNTY CANNABIS LAND USE ORDINANCE PROJECT EIR
AMENDMENT TO TITLE 19 – KERN COUNTY ZONING

ORDINANCE FOCUSED ON CHAPTER 19.120 (CANNABIS LAND USE REGULATION)

Draft Fire Severity Zones in Local Responsibility Area



Legend

- Oil Field Boundaries
- Kern County Limits

KERN COUNTY CANNABIS LAND USE ORDINANCE PROJECT EIR
AMENDMENT TO TITLE 19 – KERN COUNTY ZONING
ORDINANCE FOCUSED ON CHAPTER 19.120 (CANNABIS LAND USE REGULATION)

Oil Fields within Kern County

Pipelines

Due to the presence of oil and gas fields within the County, a large number of underground pipelines cross throughout the County. These lines transport gas, crude oil, and oil. There is a potential for leakage, ruptures, explosions, and fires to occur along existing oil and natural gas lines that traverse the County.

Wind Turbine Generator Hazards

Public safety issues related to wind energy generation facilities could arise from tower or rotor failure; however, most wind turbine generators (WTGs) currently commercially available have been equipped with safety and engineering features to prevent excess rotor speed. WTGs are located mostly within the Desert Region; however, some are within the Mountain Region. The existing WTGs are typically equipped with safety and engineering features to prevent excess rotor speed, to minimize the risk of tower failure, and to maintain personnel health and safety.

Ice throw occurs under certain meteorological conditions in which ice accumulates on WTG rotor blades and is subsequently thrown off during the operating WTG due to centrifugal forces. Ice accumulation on objects comes in two forms: rime and glaze. Rime ice is formed by a saturated atmosphere with super-cooled water vapor, which freezes to objects on contact and is otherwise known as ice fog. Glaze ice, generally considered to be more dangerous in regards to ice throw, is caused by freezing rain.

Kern County has established setback requirements for WTGs in Zoning Ordinance Section 19.64.140 to maintain and ensure public safety within the areas of WTGs.

Electromagnetic Fields

Electromagnetic fields (EMF) are associated with electromagnetic radiation, which is energy in the form of photons. Radiation energy spreads as it travels and has many natural and human-made sources. The electromagnetic spectrum, the scientific name given to radiation energy, includes light, radio waves, and x-rays, among other energy forms. Electric and magnetic fields are common throughout nature and are produced by all living organisms. Concern over EMF exposure, however, generally pertains to human-made sources of electromagnetism and the degree to which they may have adverse biological effects or interfere with other electromagnetic systems.

Commonly known human-made sources of EMF are electrical systems such as electronics, telecommunications, electric motors, and other electrically powered devices. Radiation from these sources is invisible, non-ionizing, and of low frequency. Generally, in most living environments, the level of such radiation plus background natural sources of EMF are low.

Electric voltage (electric field) and electric current (magnetic field) from transmission lines create EMFs. Power frequency EMF is a natural consequence of electrical circuits and can be either directly measured using the appropriate measuring instruments or calculated using appropriate information. Within the County, there are numerous transmission lines.

Possible health effects associated with exposure to EMFs have been the subject of scientific investigation since the 1970s. Concern about EMF originally focused on electric fields; however, much of the recent research has focused on magnetic fields. Although the health effects of EMF are uncertain, field intensity, transients, harmonics, and changes in intensity over time are some of the EMF characteristics that may need to be considered to assess human exposure effects. These

characteristics may vary from power lines to appliances to home wiring and so may create different types of exposures. The exposure most often considered is intensity or magnitude of the field.

Reviews of the scientific literature conducted by the National Institute of Environmental Health Sciences, the National Research Council/National Academy of Sciences, the International Agency for Research on Cancer (a division of the World Health Organization, or WHO), and the American Cancer Society from the 1990s through 2001 have consistently indicated insufficient evidence of an association between EMF exposure and adverse health effects in humans. During the 1990s, most EMF research focused on extremely low frequency exposures stemming from conventional power sources, such as power lines, electrical substations, or home appliances. While some of these studies showed a possible link between EMF field strength and an increased risk for childhood leukemia, their findings indicated that such an association was weak. Now, in the age of cellular telephones, wireless routers, and portable GPS devices (all known sources of EMF radiation), concerns regarding a possible connection between EMFs and adverse health effects still persist, though the National Institute of Environmental Health Sciences' research continues to point to the same weak association. Additionally, the few studies that have been conducted on adults show no evidence of a link between EMF exposure and adult cancers, such as leukemia, brain cancer, and breast cancer. Nevertheless, NIEHS recommends continued education on practical ways of reducing exposures to EMFs (National Institute of Environmental Health Sciences [NIEHS], 2017).

On January 15, 1991, the California Public Utilities Commission (CPUC) initiated an investigation to consider its role in mitigating the health effects, if any, of electric and magnetic fields from utility facilities and power lines. A working group of interested parties, called the California EMF Consensus Group, was created by the CPUC to advise it on this issue. The Consensus Group's fact-finding process was open to the public, and its report incorporated concerns expressed by the public. Its recommendations were filed with the CPUC in March 1992. Based on the work of the Consensus Group, written testimony, and evidentiary hearings, the CPUC issued its decision (93-11-013) on November 2, 1993 to address public concern about possible EMF health effects from electric utility facilities. The conclusions and findings included the following:

We find that the body of scientific evidence continues to evolve; however, it is recognized that public concern and scientific uncertainty remain regarding the potential health effects of EMF exposure. We do not find it appropriate to adopt any specific numerical standard in association with EMF until we have a firm scientific basis for adopting any particular value.

This continues to be the stance of the CPUC with regard to establishing standards for EMF exposure. Currently, the State has not adopted any specific limits or regulation on EMF levels related to electric power facilities.

Disease Vectors

A disease vector is an insect or animal that carries a disease-producing micro-organism from one host to another. The Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) defines the term vector as:

“...any organism capable of transmitting the causative agent of human disease or capable of producing human discomfort or injury, including mosquitoes, flies, fleas, cockroaches, or other insects and ticks, mites or rats.”

The accumulation of organic wastes would act as attractors for various vectors. In addition any depressed areas, ponds, or drainage channels would provide areas for the breeding of mosquitoes.

Mosquitoes

Mosquitoes are of particular concern because of their abundance and distribution. In Kern County, mosquitoes are most abundant and active between May and October. Mosquitoes require standing water to breed and can be prolific in areas with standing water, such as wetlands.

Adult female mosquitoes can deposit eggs in a variety of aquatic habitats and other sources that contain water. The immature stages of each mosquito species develop in particular habitats. In general, there are four mosquito habitat groups: agricultural, industrial, domestic, and natural sources. Typical sites within these habitat groups include:

- Agricultural Sources: irrigated pastures, dairies, and orchards.
- Industrial Sources: sewage treatment ponds, flood plains, drain ditches.
- Domestic Sources: containers, debris in and around ponds, bird baths, pet watering dishes, animal troughs, septic tanks, catch basins, roadside ditches, leaky sprinkler systems, stagnant swimming pools.
- Natural Sources: wetlands, rain pools.

All species of mosquitoes require standing water to complete their growth cycle. Therefore, any standing body of water represents a potential mosquito breeding habitat. Although mosquitoes will typically stay close to suitable breeding habitat and blood-meal hosts, they are known to travel up to 10 miles under breezy conditions. The breeding period for mosquitoes depends on temperature but generally occurs in March through October.

Water quality also affects mosquito reproduction. Generally, poor-quality water (e.g., water with limited circulation, high temperature, and high organic content) produces greater numbers of mosquitoes than high-quality water (e.g., water with high circulation, low temperature, and low organic content). Typically, water bodies with water levels that slowly increase or recede produce greater numbers of mosquitoes than water bodies with water levels that are stable or that rapidly fluctuate.

In Kern County, the Kern Mosquito and Vector Control District is responsible for vector control.

Mosquito Hazards

Mosquito Species of Concern

In Kern County, two species of mosquito are primary targets for suppression. These two species, *Culex pipiens quinquefasciatus* and *Culex tarsalis*, are potential vectors of encephalitis and West Nile Virus. Other species of mosquitoes exist in Kern County that can cause a substantial nuisance in surrounding communities, but the *Culex* mosquito is the primary vector species of concern.

Although the West Nile Virus can be transmitted by a number of mosquito species, *Culex* is the most common carrier. This disease is thought to be a seasonal epidemic that flares up in the summer and fall. West Nile Virus is spread when mosquitoes that feed on infected birds bite humans and other animals.

The encephalitis mosquito (*Culex tarsalis*) breeds in almost any freshwater pond. Birds appear to be the primary blood-meal hosts of this species, but the insect will also feed on domestic animals and

humans. This species is the primary carrier in California of western equine encephalitis, St. Louis encephalitis, and California encephalitis, and is considered a significant disease vector of concern in the State.

The house mosquito (*Culex pipiens quinquefasciatus*) usually breeds in waters with a high organic material content. This species is often identified by its characteristic buzzing. Although its primary blood-meal host is birds, the house mosquito may also seek out humans. The house mosquito is a vector of St. Louis encephalitis.

Mosquito Borne Diseases

Mosquitoes are known to be the carriers of many serious diseases. The mosquito genus *Anopheles* carries the parasite that causes malaria, which is the leading cause of premature mortality worldwide. Encephalitis-type diseases are also transmitted through mosquitoes, including Eastern equine encephalitis (EEE) and Western equine encephalitis (WEE), which occur in the United States where they cause disease in humans, horses, and some bird species. Both EEE and WEE are regarded as two of the most serious mosquito-borne diseases in the United States due to their high mortality rates. It is not known how long West Nile Virus has been in the U.S., but Centers for Disease Control and Prevention (CDC) scientists believe the virus has been in the eastern U.S. since the early summer of 1999, and possibly longer (Centers for Disease Control and Prevention [CDC], 2016a). In 2014 a yellow fever mosquito (*Aedes aegypti*) was detected in Kern County; this mosquito is a known carrier of diseases such as dengue, yellow fever, and chikungunya.

West Nile virus is the most important mosquito-borne disease affecting Kern County. West Nile virus is the most important mosquito-borne disease affecting Kern County. As of January 17, 2017, a total of 45 states and the District of Columbia had reported West Nile virus infections, with a total of 424 human West Nile virus infections in California and 19 deaths (CDC, 2017 and 2016b). As of December 13, 2016, the California Department of Public Health reports 251 human West Nile virus infections in California and 18 deaths; 17 of the infection cases were in Kern County; as of March 30, 2017, no human West Nile virus infections had been reported within the State for 2017 (California Department of Public Health, 2016a and 2017).

In September 2002, the Kern County Public Health Services Department formed a West Nile Virus Task Force and has subsequently released reports documenting cases, developed strategies to prevent the occurrence of West Nile virus, and generated public education information such as information pamphlets. Statewide, there are 52 local agencies, including local Mosquito Abatement Districts and the California Department of Health Services Arbovirus Field Testing Stations, that work cooperatively to routinely conduct surveillance and control of mosquitoes and the diseases they transmit throughout California.

Yellow fever virus is related to West Nile virus and is transmitted to humans primarily through the bite of infected mosquitoes. Symptoms typically develop within three to six days and include fever, chills, severe headache, back ache, general body aches, nausea, vomiting, and fatigue (CDC, 2016c). Dengue emerged as a worldwide project in the 1950s and rarely occurs within the continental United States. The principal symptoms of dengue fever are high fever, severe headache, severe pain behind the eyes, joint pain, muscle and bone pain, rash, and mild bleeding (e.g., nose or gums bleed, easy bruising) (CDC, 2016d). Chikungunya was identified in the Americas on islands in the Caribbean in 2013 and beginning in 2014, cases in the United States were identified in travelers returning from the Caribbean. Symptoms may include headache, muscle pain, joint swelling, or rash; chikungunya does not often result in death but symptoms can be severe and disabling (CDC, 2016e and 2014). In August

2014, one County resident was diagnosed with dengue and one County resident was diagnosed with chikungunya after traveling outside of the County. According to the Kern County Public Health Services Department, to date, no known cases of these three viruses have originated within Kern County.

Flies

Nuisance flies have a life cycle comprised of an egg stage, three larval stages, a pupal stage, and an adult stage. Eggs are laid by a mature female fly onto a substrate appropriate for larval development. A single female can lay hundreds of eggs during her life. Nuisance fly larvae (grubs) are generally white in color and are blunt ended. They develop in wet substrates, especially dung pats and manure and wet or rotting feed, hay, and bedding straw, where they feed on food particles found on the substrate. Fly larvae are not capable of developing in truly aqueous habitats; they need wet, but not overly wet, substrates.

Within the confines of a pupal case, the developing fly will undergo further changes to become a winged adult fly that will eventually emerge from the pupal case and disperse from the site. The length of time required to complete the development from egg to adult is temperature dependent and may be as short as seven days during the summer months in California.

Some nuisance flies are blood feeders and can inflict a painful bite while feeding on animals or humans. Blood feeding (or biting) flies include the stable fly and horn fly. Other flies do not bite (non-biting flies), instead feeding on body secretions or liquefied organic matter. Non-biting flies include the house fly, face fly, and garbage fly.

Adult flies are generally active during daylight hours and inactive at night. Nuisance flies are known to disperse from their development sites into surrounding areas; however, the distance and direction of dispersal are not well understood. Non-biting nuisance fly species are likely to disperse further than those fly species that require animal blood meals. The habitat surrounding a breeding site will play a role in the distance of nuisance fly dispersal. Nuisance flies will likely disperse further in open habitats typical of rangeland and low agricultural crops than they will in urban or forested/orchard areas that contain substantially more vertical structure on which flies may rest and that provide shade and higher humidity on hot summer days.

Most nuisance flies are not known to disperse great distances. Studies using marked house flies show that 60 percent to 80 percent of house flies were captured within one mile of their release point; 85 percent to 95 percent were caught within two miles of the release site within the first four days after they were turned loose. A few flies have been shown to travel further, but in general, fly control efforts for a community problem are focused within one mile of the source.

Rodents

The accumulation of organic waste presents the potential for significant populations of mice and rats. Rodents can spread or accelerate the spread of disease from contaminated areas to uncontaminated areas via their droppings, feet, fur, urine, saliva, or blood. In addition, mice provide a food source that could attract wild predatory animals (e.g., skunks, foxes, coyotes, and stray dogs), which could pose other disease problems.

Mice are generally nocturnal and secretive animals with keen senses of taste, hearing, smell, and touch. They are small enough to enter any opening larger than one quarter of an inch. Mice prefer cereal grains, if available, but will eat garbage, insects, meat, and even manure. Mice reproduce at

high rates, making early control important in minimizing the potential for infestation. Although the life span of a mouse is only nine to twelve months, a female mouse can have five to ten litters per year with five or six young in each litter. Mice do not consume large quantities of food but can cause significant economic damage due to physical structure damage and site contamination.

Rodent Borne Diseases

Hantavirus pulmonary syndrome (or simply Hantavirus) is an infectious respiratory disease endemic to North and South America. The virus is carried by wild rodents, especially deer mice. The virus produces two clinical signs in the deer mice, but can produce deadly infection in humans. Over 50 percent of human cases have been fatal. The rodents carrying the disease shed the virus in their urine, feces, and saliva. Humans become infected with the hantavirus when they inhale dust that has been contaminated with rodent urine. Most individuals who have become infected have lived or worked in areas that were heavily contaminated with rodent droppings. If a human being becomes infected, signs of illness usually appear about two weeks after exposure, although the time can range from a few days to as long as six weeks. The first signs are fever, headache, and pain in the abdomen, joints, and back. Afterwards, the patient's lungs begin to fill with fluid and breathing becomes extremely difficult. A high proportion of the patients die, but early treatment offers the best chance of survival.

Two cases of hantavirus were reported in California in 2015 (the most recent data available). Both cases occurred in Mono County (California Department of Public Health, 2016e). Of the 69 reported cases in California residents between February 1980 and December 2014, four cases were confirmed to originate in Kern County (California Department of Public Health, 2017d).

Fleas

The California ground squirrel and its fleas are the most common source of plague in the Pacific states. Domestic cats (and sometimes dogs) can be infected by fleas or from eating infected wild rodents. Cats may serve as a source of infection to persons exposed to them. In addition, pets may bring plague-infected fleas into the home.

Bubonic plague is an infectious disease of animals and humans caused by the *Yersinia pestis* bacterium. People usually get plague from being bitten by a flea from a rodent that is carrying the plague bacterium or by handling an infected animal. Millions of people in Europe died from plague in the Middle Ages, when human homes and places of work were infested by flea-infested rats. Today, modern antibiotics are effective against plague, but if an infected person is not treated promptly, the disease is likely to cause illness or death. Human plague in the United States since the last urban outbreak in the 1920s has occurred as mostly scattered cases in rural and semi-rural areas, with an average of seven human cases each year (CDC, 2016f).

Onset of plague is usually two to six days after a person is exposed. Initial symptoms include fever, headache, and general illness, followed by the development of painful, swollen regional lymph nodes. The disease progresses rapidly and the bacteria can invade the bloodstream, producing severe illness, called plague septicemia.

Once a human is infected, a progressive and potentially fatal illness generally results unless specific antibiotic therapy is given. Progression leads to blood infection and, finally, to lung infection. The infection of the lung is termed plague pneumonia, and it can be transmitted to others through the expulsion of infective respiratory droplets by coughing.

The plague is endemic to California, mainly occurring in the mountains and foothills surrounding the California Central Valley. The last urban plague epidemic in the United States occurred in Los Angeles between 1924 and 1925 (CDC, 2016f). There were two cases of the plague in humans in 2015, both of which occurred in patients that had visited or camped in Yosemite National Park prior to the onset of the disease (California Department of Public Health, 2016e).

Incidences of the plague in Kern County are extremely rare, however, since it is endemic to the area due to extensive areas of natural lands where there could be animals with fleas that could provide a source of the plague, there is the potential for the plague to occur within the County.

Ticks

Lyme disease is a potentially debilitating and sometimes chronic infection transmitted to humans and other animals by certain ticks. The disease is caused by a spirochete (*Borrelia burgdorferi*) a corkscrew-shaped bacterium. Of the 48 tick species found in California, the western black-legged tick (*Ixodes pacificus*) is the only tick thought to be responsible for transmitting the spirochete to people. A different but closely related tick species (*I. scapularis*) transmits spirochetes that cause Lyme disease in the northeastern and upper Midwestern United States, but that tick does not occur in California.

First recognized in the mid-1970s in Lyme, Connecticut, Lyme disease has been reported in the United States, Canada, and many European and Asian countries. The first Californian report of the disease appeared in 1978. State health authorities began monitoring this disease in 1983. A total of 83 cases of Lyme disease were reported to have onset in 2015 within California (CDC, 2016g); one case of lyme disease was reported for Kern County in 2015 (California Department of Public Health, 2016c and d). Between 2005 and 2015, the highest incidence of Lyme disease was in the northwest counties of California (University of California Integrated Pest Management Program, 2017).

Lyme disease begins in up to 60 to 80 percent of patients as a slowly expanding, reddish rash 3 to 32 days after the bite of an infectious tick. Fifty (50) percent or more of Lyme disease patients may not recall having been bitten by a tick. Many victims experience fatigue, headache, fever, chills, and other flu-like symptoms during the initial stage of illness. Days to weeks later, a variety of other symptoms may occur singly or in combination: secondary rashes, migratory pain in joints, tendons, muscles, or bones; headache, facial palsy; memory loss; and other symptoms involving the lymphatic system, heart, eyes, liver, respiratory system, or kidneys. Finally, a persistent infection normally begins a year or more after the onset of the disease and may involve arthritic, neurologic, or further skin manifestations, profound fatigue, or inflammation of the cornea in the eyes.

Dogs, horses, and other domesticated animals susceptible to Lyme disease may develop arthritis or lameness, lethargy, loss of appetite, disease of the lymph nodes, or other conditions after being infected.

Due to the extensive areas of natural lands that support animals which host ticks that could provide a source of Lyme disease, the ticks are endemic to the area and there is the potential for Lyme disease to occur within the County.

Valley Fever

Coccidioidomycosis, commonly known as Valley Fever, is primarily a disease of the lungs that is common in the southwestern United States and northwestern Mexico. The disease is of critical concern to Kern County. Valley Fever is caused by the fungus *Coccidioides immitis*, which grows in

soils in areas of low rainfall, high summer temperatures, and moderate winter temperatures. These fungal spores become airborne when the soil is disturbed by winds, construction, farming, and other activities. In susceptible people and animals, infection occurs when a spore is inhaled. Valley Fever symptoms generally occur within three weeks of exposure. Valley Fever is not a contagious disease, and secondary infections are rare.

It is estimated that more than four million people live in areas where Valley Fever fungus is prevalent in the soils. Residents of Bakersfield, California and Phoenix, Arizona, have shown positive skin-test reaction rates of 30 to 40 percent, meaning that about one-third of residents tested have had Valley Fever sometime in the past. Among those who have never had Valley Fever, the chance of infection is about three percent per year, but the longer one resides in an endemic area, the greater the risk. In the southwestern U.S., there are 100,000 new infections each year.

People working in certain occupations such as construction, agriculture, and archaeology have an increased risk of exposure and disease because these jobs result in the disturbance of soils where fungal spores are found. Valley Fever infection is highest in California from June to November. In addition, many domestic and native animals are susceptible to the disease, including dogs, horses, cattle, coyotes, rodents, bats, and snakes. Most Valley Fever cases are very mild. It is estimated that 60 percent or more of infected people either have no symptoms or experience flu-like symptoms and never seek medical attention.

In 2015, there were 1,174 reported cases of Valley Fever and 9 reported deaths in Kern County. In 2015, there were a reported 973 cases of Valley Fever in the Valley Region, 37 cases of Valley Fever in the Mountain Region, and 48 cases of Valley Fever in the Desert Region of Kern County (Kern County Public Health Services Department, 2017a and 2017b).

4.8.3 Regulatory Setting

Federal

As explained in Section 3.2, *Regulatory History and Background*, even though cannabis is “decriminalized” under State law, and even with the U.S. Department of Justice (USDOJ) issuance of memoranda guiding federal law enforcement related to cannabis activities within jurisdictions that have legalized cannabis, cannabis activities continue to be illegal at the federal level and subject to the prosecutorial discretion of the federal government.

U.S. Environmental Protection Agency (U.S. EPA)

The U.S. Environmental Protection Agency (U.S. EPA) was established in 1970 to consolidate in one agency a variety of federal research, monitoring, standard-setting, and enforcement activities to ensure environmental protection. The U.S. EPA's mission is to protect human health and to safeguard the natural environment - air, water, and land - upon which life depends. The U.S. EPA works to develop and enforce regulations that implement environmental laws enacted by Congress, is responsible for researching and setting national standards for a variety of environmental programs, and delegates to states and tribes the responsibility for issuing permits and for monitoring and enforcing compliance. Where national standards are not met, the U.S. EPA can issue sanctions and take other steps to assist the states and tribes in reaching the desired levels of environmental quality.

Federal Toxic Substances Control Act/Resource Conservation and Recovery Act (RCRA)/Hazardous and Solid Waste Act (HSWA)

The Federal Toxic Substances Control Act (1976) and the Resource Conservation and Recovery Act (RCRA) of 1976 established a program administered by the U.S. EPA for the regulation of the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA was amended in 1984 by the Hazardous and Solid Waste Act (HSWA), which affirmed and extended the “cradle to grave” system of regulating hazardous wastes.

Comprehensive Environmental Response, Compensation, and Liability Act/Superfund Amendments and Reauthorization Act (CERCLA)

The Comprehensive Environmental Response, Compensation, and Liability Act/Superfund Amendments and Reauthorization Act (CERCLA), commonly known as Superfund, was enacted by Congress on December 11, 1980. This law (U.S. Code Title 42, Chapter 103) provides broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. CERCLA establishes requirements concerning closed and abandoned hazardous waste sites; provides for liability of persons responsible for releases of hazardous waste at these sites; and, establishes a trust fund to provide for cleanup when no responsible party can be identified. CERCLA also enables the revision of the National Contingency Plan (NCP). The NCP (Title 40, Code of Federal Regulation [CFR], Part 300) provides the guidelines and procedures needed to respond to releases and threatened releases of hazardous substances, pollutants, and/or contaminants. The NCP also established the National Priorities List (NPL). CERCLA was amended by the Superfund Amendments and Reauthorization Act (SARA) on October 17, 1986.

Clean Water Act (CWA)/Spill, Prevention, Control, and Countermeasure (SPCC) Rule

The CWA (33 U.S.C. Section 1251 et seq., formally the Federal Water Pollution Control Act of 1972), was enacted with the intent of restoring and maintaining the chemical, physical, and biological integrity of the waters of the United States. As part of the CWA, the U.S. EPA oversees and enforces the Oil Pollution Prevention regulation contained in Title 40 of the CFR, Part 112 (Title 40 CFR, Part 112), which is often referred to as the “SPCC rule” because the regulations describe the requirements for facilities to prepare, amend, and implement SPCC plans. A facility is subject to SPCC regulations if a single oil storage tank has a capacity greater than 660 gallons, or the total above ground oil storage capacity exceeds 1,320 gallons, or the underground oil storage capacity exceeds 42,000 gallons, and if, due to its location, the facility could reasonably be expected to discharge oil into or upon the “navigable waters” of the U.S.

Other federal regulations overseen by the U.S. EPA relevant to hazardous materials and environmental contamination include Title 40 CFR Chapter 1, Subchapter D – Water Programs and Subchapter I – Solid Wastes. Title 40 CFR Chapter 1, Subchapter D, Parts 116 and 117 designate hazardous substances under the CWA. Title 40 CFR Part 116 sets forth a determination of the reportable quantity for each substance that is designated as hazardous. Title 40 CFR Part 117 applies to quantities of designated substances equal to or greater than the reportable quantities that may be discharged into waters of the U.S.

Occupational Safety and Health Administration (OSHA)

OSHA’s mission is to ensure the safety and health of America’s workers by setting and enforcing standards; providing training, outreach, and education; establishing partnerships; and encouraging continual improvement in workplace safety and health. OSHA staff establishes and enforces protective

standards and reaches out to employers and employees through technical assistance and consultation programs. OSHA standards are listed in Title 29 CFR Part 1910.

Federal Aviation Administration (FAA)

The FAA regulates aviation at regional, public, private, and military airports. The FAA regulates objects affecting navigable airspace and structures taller than 200 feet according to Federal Aviation Regulation 14 CFR Part 77. The U.S. and California Departments of Transportation also require the proponent to submit FAA Form 7460-1, Notice of Proposed Construction or Alteration. According to 14 CFR Part 77.5, notification allows the FAA to identify potential aeronautical hazards in advance, thus preventing or minimizing any adverse impacts on the safe and efficient use of navigable airspace. Any structure that would constitute a hazard to air navigation, as defined in 14 CFR Part 77, requires issuance of a permit from the California Department of Transportation's Aeronautics Program. The permit is not required if the FAA aeronautical study determines that the structure has no impact on air navigation.

As described in 14 § CFR 77.9 (Construction or alteration requiring notice), each sponsor who proposes any of the following construction or alteration scenarios shall notify the FAA in the form and manner as follows:

If requested by the FAA, or if you propose any of the following types of construction or alteration, you must file notice with the FAA of:

- (a) Any construction or alteration that is more than 200 ft. AGL at its site.
- (b) Any construction or alteration that exceeds an imaginary surface extending outward and upward at any of the following slopes:
 - (1) 100 to 1 for a horizontal distance of 20,000 ft. from the nearest point of the nearest runway of each airport described in paragraph (d) of this section with its longest runway more than 3,200 ft. in actual length, excluding heliports.
 - (2) 50 to 1 for a horizontal distance of 10,000 ft. from the nearest point of the nearest runway of each airport described in paragraph (d) of this section with its longest runway no more than 3,200 ft. in actual length, excluding heliports.
 - (3) 25 to 1 for a horizontal distance of 5,000 ft. from the nearest point of the nearest landing and takeoff area of each heliport described in paragraph (d) of this section.
- (c) Any highway, railroad, or other traverse way for mobile objects, of a height which, if adjusted upward 17 feet for an Interstate Highway that is part of the National System of Military and Interstate Highways where overcrossings are designed for a minimum of 17 feet vertical distance, 15 feet for any other public roadway, 10 feet or the height of the highest mobile object that would normally traverse the road, whichever is greater, for a private road, 23 feet for a railroad, and for a waterway or any other traverse way not previously mentioned, an amount equal to the height of the highest mobile object that would normally traverse it, would exceed a standard of paragraph (a) or (b) of this section.
- (d) Any construction or alteration on any of the following airports and heliports:
 - (1) A public use airport listed in the Airport/Facility Directory, Alaska Supplement, or Pacific Chart Supplement of the U.S. Government Flight Information Publications;

- (2) A military airport under construction, or an airport under construction that will be available for public use;
 - (3) An airport operated by a federal agency or the DOD.
 - (4) An airport or heliport with at least one FAA-approved instrument approach procedure.
- (e) You do not need to file notice for construction or alteration of:
- (1) Any object that will be shielded by existing structures of a permanent and substantial nature or by natural terrain or topographic features of equal or greater height, and will be located in the congested area of a city, town, or settlement where the shielded structure will not adversely affect safety in air navigation;
 - (2) Any air navigation facility, airport visual approach or landing aid, aircraft arresting device, or meteorological device meeting FAA-approved siting criteria or an appropriate military service siting criteria on military airports, the location and height of which are fixed by its functional purpose;
 - (3) Any construction or alteration for which notice is required by any other FAA regulation.
 - (4) Any antenna structure of 20 feet or less in height, except one that would increase the height of another antenna structure.

Per 14 CFR 77.7, notification requirements include sending one executed form set of FAA Form 7460-1, Notice of Proposed Construction or Alteration, to the Manager, Air Traffic Division, FAA Regional Office having jurisdiction over the area within which the construction or alteration will be located. The notice required must be submitted at least 45 days before the earlier of the following dates: (1) the date the proposed construction or alteration is to begin, or (2) the date an application for a construction permit is to be filed.

National Weather Service (NWS)

Under extreme fire weather conditions, the NWS issues Red Flag Warnings for all affected areas. A Red Flag Warning means that any ignition could result in a large-scale damaging wildfire. Red Flag Warning criteria for are as follows: the area contains dry fuels, the National Fire Danger Rating System is high to extreme, and the following forecast weather parameters are: 1) relative humidity is 25 percent or less; 2) a sustained wind average of 15 mph or greater; and 3) a temperature of more than 75 degrees Fahrenheit (°F) (NWS, 2014).

Transportation Emergency Preparedness Program

The U.S. Department of Energy (DOE) Office of Environmental Management implements the Transportation Emergency Preparedness Program (TEPP) through the Office of Transportation. TEPP integrates a basic approach to transportation emergency planning and preparedness activities under a single program with the goal to ensure DOE, its operating contractors, and State, tribal, and local emergency responders are prepared to respond promptly, efficiently, and effectively to accidents involving DOE shipments of radioactive material. The TEPP mission is to ensure that federal, State, tribal, and local responders have access to the plans, training, and technical assistance necessary to safely, efficiently, and effectively respond to transportation accidents involving DOE-owned radioactive materials. To accomplish this mission, a suite of tools have been developed to aid the response jurisdictions in their readiness activities.

State

California Department of Conservation, Division of Oil, Gas, and Geothermal Resources

Department of Oil, Gas and Geothermal Resources (DOGGR) is a State agency and responsible for supervising the drilling, operation, maintenance, plugging, and abandonment of oil, gas, and geothermal wells. DOGGR's regulatory program promotes the sensitive development of oil, natural gas, and geothermal resources in California through sound engineering practices, pollution prevention, and the implementation of public safety programs. DOGGR requires any construction above or near plugged or abandoned oil and gas wells to be avoided and remediation of wells to current DOGGR standards.

Pipeline Safety and Management

The California Public Utility Commission (CPUC) regulates pipelines that transport natural gas, including natural (flammable, toxic, or corrosive) gas and other gases as well as the transport and storage of liquefied natural gas. The California State Fire Marshall administers regulatory and enforcement authority over intrastate crude oil, petroleum product, and other hazardous liquid pipelines under California Government Code Sections 51010-51019.144.

Public Resources Code (PRC)

PRC 3208.1

Section 3208.1 of the Public Resources Code (PRC) authorizes the State Oil and Gas Supervisor of DOGGR to order the reabandonment of a previously abandoned well when construction of any structure over or in proximity to a well could result in a hazard. The cost of reabandonment operations is the responsibility of the owner or developer of a project upon which the structure would be located.

PRC 4292

PRC 4292 requires a 10-foot clearance of any tree branches or ground vegetation from around the base of power poles carrying more than 110 kV. The firebreak clearances required by PRC 4292 are applicable within an imaginary cylindrical space surrounding each pole or tower on which a switch, fuse, transformer, or lightning arrester is attached and surrounding each dead-end or corner pole, unless such pole or tower is exempt from minimum clearance requirements by provisions of PRC 4296.

PRC 4293

PRC 4293 presents guidelines for line clearance including a minimum of 10 feet of vegetation clearance from any conductor operating at 110,000 volts or higher.

PRC Sections 21000-21178

The California Environmental Quality Act (CEQA) Section 21092.6 requires land agencies to consult with lists compiled pursuant to Section 65962 of the Government Code to determine whether the project or alternatives are located on a site which is included on any list.

California Education Code

The California Education Code Section 17213(1)(3) prohibits the approval of a school site if the site “contains one or more pipelines, situated underground or aboveground, which carries hazardous substances, acutely hazardous substances, or hazardous wastes, unless the pipeline is a natural gas line which is used only to supply natural gas to that school or neighborhood.”

California Education Code Section 17231.1 requires the California Department of Toxic Substance Control (DTSC) to be involved in the environmental review process for the acquisition or construction of a school property utilizing State funding. The responsible school board is required to contract with an environmental assessor to supervise the preparation of a site evaluation to determine the potential for hazards or hazardous materials to exist on or near the site that could affect future staff and students, prior to acquiring a school site.

California Code of Regulations (CCR) Title 3 Division 6

The California Code of Regulations (CCR) Title 3 Division 6 provides the regulatory setting for pesticide and pest control operations to ensure proper, safe, and efficient use of pesticides and pest control. Section 6147 provides a list of exempted pesticide products that do not require pesticide registration, while Sections 6400-6489 pertain to restricted materials. Chapter 3, Subsection 3 pertains to worker safety and provides regulations for those applying pesticides, while Chapter 4 pertains to environmental protections and preventing pesticide contamination.

Hazardous Materials Release Response Plans and Inventory Act of 1985

The Hazardous Materials Release Response Plans and Inventory Act, also known as the Business Plan Act, requires businesses using hazardous materials to prepare a plan that describes their facilities, inventories, emergency response plans, and training programs. Hazardous materials are defined as unsafe raw or unused materials that are part of a process or manufacturing step. They are not considered hazardous waste. Health concerns pertaining to the release of hazardous materials, however, are similar to those relating to hazardous waste.

Hazardous Waste Control Act (HWCA)

The HWCA created the State hazardous waste management program, which is similar to, but more stringent than, the federal RCRA program. The HWCA is implemented by regulations contained in Title 26 of the CCR, which describes the following required aspects for the proper management of hazardous waste:

- Identification and classification;
- Generation and transportation;
- Design and permitting of recycling, treatment, storage, and disposal facilities;
- Treatment standards;
- Operation of facilities and staff training; and
- Closure of facilities and liability requirements.

These regulations list more than 800 materials that may be hazardous and establish criteria for identifying, packaging, and disposing of such waste. Under the HWCA and Title 26, the generator of hazardous waste must complete a manifest that accompanies the waste from generator to transporter

to the ultimate disposal location. Copies of the manifest must be filed with the California Department of Toxic Substances and Control (DTSC).

Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Unified Program)

Senate Bill 1082, introduced by Senator Charles Calderon (D-Whittier) and passed in 1993, created the Unified Program, which requires the administrative consolidation of six hazardous materials and waste programs (Program Elements) under one agency, a Certified Unified Program Agency (CUPA). The Program Elements consolidated under the Unified Program are:

- Hazardous Waste Generator and On-site Hazardous Waste Treatment Programs (a.k.a., Tiered Permitting);
- Aboveground Petroleum Storage Tank Spill Prevention Control and Countermeasure Plan (SPCC);
- Hazardous Materials Release Response Plans and Inventory Program (a.k.a. Hazardous Materials Disclosure or “Community-Right-To-Know”);
- California Accidental Release Prevention (CalARP) Program;
- Underground Storage Tank (UST) Program; and
- Uniform Fire Code Plans and Inventory Requirements.

The Unified Program is intended to provide relief to businesses complying with the overlapping and sometimes conflicting requirements of formerly independently managed programs. The Unified Program is implemented at the local government level by CUPAs. Most CUPAs have been established as a function of a local environmental health or fire department. Some CUPAs have contractual agreements with another local agency, a participating agency, which implements one or more Program Elements in coordination with the CUPA.

California Environmental Protection Agency (Cal/EPA)

The Cal/EPA was created in 1991, which unified California’s environmental authority in a single cabinet-level agency and brought the California Air Resources Board (CARB), State Water Resources Control Board (SWRCB), Regional Water Quality Control Boards (RWQCBs), California Department of Resources Recycling and Recovery (CalRecycle) - formerly the Integrated Waste Management Board (IWMB), DTSC, Office of Environmental Health Hazard Assessment (OEHHA), and Department of Pesticide Regulation (DPR) under one agency. These agencies were placed within the Cal/EPA “umbrella” for the protection of human health and the environment and to ensure the coordinated deployment of State resources. Their mission is to restore, protect, and enhance the environment, to ensure public health, environmental quality, and economic vitality.

DTSC is a department of Cal/EPA and is the primary agency in California that regulates hazardous waste, cleans up existing contamination, and looks for ways to reduce the hazardous waste produced in California. DTSC regulates hazardous waste in California primarily under the authority of RCRA and the California Health and Safety Code. Other laws that affect hazardous waste are specific to handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning.

Department of Toxic Substance Control (DTSC)

DTSC is a department of Cal/EPA and is the primary agency in California that regulates hazardous waste, cleans-up existing contamination, and looks for ways to reduce the hazardous waste produced in California. DTSC regulates hazardous waste in California primarily under the authority of the federal RCRA and the California Health and Safety Code (primarily Division 20, Chapters 6.5 through 10.6, and Title 22, Division 4.5). Other laws that affect hazardous waste are specific to handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning.

Government Code §65962.5 (commonly referred to as the Cortese List) includes DTSC-listed hazardous waste facilities and sites, DHS lists of contaminated drinking water wells, sites listed by the SWRCB as having UST leaks and which have had a discharge of hazardous wastes or materials into the water or groundwater, and lists from local regulatory agencies of sites that have had a known migration of hazardous waste/material.

California Office of Emergency Services (OES)

In order to protect the public health and safety and the environment, the California Office of Emergency Services (OES) is responsible for establishing and managing statewide standards for business and area plans relating to the handling and release or threatened release of hazardous materials. Basic information on hazardous materials handled, used, stored, or disposed of (including location, type, quantity, and the health risks) needs to be available to firefighters, public safety officers, and regulatory agencies and needs to be included in business plans in order to prevent or mitigate the damage to the health and safety of persons and the environment from the release or threatened release of these materials into the workplace and environment. These regulations are covered under Chapter 6.95 of the California Health and Safety Code Article 1—Hazardous Materials Release Response and Inventory Program (Sections 25500 to 25520) and Article 2—Hazardous Materials Management (Sections 25531 to 25543.3).

CCR Title 19, Public Safety, Division 2, Office of Emergency Services, Chapter 4—Hazardous Material Release Reporting, Inventory, and Response Plans, Article 4 (Minimum Standards for Business Plans) establishes minimum statewide standards for Hazardous Materials Business Plans (HMBPs). These plans shall include the following: (1) a hazardous material inventory in accordance with Sections 2729.2 to 2729.7; (2) emergency response plans and procedures in accordance with Section 2731; and, (3) training program information in accordance with Section 2732. Business plans contain basic information on the location, type, quantity, and health risks of hazardous materials stored, used, or disposed of in the State. Each business shall prepare a HMBP if that business uses, handles, or stores a hazardous material or an extremely hazardous material in quantities greater than or equal to the following:

- 500 pounds of a solid substance;
- 55 gallons of a liquid;
- 200 cubic feet of compressed gas;
- A hazardous compressed gas in any amount; or,
- Hazardous waste in any quantity.

California Occupational Safety and Health Administration (Cal/OSHA)

Cal/OSHA is the primary agency responsible for worker safety in the handling and use of chemicals in the workplace. Cal/OSHA standards are generally more stringent than federal regulations. The employer is required to monitor worker exposure to listed hazardous substances and notify workers of exposure (8 CCR Sections 337-340). The regulations specify requirements for employee training, availability of safety equipment, accident-prevention programs, and hazardous substance exposure warnings.

California Highway Patrol (CHP)

A valid Hazardous Materials Transportation License, issued by the CHP, is required by the laws and regulations of State of California Vehicle Code Section 3200.5 for transportation of either:

- Hazardous materials shipments for which the display of placards is required by State regulations; or,
- Hazardous materials shipments of more than 500 pounds, which would require placards if shipping greater amounts in the same manner.

Additional requirements on the transportation of explosives, inhalation hazards, and radioactive materials are enforced by the CHP under the authority of the State Vehicle Code. Transportation of explosives generally requires consistency with additional rules and regulations for routing, safe stopping distances, and inspection stops (Title 14, CCR, Chapter 6, Article 1, Sections 1150-1152.10). Inhalation hazards face similar, more restrictive rules and regulations (Title 13, CCR, Chapter 6, Article 2.5, Sections 1157-1157.8). Radioactive materials are restricted to specific safe routes for transportation of such materials.

Hazardous Material Business Plan

The State of California requires an owner or operator of a facility or business to complete and submit a HMBP to the Kern County Public Health Services Department if the facility or business handles a hazardous material or mixture containing a hazardous material that has a quantity at any one time during the reporting year equal to or greater than: 55 gallons; 500 pounds; 200 cubic feet at standard temperature and pressure for a compressed gas; any amount of hazardous waste; or amounts of radioactive materials requiring an emergency plan pursuant to Parts 30, 40, or 70 of Title 10, Code of Federal Regulations. Lower threshold quantities may be required for acutely hazardous substances. Pursuant to Health and Safety Code Section 25504 (a-c), an HMBP is required to contain detailed information on:

- Hazardous materials at the facility;
- Emergency response plans and procedures in the event of the reportable release or threatened release of a hazardous material; and
- Training for all new employees and annual training, including refresher courses, for all employees in safety procedures in the event of a release or threatened release of a hazardous material.

The intent of the HMBP is to provide basic information necessary for use by first responders in order to: prevent or mitigate damage to the public health and safety and to the environment from a release or threatened release of a hazardous material; and to satisfy federal and State Community Right-to-Know laws.

Senate Bill (SB) 1639

On January 1, 2005, California Governor Arnold Schwarzenegger signed into law on September 23, 2004, Senate Bill (SB) 1369 which amends both Public Resources Code 4291 and Government Code 51182. The following is an overview of these new fire safe requirements:

- The minimum clearance around structures increases from 30 feet to 100 feet.
- Local ordinance or regulations are allowed to specify clearance distances greater than 100 feet.
- Allows insurance companies to require home/building owners to maintain fire breaks greater than 100 feet.
- In areas where Public Resources Code 4291 applies, owners proposing to build or rebuild must obtain certification from the local building official that the proposed structure complies with all applicable State and local building standards.
- Owners must provide, upon request, a copy of the fire safe certification to their insurance company.
- After construction, the owner must obtain from the local building official, a copy of the final inspection report that demonstrates the structure was constructed in compliance with standards mentioned above.
- Owners must provide, upon request, a copy of the final inspection report to their insurance company.
- The Director of the Department of Forestry and Fire Protection (CAL FIRE) is authorized to remove vegetation not consistent with Public Resources Code 4291 and, if necessary, make the removal expense a lien upon the property.

Assembly Bill (AB) 2679

Assembly Bill (AB) 2679 amended Section 11362.775 of the Health and Safety Code and established rules for the manufacture of oils, waxes, and other concentrates used for producing cannabis products. It provides guidelines on the manufacturing systems and solvents that are allowable for commercial cannabis.

Local

Kern County General Plan (KCGP)

The policies, goals, and implementation measures in the KCGP applicable to hazards as related to the proposed project are provided below. The KCGP contains additional policies, goals, and implementation measures that are more general in nature and not specific. Therefore, they are not listed below, but, as stated in Chapter 2, *Introduction*, all policies, goals, and implementation measures in the KCGP are incorporated by reference.

Chapter 1. Land Use, Open Space, and Conservation Element

Section 1.3 Physical and Environmental Constraints

Goals

- **Goal 1.** To strive to prevent loss of life, reduce personal injuries and property damage, and minimize economic and social diseconomies resulting from natural disaster by directing

development to areas that are not hazardous.

Policy

- **Policy 1.** Kern County will ensure that new developments will not be sited on land that is physically or environmentally constrained (Map Code 2.1 [Seismic Hazard], Map Code 2.2 [Landslide], Map Code 2.3 [Shallow Groundwater], Map Code 2.5 [Flood Hazard], Map Codes 2.6–2.9 and Map Code 2.10 [Nearby Waste Facility], and Map Code 2.11 [Burn Dump Hazard]) to support such development unless appropriate studies establish that such development will not result in an unmitigated significant impact.

Section 1.4 Public Facilities and Services

Goals

- **Goal 9.** Serve the needs of industries and Kern County residents in a manner that does not degrade the water supply and the environment and protect the public health and safety by avoiding surface and subsurface nuisances resulting from the disposal of hazardous wastes, irrespective of the geographic origin of the waste.

Implementation Measures

- **Implementation Measure N.** Secure complete and accurate information on all hazardous wastes generated, handled, stored, treated, transported, and disposed of within or through Kern County.
- **Implementation Measure O.** Reduce to the greatest degree possible the amount of waste to be disposed of by encouraging private industry to construct and manage a high quality system of transfer stations, recycling facilities, treatment plants, and incinerators located near the generators of hazardous waste.
- **Implementation Measure R.** Roads and highways utilized for commercial shipping of hazardous waste destined for disposal will be designated as such pursuant to Vehicle Code Sections 31303 et seq. Permit applications shall identify commercial shipping routes they propose to utilize for particular waste streams.

Chapter 2. Circulation Element

Section 2.5 Other Modes

Goals

- **Goal 1.** Plan for land uses that are compatible with public airport and military bases and mitigate encroachment issues.

Policies

- **Policy 1.** Plan for land uses that are compatible with public airport and military bases and mitigate encroachment issues.
- **Policy 2.** To the extent legally allowable prevent encroachment on public airport and military base operations from incompatible, unmitigated land uses.

Implementation Measures

- **Implementation Measure A.** Review discretionary land use development applications within the airports influence area and the military base operating area as shown in the

Airport Land Use Compatibility Plan (ALUCP) for consistency.

- **Implementation Measure B.** Coordinate and cooperate with airport operators, the County Department of Airports, the California Department of Transportation, Division of Aeronautics, affected cities, Edwards Air Force Base, NAWS China Lake, and the U.S. Department of Defense on ALUCP, review of land use applications, public education, and encroachment issues.

Section 2.5.4 Transportation of Hazardous Materials

Issues

Transportation-related accidents and spills of hazardous materials pose a serious threat to the traveling public and nearby sensitive land uses. Transportation of hazardous materials poses a short-term threat to public health.

Goals

- **Goal 1.** Reduce risk to public health from transportation of hazardous materials.

Policies

- **Policy 1.** The commercial transportation of hazardous material, identification, and designation of appropriate shipping routes will be in conformance with the adopted Kern County and Incorporated Cities Hazardous Waste Management Plan.
- **Policy 2.** Kern County and affected cities should reduce use of County-maintained roads and city-maintained streets for transportation of hazardous materials.

Implementation Measures

- **Implementation Measure A.** Roads and highways utilized for commercial shipping of hazardous waste destined for disposal will be designated as such pursuant to California Vehicle Code Sections 31303 et seq. Permit applications shall identify commercial shipping routes they propose to utilize for particular waste streams.

Chapter 4. Safety Element

Section 4.1 Introduction

Goals

- **Goal 1.** Minimize injuries and loss of life and reduce property damage.
- **Goal 2.** Reduce economic and social disruption resulting from earthquakes, fire, flooding, and other geologic hazards by assuring the continuity of vital emergency public services and functions.
- **Goal 4.** Create an awareness of the residents in Kern County through the dissemination of information about geologic, fire, and flood safety hazards.
- **Goal 5.** Ensure the availability and effective response of emergency services following a catastrophic event.
- **Goal 7.** Ensure that adequate emergency services and facilities are available to the residents of Kern County through the coordination of planning and development of emergency facilities and services.

- **Goal 8.** Reduce the public's exposure to fire, explosion, blowout, and other hazards associated with the accidental release of crude oil, natural gas, and hydrogen sulfide gas.

Section 4.2 General Policies and Implementation Measure, which Apply to More than One Safety Constraint

Policies

- **Policy 1.** That the County's program of identification, mapping, and evaluating the geologic, fire, flood safety hazard areas, and significant concentrations of hydrogen sulfide in oilfield areas, presently under way by various County departments, be continued.
- **Policy 2.** Those hazardous areas, identified as unsuitable for human occupancy, are guided toward open space uses, such as agriculture, wildlife habitat, and limited recreation.
- **Policy 3.** That the County government encourage public support of local, State, and federal research programs on geologic, fire, flood hazards, valley fever, plague, and other studies so that acceptable risk may be continually reevaluated and kept current with contemporary values.
- **Policy 4.** The County shall encourage extra precautions be taken for the design of significant lifeline installations, such as highways, utilities, and petrochemical pipelines.

Implementation Measures

- **Implementation Measure A.** All hazards (geologic, fire, and flood) should be considered whenever a Planning Commission or Board of Supervisor's action could involve the establishment of a land use activity susceptible to such hazards.
- **Implementation Measure C.** Require detailed site studies for ground shaking characteristics, liquefaction potential, dam failure inundation, flooding potential, and fault rupture potential as background to the design process for critical facilities under County discretionary approval.
- **Implementation Measure D.** Require seismic review prior to major addition, renovation, or increase in occupancy of buildings.
- **Implementation Measure E.** Maintain adequate setbacks between oil/gas wells and development through the use of the zone DI (Drilling Island) or PE (Petroleum Extraction) and implementation of the uniform Fire Code 7904.32.3
- **Implementation Measure F.** The adopted multi-jurisdictional Kern County, California Multi-Hazard Mitigation Plan, as approved by FEMA, shall be used as a source document for preparation of environmental documents pursuant to CEQA, evaluation of project proposals, formulation of potential mitigation, and identification of specific actions that could, if implemented, mitigate impacts from future disasters and other threats to public safety.

Section 4.6 Wildland and Urban Fire

Hazard Identification

- Access and Evacuation Routes - Good planning principles, as well as existing policies and laws, dictate that all developments must be planned with circulation routes that will assure safe access for fire and other emergency equipment. The circulation routes must include

secondary means of ingress and egress, consistent with topography, to meet emergency needs.

The general circulation routes are provided throughout the County by federal, State, and County-maintained road systems which are adequate for access and evacuation. State and County laws regulate the standards for new public circulation routes.

Private circulation routes that are not maintained by the State or County are subject to the standards set forth in Kern County Ordinance No. G-1832.

- Clearance of Vegetative Cover for Fire Control - In 1963 the State of California enacted the Public Resources Code clearance law. This is a minimum Statewide clearance law of flammable vegetative growth around structures, especially in brush- and tree-covered watershed areas. The enactment of a local ordinance is necessary where more restrictive fire safety clearance measures are desirable to meet local conditions.
- Fuel Breaks and Firebreaks - Fuel breaks and/or firebreaks separating communities or clusters of structures from the native vegetation may be required. Such fuel breaks may be "greenbelts," as all vegetation need not be removed but thinned or landscaped to reduce the volume of fuel.

All fuel and firebreaks are required to meet the minimum design standards of the Kern County Fire Chief.

The Fire Department's Chief may require a fire plan for a development during the critical fire season. This plan should reflect the proposed course of action for fire prevention and suppression.

The parcel size and setback distances of buildings placed thereon should be such that adequate clearance of flammable vegetation cover may be performed within the limits of the owner's parcel of land.

Should the owner of a property fail to apply the required firebreak clearance, following proper notice, the County may elect to clear the firebreak vegetation and make the expense of the clearing a lien against the property upon which the work was accomplished.

- Hazardous Fire Area - The Hazardous Fire Areas consists mainly of wildlands, which are mountain and hill land in an uncultivated, more or less natural state, covered with timber, wood, brush, and grasslands. This area includes some urban influence and agricultural use, such as exists around Isabella Lake and the Kern River, Woody/Glennville, Tehachapi/Cummings Valley, and Lebec/Frazier Park/Lake of the Woods.

The wildlands provide prime habitats for deer, mountain lions, bears, kit foxes, quail, chucker, wild turkeys, and condors. They also harbor fifteen identified and important rare botanic communities and vegetation associations.

The Kern County Hazardous Fire Area was established by an amendment to the Uniform Fire Code, Section 1.49H under Section 4016 of the Kern County Ordinance Code.

The boundaries of the Hazardous Fire Area are determined and publicly announced before the start of each annual "fire season" and is normally the period from April 15 to December 1 of each year, except when the Fire Chief extends this period.

The wildlands include valuable watersheds that must be preserved for receiving and passing water into surface streams and underground storage. Protection of the watersheds will prevent erosion and flood damages.

For the protection of our wildlands we must consider all factors which will aid in fulfilling the policy stated in the California Environmental Quality Act, Public Resources Code Section 21000 et seq., to “create and maintain conditions under which man and nature can exist in productive harmony to fulfill the social and economic requirements of present and future generations.”

In implementing their Fire Prevention Program, Fire Department personnel periodically inspect the areas around all buildings for accumulations of flammable material and closure of openings of vacant buildings.

Policies

- **Policy 1.** Require discretionary projects to assess impacts on emergency services and facilities.
- **Policy 2.** The County will encourage the promotion of public education about fire safety at home and in the work place.
- **Policy 3.** The County will encourage the promotion of fire prevention methods to reduce service protection costs and costs to taxpayers.
- **Policy 4.** Ensure that new development of properties have sufficient access for emergency vehicles and for the evacuation of residents.
- **Policy 5.** Require that all roads in wildland fire areas are well marked and that homes have addresses prominently displayed.
- **Policy 6.** All discretionary projects shall comply with the adopted Fire Code and the requirements of the Fire Department.

Implementation Measures

- **Implementation Measure A.** Require that all development comply with the requirements of the Kern County Fire Department or other appropriate agency regarding access, fire flows, and fire protection facilities.
- **Implementation Measure B.** The provision of an adequate water supply for firefighting purposes should be encouraged for all housing areas where an inadequate supply now exists.

Section 4.9 Hazardous Materials

Policies

- **Policy 1.** The proposed siting or expansion of hazardous waste facilities will be in conformance with the adopted Kern County and Incorporated Cities Hazardous Waste Management Plan.
- **Policy 2.** Innovative technologies to manage hazardous waste streams generated in Kern County will be encouraged.

Implementation Measures

- **Implementation Measure A.** Facilities used to manufacture, store, and use of hazardous materials shall comply with the Uniform Fire Code, with requirements for siting or design to prevent onsite hazards from affecting surrounding communities in the event of inundation.
- **Implementation Measure B.** The proposed siting or expansion of hazardous waste facilities will be in conformance with the adopted Kern County and Incorporated Cities Hazardous Waste Management Plan.

Kern County Specific Plans

Kern County has adopted 39 Specific Plans, 10 Rural Community Plans, and 14 Interim Rural Community Plan Maps. The Specific Plans and Rural Community Plans are intended to be an amplification of the goals and policies of the KCGP and are, therefore, consistent therewith. Interim Rural Community Plan Maps are areas where a specific plan has not been formally adopted, thus the goals and policies of the KCGP govern these areas. Future commercial cannabis cultivation, processing/packaging, and sales activities that would be authorized under the proposed project that would be located within the boundary of an adopted Specific Plan would be regulated according to County zoning.

Kern County Wildland Fire Management Plan

The Kern County Wildland Fire Management Plan documents the assessment of wildland fire situations throughout the SRAs within the County. The Kern County Fire Department Wildland Fire Management Plan provides for systematically assessing the existing levels of wildland protection services and identifying high-risk and high-value areas that are potential locations for costly and damaging wildfires. The goal of the plan is to reduce costs and losses from wildfire by protecting assets at risk through focused pre-fire management prescriptions and increasing initial attack success. Based on this assessment, preventive measures are implemented, including the creation of wildfire protection zones.

Kern County Building and Construction Ordinance (Title 17 of the Kern County Code of Ordinances)

Chapter 17.32 Fire Code

Kern County has adopted, by reference, portions of the California Building Standards Code and the Uniform Fire Code, with modifications and amendments. The purpose of this code is to prescribe the minimum requirements necessary to establish a reasonable level of fire safety to protect life and property from hazards created by fire, explosion, and dangerous conditions.

The Kern County Fire Code defines a hazardous fire area as any land that is covered with grass, grain, brush, or forest and situated (e.g., in an inaccessible location) so that a fire originating upon such land would present an abnormally difficult job of suppression and would result in great and unusual damage through fire or the resulting erosion.

Chapter 17.34 Wildland-Urban Interface Code

Kern County has adopted, by reference the Urban Wildland Interface Code, published by the International Fire Code Institute, with modifications and amendments. The purpose of this code is to

safeguard life and property and maintain public welfare to a reasonable degree by addressing hazards related to wildland fire exposures and fire exposures from adjacent structures, and to prevent structure fires from spreading to wildland fuels.

Kern County Multi-Hazard Mitigation Plan (2012)

The Kern County Multi-Hazard Mitigation Plan, adopted in November 2005 and updated in September 2012, was prepared for the purpose of reducing or eliminating long-term risk to people and property from natural hazards and their effects. The Multi-Hazard Mitigation Plan was prepared to meet the requirements of the Disaster Mitigation Act of 2000 and the Hazards Mitigation Grant Programs. The plan and planning process lays out the strategy that will enable Kern County to become less vulnerable to future disaster losses.

Kern County and Incorporated Cities Hazardous Waste Management Plan

In response to the growing public concern regarding hazardous waste management, State Assembly Bill (AB) 2948 enacted legislation authorizing local governments to develop comprehensive hazardous waste management plans. The intent of each plan is to ensure that adequate treatment and disposal capacity is available to manage the hazardous wastes generated within the local government's jurisdiction.

The Kern County and Incorporated Cities Hazardous Waste Management Plan (Hazardous Waste Plan) was first adopted by Kern County and each incorporated city before September 1988 and was subsequently approved by the State Department of Health Services. The Hazardous Waste Plan was updated and incorporated by reference into the KCGP in 2004 as permitted by Health and Safety Code Section 25135.7(b), and thus must be consistent with all other aspects of the KCGP.

The Hazardous Waste Plan provides policy direction and action programs to address current and future hazardous waste management issues that require local responsibility and involvement in Kern County. In addition, the Hazardous Waste Plan discusses hazardous waste issues and analyzes current and future waste generation in the incorporated cities, County, and State and federal lands. The purpose of the Hazardous Waste Plan is to coordinate local implementation of a regional action to effect comprehensive hazardous waste management throughout Kern County. The action program focuses on development of programs to equitably site needed hazardous waste management facilities; to promote on-site source reduction, treatment, and recycling; and to provide for the collection and treatment of small quantity hazardous waste generators. An important component of the Hazardous Waste Plan is the monitoring of hazardous waste management facilities to ensure compliance with federal and State hazardous waste regulations. The siting criteria and any subsequent environmental documentation required pursuant to the California Environmental Quality Act (CEQA) would also ensure the mitigation of adverse impacts associated with the siting of any new hazardous waste facility.

Kern County Operational Area Hazardous Materials Area Plan

The Hazardous Materials Area Plan identifies local, State, and federal responsibilities during incidents involving the release or threatened release of hazardous substances. According to the Kern County Operational Area Hazardous Materials Area Plan:

[H]azardous materials emergencies are the result of threatened releases, highway accidents, clandestine drug laboratories, train derailments, pipeline transportation accidents, pesticide drift incidents, or related fire and/or spills at fixed facilities.

Metropolitan Bakersfield General Plan (MBGP)

The MBGP, a joint effort between the Kern County Planning Department and the City of Bakersfield Planning Division, was last adopted on December 11, 2007. The MBGP includes both city and unincorporated County lands. The MBGP describes the community's physical development as well as its economic, social and environmental goals. Project-related development on unincorporated lands within the MBGP Planning Area would be subject to the following applicable policies and implementation measures of the MBGP, with respect to hazards and hazardous materials.

Chapter VIII. Safety Element

General Provisions

Goal

- **Goal 1.** To develop sustainable communities to preserve life, protect property, the environment, and the economy from natural hazards.

Public Safety

Goals

- **Goal 4.** Assure that fire, hazardous substance regulation and emergency medical service problems are continuously identified and addressed in a proactive way, in order to optimize safety and efficiency

Policies

- **Policy 6.** Promote fire prevention methods to reduce service protection costs and costs to the taxpayer.
- **Policy 7.** Enforce ordinances regulating the use/manufacture/sale, transport/disposal of hazardous substances, and require compliance with State and federal laws regulating such substances.
- **Policy 8.** The Kern County and Incorporated Cities Hazardous Waste Management Plan and Final Environmental Impact Report serves as the policy document guiding all facets of hazardous waste.
- **Policy 9.** Restrict, after appropriate public hearings, the use of fire-prone building materials in areas defined by the fire services as presenting high-conflagration risk.
- **Policy 12.** Where recommended by appropriate local, State or federal agencies for discretionary projects, soils shall be tested for concentrations of agricultural chemicals prior to grading permit approval whenever feasible. Contaminated soils shall be excavated and disposed of at a certified hazardous waste disposal facility whenever necessary.
- **Policy 13.** Fugitive dust emissions shall be controlled through applicable requirements (Regulation VIII) set forth by the San Joaquin Valley Unified Air Pollution Control District, including but not limited to; irrigation, paving of construction roads, and limiting grading

activities during periods of high wind. These practices would reduce potential adverse health effects resulting from the development of agricultural property.

- **Policy 15.** Fugitive dust emissions shall be controlled through applicable requirements set forth by the San Joaquin Valley Unified Air Pollution Control District (Regulation VIII), including but not limited to; irrigation, paving of construction roads, and limiting grading activities during periods of high wind. These practices would reduce potential adverse health effects as a result of exposure to Coccidioidomycosis.
- **Policy 16.** All new discretionary development projects shall be subject to environmental and design review on a site-specific, project-by-project basis, including but not limited to an assessment to determine whether hazardous materials present potential health effects to human health as required by the Department of Environmental Services.

4.8.4 Impacts and Mitigation Measures

This section analyzes the impacts associated with implementation of the project related to the risk of upset due to potential hazardous substances, including hazardous materials and/or hazardous waste within the project site and the vicinity, as well as other hazards to public safety. The impact analysis describes the methods used to determine the proposed project's impacts and lists the thresholds used to conclude the significance of an impact. Measures to mitigate (avoid, minimize, rectify, reduce, eliminate, or compensate for) significant impacts accompany each impact discussion, as appropriate.

Methodology

Potential impacts associated with the proposed project and mitigation measures were developed based on consultation with Kern County and review of the proposed amendments to the Kern County Code of Ordinances under Options A and B. The discussion below lists specific impacts and measures that would be incorporated to mitigate and reduce potential impacts to the extent feasible.

Development Standards Related to Hazards and Hazardous Materials

Option A

Option A of the proposed project would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Therefore, no development standards are identified in the proposed Zoning Ordinance; refer to Appendix B for specific wording of the proposed ordinance under Option A.

Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, testing, and retail cannabis stores with or without mobile delivery facilities. Development standards provided in the proposed Zoning Ordinance, that pertain to hazards and hazardous materials include, but are not limited to, the following (refer to Appendix C for specific working of the proposed ordinance under Option B):

- All cannabis facilities must be 0.5 mile from any school, park, day care center or youth center.
- The applicant must demonstrate compliance with all applicable mitigation measures prior to the issuance of a grading or building permit for any future cannabis related facility.

- A Fire Safety Plan must be approved by the Kern County Fire Department for future cannabis related facilities.
- All entrances to the future cannabis facility shall be clearly marked and legibly posted. No minors or adults below the age of 21 years old will be allowed on the premises.
- A Hazardous Materials Business Plan must be approved by the Kern County Environmental Health Services Division/Hazardous Materials Section.
- Future cannabis related facilities shall be equipped with an effective odor control system which at all times must prevent unreasonable interference with neighbors' use and enjoyment of their property. The odor control system shall: consist of one or more fans; utilize an alternative method or technology to achieve equal to or greater odor mitigation than provided by the fan system; and the system must be maintained in working order and in use.
- For indoor cultivation, processing and packaging, and distribution facilities, the project applicant must prepare an Odor Complaint Management Plan prior to approval of a site plan or issuance of a grading or building permit.
- For future cannabis related facilities, if construction is required, debris and waste generated would be recycled to the extent feasible.
- For cannabis cultivation (indoor and outdoor), processing and packaging, and distribution facilities, on-site energy shall be provided or offset with a solar photovoltaic system; small wind generators may be used only in appropriate areas of Eastern Kern County.
- No cannabis related facility shall have a private patio or café seating.
- Trash dumpsters shall be enclosed and not accessible to the public.

Thresholds of Significance

The Kern County CEQA Implementation Document and Kern County Environmental Checklist state that a project would normally be considered to have a significant impact if it would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment;
- For a project located within the adopted Kern County Airport Land Use Compatibility Plan, would the project result in a safety hazard for people residing or working in the project area;
- For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area;

- Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan;
- Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands; or,
- Would implementation of the project generate vectors (flies, mosquitoes, rodents, etc.) or have a component that includes agricultural waste. Specifically, would the project exceed the following qualitative threshold:

The presence of domestic flies, mosquitoes, cockroaches, rodents, and/or any other vectors associated with the project is significant when the applicable enforcement agency determines that any of the vectors:

- i. Occur as immature stages and adults in numbers considerably in excess of those found in the surrounding environment; and,
- ii. Are associated with design, layout, and management of project operations; and,
- iii. Disseminate widely from the property; and,
- iv. Cause detrimental effects on the public health or well-being of the majority of the surrounding population.

Project Impacts

Impact 4.8-1: Create a Significant Hazard to the Public or the Environment through the Routine Transport, Use, or Disposal of Hazardous Materials

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A does not provide opportunities for business development. Option A would continue to allow individuals to cultivate up to six plants on private property. Any use or disposal of hazardous materials would be similar to hazardous materials generated from residential gardens and the residential gardening standards would continue to apply. If cultivation occurs indoors, then grow-lamps may be used; however, they would be used for up to six plants and lightbulbs would have the same disposal requirements as other residential lightbulbs that are currently used in residences. Implementing Option A in the long-term would not result in the routine transport, use or disposal of hazardous materials beyond what currently exists for residential gardening.

Option A would result in the closure of existing cannabis dispensaries over a two-year period which could result in solid waste, including hazardous materials, as dispensaries are closed and cannabis products and supplies are removed from the dispensary sites. The existing cannabis dispensaries are located throughout the County, any hazardous waste identified during cannabis dispensary closures would be disposed of at the appropriate landfill within the County. All applicable federal, State, and local requirements and BMPs would be incorporated into the closure of existing medical dispensaries and the disposal of any hazardous materials. Option A would have a less than significant impact related to transport, use, or disposal of hazardous materials.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 square feet (ft^2) of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft^2 of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

Option B could result in the closure or relocation of existing cannabis dispensaries over a one- to two-year timeframe, to allow for amortization of the business investment, could result in solid waste, including hazardous materials, as dispensaries are closed and cannabis products and supplies are removed from the dispensary sites. All applicable federal, State, and local requirements and BMPs would be incorporated into the closure of existing medical dispensaries and the disposal of any hazardous materials.

The Kern County and Incorporated Cities Hazardous Waste Management Plan (Hazardous Waste Plan) identifies goals and policies regarding the transport of hazardous wastes in and throughout Kern County. The Hazardous Waste Plan establishes State and federally maintained roads as candidate Commercial Hazardous Waste Shipping Routes in and through the County, except those to collect locally generated hazardous wastes. The KCGP Circulation Element identifies adopted commercial hazardous shipping routes. The hazardous materials shipping routes within the County are Interstate (I) 5, U.S. Route (US) 395; State Route (SR) 14; SR-33; SR-43; SR-46; SR-58; SR-65; SR-99; SR-119; and SR-166. The MBGP states that commercial hazardous material shipping routes must be State and federally maintained roads; the MBGP also states that trucks are allowed to use the most direct route when traveling from an identified route to sites that use hazardous materials. The transport of proposed project-related hazardous materials would occur along these approved routes. Compliance with the Kern County Hazardous Waste Plan, KCGP, MBGP, and/or applicable specific plan would be considered adequate to offset the potentially negative effects related to the transport of hazardous materials within the County. In addition, regulations for the transportation of hazardous and other regulated substances are covered under the Federal

Hazardous Materials Transportation Law (49 U.S.C. 5101-5127) and the Hazardous Materials Regulations (49 CFR Parts 171-180). Under these regulations, hazardous materials must be transported pursuant to materials classification, hazard communication, packaging requirements, operational rules, training and security, and registration. All hazardous materials being transported must be handled, packaged, labeled, and transported in a manner that is consistent with the Hazardous Materials Regulations set forth for each categorized hazardous material/waste.

Hazardous and non-hazardous wastes would likely be transported to and from the future cannabis-related facilities during the construction, if required, and operation of the proposed facility. Construction activities, as well as future cannabis cultivation, processing and packaging, and distribution activities, would involve the use of some hazardous materials, such as diesel fuel, hydraulic oil, grease, solvents, adhesives, paints, and other petroleum based products, although these materials are commonly used during construction and operation activities and would not be disposed of on a future facility site. Any hazardous waste or debris that is generated during construction or operation of the proposed project would be collected and transported away from the site, and disposed of at an approved off-site landfill or other such facility. In accordance with the California Health and Safety Code and Kern County regulations, the project applicant would be required to prepare and submit a hazardous materials business plan for any uses that would require the use and storage of hazardous materials, as discussed in Mitigation Measure MM 4.8-1, to the Kern County Public Health Service Department, Environmental Health Services Division/Hazardous Materials Section. Therefore, with implementation of Mitigation Measure MM 4.8-1, no significant hazard to the public or to the environment through the routine transport, use, or disposal of hazardous waste during any construction or operation of the proposed project would occur.

Construction of future cannabis related facilities would involve the use of hazardous materials, such as diesel fuel, hydraulic oil, grease, solvents, adhesives, paints, and other petroleum based products, although these materials are commonly used during construction activities and would not be disposed of on the future cannabis-related facility site. Any hazardous waste or debris that is generated during construction of a future cannabis facility would be collected and transported to an approved landfill or other such facility. The contractor would be required to comply with applicable federal and State environmental and workplace safety laws. These regulations include a requirement for contractors to submit a hazardous materials inventory and emergency plan to the Kern County Fire Department for review and approval. Adherence to these regulatory requirements would ensure that this impact would be less than significant.

Cannabis cultivation, similar to other agricultural crops, would require the use of pesticides and fertilizers. Potting soil, amendments, and fertilizers contain nutrients, particularly nitrogen and phosphorous, which when excess water is applied and untreated runoff occurs, these nutrients could contribute to toxic algae blooms, and deplete the dissolved oxygen that fish and other aquatic species need to survive. In addition, pesticides can lead to many unintended effects, and often are easily mobilized by storm water runoff. There are no pesticides registered specifically for use on cannabis, and the use of pesticides on cannabis plants has not been reviewed for safety, human health effects, or environmental impacts. Under California law, the only pesticide products not illegal to use on cannabis are those that contain an active ingredient that is exempt from residue tolerance requirements and either registered and labeled for a broad enough use to include use on cannabis or exempt from registration requirements as a minimum risk pesticide under FIFRA section 25(b) and the California Code of Regulations, Title 3, Section 6147. There are many

effective practices for controlling pests and enhancing soil and plant growth that do not require chemical fertilizers or pesticides. Overuse or improper use and storage of potting soil, amendments, fertilizers, pesticides, poisons and petroleum products could result in a significant hazard to the public. Mitigation measure would be implemented in order to reduce risks associated with the use or disposal of hazardous materials.

The byproducts of cannabis manufacturing, including processing, extraction and quality assurance testing, can be subject to hazardous waste requirements. It is the generator's responsibility in California to determine if its waste is considered hazardous and follow all hazardous waste management requirements as applicable. Local Certified Unified Program Agencies (CUPAs) generally enforce generator requirements and other hazardous materials management provisions. The CUPA for County of Kern is the Environmental Health Services Division.

The area of most concern in the processing of cannabis would typically be the extraction and concentration of THC and other cannabinoids from cannabis plant leaves and buds to produce highly concentrated oils, honeys, and waxes. This is achieved through a variety of extraction processes and solvents. Cannabis processing for concentrates such as oils, honeys, and waxes uses a variety of extraction processes and solvents, such as butane (C_4H_{10}), carbon dioxide (CO_2), or alcohol distillation. Cannabis or infused products found to have residues of banned chemicals be destroyed, as they pose a threat to public health. In California, the legislature passed Assembly Bill (AB) 2679 on September 29, 2016, which amends Section 11362.775 of the Health and Safety Code and establishes rules for the manufacture of oils, waxes, and other concentrates. These manufacturing systems may be solventless, or may use non-flammable, non-toxic solvents. The implementation of mitigation measures would reduce the risk of creating a significant hazard to the public through the transport, use, or disposal of hazardous materials.

Certain future cannabis-related activities and facilities would require processing a Conditional Use Permit (CUP) and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing before the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to creating a significant hazard to the public through the transport, use, or disposal of hazardous materials would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Transport, Use, or Disposal of Hazardous Materials

1. Federal Toxic Substances Control Act, RCRA, and HSWA which regulate the generation, transportation, treatment, storage and disposal of hazardous waste.
2. OSHA and Cal/OSHA related to workplace safety.
3. Pipeline Safety and Management related to transport and storage of natural gas.
4. CEQA related to hazardous materials.

5. Hazardous Materials Release Response Plans and Inventory Act, HWCA, Unified Program, California OES, HMBP, SB 1639 related to hazardous materials and HMBPs.
6. CalEPA and DTSC regulations related to hazardous materials.
7. CCR Title 3 Division 6 which regulates pesticides and pest control operations.
8. AB 2679 which establishes guidelines regarding cannabis related manufacturing of oils, waxes, and other concentrates.
9. KCGP Land Use, Open Space, and Conservation Element, Section 1.4, Public Facilities and Services, Goal 9 and Implementation Measures N, O, and R related to hazardous materials transport, use, and disposal.
10. KCGP Circulation Element, Section 2.5.4, Transportation of Hazardous Materials, Issue, Goal 1, Policies 1 and 2, and Implementation Measure A related to hazardous material transport.
11. KCGP Safety Element, Section 4.1, Introduction, Goals 1 and 8 related to hazardous materials and public safety.
12. KCGP Safety Element, Section 4.2, General Policies and Implementation Measure, which Apply to More than One Safety Constraint, Policies 1 through 4 and Implementation Measures A, C, D, E, and F related to hazardous materials, wildfires, and vectors.
13. KCGP Safety Element, Section 4.9, Hazardous Materials, Policies 1 and 2 and Implementation Measures A and B related to generation of hazardous materials.
14. Kern County Multi-Hazard Mitigation Plan, Kern County and Incorporated Cities Hazardous Waste Management Plan, and Kern County Operational Area Hazardous Materials Area Plan ensures hazard and hazards material management and safety.
15. MBGP Safety Element, General Provisions Goal 1, and Public Safety Goal 4, Policies 7, 8, 12, and 16 related to the use of hazardous materials.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

Implement Mitigation Measure MM 4.4-11, as described in Section 4.4, *Biological Resources*, Mitigation Measures MM 4.9-2 through MM 4.9-5, as described in Section 4.9, *Hydrology and Water Quality*.

MM 4.8-1 Prior to the issuance of grading or building permits or the approval of a site plan for a cannabis facility and operation that would involve the use of hazardous materials, the project applicant shall prepare a Hazardous Materials Business Plan in accordance with the California Health and Safety Code and Kern County regulations and shall submit the plant to the Kern County Health Services Department for review and approval.

The Hazardous Materials Business Plan shall delineate storage areas for hazardous material and hazardous waste; describe proper handling, storage, and disposal techniques; describe methods to be used to avoid spills and minimize impacts in the

event of a spill; describe procedures for handling and disposing of unanticipated hazardous materials encountered during construction; and establish public and agency notification procedures for spills and other emergencies, including fires. The project applicant shall provide the Hazardous Materials Business Plan to all contractors working on the project and shall ensure that one copy is available on the site at all times.

MM 4.8-2 For cannabis processing operations with systems that use solvents that are potentially flammable or toxic, the project applicant shall provide written verification to the Kern County Health Services Department and the Kern County Planning and Natural Resources Department that the cannabis operations meet the following requirements:

- Use a closed-loop system that will prevent off-gassing.
- Use solvents that are recognized as safe pursuant to the federal Food, Drug and Cosmetic Act.
- Have a licensed engineer certify that the system was commercially manufactured, is safe for its intended use, and was built to codes of recognized and generally accepted good engineering practices, including, but not limited to, the American Society of Mechanical Engineers, the American National Standards Institute, Underwriters Laboratories, the American Society for Testing and Materials, or Occupational Safety and Health Administration Nationally Recognized Testing Laboratories.
- Have a certification document that includes the unit's serial number and is signed by a professional engineer.
- Receive and maintain approval from local fire officials for the closed-loop system, other equipment, the extraction operation and the facility.
- Adhere to State and national fire protection standards.

MM 4.8-3 The following measures shall be implemented regarding pesticide, herbicide, rodenticide, and fertilizer applications:

- All uses of weed and pest control compounds shall comply with the application restrictions mandated by the U.S. Environmental Protection Agency and the California Department of Pesticide Regulation.
- The application of herbicides, rodenticides, or fertilizers shall be in compliance with all State and federal laws and regulations and implemented by a Licensed Qualified Applicator. Herbicides, rodenticides, or fertilizers shall not be applied during or within 72 hours of a scheduled rain event. In riparian areas only water-safe herbicides shall be used. Herbicides, rodenticides, or fertilizers shall not be applied when wind velocities exceed six miles per hour.
- The use of herbicides, rodenticides, or fertilizers for vegetation control shall be restricted to those approved by the United States Fish and Wildlife Service and the California Department of Fish and Wildlife. No rodenticides shall be used on any site unless approved by the United States Fish and Wildlife Service, and the California Department of Fish and Wildlife, and shall observe label and other restrictions mandated by the United States Environmental

Protection Agency, California Department of Food and Agriculture, and State and federal laws and regulations.

- If herbicides, pesticides or rodenticides are to be utilized at a cannabis facility, the project applicant or personnel applying herbicides, pesticides or rodenticides must have the appropriate State and local applicator licenses and comply with all State and local regulations regarding use. Herbicides, pesticides or rodenticides shall be mixed and applied in conformance with the product manufacturer's directions. The applicator shall be equipped with splash protection clothing and gear, chemical-resistant gloves, chemical spill/splash wash supplies, and material safety data sheets for all hazardous materials to be used. To minimize harm to wildlife, vegetation, and waterbodies, herbicides, pesticides, or rodenticides shall not be applied directly to wildlife, products identified as non-toxic to birds and small mammals shall be used if nests or dens are observed, and herbicides shall not be applied within 50 feet of any surface waterbody when water is present. Herbicides, pesticides, or rodenticides shall not be applied if it is raining at the site, rain is imminent, or the target area has puddles or standing water. Herbicides, pesticides, or rodenticides shall not be applied when wind velocity exceeds 10 miles per hour. If spray is observed to be drifting to a non-target location, spraying shall be discontinued until conditions causing the drift have abated.

Level of Significance after Mitigation

Impacts related to Option A would be less than significant. Impacts regarding Option B would be less than significant.

Impact 4.8-2: Create a Significant Hazard to the Public or the Environment through Reasonably Foreseeable Upset and Accident Conditions Involving the Release of Hazardous Materials into the Environment

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on commercial cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A does not provide opportunities for business development. Option A would continue to allow individuals to cultivate up to six plants on private property. Any upset or

accidental release of hazardous materials would be similar to the risk associated with residential gardens; the residential gardening standards would continue to apply. Therefore, Option A would not result in the creating of a significant hazard to the public or the environment through the release of hazardous materials. Impacts would be less than significant in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

During construction, any activity which results in the accidental release of hazardous or potentially hazardous materials could result in a hazard to the public or the environment. Materials that could contribute to this impact include, but are not limited to, the following: lead-based paint flakes, diesel fuel, gasoline, lubricating fluids, solvents, hydraulic fluid, antifreeze, transmission fluid, cement slurry, and other fluids utilized by construction and maintenance vehicles and equipment; however, the potential consequences of any spill or release of these types of materials are generally small due to the localized, short-term nature of such releases. Furthermore, implementation of a Stormwater Pollution Prevention Plan (SWPPP) would identify measures regarding the handling of these types of materials and the protocols for actions taken if a spill or release does occur. Therefore, with implementation of mitigation measures, impacts associated with these types of pollutants would be considered less than significant.

Hazardous materials from historic land uses (legacy hazards) could be encountered. In addition, pesticides are potentially present in soils on future cannabis related sites within zones A (Exclusive Agriculture) and A-1 (Limited Agriculture) due to past and on-going agricultural activities. In addition, portions of the County, mostly in the Valley Region, contain large oil fields and many oil and gas extraction wells (refer to Figure 4.8-3). To reduce potential release of hazardous materials associated with potential hazards, mitigation measures would require that if petroleum products or other suspect materials or wastes of unknown origin are discovered during ground disturbing activities, all work would immediately halt and proper handling or treatment of the materials shall be determined. In addition, Mitigation Measure MM 4.8-4 would require the completion of record searches to determine if any oil-related wells are located within the property and provides guidance if wells are present.

Existing site structures may include asbestos-containing materials (ACMs). There is the potential for ACMs to exist in on-site structures. Improvements to existing structures could result in the demolition or remodeling of structures containing ACM. Mitigation Measure MM 4.8-6 requires that any

structure to be demolished or extensively remodeled as part of a future cannabis facility be tested for ACMs prior to demolition or remodeling. If ACMs are detected, then a certified asbestos abatement specialist would be required to handle and dispose of the material prior to project construction. In addition, Mitigation Measure MM 4.8-6 would require the coordination with the San Joaquin Valley Air Pollution Control district (SJVAPCD) or Eastern Kern Air Pollution Control District (EKAPCD), as appropriate, to determine if additional requirements are necessary. Implementation of Mitigation Measure MM 4.8-6 would reduce the potential ACM-related impacts to less than significant.

As discussed in Impact 4.8-1, cannabis-related activities could result in the use of hazardous materials. Future cannabis cultivation activities, similar to other agricultural crops, would require the use of pesticides and fertilizers. Future cannabis processing activities would use a variety of extraction processes and solvents, some of which are considered hazardous. Mitigation Measures MM 4.8-1 would require that a future cannabis related business provide a Hazardous Materials Business Plan if the facility would be using hazardous material. This would provide information regarding the hazardous materials stored and used on-site, and provide actions required if hazardous materials are accidentally released into the environment. Mitigation Measures MM 4.8-2 and MM 4.8-3 would help to reduce the chance of hazardous material releases into the environment.

Assembly Bill (AB) 2679 amended Section 11362.775 of the California Health and Safety Code and established rules for the manufacturing of oils, waxes and other concentrates produced by a collective or cooperative producing medical cannabis products. AB 2679 provides guidelines on the manufacturing systems and solvents that are allowable for commercial cannabis. Like other businesses that use hazardous materials, and in accordance with the California Health and Safety Code and Kern County regulations, business owners would be required to prepare a HMBP and submit it to the Kern County Public Health Services Department for review and approval. Implementation of HMBPs not only helps to reduce the frequency of emergency calls to the KCFD, it allows the KCFD to be prepared to respond to all types of emergencies that could occur at such facilities.

If a future indoor cannabis cultivator promotes plant growth by elevating levels of carbon dioxide (CO₂), the process of elevation CO₂ levels for plant growth can produce elevated levels of ultrafine particles and carbon monoxide (CO); which can be hazardous to workers within the indoor facility. Appropriate heating, ventilation, and air conditioning (HVAC) systems would be required. The future cannabis related facility would be required to adhere to development standards as outlined in Appendix C of this EIR, as well as all other federal, State, and local requirements regarding HVAC systems.

There is a potential that hazardous materials used at a future cannabis-related facility would be released into nearby drainages or other surface waters; however, Mitigation Measure MM 4.9-1 through MM 4.9-5 would reduce the potential for any spilled materials to enter nearby watercourses.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing before the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP

processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to the creating of significant hazards to the public or environment through upset and accident condition involving the release of hazardous materials would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Upset and Accidental Release of Hazardous Materials

Refer to Impact 4.8-1, above, for a summary of applicable existing regulations and policies related to release of hazardous materials. In addition, the following are also applicable.

1. CERCLA, CWA and SPCC Rule related to releases of hazardous substances.
2. DOGGR, PRC 3208.1 related to oil, gas, and geothermal wells and pollution prevention.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

Implement Mitigation Measures MM 4.8-1 through MM 4.8-3, as described above, Mitigation Measure MM 4.4-11, as described in Section 4.4, *Biological Resources*, and Mitigation Measures MM 4.9-1 through MM 4.9-5, as described in Section 4.9, *Hydrology and Water Quality*.

MM 4.8-4 For any cannabis facility on property located in the Valley area, the project applicant shall contact the California Department of Conservation, Division of Oil, Gas, and Geothermal Resources for record searches to determine the location of any active, exploratory, or closed oil-related wells within the property boundaries, or to confirm absence of oil-related wells. If active, exploratory, or closed oil-related wells are identified on the property, the project applicant shall include in any ground disturbing activity application, the location and descriptions of any oil and gas equipment on the parcel

- a. Prior to the approval of a site plan or issuance of a grading or building permit, for lands that include abandoned oil and gas wells, or abandoned oil and ancillary equipment, such wells shall be decommissioned and ancillary equipment removed, as required by applicable law, including but not limited to the regulatory requirements of the California Department of Conservation, Division of Oil, Gas, and Geothermal Resources. If soil contamination conditions exist in the oil and gas equipment areas, testing and remediation shall be required. Any application for a conditional use permit shall include details that demonstrate compliance.
- b. Any grading permits approved for a cannabis facility that involves ground disturbing activities shall require the permittee to report to the County any previously-unknown oil and gas equipment that is discovered during site grading or construction activities, and to comply with (a), above, prior to obtaining any building permit for the construction of a structure at the location of the newly-discovered oil and gas equipment.

- c. Construction and operation activities area required to avoid oil and gas equipment, including wells and ancillary equipment such as pipelines and storage tanks, with a 50-foot setbacks.

MM 4.8-5 If previously unknown soil contamination conditions are discovered during construction activities, the project applicant will (a) report these conditions to the County and, as applicable, other environmental oversight agencies; (b) prepare and implement a Soil Management Plan (SMP) addressing the newly discovered environmental conditions under the oversight of the County or alternate environmental oversight agency.

MM 4.8-6 If construction activities result in demolition or renovation of an existing structure, the project applicant shall complete an asbestos survey. The asbestos survey shall be conducted by an Asbestos Hazard Emergency Response Act and California Occupational Safety and Health Administration certified building inspector to determine the levels of asbestos in the structure, prior to demolition or renovation,

1. For projects within the San Joaquin Valley Air Pollution Control District - pursuant to the Asbestos Program. Compliance with Valley Air District Rule 4002 shall be required for any demolition or renovation work involving asbestos containing materials.
2. For projects within the Eastern Kern Air Pollution Control District, the asbestos survey shall be pursuant to the asbestos program. Compliance with District Rule 423 shall be required for any demolition or renovation work involving asbestos containing materials.

Level of Significance after Mitigation

Impacts related to Option A would be less than significant. Impacts regarding Option B would be less than significant.

Impact 4.8-3: Emit Hazardous Emissions or Handle Hazardous or Acutely Hazardous Materials, Substances, or Waste within One-Quarter Mile of an Existing or Proposed School

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on commercial cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would

not be allowed. Option A does not provide opportunities for business development. Option A would continue to allow individuals to cultivate up to six plants on private property. Any upset or accidental release of hazardous materials would be similar to the risk associated with residential gardens; the residential gardening standards would continue to apply. Therefore, Option A would not result in emitting or handling hazardous materials within 0.25 mile of a school. Impacts would be less than significant in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

Future retail cannabis stores would be required to be located a minimum of 0.5 mile from any school, day care center, youth center while children are present, or incorporated city limit boundary. Appendices D, E, and F provide maps outlining areas within each zone classification that have the potential for future cannabis-related facilities. As discussed above, future retail cannabis stores are not anticipated to use or release hazardous materials. However, if renovation or demolition of a building is required to house the future retail cannabis store, then there is potential that hazardous materials could be encountered. Mitigation Measures MM 4.8-1 through MM 4.8-6 would reduce these impacts. Each retail cannabis store would require a CUP (as outlined in Chapter 3, *Project Description*, and further explained in the Option B proposed ordinance language provided in Appendix C of this EIR). Therefore, all future retail cannabis stores would require project-specific review under CEQA, which would further analyze hazardous materials used or encountered within 0.25 mile (1,320 feet) of a school.

Future cannabis cultivation (indoor and outdoor), processing and packaging, and distribution facilities could emit or handle hazardous materials. As described in Chapter 3, *Project Description*, future cannabis cultivation (indoor and outdoor), processing and packaging, and distribution facilities would be required to be located a minimum of 0.5 mile (2,640 feet) from any school, day care center, youth center while children are present, or incorporated city limit boundary. Appendices D, E, and F provide maps outlining areas within each zone classification that have the potential for future cannabis-related facilities, showing a one (1)-mile radius. Even with this distance, Mitigation Measures MM 4.8-1 through MM 4.8-6 would be required. Therefore, impacts would be less than significant.

Environmental risks to human health include potential exposure to unsafe agricultural chemicals as a result of development on or adjacent to agricultural lands. Potential risks to human health due to

pesticide usage can result from contamination of groundwater, inhalation due to crop dusting, and inhalation of contaminated dust, and as a result of grading activities. Additionally, pesticide overspray is a potential human health hazard. Pesticide overspray is defined as applying pesticide beyond the boundaries of the target areas. Pesticide drift, like overspray, often implies a lack of due care on the part of the pesticide applicator. Drift is defined as the movement of pesticide in air currents or by diffusion onto property beyond the boundaries of the target area. As mentioned above, future cannabis cultivation (indoor and outdoor), processing and packaging, and distribution facilities would be required to be located a minimum of 0.5 mile (2,640 feet) from any school, day care center, youth center while children are present, or incorporated city limit boundary. Even with this distance, Mitigation Measures MM 4.8-1 through MM 4.8-6 be required. Therefore, impacts would be less than significant.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing before the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to the emission or handling of hazardous materials with 0.25 mile of a school would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Emitting or Handling Hazardous Materials within 0.25 Mile of a School

Refer to Impacts 4.8-1 and 4.8-2, above, for a summary of applicable existing regulations and policies related to use or release of hazardous materials within 0.25 mile from a school. In addition, the following are also applicable.

1. California Education Code related to hazardous substances on or near school sites.
2. KCGP Land Use, Open Space, and Conservation Element, Section 1.3, Physical and Environmental Constraints, Goal 1 and Policy 1 related to developing areas that are not hazardous.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

Implement Mitigation Measures MM 4.8-1 through MM 4.8-6, as described above.

Level of Significance after Mitigation

Impacts related to Option A would be less than significant. Impacts regarding Option B would be less than significant.

Impact 4.8-4: Create a Hazard to Public or the Environment as a Result of Being Located on a Site that is Included on a List of Hazardous Material Sites Compiled Pursuant to Government Code Section 65962.5

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on commercial cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A does not provide opportunities for business development. Option A would continue to allow individuals to cultivate up to six plants on private property, similar to the existing conditions. Therefore, Option A would not result in facilities being located on a site that is included on a list of hazardous materials sites pursuant to Government Code Section 65962.5. No impacts would occur in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

Future retail cannabis stores that would be allowed through the implementation of the proposed project would be allowed in the following zone classifications: C-1 (Neighborhood Commercial); C-2 (General Commercial); CH (Highway Commercial); M-1 (Light Industrial); M-2 (Medium Industrial); and M-3 (Heavy Industrial). These zones generally contain existing development and structures. Therefore, there is a potential for a future retail cannabis store to be located on a site that is included in a hazardous materials list pursuant to Government Code 65962.5. However, as described below, in Chapter 3, *Project Description*, and in Appendix C of this EIR, all future retail

cannabis stores with or without mobile delivery would be required to process a CUP and additional site-specific review under CEQA. Impacts would be less than significant in this regard.

Future cannabis indoor cultivation facilities would be allowed within zone classifications A (Exclusive Agriculture); A-1 (Limited Agriculture); M-1 (Light Industrial); M-2 (Medium Industrial); and M-3 (Heavy Industrial); C-2 (General Commercial); and CH (Highway Commercial). Future commercial cannabis cultivation would be limited to 150 acres of outdoor cultivation countywide within zone classification A (Exclusive Agriculture) only. Processing, packaging, and distribution facilities would be allowed under agricultural and industrial zone classifications: A (Exclusive Agriculture); M-2 (Medium Industrial); and M-3 (Heavy Industrial). There is a potential for future cannabis related facilities to be located on a site that is included in a hazardous materials list pursuant to Government Code 65962.5. Mitigation Measure MM 4.8-7 would require the project applicant to provide written verification that the facility is not located on a site included in a hazardous materials list. Mitigation Measure MM 4.8-8 would require subsurface testing, and resultant remediation if required, if a future cannabis related facility is located on a site included on a hazardous materials list. In addition, future cannabis indoor cultivation facilities proposed in zones C-2 (General Commercial) and CH (Highway Commercial) would be required to process a CUP and additional site-specific review under CEQA. Impact would be less than significant in this regard.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing before the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to facilities located on a site that is included on a list of hazardous materials compiled pursuant to Government Code Section 65962.5 would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Facilities Located on a Hazardous Materials List Pursuant to Government Code 65962.5

Refer to Impacts 4.8-1, 4.8-2 and 4.8-3, above, for a summary of applicable existing regulations and policies related to facilities located on a hazardous materials list pursuant to Government Code 65962.5.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

Implement Mitigation Measures MM 4.8-1 through MM 4.8-6, as described above.

MM 4.8-7 Prior to the approval of a site plan or issuance of a grading or building permit or for any application for a conditional use permit, the project applicant shall review the hazardous materials list pursuant to Government Code Section 65962.5. If the

property is listed the applicant shall submit a Phase I ASTM report that determines the current state of the hazardous materials, and any management restrictions on the use of the site. The report and any recommendations shall be reviewed by Kern County Public Health Services and Kern County Planning and Natural Resources to determine if a Phase II ASTM is warranted.

Appropriate subsurface testing and recommended remediation, with regulatory agency oversight, shall be undertaken if considered warranted by Kern County Public Health in consultation with the Kern County Planning and Natural Resources Department. Potential remediation options could include excavation and off-site disposal of contaminated soil, in-place treatment, and/or the installation of protective barriers.

Level of Significance after Mitigation

No impacts would occur related to Option A. Impacts regarding Option B would be less than significant.

Impact 4.8-5: For a Project Located within the Adopted Kern County Airport Land Use Compatibility Plan or within Two Miles of a Public Airport, Would the Project Result in a Safety Hazard for People Residing or Working in the Project Area

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on commercial cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed, thus Option A would not result in an increase in people residing or working in an area within the Kern County ALUCP. Option A would continue to allow individuals to cultivate up to six plants on private property similar to existing conditions. Therefore, Option A would not result in an increased safety hazard for people residing or working within the Kern County ALUCP or within two miles of a public airport. Impacts would be less than significant in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing,

packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

There are more than 300 public, private, and military airports, balloonports, gliderports, heliports, and ultraflight flightparks within a 100-mile radius of the City of Bakersfield (AirNav, 2017a). The Kern County ALUCP identifies 18 airports within the project site: 8 within the Valley Region; 4 within the Mountain Region; and 4 within the Desert Region.

The Kern County ALUCP specifies restrictions within designated zones surrounding airports to ensure that activities within those zones are compatible with the safe operation of the airport. If cannabis related activities are proposed in the vicinity of one of the airports identified in the Kern County ALUCP, some activities may not be compatible with the ALUCP and, therefore, would have a significant impact. The proposed project would create a hazard if the height of structures at the future cannabis related facility creates obstructions to air navigation by being poorly lit or marked or by obstructing the navigation system used by aircraft. It is not anticipated that future cannabis related facilities would exceed height limits of 200 feet, in airport influence zones. Lighting could exceed restrictions on lighting type, design, and placement in certain airport influence zones. Mitigation Measures MM 4.8-9 and MM 4.8-10 would reduce impacts to less than significant levels. Additionally, future cannabis related facilities would be required to comply with federal, State, and local regulation, the Kern County ALUCP, any specific plans applicable to the future facility, as well as the development standards provided above and further detailed within Appendix C of this EIR.

Portions of the project site fall inside the boundaries of the Special Use Airspace of the Joint Service Restricted R-2508 Complex (Military Review Requirements). This complex is considered an extension of the airspace of the military installations within the complex, including Edwards AFB, China Lake NAWS, and Fort Irwin/National Training Center, and covers 20,000 square miles. As such, the project site falls within a special use military airspace where structure height shall not exceed the maximum allowable heights specified in Figure 19.08.160 of the Kern County Zoning Ordinance. Generally, areas within the eastern portion of the Mountain Region and the Desert Region would require structures to be no more than 100 feet in height. Areas within the western portion of the Mountain Region and with the Valley Region would require structures to be no more than 200 feet in height in some areas, while other areas would require no review. Mitigation Measure MM 4.8-10 would reduce impacts to less than significant levels.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing before the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP

processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to safety hazards for people residing or working within the Kern County ALUCP or within two miles of a public airport would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Public Airports

1. FAA related to aviation safety.
2. KCGP Circulation Element, Section 2.5, Other Modes, Goal 1, Policies 1 and 2, and Implementation Measures A and B related to aviation safety.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

MM 4.8-8 Establishment of any cannabis facility on property that is within the adopted Kern County Airport Land Use Compatibility Plan shall require the project applicant to comply with all applicable policies within the Kern County Airport Land Use Compatibility Plan. The project applicant shall provide evidence of compliance to the Kern County Planning and Natural Resources Department.

MM 4.8-9 The project applicant shall provide the Kern County Planning and Natural Resources Department with written documentation of the distance between the cannabis facility and the nearest public airport, private airport, or private airstrip. If the establishment a cannabis facility is on property that is within two miles of a public airport, within the Kern County Airport Land Use Compatibility Plan, or within the vicinity of a private airstrip, then any new structures shall be no more than 200 feet in height.

MM 4.8-10 The project applicant shall provide the Kern County Planning and Natural Resources Department with written documentation of the location of the cannabis facility within the Special Use Airspace of the Joint Service Restricted R-2508 Complex (Military Review Requirements) and that the cannabis facility structure will not exceed the maximum allowable heights specified in Figure 19.08.160 of the Kern County Zoning Ordinance as follows:

- A structure located within the red zone with diagonal lines cannot exceed 100 feet in height.
- A structure located within the red zone cannot exceed 200 feet in height.
- A structure located in the yellow zone cannot exceed 500 feet in height.

Level of Significance after Mitigation

Impacts related to Option A would be less than significant. Impacts regarding Option B would be less than significant.

Impact 4.8-6: For a Project Located within the Vicinity of a Private Airstrip, Would the Project Result in a Safety Hazard for People Residing or Working in the Project Area

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on commercial cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed, thus Option A would not result in an increase in people residing or working in an area within close proximity of a private airstrip. Option A would continue to allow individuals to cultivate up to six plants on private property similar to existing conditions. Therefore, Option A would not result in an increased safety hazard for people residing or working within close proximity of a private airstrip. Impacts would be less than significant in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

As mentioned above, there are more than 300 public, private, and military airports, balloonports, gliderports, heliports, and ultraflight flightparks within a 100-mile radius of the City of Bakersfield (AirNav, 2017a). The Kern County ALUCP identifies 18 airports within the project site: eight within the Valley Region; four within the Mountain Region; and four within the Desert Region. Portions of the project site fall inside the boundaries of the Special Use Airspace of the Joint Service Restricted R-2508 Complex (Military Review Requirements).

With respect to private airstrips, the proposed project would create a hazard if the height of structures at the future cannabis related facility creates obstructions to air navigation by being poorly lit or marked or by obstructing the navigation system used by aircraft. It is not anticipated that future cannabis related facilities would exceed height limits of 200 feet, in airport influence zones. Lighting could exceed restrictions on lighting type, design, and placement in certain airport influence zones. Mitigation Measures MM 4.8-8 through MM 4.8-10 would reduce impacts to less than significant levels. Additionally, future cannabis related facilities would be required to comply with federal, State, and local regulation, the Kern County ALUCP, any specific plans applicable to the future facility, as well as the development standards provided above and further detailed within Appendix C of this EIR.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing before the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to safety hazards for people residing or working within close proximity to a private airport or airstrip would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Private Airstrips

Refer to Impact 4.8-5, above, for a summary of applicable existing regulations and policies related to aviation and private airstrips.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

Implement Mitigation Measures MM 4.8-8 through MM 4.8-10, as described above.

Level of Significance after Mitigation

Impacts related to Option A would be less than significant. Impacts regarding Option B would be less than significant.

Impact 4.8-7: Impair Implementation of, or Physically Interfere with, an Adopted Emergency Response Plan or Emergency Evacuation Plan

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis

dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on commercial cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A does not provide opportunities for business development. Option A would continue to allow individuals to cultivate up to six plants on private property similar to existing conditions. Therefore, Option A would not impair or physically interfere with an adopted emergency response plan or emergency evacuation plan. No impact would occur in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

The Kern County Emergency Operations Plan establishes an emergency management organization and assigns functions and tasks consistent with California's standardized Emergency Management System and the National Incident Management System. It provides an integration and coordination of planning efforts of the County with those of its cities, special districts and the State. The KCFD maintains the Isabella Dam Failure Evacuation Plan specifies evacuation routes and evacuation zones. The area of inundation is shown in Figure 4.9-3 and includes most of the Valley Region. The area is divided into five zones for evacuation and identifies the evacuation routes for the five zones. The Draft Kelso Creek Emergency Operations Plan provides the framework for communication protocol and alert and warning operations due to potential or actual flooding that would impact communities in the Kelso Creek area.

The future cannabis related activities and facilities are unlikely to result in a significant impact to the implementation of or to interfere with the any emergency response or evacuation plan affecting the project area. While future cannabis related activities may include facilities along or equipment using emergency evacuation routes, setback distances from public roadways, residences, and other structures in the vicinity of future cannabis related facilities would ensure that activities would not

impair the implementation of or physically interfere with an emergency response plan. The potential impact would be less than significant and no mitigation measures would be required.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing for the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to emergency response routes and emergency evacuation plans would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Emergency Response Routes and Emergency Evacuation Plans

Refer to Impacts 4.8-1, 4.8-2 and 4.8-3, above, for a summary of applicable existing regulations and policies related to emergency response routes and evacuation plans. In addition, the following is also applicable.

1. The Office of Environmental Management implements the TEPP related to emergency response plans.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

No mitigation measures are required.

Level of Significance

No impacts would occur related to Option A. Impacts regarding Option B would be less than significant.

Impact 4.8-8: Expose People or Structures to a Significant Risk of Loss, Injury, or Death Involving Wildland Fires, Including Where Wildlands are Adjacent to Urbanized Areas or Where Residences are Intermixed with Wildlands

This analysis discusses the fire risk and onsite methods to reduce that risk. Impacts on the Kern County Fire Department and its response times are discussed in Section 4.13, *Public Services*.

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for

amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on commercial cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A does not provide opportunities for business development and thus would not result in an increase in residents or employees within the County, as discussed in detail in Section 4.12, *Population and Housing*. Option A would continue to allow individuals to cultivate up to six plants on private property similar to existing conditions. Therefore, Option A would not result in the exposure of people or structures to the potential for injury or loss of life and property due to wildfires. No impact would occur in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

As discussed above, the fire hazard within the County varies by physiographic region. The County contains areas with “Moderate,” “High,” and “Very High” fire threat ratings, with the majority of the Mountain and Desert regions within an SRA; refer to Figure 4.8-1, *Fire Hazard Severity Zones in State Responsibility Area*. CAL FIRE determined that Kern County has no “Very High” FHSZs in LRA, therefore Kern County does not have a final LRA map of FHSZs (CAL FIRE, 2008); refer to Figure 4.8-2, *Draft Fire Severity Zones in Local Responsibility Area*. Fire intensities and rates of spread increase as slope increases due to the tendency of heat from a fire to rise via convection. The areas of the County designated as high FHSZs are largely in the foothills of the Mountain Region (refer to Figure 4.8-1). Areas designated as moderate FHSZs include terrain and fuels that are transitioning between the Valley Region and Mountain Region or between the Mountain Region and Desert Region. Wildfires may occur, but are considered manageable. The vegetation in the high FHSZs is typically more forested areas with denser vegetation, steeper slopes, and larger fuel loads. Fires occurring in the high FHSZs are typically more aggressive than in the moderate FHSZs. The project site contains areas where the fire season is virtually year round; however, it is more likely for large wildfires to occur in mid- to late-summer as vegetation begins to dry.

Option B would not construct new residential units nor would it result in the need for roadway improvements or expansions, therefore, Option B would not directly induce population growth in this regard. Option B would result future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis stores with or without mobile delivery facilities which would result in new employment opportunities; however, Kern County has an available workforce to accommodate any increase in employment as a result of the cannabis-related industry. Therefore, future cannabis-related activities that would be authorized under Option B are not anticipated to result in a substantial population increase, as further explained in Section 4.12, *Population and Housing*.

Construction and operation of future cannabis related activities could occur anywhere within the appropriate zone districts (agricultural, commercial, and industrial) within unincorporated Kern County. In certain locations, these activities could increase the potential for wildland fires. Although the exact location of future cannabis related facilities is not known within the project site, activities associated with the implementation of Option B could result in a significant risk of wildland fires that could result in loss, injury, or death.

Future cannabis facilities could be located within areas where the development is adjacent to or intermixed with wildlands. Business owners would be required to prepare a HMBP and submit it to the Kern County Public Health Services Department for review and approval, as outlined in Mitigation Measure MM 4.8-1. Implementation of HMBPs not only helps to reduce the risk of fire at the facility, it helps to reduce the risk of wildland fires as a result of cannabis-related activities. Additionally, Mitigation Measures MM 4.8-11 through MM 4.8-13 would reduce the potential for injury or loss of life and property due to wildfires.

The KCGP Safety Element further outlines protocol that would ensure that future cannabis related facilities are properly maintained. These measures include identifying access and evacuation routes, clearing dry vegetative cover, limiting potential fuel sources, and designing firebreaks (by at minimum adhering to the established setback distances). Each business would be required to implement all relevant safety measures into the operation and maintenance of the future cannabis business in order to ensure the safety to the employees and customers within and adjacent to the facility.

Any new structures would be required to be constructed to KCFD Fire and Building Code Standards for the type of occupancy. These future structures would also be required to comply with the most current California Building Code. These requirements address roofs, eaves, exterior walls, vents, appendages, windows, and doors and result in hardened structures that have been proven to perform at high levels (resist ignition) during the typically short duration of exposure to burning vegetation from wildfires.

Future cannabis related structures, either existing or new, would be required to provide interior fire sprinklers to code based on the occupancy type. Automatic internal fire sprinklers would be in accordance with National Fire Protection Association (NFPA) standards for the type of occupancy. For this proposed project, it is anticipated that the sprinkler standards established by the NFPA and adopted by KCFD would include the NFPA 13, which is an industrial fire protection system.

The Fire Protection Plan, KCFD Fire Codes, and Public Resources Code 4290 and 4291 would be implemented and would require property owners to maintain fuel modification areas and complete vegetation management annually by May 15 of each year and more often as needed for fire safety and as determined by the KCFD.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing for the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to the exposure of people or structures to the potential for injury or loss of life and property due to wildfires would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Wildfires

Refer to Impacts 4.8-1, 4.8-2, 4.8-3, and 4.8-7, above, for a summary of applicable existing regulations and policies related to wildfires. In addition, the following are also applicable.

1. NWS regarding weather conditions and red flag warnings.
2. PRC 4292, 4293 related to vegetation clearance of powerlines.
3. KCGP Safety Element, Section 4.1, Introduction, Goals 2, 4, 5, and 7 related to public hazards including fire.
4. KCGP Safety Element, Section 4.6, Wildland and Urban Fire, Hazard identification, Policies 1 through 6, and Implementation Measures A and B related to fire and fire safety.
5. Kern County Wildlife Fire Management Plan.
6. Title 17 of the Kern County Ordinance Code establishes fire codes and wildland-urban interface codes to reduce wildland fire risks.
7. MBGP Safety Element, Public Safety Policies 6 and 9 relate to fire safety.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

MM 4.8-11 The project applicant is required to implement the following measures:

- a. Comply with Kern County Fire Codes.
- b. Maintain firefighting apparatus and supplies required by the Kern County Fire Department.
- c. Maintain of a list of all relevant fire-fighting authorities for the property.
- d. For properties abutting wildlands, have available equipment to extinguish incipient fires and or construction of a fire break, such as: chemical fire extinguishers, shovels, axes, chain saws, etc.
- e. For cannabis cultivation activities, carry water or fire extinguishers and shovels in non-passenger vehicles in the field.

- f. Have and maintain an adequate supply of fire extinguishers for the cannabis facility.
- g. Protect individual safety to contain any fire that occurs and notify local emergency response personnel.
- h. Remove any flammable wastes generated during cannabis cultivation and processing activities regularly.
- i. Store all flammable materials away from ignition sources and in approved containers.
- j. Allow smoking only in designated smoking areas.
- k. Prohibit smoking where flammable products are present and when the fire hazard is high. Train personnel regarding potential fire hazards and their prevention.
- l. All internal combustion engines, stationary and mobile, shall be equipped with spark arresters. Spark arresters shall be in good working order.
- m. Light trucks and cars with factory-installed (type) mufflers shall be used only on roads where the roadway is cleared of vegetation. Said vehicle types shall maintain their factory-installed (type) muffler in good condition.
- n. Fire rules shall be posted on the Project bulletin board at the contractor's field office and areas visible to employees.
- o. Equipment parking areas and small stationary engine sites shall be cleared of all extraneous flammable materials.
- p. Personnel shall be trained in the practices of the Fire Safety Plan relevant to their duties. Construction and maintenance personnel shall be trained and equipped to extinguish small fires in order to prevent them from growing into more serious threats.

MM 4.8-12

For cannabis cultivation and processing operations, the project applicant shall restrict the use of chainsaws, chippers, vegetation masticators, grinders, tractors, torches, and other flammable material uses at its locations, and ensure the facility where this equipment is used are equipped with portable or fixed fire extinguishers and/or a water tank, with hoses, fire rakes, and other tools to extinguish and or control incipient stage fires. The Hazardous Material Business Plan shall include fire prevention and response training for workers using these tools.

MM 4.8-13

Prior to the approval of a site plan or issuance of a grading or building permit, the project applicant shall provide a site plan designed to meet all applicable State and local fire codes consistent with the requirements of the Kern County Fire Department and California Department of Forestry and Fire Protection. Any application for a conditional use permit shall include details on the site plan that demonstrate compliance.

Level of Significance after Mitigation

No impacts would occur with regard to Option A. Impacts regarding Option B would be less than significant.

Impact 4.8-9: Would Implementation of the Project Generate Vectors or Have a Component That Includes Agricultural Waste Exceeding Adopted Qualitative Thresholds

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on commercial cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A does not provide opportunities for business development. Option A would continue to allow individuals to cultivate up to six plants on private property similar to existing conditions, which could generate vectors and agricultural waste; however this would be similar to existing residential gardens. Therefore, Option A would not result in the generation of vectors or agricultural waste. Impacts would be less than significant in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

Future cannabis cultivation and processing activities would result in the generation of waste. Typical waste from cannabis cultivation would be similar to other agricultural crops and can include, but are not limited to, HID lights, plastics, lab wastes, pesticides and fertilizers, wastewater, solid waste, and

greenwaste (i.e., plants). Non-cannabis wastes associated with cannabis operations are generally the same as those found in any other businesses. Hazardous material use and disposal are discussed under Impacts 4.8-1 and 4.8-2, above; solid waste is discussed in Impacts 4.16-5 and 4.16-6, Section 4.16, *Utilities and Public Services*. Implementation of mitigation measures regarding hazardous materials, solid waste, and wastewater would reduce impacts related to agricultural waste to a less than significant level.

Ground disturbing activities associated with future cannabis cultivation or future construction of cannabis related facilities would occur in an area favorable to the growth of the Valley Fever vector, the fungus *Coccidioides immitis*, which grows in soils in areas of low rainfall, high summer temperatures, and moderate winter temperatures. Future cannabis cultivation activities, as well as potential construction activities, would disturb the soil and cause the fungal spores to become airborne, potentially putting construction personnel and wildlife at risk of contracting Valley Fever; however, most Valley Fever cases are very mild, and more than half of infected people either have no symptoms or experience flu-like symptoms and never seek medical attention. In addition, mitigation for dust control and Valley Fever, as described in Section 4.3, *Air Quality*, would minimize the spread of fungal spores.

The implementation of Option B would provide business development within the project site. Future cannabis related facilities could, in some cases, provide increased opportunities for vectors by providing standing water, trash piles, or open containers that could provide breeding areas for mosquitoes, flies, or rodents. This could increase the opportunities for interaction with existing insect and rodent species and for new populations of vectors to be introduced onto the project site. The risk of contracting disease from such vectors would be similar to existing conditions, and are considered low. Standard operations and management of these facilities in accordance with Kern County Public Health Services Department requirements would be required. In addition, Mitigation Measure MM 4.8-14 would prohibit standing water, trash piles, and open containers from being accumulated at a future cannabis related facility.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing for the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, and distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to generation of vectors and agricultural waste would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Vectors and Agricultural Waste

Refer to Impacts 4.8-1, 4.8-2, 4.8-3, 4.8-7, and 4.8-8, above, for a summary of applicable existing regulations and policies related to wildfires. In addition, the following are also applicable.

1. MBGP Safety Element, Public Safety Policies 13 and 15 related to valley fever and agricultural health effects.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

Implement Mitigation Measures MM 4.8-1 through MM 4.8-6, as described above, Mitigation Measures MM 4.3-2, MM 4.3-3, MM 4.3-4, and MM 4.3-6, as described in Section 4.3, *Air Quality*, and Mitigation Measures MM 4.16-2 through MM 4.16-4, as described in Section 4.16, *Utilities and Service Systems*.

MM 4.8-14 The project applicant shall continuously comply with the following: In order to eliminate the risk of generating disease vectors at the cannabis facility, the project applicant shall ensure that trash is stored in closed containers and removed from the site at regular intervals. Open containers shall be inverted and any ditches, other than agricultural water ditches, shall not be allowed to accumulate water. Activities other than watering plants for cultivation shall not generate standing water. Project compliance shall be verified by the Kern County Department of Agriculture during the course of that agency's performance of any on-site inspections. Naturally occurring depressions, drainages, or pools at the site shall not be drained or filled without consulting with the appropriate resource agency (Kern County, United States Army Corps of Engineers, United States Fish and Wildlife Service, California Department of Fish and Wildlife) as applicable, and obtaining the appropriate permits.

Even though cannabis is “decriminalized” under State law, and even with the U.S. Department of Justice issuance of memoranda guiding federal law enforcement related to cannabis activities within jurisdictions that have legalized cannabis, cannabis activities continue to be illegal at the federal level and subject to the prosecutorial discretion of the federal government. Therefore, any cannabis operation that is located on a parcel requiring a federal permit will be prohibited.

Level of Significance after Mitigation

Impacts related to Option A would be less than significant. Impacts regarding Option B would be less than significant.

Cumulative Setting Impacts and Mitigation Measures

Cumulative Setting

The geographic scope for cumulative impacts from hazards and hazardous materials includes both the KCGP and the regional growth plan and projections included in the Kern COG Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) approved in 2014, as defined in Section 3.7, *Cumulative Projects*. This is a large enough area to encompass any effects of the proposed project from hazards and hazardous materials that may combine with similar effects caused by other projects, and provides a reasonable context wherein cumulative actions could affect these resources. The cumulative analyses consider whether the proposed project, Option A or Option B, in

combination with the past, present, and reasonably foreseeable projects, could cumulatively expose the public or the environmental to hazards and hazardous materials.

Cumulative Impacts and Mitigation Measures

Impact 4.8-10: Cumulative Hazards and Hazardous Materials Impacts

Proposed Project Option A

Option A of the proposed project would ban all commercial medical and adult use cannabis-related activities other than what is allowed for personal use under Proposition 64. Option A would not result in an increase in residents or employees within the County. As discussed above, Option A would not create a hazard through upset or accident conditions involving a hazardous material release (Impact 4.16-2); emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school (Impact 4.8-3); result in facilities being located on a site that is included on a list of hazardous material sites compiled pursuant to government code section 65962.5 (Impact 4.8-4); create a safety hazard for a project located within the vicinity of a public airport or private airstrip or within the Kern County ALUCP (Impacts 4.8-5 and 4.8-6); interfere with an adopted emergency response plan or emergency evacuation plan (Impact 4.8-7); expose people or structures to a wildland fire hazard (Impact 4.8-8); generate vectors or include agricultural waste (Impact 4.8-9). Therefore, Option A would not contribute to cumulative impacts when combined with past, present, or reasonably foreseeable projects. Less than significant impacts would occur in this regard.

With respect to transport, use or disposal of hazardous materials (Impact 4.8-1), Option A would not use or transport hazardous materials beyond what currently exists for residential gardening; however, the closure of existing cannabis dispensaries could result in disposal of hazardous materials. Other projects in the cumulative area would be required to adhere to federal, State, and local requirements, as well as any project-specific mitigation measures regarding solid waste and recycling. Therefore, Option A would not contribute to cumulative impacts when combined with past, present, or reasonably foreseeable projects. Less than significant impacts would occur in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery (refer to Appendix C, of this EIR, for specific wording of the proposed ordinance under Option B). The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3).

With regard to the creation of a hazard through the routine transport, use, or disposal of hazardous materials (Impact 4.8-1), a potentially significant impact could result if a spill or leak were to occur during construction or operation of a future cannabis facility; however, compliance with State and

County regulations and the mitigation measures outlined above would ensure that impacts would remain less than significant. Each future cannabis relate facility that would use hazardous materials would be required to complete and Hazardous Materials Business Plan. In addition, each facility would be required to comply with federal, State, and local regulations. The byproducts of cannabis manufacturing would be required to comply with Kern County Environmental Health Services Division. Implementation of Mitigation Measures MM 4.8-1 through MM 4.8-3, as described above, Implement Mitigation Measure MM 4.4-11, as described in Section 4.4, *Biological Resources*, Mitigation Measures MM 4.9-2 through MM 4.9-5, as described in Section 4.9, *Hydrology and Water Quality*, would further reduce the potential for project-related public hazards. Therefore, impacts of the project would not be expected to make a cumulatively considerable contribution, in combination with impacts from past, present, or reasonably foreseeable projects, to result in a cumulative impact.

With regard to creation of a hazard through upset or accident conditions involving a hazardous material release (Impact 4.8-2), the potential exists for proposed project activities to result in the release of hazardous materials in the soil resulting in exposure of personnel and other sensitive receptors to contaminant levels that could result in short-term and/or long-term health effects. Additionally, demolition or renovation of structures resulting from the implementation of Option B of the proposed project could result in the handling of ACMs; however, conformance with existing State and County regulations and implementation of the mitigation measures identified above would render this impact less than significant. This impact does not have the potential to combine with impacts of other projects because of the localized nature of the impacts, and because appropriate safety, cleanup, and disposal methods would be implemented to reduce the impact to a level that would not combine with impact of other projects. Therefore, impacts of the proposed project would not have the potential to make a cumulatively considerable contribution in combination with impacts from past, present, or reasonably foreseeable projects to result in a cumulative impact.

With respect to emitting hazardous emissions or handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school (Impact 4.8-3), future cannabis cultivation, processing and packaging, and distribution facilities would be required to be located a minimum of 0.5 mile from any school, day care center, youth center while children care present, or incorporated city limit boundary. Mitigation Measure MM 4.8-1 through MM 4.8-6 would be implemented. To reduce impacts resulting from the implementation of Option B. Future retail cannabis stores would be required to be located a minimum of 0.5 mile from any school, day care center, youth center while children are present, or incorporated city limit boundary; however, future retail cannabis stores would require a CUP and addition project-specific review under CEQA. This impact does not have the potential to combine with impacts of other projects because of the localized nature of the impacts associated with existing of proposed schools. Impacts of the proposed project would not make a cumulatively considerable contribution, in combination with impacts from past, present, or reasonably foreseeable projects, to result in a cumulative impact.

With regard to the creation of a hazard to public or the environment as a result of being located on a site that is included on a list of hazardous material sites compiled pursuant to government code section 65962.5 (Impact 4.8-4), with the implementation of the mitigation measures provided above, a project applicant would verify that the future cannabis facility is not located on a listed site. If the future cannabis facility is included on a hazardous materials list, then subsurface testing would be required, and appropriate remediation activities would be implemented if necessary. Therefore, impacts of the proposed project would not have the potential to combine with impacts from past, present, or reasonably foreseeable projects to result in a cumulative impact.

With regard to the creation of a safety hazard for a project located within the vicinity of a public airport or private airstrip or within the Kern County ALUCP (Impacts 4.8-5 and 4.8-6), there are more than 300 public, private, and military airports, balloonports, gliderports, heliports, and ultraflight flightparks within a 100-mile radius of the City of Bakersfield. The County contains 18 airports that are listed within the ALUCP. In addition, portions of the project site fall inside the boundaries of the Special Use Airspace of the Joint Service Restricted R-2508 Complex. Future cannabis-related facilities would comply with applicable Kern County Zoning Ordinances, as well as military height restrictions and the Kern County ALUCP. Each future cannabis facility would be required to comply with applicable height and lighting requirements. In addition, Mitigation Measures MM 4.8-9 through MM 4.8-10 would be implemented to further reduce potential hazards. As such, the proposed project would not have the potential to combine with impacts of other projects because of the localized nature of airport operations with regard to each project's location, and because compliance with existing rules would render impacts less than significant. Therefore, impacts of the proposed project would not have the potential to make a cumulatively considerable contribution, in combination with impacts from past, present, or reasonably foreseeable projects, to result in a cumulative impact.

With regard to interference with an adopted emergency response plan or emergency evacuation plan (Impact 4.8-7), it would be unlikely that future cannabis related facilities and activities would interfere with the an emergency response or evacuation plan. The proposed project's less-than-significant impact has the potential to combine with other current and future projects that would generate high volumes of traffic on area roadways by creating a cumulative traffic burden on regional roadways; however, given the facts that Option B is not anticipated to increase the number of residents or employees with the County, Option B would be required to be designed to Kern County design standards, ensuring emergency vehicles have access to unincorporated Kern County, and that the Kern COG RPT/SCS took in account traffic volumes from anticipated projects, the potential for a considerable contribution to a cumulative impact to emergency response is unlikely to occur, and would therefore be less than significant. Therefore, impacts of the proposed project would not have the potential to make a cumulatively considerable contribution, in combination with impacts from past, present, or reasonably foreseeable projects, to result in a cumulative impact.

With regard to exposing people or structures to a wildland fire hazard (Impact 4.8-8), any future construction activities and implementation of Option B of the proposed project would increase the likelihood of wildfire ignition. Future cannabis related facilities would be required to comply with federal, State, and local fire safety requirements. In addition, the implementation of Mitigation Measure MM 4.8-1, as well as implementation of Mitigation Measures MM 4.8-11 through MM 4.8-13 would reduce the expose of people or structures to a wildland fire hazard. These mitigation measures would reduce this impact to a level that would not combine with other projects. Therefore, impacts of the project would not have the potential to make a cumulatively considerable contribution, in combination with impacts from past, present, or reasonably foreseeable projects, to result in a cumulative impact.

With regard to generating disease vectors or agricultural waste (Impact 4.8-9), future cannabis cultivation and processing activities would result in the generation of waste. Compliance with State and local regulation and the implementation of mitigation measures regarding hazardous materials, solid waste, and wastewater would reduce impacts related to agricultural waste to a less than significant level. Ground disturbing activities could disturb the Valley Fever vector or attract other disease vectors by allowing standing water, trash piles, or open containers to accumulate at the project site, potentially resulting in a hazard to construction personnel or the general public. However,

implementation of the mitigation measures described above, in combinations with standard operations and management pursuant to the Kern County Public Health Services Department would reduce this impact to a less than significant level. These mitigation measures would reduce this impact to a level that would not combine with other projects, therefore, impacts of Option B of the proposed project would not have the potential to make a cumulatively considerable contribution, in combination with impacts from past, present, or reasonably foreseeable projects, to result in a cumulative impact.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

Implement Mitigation Measures MM 4.8-1 through MM 4.8-14, as described above, Mitigation Measures MM 4.3-2, MM 4.3-4, MM 4.3-4, and MM 4.3-6, as described in Section 4.3, *Air Quality*, Mitigation Measures MM 4.4-11, as described in Section 4.4, *Biological Resources*, Mitigation Measures MM 4.9-1 through MM 4.9-5, as described in Section 4.9, *Hydrology and Water Quality*, Mitigation Measures MM 4.16-2 through MM 4.16-4, as described in Section 4.16, *Utilities and Service Systems*.

Level of Significance after Mitigation

With respect to Option A, cumulative impacts would be less than significant. Cumulative impacts resulting from Option B would be less than significant.

Section 4.9

Hydrology and Water Quality

Section 4.9

Hydrology and Water Quality

4.9.1 Introduction

This Draft Environmental Impact Report (EIR) section addresses potential impacts of the Kern County Cannabis Land Use Project (proposed project) on hydrology and water quality, describes the environmental and regulatory setting, and discusses mitigation measures to reduce impacts where applicable.

4.9.2 Environmental Setting

Climate and Topography

Valley Region

Kern County consists of three general regions – Valley Region, Mountain Region, and Desert Region. The Valley Region is within the Tulare Lake Hydrologic Basin in the San Joaquin Valley. The Valley Region is characterized by low rainfall, relatively high average summer temperatures, and generally mild winters. The Valley Region has greater temperature extremes than the coastal areas because it is less affected by the moderating influence of the Pacific Ocean.

The Valley Region enjoys an inland Mediterranean climate, averaging more than 260 sunny days per year. Average daily temperatures in the Valley Region range from 41.7 degrees Fahrenheit (°F) in December to 98.7 °F in July. Summer highs often exceed 100 °F, averaging in the low 90s °F in the northern valley and high 90s °F in the south. Although the San Joaquin Valley Air Basin (SJVAB) enjoys a high percentage of sunshine, a reduction in sunshine occurs during December and January because of fog and intermittent stormy weather.

The annual precipitation is 11.68 inches. Nearly 90 percent of the annual precipitation falls in the six months between October and May, when the Gulf Stream shifts southward from northern latitudes. This shift creates a quasi-permanent low-pressure zone over southern California and feeds moisture originating over the Pacific Ocean into the region. The summer months are virtually rainless, with average monthly rainfalls ranging from 0.1 to 0.02 inch per month.

Topography in the Valley Region is generally flat. Steeper, mountainous topography surrounds the Valley Region, in the Mountain Region, with the Sierra Nevada Mountains to the east, the San Emigdio and Tehachapi Mountains to the south, and the Coast Range Mountains to the west.

Mountain Region

The Mountain Region spans three hydrologic units: Central Coast, Tulare Lake, and South Lahontan. The Mountain Region, from east to west, include the Sierra Nevada Mountains, Tehachapi Mountains, San Emigdio Range, Temblor Range, and parts of the Coast Range. The elevation of these mountain ranges average between 4,000 and more than 8,000 feet above mean sea level (amsl); the highest point in the County is 8,831 feet amsl at the summit of Mount Pinos. The average rainfall is approximately 15 inches, but can be as high as 35 or more inches. Snow accounts for much of the precipitation above 6,000 feet amsl. The average temperature depending on location within the mountainous areas is approximately 55 degrees Fahrenheit (°F).

Regional geomorphology, geology, and faulting combine to form the major valleys and peaks that comprise this Region. The varied topography throughout the Mountain Region lends itself to an equally diverse pattern of surface drainage features, as defined by watersheds, streams, and man-made water/stormwater conveyance and storage features. This complex surface hydrology system, in turn, bears directly upon the extent of groundwater resources in the Region.

Topographically, the Tehachapi area of the Mountain Region is a relatively broad, flat, alluvial basin bounded by the steep face of the granitic highlands on the south and a more gradual slope on the north. There is approximately 4,100 feet of relief in the Mountain Region from the highest point in the south (Tehachapi Mountain) to the lowest point in the north (Tehachapi Creek).

Desert Region

The Desert Region is within the South Lahontan Hydrologic Region. The western Mojave Desert, including Indian Wells Valley and Antelope Valley, is located in the eastern portion of Kern County, east of the Sierra Nevada and Tehachapi ranges and south of the Tehachapi ranges. The climate of the Desert Region can be characterized as hot in the summer and cold in the winter with relatively low annual precipitation. Average temperatures recorded in the Community of Mojave range from a low of 33°F in December to highs of 98°F in July and August. Precipitation in Mojave averages approximately six inches annually. The peak monthly precipitation generally occurs in February, with an average of approximately 1.2 inches. Topography is relatively flat, but elevations gradually rise towards the northwest.

The environmental setting section describes the current hydrology, hydrogeology, and water quality within the County, including the primary watersheds and surface water and groundwater quality data. Kern County includes two hydrologic regions, the South Lahontan Hydrologic Region and the Tulare Lake Hydrologic Region. They are described separately below.

Hydrological Setting

South Lahontan Hydrologic Region

The South Lahontan Hydrologic Region encompasses the area from the drainage divide between the Walker River and Mono Lake Basin to the divide south of the Mojave River. The region is bordered on the east by the Nevada State line and on the west by the crest of the southern Sierra Nevada and San Gabriel Mountains. The region includes all of Inyo County and parts of Mono, San Bernardino, Kern, and Los Angeles Counties. Prominent geographic features of the region are Owens Valley and Death Valley. The region contains the highest and lowest points in the lower 48 States – Mount Whitney (elevation 14,495 feet above mean sea level) and Death Valley (elevation 282 feet below mean sea level).

The South Lahontan Region contains many waterways, including the Mojave River, Owens River, and Amargosa River, plus several well-known lakes, such as Mono Lake, Haiwee Reservoir, and Silver Lake. None of these waterways or lakes are located in the Kern County portion of the South Lahontan Region. Therefore, the Kern County communities, such as Ridgecrest, Inyokern, North Edwards, Mojave, and Rosamond must depend on the region's groundwater and imported water.

The region has 75 distinct groundwater basins and 3 subbasins of the Langford Valley. Eight groundwater basins are contained all or partially within Kern County; they are: the Indian Wells Valley Basin, Searles Valley Basin, Fremont Valley Basin, Tehachapi Valley East Basin, Kelso Lander Valley Basin, Cuddeback Valley Basin, Harper Valley Basin, and Antelope Valley Basin.

Tulare Lake Hydrologic Region

The Tulare Lake Hydrologic Region includes roughly the southern two-thirds of the Central Valley. The San Joaquin River watershed forms the northern boundary of the region, and the Tehachapi Mountains form the southern boundary. The region is bounded to the east by the Sierra Nevada crest and by the Temblor Range to the west. The area includes several rapidly growing cities, which include Bakersfield, Fresno and Visalia. In the sparsely populated areas on the west side of the valley, industrial water demands for petroleum recovery and production exceed municipal water demands.

The region has 12 distinct groundwater basins and 7 subbasins of the San Joaquin Valley Groundwater Basin which crosses north into the San Joaquin River Hydrological Region.

Eleven of these areas are completely or partially within Kern County, and they are listed as follows: Cuyama Valley Basin, Carrizo Plain Basin, San Joaquin Valley basin with the Kern County Sub-basin, Kern River Valley Basin, Walker Creek Valley Basin, Cummings Valley Basin, Castac Lake Valley Basin, Cuddy Canyon Valley Basin, Cuddy Ranch Area Basin, Cuddy Valley Basin, Mil Potrero Area Basin, and Tehachapi Valley West Basin.

Regional Surface Water

Rivers and Creeks

Kern River

Originating in groups of glacial lakes in the vicinity of Mount Whitney, Kern River drains an approximately 2,420 square mile area in the Sierra Nevada Mountains. Water runoff from the Sierras flows from northeast to southwest and enters the San Joaquin Valley through the Kern River Canyon. The River has two principal tributaries that meet at Lake Isabella. With the exception of the small valley in which Lake Isabella is located, the Kern River and its principal tributaries flow in steep, and narrow canyons from their headwaters to the mouth of Kern Canyon. Beyond the mouth of the Canyon, the river channel is deeply entrenched in an alluvial fan that extends westward to the main valley trough where the channel is controlled by levees to prevent flood flows from spreading to the adjacent.

Kern River had an unregulated flow until 1954 when the Isabella Dam and Reservoir were constructed by the Army Corps of Engineers. The primary purpose of the dam is flood control with the ability to hold back approximately 570,000 acre-feet of water in the reservoir.

With the exception of very wet years, there is no flow in the river past Bakersfield due to upstream canal diversions. The river encounters its first diversion into a canal when it first exits the Kern River Canyon and encounters another diversion when it reaches the east side of Bakersfield, near Hart Park. The Beardsley and Rocky Point weirs are the first two of seven diversion weirs in Bakersfield. From there, canal water travels north and south to irrigate farmlands. In total, the River is diverted into seven canals that pass through the City. During very wet years, water flows in the river southwest to the Buena Vista Lake bed and then north to Tulare Lake or into the California Aqueduct near Tupman.

Poso Creek and Caliente Creek

Drainage channels of importance include Poso Creek and Caliente Creek, both located on the east side of the valley, north and south of the Kern River, respectively. Poso Creek is the principal drainage of the Greenhorn Range in Kern County. The creek follows zones of weakness southwest

out of Tulare County, before it abruptly turns northwest just before it outlets onto the plains north of Bakersfield to drain eventually into the Tulare Lake Bed.

The Caliente Creek Stream group consists of Caliente Creek, Sycamore Creek, Walker Basin Creek, Tehachapi Creek, Little Sycamore Creek, Comanche, and Tejon Creeks. The channel of Caliente Creek in the area where it leaves the foothills is highly absorptive and all but infrequent, high intensity flows percolate in the channel before they reach valley lands. Historically excessive (i.e., flood) waters from Caliente Creek have followed a number of different courses once leaving its channel in the foothills. Water will eventually pond in the historic Kern Lake area.

Sandy Creek

Sandy Creek, which drains an area within Kern and San Luis Obispo Counties, in the southwesterly sector of the San Joaquin Valley, originates on the eastern slopes of the Temblor Range at an elevation of approximately 3,300 feet. The stream basin is bounded by Twenty-One Canyon on the north and by poorly defined minor drainage areas and the Bitterwater Creek Basin on the south. The channel of Sandy Creek is poorly defined east of the Taft-Ford City area and eventually redefined near the Buena Vista Lake bed. Runoff from the basin is very erratic and many months or even several years may pass without appreciable stream flow. Sandy Creek channel is small and ill-defined in its upper and lower reaches. The channel through Taft and Ford City is well defined. During large floods, flows may exceed the channel capacity and spread through commercial and residential areas of these communities.

Cuddy Creek

Cuddy Creek originates in the San Emigdio Mountains and flows eastward, through the communities of Lake of the Woods and Frazier Park, under Highway I-5 to the Tejon (Castac) Lake bed. The creek is intermittent with peak flows occurring in winter and spring, coincident with and immediately following periods of peak precipitation. Tejon (Castac) Lake is similarly an intermittent body of water. The volume of water in the lake can fluctuate considerably with the precipitation pattern. During some years, the lake will dry out completely while in others it may contain water all year. At times, in recent history, water in the lake stood to a depth of 18 to 20 feet, and some outflow occurred to the south fork of Grapevine Creek and thence to the San Joaquin Valley floor.

Constructed Infrastructure

Water is moved from sources within the County and from outside the County by constructed conveyance facilities: canals that deliver the water to users. These waters are distributed to farmers either directly or by local water districts, or are stored in reservoirs in anticipation of future delivery.

Intra-County Canals

- J.B. Haggin Canals
- Calloway
- Beardsley
- Cross Valley
- Other Canals: The James, Anderson, and Plunket Canals

Friant-Kern/Arvin-Edison

The San Joaquin River is the river source for the Friant Dam. The Friant-Kern Canal, constructed in 1949 as a part of the Central Valley Project (CVP), diverts from Friant Dam and extends its concrete lined channel 153 miles through Fresno, Tulare, and Kern Counties to its terminus in the Kern River near Bakersfield. At that point, the Arvin-Edison Canal takes Friant-Kern water for delivery to the Arvin-Edison Water Storage District (WSD).

California Aqueduct

The California Aqueduct is the major conveyance feature of the State Water Project (SWP). It diverts water from the Delta and, after crossing the Tehachapi Mountains, splits into two branches at the Edmonston Pumping Plant with one terminus in Los Angeles County near Castaic and the other in Riverside County. Total length of the two components is 572 miles. Other infrastructure of the SWP results in a total length of over 600 miles.

Kern County Lakes

Buena Vista (Lake Evans/Lake Webb)

Located approximately 23 miles southwest of Bakersfield, this recreation area occupies a portion of the old Buena Vista Lakebed. Technically the recreation area is an Agricultural Water Conveyance Facility that connects the Alejandro Canal with the Kern River Channel and the California Aqueduct for the purpose of facilitating more efficient storage and distribution of water.

Lake Woollomes

Lake Woollomes is located approximately 29 miles north of Bakersfield, and six miles southeast of Delano. The lake's primary purpose is to act as an equalizing reservoir for agricultural irrigation along the Friant-Kern Canal, an element of the Central Valley Project. Water-oriented recreation activities are limited to fishing and non-motorized boating.

Kern River Facility

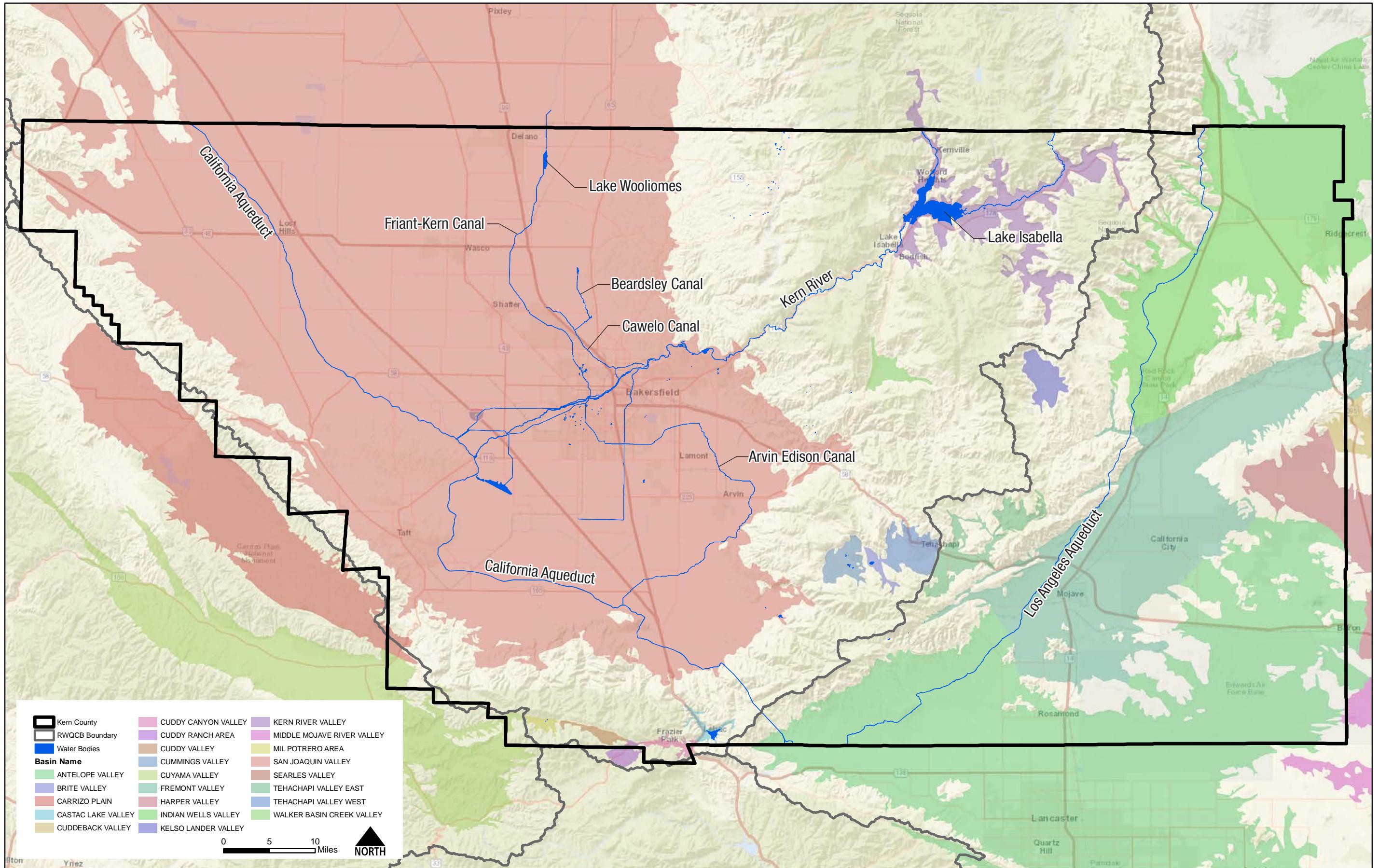
Man-made water resource facilities along the Kern River provide for storage and recreation uses of the waters of this River. The Kern River Park is located adjacent to the Kern River and stretches approximately 5 miles along its southern bank.

Lake Isabella

This major reservoir was constructed and is operated as a joint flood control, irrigation, and recreation facility by the U. S. Army Corps of Engineers. Since the construction of the Main and Auxiliary Dams at Isabella, the flows on the lower Kern River have been regulated.

Brite Valley Reservoir

Constructed in 1972 as storage for the Tehachapi-Cummings County Water District, the reservoir provides agricultural water during peak irrigation seasons. Water filling this facility is piped from the California Aqueduct near the Edmonston pumping plant.



KERN COUNTY CANNABIS LAND USE ORDINANCE PROJECT EIR
AMENDMENT TO TITLE 19 – KERN COUNTY ZONING
ORDINANCE FOCUSED ON CHAPTER 19.120 (CANNABIS LAND USE REGULATION)

Surface and Groundwater Features

Groundwater Resources

Groundwater can be defined as the portion of water occurring beneath the earth's surface, which completely fills (saturates) the void space of rocks or sediment. Given that all rock has some degree of void space, it is fairly safe to say that groundwater can be found underlying nearly any location in the State.

Several key properties help determine whether the subsurface environment will provide a significant, usable groundwater resource. Most of California's groundwater occurs in material deposited by streams, called alluvium. Alluvium consists of coarse deposits, such as sand and gravel, and finer-grained deposits such as clay and silt. The coarse and fine materials are usually coalesced in thin lenses and beds in an alluvial environment. In an alluvial environment, the coarse materials such as sand and gravel deposits usually provide the best source of water and are termed aquifers; whereas, the finer-grained clay and silt deposits are relatively poor sources of water and are referred to as aquitards. California's groundwater basins usually include one or a series of alluvial aquifers with intermingled aquitards. Although alluvial aquifers are most common in California, other groundwater development occurs in fractured crystalline rocks, fractured volcanics, and limestones.

Groundwater Basins

Valley Region

The Valley Region is within the Tulare Lake Hydrologic Basin, within the San Joaquin Valley Groundwater Basin, specifically the Kern County Subbasin (DWR Groundwater Subbasin 5-22.14). The Kern County Subbasin was identified by DWR as subject to critical conditions overdraft in January 2016.

Mountain Region

The Mountain Region spans three hydrologic units: Central Coast, Tulare Lake, and South Lahontan. The Central Coast Hydrologic Region has two groundwater basins that extend into Kern County: Carrizo Plain (DWR Groundwater Basin 3-019) and Cuyama Valley Basin (DWR Groundwater Basin 3-013). Within the Tulare Lake Hydrologic Region there are 10 basins that are within the project area: Kern River Valley (DWR Groundwater Basin 5-025), Walker Basin Creek Valley (DWR Groundwater Basin 5-026), Cummings Valley (DWR Groundwater Basin 5-027), Tehachapi Valley West (DWR Groundwater Basin 5-028), Castaic Lake Valley (DWR Groundwater Basin 5-029), Brite Valley (DWR Groundwater Basin 5-080), Cuddy Canyon Valley (DWR Groundwater Basin 5-082), Cuddy Ranch Area (DWR Groundwater Basin 5-083), Cuddy Valley (DWR Groundwater Basin 5-084), and Mil Potrero Area (DWR Groundwater Basin 5-085). The South Lahontan Hydrologic Region has two groundwater basins within the Mountain Region: Tehachapi Valley East (DWR Groundwater Basin 6-045) and Kelso Lander Valley (DWR Groundwater Basin 6-069).

Groundwater is the primary source of water in the Mountain Region. Of these groundwater basins, the Cuyama Valley Basin is identified as a groundwater basin subject to critical conditions of overdraft (DWR, 2016).

Desert Region

The Desert Region is within the South Lahontan Hydrologic Region. South Lahontan Hydrologic Region, there are six basins that are entirely within, or partially within, the project area: 6-044, 6-046, 6-047, 6-050, 6-052, and Indian Wells Valley Basin (DWR Groundwater Basin 6-054). Of these

groundwater basins, the Indian Wells Valley Basin, which is monitored by the Indian Wells Valley Water District, is identified as a groundwater basin subject to critical conditions of overdraft (DWR, 2016).

Groundwater Degradation

Water quality degradation has been observed in many wells in Kern County. Groundwater contamination may include nitrates, ethylene dibromide (EDB), and dibromochloropropane (DBCP). As a result of the historical use of the area as cultivated agriculture, a number of groundwater contaminants have been introduced over a period of years. In many cases, recent efforts to limit such discharge have led to a reduction or complete cessation of new sources of contamination; however, many uses continue to contribute significant quantities of contaminants to the groundwater supply.

Sources for ongoing groundwater contamination within the Kern County subbasin may include septic systems, cultivated agriculture, and the petroleum industry. By design, septic systems discharge nitrified effluent into soils surrounding the systems. Cultivated agriculture contributes pollutants through nitrogen fertilizer application resulting in a measurable increase in groundwater nitrates throughout the area. Petroleum production and refining activities in the area also have the potential to contribute to contamination through direct application of spilled or leaked crude oil and petroleum products to the ground surface and through the use of corrosion inhibitors in the well development process. Pollutants resulting from this activity typically include hydrocarbons and phenols that have entered the subsurface soils through injection or by percolation.

Clean Water Act (CWA)

The principle law governing pollution of the nation's surface waters is the Federal Water Pollution Control Act, or Clean Water Act (CWA). Originally enacted in 1948, it was totally revised by amendments in 1972 that resulted in the current Act. The CWA consists of two major parts; the provisions that authorize federal financial assistance for municipal sewage treatment plant construction and the regulatory requirements that apply to industrial and municipal dischargers. The law gave the authority to set effluent standards based on available technology. The CWA also requires states to adopt water quality standards that "consist of the designated uses of the navigable waters involved and the water quality criteria for such waters based upon such uses."

To achieve its objectives, the CWA is based on the concept that all discharges into the nation's waters are unlawful, unless specifically authorized by a permit. Industrial and municipal dischargers must obtain permits from the appropriate Regional Water Quality Control Board (Central Valley or Lahontan). Point source dischargers of pollutants into surface waters are required to obtain a National Pollutant Discharge Elimination System (NPDES) permit. Other dischargers, such as those affecting groundwater or from nonpoint sources are required to file a Report of Waste Discharge. For specified situations, some permits may be waived and some discharge activities may be handled through enrollment in an existing general permit. The existing NPDES (Phase I) storm water program requires municipalities serving greater than 100,000 persons to obtain a NPDES storm water permit for construction projects greater than five acres in size. Proposed NPDES storm water regulations (Phase II) expand this existing national program to smaller municipalities with populations of 10,000 persons or more and construction sites that disturb greater than one acre.

Point and Non-Point Source Discharges

The issue of pollution of storm water and urban runoff affecting California's surface, coastal or groundwater is an area of emerging concern. Discharges of water are classified as either point source

or non-point source discharges. A point source discharge usually refers to waste emanating from a single, identifiable point. Regulated point sources include municipal wastewater, oil field wastewater, winery discharges, solid waste sites and other industrial discharges. Point source discharges must be actively managed to protect the State's waters. A nonpoint source discharge usually refers to waste emanating from many different, overlapping locations. Examples of nonpoint source pollution include:

- Herbicides and insecticides form residential landscaped area, golf courses, and parks.
- Oil, grease, and heavy metals illegally or improperly disposed of or accumulated on parking lots, streets and highways from automobiles, trucks and busses.
- Sediment from improperly managed construction activities.
- Litter and green waste
- Bacteria and nutrients from excess fertilizers, improperly maintained septic systems and wastes from pets and wildlife.

As a result, specific sources of nonpoint source pollution may be difficult to identify, treat or regulate. The goal is to reduce the adverse impact for nonpoint source discharges on the basin's water resources through better management of these activities. Nonpoint sources include drainage and percolation from a variety of activities such as agriculture, forestry, recreation and storm runoff.

Section 303(d) of the Clean Water Act requires states to identify “impaired” water bodies as those which do not meet water quality standards. States are required to compile this information in a list and submit the list to the U.S. EPA for review and approval. This list is known as the Section 303(d) list of impaired waters. Within Kern County, Isabella Lake is the only water body listed as a 303(d)-impaired water (State Water Resources Control Board [SWRCB], 2012).

Regional Groundwater Overdraft Conditions and Recharge Activities

Kern County experiences an inland Mediterranean climate that relies heavily on its groundwater supply for farming, municipal, and industrial uses. The goal for water resource management in the area is to reach a condition of “safe yield,” where the amount of water pumped from the basin is less than or equal to recharge in the basin. Groundwater overdraft occurs when groundwater-pumping rates exceed recharge rates. If groundwater pumping is not controlled, the groundwater table could be lowered to a depth where its use is not economical. Extended overdraft situations also raise the possibility of physical damage to aquifers through subsidence, where the aquifer collapses on itself as a result of insufficient pressure in its pore space.

Overdraft conditions have historically been an issue in the County, and in the worst-case scenario, would lower groundwater to a depth where pumping for agricultural uses would no longer be economical. This would reduce withdrawals to balance recharge, thus achieving storage balance; however, it would make water available only for municipal and industrial uses that could afford the increased cost.

Water that is pumped from the local aquifer is generally recharged by precipitation runoff, whether in the form of direct precipitation or melted snow from the nearby Sierra Nevada Mountains; however, direct recharge (i.e., in-situ percolation) from precipitation may represent a minor source of supply for the aquifers in the affected watershed, due to low annual rainfall. Additionally, snow melt and precipitation runoff from the Sierra Nevada feeds into the Kern River, which recharges local

aquifers through seepage and percolation. Other sources of groundwater recharge come in the form of agricultural canal seepage and percolation, irrigation of inedible crops with reclaimed water (which percolates to the aquifer), and water spreading.

In response to concerns regarding groundwater supplies, Kern County created the Kern Water Bank (KWB). The Kern Water Bank manages the recharging stream flow into the permeable aquifers during years of normal and surplus runoff and extracting the recharge ground water during dry years. This is one of the largest ground water banking operations in the United States.

Flooding/Floodplains

Since 1971, the U. S. Department of Housing and Urban Development (HUD) has designated the unincorporated portions of Kern County as a special flood hazard area. In compliance with the Federal Flood Insurance Program, HUD has provided the County of Kern with a series of 83 Flood Hazard Boundary Maps. These maps apply primarily to unincorporated areas. As more land is annexed into the cities of the County, a greater number of the areas are overseen by the specific incorporated area. These maps, which delineate major areas of flooding throughout the County, are on file in the offices of the Kern County Public Works Department, and are hereby incorporated into this document by reference.

Storm Drainage

Kern County regulates development through the Kern County Land Division Ordinance, Development Standards and Zoning Ordinance. Development sites are required to provide for their own on-site retention or show that existing facilities have sufficient capacity to carry the additional runoff. These on-site retention basins are maintained by a County Service Area (CSA) if for a residential project and privately maintained by the developer through a special district or other entity if it is for a commercial or industrial development. The county declines assume liability for commercial or industrial drainage sumps due to the issues of increased nonpoint source contamination, particularly from industrial uses. The County has identified urbanizing areas to formulate planned drainage areas with master storm drain systems, however lack of funding has slowed implementation

4.9.3 Regulatory Setting

Additional regulations related to hydrology and water quality impacts are presented in Sections 4.4, *Biological Resources*, 4.6, *Geology and Soils*, 4.8, *Hazards and Hazardous Materials*, and 4.16, *Utilities and Service Systems*.

Federal

As explained in Section 3.2, *Regulatory History and Background*, even though cannabis is “decriminalized” under State law, and even with the U.S. Department of Justice (USDOJ) issuance of memoranda guiding federal law enforcement related to cannabis activities within jurisdictions that have legalized cannabis, cannabis activities continue to be illegal at the federal level and subject to the prosecutorial discretion of the federal government.

Clean Water Act (CWA)

The CWA (33 U.S.C. Section 1251 et seq.), formerly the Federal Water Pollution Control Act of 1972, was enacted with the intent of restoring and maintaining the chemical, physical, and biological

integrity of the waters of the United States. The CWA requires individual states to set standards to protect, maintain, and restore water quality through the regulation of point source and certain non-point source discharges to surface water. Those discharges are regulated by the National Pollutant Discharge Elimination System (NPDES) permit process (CWA Section 402). In California, NPDES permitting authority is delegated to, and administered by, the nine RWQCBs.

The primary responsibility for the protection of water quality in California rests with the SWRCB and nine regional water quality control boards (RWQCBs). The SWRCB sets Statewide policy for the implementation of State and Federal laws and regulations. The RWQCBs adopt and implement Water Quality Control Plans (Basin Plans) that recognize regional differences in natural water quality, actual and potential beneficial uses, and water quality problems associated with human activities. The jurisdiction of the Central Valley RWQCB extends from the Oregon border, over the valley and foothills from Redding to Fresno, through the Central Valley, to the border with Los Angeles County. The jurisdiction of the Lahontan RWQCB extends from the Oregon border to the northern Mojave Desert and includes all of California east of the Sierra Nevada crest.

Section 401, Water Quality Certification

Section 401 of the CWA requires that any activity, including river or stream crossing during road, pipeline, or transmission line construction, which may result in discharges into a State water body, must be certified by the State, as administered by the RWQCB. This certification ensures that the proposed activity does not violate State and/or federal water quality standards.

Section 402, National Pollutant Discharge Elimination System (NPDES)

The CWA is based on the concept that all discharges into the Nation's waters are unlawful unless specifically authorized by permit. The 1972 amendments to the CWA established the NPDES permit program to control discharges of pollutants from point sources (Section 402). The 1987 amendments to the CWA created a new section of the act devoted to stormwater permitting (Section 402(p)). The U.S. EPA has granted the states primacy in administering and enforcing the provisions of the CWA and the NPDES permit program. The NPDES permit program is the primary Federal program that regulates point-source and nonpoint-source discharges to waters of the United States. The SWRCB issues both general and individual permits for certain activities.

Industrial and municipal dischargers (point-source discharges) must obtain NPDES permits from the governing RWQCB. The existing NPDES stormwater program (Phase I) requires municipalities with more than one million persons to obtain an NPDES stormwater permit for any construction project that would disturb more than five acres. Proposed NPDES stormwater regulations (Phase II) expand the existing national program to include smaller municipalities with more than 10,000 persons and construction sites that disturb more than one acre. For other discharges, such as those that affect groundwater or nonpoint-source discharges, a report of waste discharge must be filed with the RWQCB. In specified situations, some permits may be waived, and some discharge activities may be handled through an existing general permit.

While U.S. EPA has two permitting options to meet NPDES requirements (individual permits and general permits), the SWRCB has elected to adopt one statewide general permit for California that applies to all construction-related stormwater discharges, except for those on tribal lands, in the Lake Tahoe Hydrologic Unit, or under the control of the California Department of Transportation (Caltrans) – the Construction General Permit. Construction activities that are subject to this general permit include clearing, grading, stockpiling, and excavation that result in soil disturbances to at least

one acre of the total land area. Construction activities that disturb less than one acre are still subject to this general permit if the activities are part of a large common plan of development or if significant water quality impairment would result. In California, the Construction General Permit, revised in September 2009, is implemented by the SWRCB. See discussion under State regulations below.

Operational compliance with NPDES, for projects within the Bakersfield Urbanized Area, would be regulated by the City of Bakersfield and County of Kern 2014 Storm Water Management Plan (SWMP). The City and County are permittees under the Waste Discharge Requirements for the County of Kern and the City of Bakersfield for Urban Storm Water Discharges, NPDES Permit No. CA0083399, Order No. R5-2013-0153.

Section 404, Discharge of Dredged or Fill Materials

Section 404 of the CWA establishes programs to regulate the discharge of dredged and fill material in waters of the U.S., including wetlands. For purposes of section 404 of the CWA, the limits of non-tidal waters extend to the Ordinary High Water (OHW) line, defined as the line on the shore established by the fluctuation of water and indicated by physical characteristics, such as natural line impressed on the bank, changes in the character of the soil, and presence of debris. When an application for a Section 404 permit is made, the applicant must show it has:

- Taken steps to avoid impacts to wetlands or waters of the U.S. where practicable;
- Minimized unavoidable impacts on waters of the U.S. and wetlands; and
- Provided mitigation for unavoidable impacts.

Section 404 of the CWA requires a permit for construction activities involving placement of any kind of fill material into waters of the U.S. or wetlands. A Water Quality Certification pursuant to Section 401 of the CWA is required for Section 404 permit actions. If applicable, construction would also require a request for Water Quality Certification (or waiver thereof) from the Central Valley RWQCB. Project activities would adhere to State and federal water quality standards and would be in compliance with Sections 401 and 404 of the CWA.

Section 303, Water Quality Standards and Implementation Plans

Section 303(d) of the CWA (CWA, 33 USC 1250, et seq., at 1313(d)) requires states to identify “impaired” water bodies as those which do not meet water quality standards. States are required to compile this information in a list and submit the list to the U.S. EPA for review and approval. This list is known as the Section 303(d) list of impaired waters. As part of this listing process, states are required to prioritize waters and watersheds for future development of Total Maximum Daily Load (TMDL) requirements. The SWRCB and RWQCBs have ongoing efforts to monitor and assess water quality, to prepare the Section 303(d) list, and to develop TMDL requirements.

California Toxics Rule

In 2000, the U.S. EPA established water quality criteria for potentially toxic constituents in receiving waters with human health or aquatic life designated uses for California inland surface waters, enclosed bays, and estuaries. The California Toxic Rule fills a gap in California water quality standards that was created in 1994 when a state court overturned the State’s water quality control plans containing water quality criteria for priority toxic pollutants (USEPA, 2000). These federal criteria are legally applicable in the State of California for inland surface waters, enclosed bays and estuaries for all purposes and programs under the Clean Water Act. The California Toxic Rule criteria

are calculated on the basis of the hardness of the receiving waters. Lower hardness concentrations result in lower, more stringent California Toxic Rule criteria.

National Flood Insurance Program (NFIP)

FEMA is responsible for managing the National Flood Insurance Program (NFIP) which makes Federally-backed flood insurance available for communities that agree to adopt and enforce floodplain management ordinances to reduce future flood damage. The NFIP, established in 1968 under the National Flood Insurance Act, requires that participating communities adopt certain minimum floodplain management standards, including restrictions on new development in designated floodways, a requirement that new structures in the 100-year flood zone be elevated to or above the 100-year flood level (known as base flood elevation), and a requirement that subdivisions be designed to minimize exposure to flood hazards. To help identify areas with flood potential, FEMA has developed FIRMs that can be used for planning purposes, including floodplain management, flood insurance, and enforcing mandatory flood insurance purchase requirements. Kern County is a participating jurisdiction in the NFIP, and therefore, all new development must comply with the minimum requirements of the NFIP.

United States Environmental Protection Agency (U.S. EPA) Recreational Water Quality Criteria

U.S. EPA updated its recreational water quality criteria in 2012. The criteria recommend using FIB enterococci and E. coli as indicators of fecal contamination in fresh water. Scientific advancements in microbiological, statistical, and epidemiological methods have demonstrated that culturable enterococci and E. coli are better indicators of fecal contamination than the previously used general indicators total coliform and fecal coliform. Water quality criteria consist of a geometric mean and statistical threshold value. U.S. EPA recommends that states make a risk management decision about illness rate that will determine which set of criteria is most appropriate for the receiving waters.

State

State Water Resources Control Board

The National Pollution Discharge Elimination System (NPDES) was established per the 1972 amendments to the Federal Water Pollution Control Act, or Clean Water Act (CWA), to control discharges of pollutants from point sources (Section 402). Amendments to the CWA created a new section to the Act, which is devoted to stormwater permitting (Section 402[p]), with individual states designated for administration and enforcement of the provisions of the CWA and the NPDES permit program. The SWRCB issues both general construction permits and individual permits under this program.

Central Valley and Lahontan Regional Water Quality Control Boards

The primary responsibility for the protection of water quality in California rests with the SWRCB and nine regional water quality control boards (RWQCBs). The SWRCB sets Statewide policy for the implementation of State and federal laws and regulations. The RWQCBs adopt and implement Water Quality Control Plans (Basin Plans) that recognize regional differences in natural water quality, actual and potential beneficial uses, and water quality problems associated with human activities. The jurisdiction of the Central Valley RWQCB extends from the Oregon border, over the valley and foothills from Redding to Fresno, through the Central Valley, to the border with Los Angeles County.

The jurisdiction of the Lahontan RWQCB extends from the Oregon border to the northern Mojave Desert and includes all of California east of the Sierra Nevada crest.

Department of Water Resources (DWR)

DWR's major responsibilities include preparing and updating the California Water Plan to guide development and management of the State's water resources; planning, designing, constructing, operating, and maintaining the State Water Resources Development System; regulating dams; providing flood protection; assisting in emergency management to safeguard life and property; educating the public; and serving local water needs by providing technical assistance. In addition, DWR cooperates with local agencies on water resources investigations; supports watershed and river restoration programs; encourages water conservation; explores conjunctive use of ground and surface water; facilitates voluntary water transfers; and, when needed, operates a State drought water bank.

Porter-Cologne Water Quality Control Act

The Porter Cologne Act, passed in 1969, acts in concert with the Federal CWA. The act established the SWRCB and divided the State into nine regions, each overseen by an RWQCB. The SWRCB is the primary State agency responsible for protecting the quality of the State's surface and groundwater supplies; however, much of its daily implementation authority is delegated to the nine RWQCBs. The Project Area is under the jurisdiction of two RWQCBs: Central Valley Region and Lahontan Region.

The Porter Cologne Act provides for the development and periodic review of water quality control plans (basin plans) that designate beneficial uses of California's major rivers and groundwater basins and establish narrative and numerical water quality objectives for those waters. Basin plans are primarily implemented by using the NPDES permitting system to regulate waste discharges so that water quality objectives are met. Basin plans, updated every three years, provide the technical basis for determining waste discharge requirements, taking enforcement actions, and evaluating clean water grant proposals. The act also assigns responsibility for implementing CWA Sections 401, 402, and 303(d) to the SWRCB and RWQCBs. There are two basin plans in the Central Valley RWQCB region, the Water Quality Control Plan for the Sacramento and San Joaquin Rivers and the Water Quality Control Plan for the Tulare Lake Basin. There is one basin plan in the Lahontan RWQCB region, the Water Quality Control Plan for the Lahontan Region.

Streambed Alteration Agreement (California Fish and Game Code)

Section 1602 of the California Fish and Game Code protects the natural flow, bed, channel, and bank of any river, stream, or lake designated by the California Department of Fish and Wildlife (CDFW) in which there is, at any time, any existing fish or wildlife resources, or benefit for the resources. Section 1602 applies to all perennial, intermittent, and ephemeral rivers, streams, and lakes in the State, and requires any person, State or local governmental agency, or public utility to notify the CDFW before beginning any activity that will:

- Substantially divert or obstruct the natural flow of any river, stream or lake;
- Substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake; or
- Deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.

During final engineering and design of a project, if it is determined that any project-related actions would have the potential to necessitate a Streambed Alteration Agreement, then such an agreement would be prepared and implemented prior to construction of the project, thus maintaining compliance with Section 1602 of the California Fish and Game Code. A Streambed Alteration Agreement is required if the CDFW determines the activity could substantially adversely affect an existing fish and wildlife resource. The agreement includes measures to protect fish and wildlife resources while conducting the project. The CDFW must comply with CEQA before it may issue a final Lake or Streambed Alteration Agreement; therefore, the CDFW must wait for the lead agency to fully comply with CEQA before it may sign the draft Lake or Streambed Alteration Agreement, thereby making it final.

California Water Code Section 13260

California Water Code Section 13260 requires that any person discharging waste, or proposing to discharge waste, within any region that could affect the quality of the waters of the State, other than into a community sewer system, must submit a report of waste discharge to the applicable RWQCB. Any actions related to the project that would be applicable to California Water Code Section 13260 would be reported to the appropriate RWQCB.

California Water Code Section 13751

California Water Code Section 13751 requires a Report of Well Completion to be filed with the Department of Water Resources within 60 days of well completion. New wells must comply with California Department of Water Resources Well Standards as described in Water Resources Bulletins 74-81 and 74-90.

Resolution No. 68-16 (Antidegradation Policy)

The SWRCB Resolution No. 68-16, *Statement of Policy with Respect to Maintaining High Quality Water of the State* (Antidegradation Policy), requires that high quality waters of the State of California be maintained consistent with their beneficial uses and water quality objectives as defined in a basin plan. Resolution Non 68-16 prohibits degradation of groundwater by waste discharges unless dischargers meet specific conditions.

California Toxics Rule

In 2000, the U.S. EPA promulgated federal water quality standards for the State of California after previously adopted water quality objectives for toxic pollutants were overturned in a court proceeding. These federal water quality standards are known as the California Toxics Rule and have since been incorporated into regional basin plans, where applicable. The State Board has adopted a policy implementing the California Toxics Rule (Resolution 2000-015, as amended by Resolution 2000-30). The California Toxics Rule specifies water quality criteria for 128 priority pollutants based on toxicity to aquatic species, which are used as a basis for the establishment of effluent limitations in NPDES permits. The California Toxics Rule is applicable to surfaced waters only.

National Pollutant Discharge Elimination System (NPDES) General Construction Permit

The NPDES was established per 1972 amendments to the federal CWA, in order to control discharges of pollutants from point sources (Section 402). As described above, under “Federal,” 1987 amendments to the Clean Water Act created a new section of the act devoted to storm water permitting

(Section 402[p]), with individual States designated for administration and enforcement of the provisions of the Clean Water Act and the NPDES permit program. The SWRCB issues both general permits and individual permits under this program.

The California SWRCB Water Quality Order 2009-0009-DWQ (as amended by 2010-0014-DWQ and 2012-006-DWQ) the NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (General Permit) prescribes requirements for stormwater discharges associated with construction activities that disturb one or more acres of land. Construction activities subject to the permit include cleaning, grubbing, grading, stockpiling, and excavation activities. The General Permit requires the filing of a Notice of Intent (NOI) with the SWRCB to be covered under the permit and the development Stormwater Pollution Prevention Plan (SWPPP). The SWPPP must list Best Management Practices (BMPs) the discharger will use to protect storm water runoff and the placement of those BMPs. Additionally, the SWPPP must contain a visual monitoring program; a chemical monitoring program for "non-visible" pollutants to be implemented if there is a failure of BMPs; and a sediment monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment. Section A of the Construction General Permit describes the elements that must be contained in a SWPPP.

Dewatering General Permit

The Central Valley RWQCB issued a General Order for Dewatering and Other Low Threat Discharges to Surface Waters (NPDES No. CAG995001, Order No. R5-2013-0074). The Lahontan RWQCB issued a General Order for Limited Threat Discharges to Surface Waters (NPDES No. CAG996001, Order No. R6T-2014-0049). These General Permits cover discharges of pollutants to surface waters that constitute low-threat concentrations and/or waste loads meeting criteria specified in the General Permit. The Central Valley RWQCB General Order covers discharges which are either 4 months or less in duration or have a daily average discharge flow of less than 0.25 MGD and include construction dewatering and miscellaneous dewatering/low threat discharges. The Lahontan RWQCB General Order covers discharges that do not contain or produce significant quantities of pollutants that could adversely affect designated beneficial uses, including diverted stream flows, construction dewatering and well construction.

The discharge must meet effluent limitations in the General Order and dischargers must comply with the General Order monitoring and reporting requirements, which include effluent and receiving water monitoring for constituents specified in the Order.

Sustainable Groundwater Management Act of 2014

In 2014, California enacted the Sustainable Groundwater Management Act (SGMA; Water Code Section 10720 et seq.). SGMA, and related amendments to California law, require that all groundwater basins designated as high or medium priority in the DWR California Statewide Groundwater Elevation Monitoring (CASGEM) Program, and that are subject to critical overdraft conditions, must be managed under a new Groundwater Sustainability Plan (GSP) or a coordinated set of GSPs, by January 31, 2020. High or medium priority basins that are not subject to a critical overdraft must be regulated under one or more GSPs by 2022. Where GSPs are required, one or more local Groundwater Sustainability Agencies (GSAs) must be formed to implement applicable GSPs. A GSA has the authority to require registration of groundwater wells, measure and manage extractions, require reports and assess fees, and to request revisions of basin boundaries, including establishing new subbasins. GSAs must be formed for high and medium priority basins by June 2017.

The 2.8 million acres of the Valley Region of Kern County has been designated a high priority and the 250,000 acres of the Indian Wells Valley subbasin, which includes the City of Ridgecrest and China Lake Naval Weapons Station, has been classified a medium priority basin. Both are under mandatory requirements to form a GSA and create a GSP that achieves sustainability in 20 years.

Each GSP must include a physical description of the covered basin, such as groundwater levels, groundwater quality, subsidence, information on groundwater-surface water interaction, data on historical and projected water demands and supplies, monitoring and management provisions, and a description of how the plan will affect other plans, including city and county general plans. Under the Act, the GSA is authorized to restrict pumping, levy assessments and fees and undertake water quality and quantity projects to rebalance the basin. The DWR must adopt regulations for the preparation of a GSP by January 2016. As defined by the Act, “sustainable groundwater management” means that groundwater use within basins managed by a GSP will not cause any of the following “undesirable results:” (a) chronic lowering of groundwater levels (not including overdraft during a drought, if a basin is otherwise managed); (b) significant and unreasonable reductions in groundwater storage; (c) significant and unreasonable seawater intrusion; (d) significant and unreasonable degradation of water quality; (e) significant and unreasonable land subsidence; and (f) surface water depletions that have significant and unreasonable adverse impacts on beneficial uses (Water Code Section 10721(w)).

Kern County is a member of the following GSA’s: Cuyama Basin Groundwater Sustainability Agency, Indian Wells Valley Groundwater Authority, and Kern Groundwater Authority, which manages a portion of the valley subbasin. The Valley Region of Kern County also is managed by the Kern River Groundwater Sustainability Agency which is comprised of the City of Bakersfield, Kern Delta Water District, and Improvement District No. 4 of the Kern County Water Agency.

Recycled Water Policy

On February 3, 2009, by Resolution No. 2009-0011, the SWRCB adopted a Recycled Water Policy in an effort to move towards a sustainable water future. In the Recycled Water Policy states “we declare our independence from relying on the vagaries of annual precipitation and move towards sustainable management of surface waters and groundwater, together with enhanced water conservation, water reuse and the use of stormwater.”

The following goals were included in the Recycled Water Policy:

- Increase use of recycled water over 2002 levels by at least one million acre-feet per year by 2020 and at least two million acre-feet per year by 2030.
- Increase the use of stormwater over use in 2007 by at least 500,000 acre-feet per year by 2020 and at least one million acre-feet per year by 2030.
- Increase the amount of water conserved in urban and industrial areas by comparison to 2007 by at least 20 percent by 2020.
- Included in these goals is the substitution of as much recycled water for potable water as possible by 2030.

The Recycled Water Policy provides direction to the RWQCBs regarding issuing permits for recycled water projects, addresses the benefits of recycled water, addresses a mandate for use of recycled water

and indicates the SWRCB will exercise its authority to the fullest extent possible to encourage the use of recycled water.

The Recycled Water Policy also indicates that some groundwater basins contain salts and nutrients that exceed or threaten to exceed water quality objectives established in basin plans and states that it is the intent of this Recycled Water Policy that all salts and nutrients be managed on a basin-wide or watershed-wide basis through development of regional or sub-regional management plans. Finally, the Recycled Water Policy addresses the control of incidental runoff from landscape irrigation projects, recycled water groundwater recharge projects, anti-degradation, control of emerging constituents and chemicals of emerging concern and incentives for use of recycled water.

In accordance with the provisions of the Recycled Water Policy, a CEC Advisory Panel was established to address questions about regulating CECs with respect to the use of recycled water. The CEC Advisory Panel's primary charge was to provide guidance for developing monitoring programs that assess potential CEC threats from various water recycling practices, including groundwater recharge/reuse and urban landscape irrigation. On June 25, 2010, the CEC Advisory Panel provided recommendations to the SWRCB and California Department of Public Health in their Final Report "Monitoring Strategies for Chemicals of Emerging Concern in Recycled Water – Recommendations of a Scientific Advisory Panel". The SWRCB used those recommendations to amend the Recycled Water Policy in 2013 (SWRCB Resolution No. 2013-003).

The April 2013 amendment provides direction to the RWQCBs on monitoring requirements for CECs in recycled water. The monitoring requirements pertain to the production and use of recycled water for groundwater recharge reuse by surface and subsurface application methods, and for landscape irrigation. The amendment identifies three classes of constituents to monitor:

- Human health-based CECs: CECs of toxicological relevance to human health.
- Performance indicator CECs: An individual CEC used for evaluating removal through treatment of a family of CECs with similar physicochemical or biodegradable characteristics.
- Surrogates: A measurable physical or chemical property, such as chlorine residual or electrical conductivity, that provides a direct correlation with the concentration of an indicator compound. Surrogates are used to monitor the efficiency of CEC treatment.

Only groundwater recharge reuse facilities will be required to monitor for CECs and surrogates. Surface application and subsurface application facilities will have different mandatory CECs and a different monitoring schedule. Monitoring is not required for recycled water used for landscape irrigation projects that qualify for streamlined permitting unless monitoring is required under the adopted salt and nutrient management plan. Streamlined permitting projects must meet the criteria specified in the Policy including: compliance with Title 22, application at agronomic rates, compliance with any applicable salt and nutrient management plan, and appropriate use of fertilizers.

Biosolids Regulations

Biosolids generated during wastewater treatment are regulated by the State under SWRCB Water Quality Order No. 2004-0012-DWQ, *Final General Waste Discharge Requirements for Land Application of Biosolids for Use as a Soil Amendment in Agricultural, Silvicultural, Horticultural, and Land Reclamation Activities*. This order, implemented under the federal biosolids rules (40 CFR Part 503), applies to all land application of Class A and Class B biosolids and "exceptional quality" biosolids-derived mixtures consisting of 50 percent or more biosolids. The order establishes

permitting, monitoring, and reporting requirements. Local ordinances, described below, also regulate the disposal of biosolids in Kern County.

Municipal Recycled Water Landscape Irrigation Use Permit

The General Waste Discharge Requirements for Landscape Irrigation Uses of Municipal Recycled Water (Water Quality Order No. 2009-0006-DWQ) (Landscape Irrigation General Permit) regulates landscape irrigation with recycled water. Specified uses of recycled water considered to be “landscape irrigation” include any of the following: (i) parks, greenbelts, and playgrounds; (ii) school yards; (iii) athletic fields; (iv) golf courses; (v) cemeteries; (vi) residential landscaping and common areas (not including individually owned residential areas); (vii) commercial landscaping, except eating areas; (viii) industrial landscaping, except eating areas; and (ix) freeway, highway, and street landscaping. Producers or distributors of recycled water must submit a Notice of Intent for coverage under the Landscape Irrigation General Permit. This permit is not required for individual recycled water users and does not cover use of harvested stormwater for irrigation.

Producer and Distributor Responsibilities

Producers must deliver disinfected tertiary recycled water as defined by California Code of Regulations (CCR) Title 22, sections 60301.230 and 60301.320, which address disinfection requirements and “filtered wastewater” requirements, respectively. Producers are responsible for ensuring that recycled water meets the quality standards for disinfected tertiary recycled water as described in Title 22 and any associated waste discharge requirement order for the water reclamation plant. Distributors are responsible for drafting and submitting an operations and maintenance plan to the SWRCB. The operations and maintenance plan contents are contained in a permit, and include operation and maintenance/management of transport facilities and associated infrastructure necessary to convey and distribute recycled water from the point of production to the point of use. Additionally, distributors must designate a Recycled Water Use Supervisor for each use area. A permit also addresses best management practices, including general operations and maintenance, which producers and distributors must apply to manage recycled water and prevent water quality impacts.

Usage

A permit establishes terms and conditions of discharge to ensure that the discharge does not unreasonably affect beneficial uses of groundwater and surface water. This includes minimum setback distances, signage, application control, and use restrictions, along with other preventative measures, such as backflow prevention and cross-contamination programs.

California Green Building Standards Code (CALGreen Code)

The State of California enacted The California Green Building Standards Code (CALGreen Code) as part 11 of The California Building Standards Code (Title 24). The 2016 CALGreen Code, effective on January 1, 2017, contains measures that are designed to improve public health, safety, and general welfare by utilizing design and construction methods that reduce the negative environmental impact of development and encourage sustainable construction practices.

The CALGreen Code provides mandatory direction to developers of all new construction and renovations of residential and non-residential structures with regard to all aspects of design and construction, including but not limited to site drainage design, stormwater management, and water use efficiency. Required measures are accompanied by a set of voluntary standards that are designed to encourage developers and cities to aim for a higher standard of development.

Under the CALGreen Code, all residential and non-residential sites are required to be planned and developed to keep surface water from entering buildings and to incorporate efficient outdoor water use measures. Construction plans are required to show appropriate grading and surface water management methods, such as swales, water collection and disposal systems, French drains, and rain gardens. Plans should also include outdoor water use plans that utilize weather or soil moisture controlled irrigation systems. In addition to the above-mentioned requirements, non-residential structures are also required to develop:

- A SWPPP;
- An irrigation budget for landscapes greater than 2,500 square feet, and
- A quantified plan to reduce waste water by 20 percent through use of water-efficient fixtures or non-potable water systems, such as use of harvested rainwater, grey water, and/or recycled water.

CALGreen also offers a tiered set of voluntary measures to encourage residential and non-residential development that goes beyond the mandatory standards to reduce soil erosion, rainwater capture and infiltration, and use of recycled and/or grey water systems. Non-residential developers are further encouraged to integrate treatment BMPs that result in zero net increase in runoff due to development and can treat runoff from the 85th percentile storms. Furthermore, by meeting overall environmental performance goals for the specified categories (e.g., planning and design, energy efficiency, water efficiency and conservation, etc.), buildings can be designated as CALGreen Tier 1 or Tier 2, with the Tier 2 designation having more stringent goals than the Tier 1 designation.

Assembly Bill (AB) 1750 (Rainwater Capture Act of 2012)

Assembly Bill (AB) 1750 (AB 1750), also known as the Rainwater Capture Act of 2012, allows residential, commercial, and government land owners to install, operate, and maintain rainwater collection systems that would not otherwise directly enter a saltwater body through a constructed conveyance and treatment system. Under AB 1750, rainwater is defined as precipitation on any public or private parcel that has not entered an off-site storm drain system or channel, a flood control channel, or any other stream channel, and has not previously been put to beneficial use. AB 1750 permits the following uses for rooftop runoff: rain barrel system for outdoor non-potable use, rain collection system for outdoor non-potable use or infiltration into groundwater, and rain collection system for indoor non-potable use. Additional requirements are included for indoor non-potable use. Compliance with any local rainwater or stormwater capture programs continues to be required under AB 1750.

Senate Bill (SB) 610 (Chapter 643, Statutes of 2001) and SB 221 (Chapter 642, Statutes of 2001)

SB 610 and SB 221 are companion measures that seek to promote more collaborative planning among local water suppliers and cities and counties. They require that water supply assessments occur early in the land use planning process for all large-scale development projects. If groundwater is the supply source, the required assessments must include detailed analyses of historic, current, and projected groundwater pumping and an evaluation of the sufficiency of the groundwater basin to sustain a new project's demands. They also require an identification of existing water entitlements, rights, and contracts and a quantification of the prior year's water deliveries. In addition, the supply and demand analysis must address water supplies during single and multiple dry years presented in 5-year

increments for a 20-year projection. Under SB 221, approval by a county of a subdivision of more than 500 homes requires an affirmative written verification of a sufficient water supply.

California Drought Regulations

Beginning in January 2014, Governor Jerry Brown issued three Executive Orders (EOs), B-26-14, B-28-14, and B-29-15, regarding water supply, water demand, and water use within the State during severe drought conditions. EO B-29-15, issued April 1, 2015, sets limitations not only for existing land uses and water supply systems, but also for new construction. Some of these restrictions include:

- The Water Board shall prohibit irrigation with potable water of ornamental turf on public street medians. (EO B-29-15, Save Water, Action #6)
- The Water Board shall prohibit irrigation with potable water outside of newly constructed homes and buildings that is not delivered by drip or microspray systems. (EO B-29-15, Save Water, Action #7)
- The California Energy Commission (CEC) shall adopt emergency regulations establishing standards that improve the efficiency of water appliances, including toilets, urinals, and faucets available for sale and installation in new and existing buildings. (EO B-29-15, Increase Enforcement Against Water Waste, Action #16)

In addition, EO B-29-15 requires that DWR update the State Model Water Efficient Landscape Ordinance through expedited regulation by the end of 2015. This ordinance will increase water efficiency standards for new and existing landscapes through more efficient irrigation systems, greywater usage, onsite storm water capture, and by limiting the portion of landscapes that can be covered in turf (EO B-29-15, Increase Enforcement Against Water Waste, Action #11).

On November 13, 2015, Governor Brown issued EO B-36-15, which upheld the previous EOs, and directs the SWRCB to extend of urban water use restrictions through October 31, 2016 based on drought conditions known through January 2016. The SWRCB issued Emergency Regulations on February 2, 2016, in compliance with EO B-36-15. These emergency regulations maintain the current tiers of required water reductions; however, additional adjustments in response to stakeholders; equity concerns were included in the Emergency Regulations.

In addition, DWR and the U.S. Bureau of Reclamation have finalized the 2016 Drought Contingency Plan that outlines State Water Project and Central Valley Project operations from February through November 2016. The 2016 Drought Contingency Plan was developed in coordination with staff from State and federal agencies. The 2016 Drought Contingency Plan communicates overarching goals for 2016 water management and the potential operations needed to achieve those goals.

In May 2016, Governor Brown issued EO B-37-16, which upheld the previous EOs, and directs local agencies to provide new permanent water use targets for each urban water supplier and concrete improvements to drought preparedness. The order bolstered the State's drought resilience and preparedness by establishing longer-term water conservation measures that include permanent monthly water use reporting, new urban water use targets, reducing system leaks and eliminating clearly wasteful practices, strengthening urban drought contingency plans and improving agricultural water management and drought plans. Local agencies are required to publicly disclose the projections and calculations used to determine their conservation standards, and to continue monthly water conservation reporting. EO B-37-16 calls for wise water use and less water waste to become permanent changes to prepare for more frequent and persistent periods of limited water supply. On April 7, 2017, EO B-40-17 lifted the drought emergency in all California counties except Fresno,

Kings, Tulare, and Tuolumne counties. EO B-40-17 builds on EO B-37-16, which continues to remain in effect, to continue to make water conservation a way of life in California.

Local

Kern County General Plan (KCGP)

The policies, goals, and implementation measures in the KCGP applicable to hydrology and water quality as related to the proposed project are provided below. The KCGP contains additional policies, goals, and implementation measures that are more general in nature and not specific. Therefore, they are not listed below, but, as stated in Chapter 2, *Introduction*, all policies, goals, and implementation measures in the KCGP are incorporated by reference.

Chapter 1. Land Use, Open Space, and Conservation Element

Section 1.3 Physical and Environmental Constraints

Policies

- **Policy 1.** Kern County will ensure that new developments will not be sited on land that is physically or environmentally constrained (Map Code 2.1 [Seismic Hazard], Map Code 2.2 [Landslide], Map Code 2.3 [Shallow Groundwater], Map Code 2.5 [Flood Hazard], Map Codes from 2.6 – 2.9, Map Code 2.10 [Nearby Waste Facility], and Map Code 2.11 [Burn Dump Hazard]) to support such development unless appropriate studies establish that such development will not result in unmitigated significant impact.
- **Policy 2.** In order to minimize risk to Kern County residents and their property, new development will not be permitted in hazard areas in the absence of implementing ordinances and programs. The ordinances will establish conditions, criteria and standards for the approval of development in hazard areas.
- **Policy 3.** Zoning and other land use controls will be used to regulate and, in some instances, to prohibit development in hazardous areas.
- **Policy 6.** Regardless of percentage of slope, development on hillsides will be sited in the least obtrusive fashion, thereby minimizing the extent of topographic alteration required and reducing soil erosion while maintaining soil stability.
- **Policy 7.** Ensure effective slope stability, wastewater drainage, and sewage treatments in areas with steep slopes are adequate for development.
- **Policy 8.** Encourage the preservation of the floodplain's flow conveyance capacity, especially in floodways, to be open space/passive recreation areas throughout the County.
- **Policy 9.** Construction of structures that impede water flow in a primary floodplain will be discouraged.
- **Policy 10.** The County will allow lands which are within flood hazard areas, other than primary floodplains, to be developed in accordance with the General Plan and Floodplain Management Ordinance, if mitigation measures are incorporated so as to ensure that the proposed development will not be hazardous within the requirements of the Safety Element (Chapter 4) of this General Plan.
- **Policy 11.** Protect and maintain watershed integrity within Kern County.

Implementation Measures

- **Implementation Measure C.** Cooperate with the Kern County Water Agency to classify lands in the County overlying groundwater according to groundwater quantity and quality limitations.
- **Implementation Measure E.** Development proposed in areas with steep slopes (Map Code 2.4) will be reviewed for conformity to Chapter 19.88 Hillside Development Ordinance or Chapter 19.52 Special Planning (SP) District to ensure that appropriate soil stability, drainage, and sewage treatment will result.
- **Implementation Measure F.** The County will comply with the Colbey-Alquist Floodplain Management Act in regulating land use within designated floodways.
- **Implementation Measure H.** Development within areas subject to flooding, as defined by the appropriate agency, will require necessary flood evaluations and studies.
- **Implementation Measure I.** Designated flood channels and water courses, such as creeks, gullies, and riverbeds, will be preserved as resource management areas or in the case of urban areas, as linear parks whenever practical.
- **Implementation Measure J.** Compliance with the Floodplain Management Ordinance prior to grading or improvement of land for development or the construction, expansion, conversion or substantial improvements of a structure is required.
- **Implementation Measure N.** Applicants for new discretionary development should consult with the appropriate Resource Conservation District and the California Regional Water Quality Control Board regarding soil disturbances issues.

Goals

- **Goal 5.** Ensure that adequate supplies of quality (appropriate for intended use) water are available to residential, industrial, and agricultural users within Kern County.
- **Goal 9.** Serve the needs of industries and Kern County residents in a manner that does not degrade the water supply and the environment and protect the public health and safety by avoiding surface and subsurface nuisances resulting from the disposal of hazardous wastes, irrespective of the geographic origin of the waste

Section 1.9 Resource

Goals

- **Policy 10.** To encourage effective groundwater resource management for the long-term economic benefit of the County the following shall be considered:
 - a. Promote groundwater recharge activities in various zone districts.
 - b. Support for the development of Urban Water Management Plans and promote Department of Water Resources grant funding for well water providers.
 - c. Support the development of groundwater management plans.
 - d. Support the development of future sources of additional surface water and groundwater, including conjunctive use, recycled water, conservation, additional storage of surface water and groundwater and desalination.

- **Policy 11.** Minimize the alteration of natural drainage areas. Require development plans to include necessary mitigation to stabilize runoff and silt deposition through utilization of grading and flood protection ordinances.
- **Policy 12.** Areas identified by the Natural Resource Conservation Service (formerly Soil Conservation Service) as having high range-site value should be conserved for Extensive Agriculture uses or as Resource Reserve, if located within a County water district.

Implementation Measures

- **Implementation Measure C.** The County Planning Department will seek review and comment from the County Engineering and Survey Services Department on the implementation of the National Pollution Discharge Elimination System for all discretionary projects.

Section 1.10 General Provisions

Goals

- **Goal 1.** Ensure that the County can accommodate anticipated future growth and development while maintaining a safe and healthful environment and a prosperous economy by preserving valuable natural resources, guiding development away from hazardous areas, and assuring the provision of adequate public services.

Section 1.10.5 Threatened and Endangered Species

Policies

- **Policy 32.** Riparian areas will be managed in accordance with United States Army Corps of Engineers, and the California Department of Fish and Wildlife rules and regulations to enhance the drainage, flood control, biological, recreational, and other beneficial uses while acknowledging existing land use patterns.

Section 1.10.6 Surface Water and Groundwater

Policies

- **Policy 34.** Ensure that water quality standards are met for existing users and future development.
- **Policy 39.** Encourage the development of the County's groundwater supply to sustain and ensure water quality and quantity for existing users, planned growth, and maintenance of the natural environment.
- **Policy 43.** Drainage shall conform to the Kern County Development Standards and the Grading Ordinance.
- **Policy 44.** Discretionary projects shall analyze watershed impacts and mitigate for construction-related and urban pollutants, as well as alterations of flow patterns and introduction of impervious surfaces as required by the California Environmental Quality Act (CEQA), to prevent the degradation of the watershed to the extent practical.
- **Policy 46.** In accordance with the Kern County Development Standards, tank truck hauling of domestic water for land developments or lots within new land developments is not permitted.

Implementation Measures

- **Implementation Measure Y.** Promote efficient water use by utilizing measures such as:
 - i. Requiring water-conserving design and equipment in new construction.
 - ii. Encouraging water-conserving landscaping and irrigation methods.
 - iii. Encouraging the retrofitting of existing development with water conserving devices.

Section 1.10.8 Smart Growth

Policies

- **Policy 49.** Discretionary development projects should be encouraged to incorporate innovative or “smart growth” land use planning techniques as design features, as follows:
 - a. Higher Density development, where compatible, to maximize the efficient use of land.
 - b. Mixed use developments that promote reduced vehicle trips by having residential, commercial, and public uses proximate to each other.
 - c. Variety of housing types, including those using energy efficient design, and densities to address Kern County’s housing needs.
 - d. Master planned communities that feature interconnected roads, transit stops, sidewalks, landscaping, and trails to encourage efficient vehicle and pedestrian movement.
 - e. Compact development that conserves open space, agricultural land, floodprone areas, creeks, hillsides, ridge tops, wetlands, and other natural features.
 - f. Adequate infrastructure (i.e. roads, sewer, water, parks, etc.) is provided as a condition of development approval by the project proponent.
 - g. Aesthetically pleasing and unifying design features that promote a visually pleasing environment.

Building and Construction Ordinance (Title 17 of the Kern County Code of Ordinances)

Requirements of the Kern County Buildings and Construction Ordinance (Title 17 of the Kern County Code of Ordinances) will be implemented. The purpose of the Building and Construction Ordinance is to promote the public safety and welfare by the adoption of minimum building standards to be required and enforced throughout unincorporated Kern County.

Chapter 17.28 Kern County Grading Code

Section 17.28.140 Erosion Control

Requirements of the Kern County Grading Code will be implemented. A grading permit will be obtained prior to commencement of construction activities. Of particular note with respect to hydrology and water quality is Section 17.28.140, Erosion Control, which addresses the following:

- **Slopes.** The faces of cut and fill slopes shall be prepared and maintained to control against erosion. This control may consist of effective planting. The protection for the slopes shall be installed as soon as practicable and prior to calling for final approval. Where cut slopes

are not subject to erosion due to the erosion-resistant character of the materials, such protection may be omitted.

- **Other Devices.** Where necessary, check dams, cribbing, riprap or other devices or methods shall be employed to control erosion and provide safety.
- **Temporary Devices.** Temporary drainage and erosion control shall be provided as needed at the end of each work day during grading operations, such that existing drainage channels would not be blocked. Dust control shall be applied to all graded areas and materials and shall consist of applying water or another approved dust palliative for the alleviation or prevention of dust nuisance. Deposition of rocks, earth materials or debris onto adjacent property, public roads or drainage channels shall not be allowed.

Chapter 17.48 Kern County Floodplain Management Ordinance

Any construction that takes place within areas of special flood hazards, areas of flood-related erosion hazards, and areas of mudslide (i.e., mudflow) hazards within the jurisdiction of unincorporated Kern County will comply with the requirements and construction design specifications of this ordinance. Any required development permits will be obtained prior to commencement of construction activities. Sections 17.48.250 through 17.48.350 of the ordinance elaborate on the standards of construction in the special flood hazards area. The requirements of sections 17.48.250 through 17.48.350 include standards to:

- Address the issue of anchoring to prevent flotation, collapse or lateral movement of the structure resulting from hydrologic forces; include acceptable construction materials that are flood resistant;
- Raise buildings within flood areas one foot above the shallow flooding depth; and
- Ensure utilities would not interfere with flood hazard areas.

Kern County Zoning Ordinance (Title 19 of the Kern County Code of Ordinances)

Chapter 19.50 Floodplain Primary District

The purpose of the Floodplain Primary (FPP) district is to protect the public health and safety and minimize property damage by designating areas that are subject to flooding with high velocities or depths and by establishing reasonable restrictions on land use in such areas. The FPP district shall be applied to those areas lying within the “floodway” as shown on the Flood Boundary Floodway Map (FBFM) or within the “designated floodway” on the State of California’s Board of Reclamation’s Kern River Designated Floodway Studies, or other maps where engineering studies have been made and adopted by the county board of supervisors. Uses in the FPP district are limited to those low intensity uses not involving buildings, structures and other activities that might adversely affect or be adversely affected by flow of water in the floodway.

Section 19.50.040 – Prohibited Uses.

All other uses not permitted by Sections 19.50.020 and 19.50.030 of this chapter or accessory thereto under Section 19.08.110 are prohibited in an FPP District, including:

- A. Buildings, structures, mobile homes, other improvements or accessory uses, or development that would encroach into the channel and obstruct the natural flow of waters within a designated floodway or which will in any manner endanger life and property;
- B. All public and private sewage disposal systems or any part thereof;

- C. Any use which may endanger temporary safeguards which have been erected until such time as flood protection or control works have been constructed;
- D. Land fill, sumps or excavation of a similar nature that would obstruct the natural flow of floodwater within a designated floodway;
- E. All uses that are likely to increase the flood hazard or in any way affect the water-carrying capacity of the designated floodway;
- F. Dumping, stockpiling or storage of floatable substances or other materials which, in the opinion of the Kern County Public Works Department, will add to the debris load of the stream or watercourse;
- G. Commercial cattle or livestock feed yards, auction yards, dairies, junk or salvage yards, billboards and other advertising structures of any kind or type which may have residential, commercial or industrial connotations;
- H. Storage tanks, sumps, processing equipment or other similar facilities related to oil and gas production not expressly permitted pursuant to Section 19.50.020 and subsection (C) of Section 19.50.130 of this chapter;
- I. Sources of water supply (e.g. wells, springs, etc.) unless protected by flood control devices approved by the Kern County Public Works Department and constructed in accordance with the requirements of the Kern County health department or Kern County engineering and survey services department, whichever has jurisdiction, so as to minimize infiltration of floodwaters;
- J. Tree farming, unless it can be shown to the Kern County Planning and Natural Resources Department that the spacing of the trees will not cause a rise in the base flood elevation or that the trees will not add to the debris load of the stream.

Kern County Specific Plans

Kern County has adopted 39 Specific Plans, 10 Rural Community Plans, and 14 Interim Rural Community Plan Maps. The Specific Plans and Rural Community Plans are intended to be an amplification of the goals and policies of the KCGP and are, therefore, consistent therewith. Interim Rural Community Plan Maps are areas where a specific plan has not been formally adopted, thus the goals and policies of the KCGP govern these areas. Future commercial cannabis cultivation, processing/packaging, and sales activities that would be authorized under the proposed project that would be located within the boundary of an adopted Specific Plan would be regulated according to County zoning.

Metropolitan Bakersfield General Plan (MBGP)

The Metropolitan Bakersfield General Plan (MBGP), a joint effort between the Kern County Planning and Natural Resources Department and the City of Bakersfield Planning Division, was last adopted on December 11, 2007. The MBGP includes both city and unincorporated County lands. The MBGP describes the community's physical development as well as its economic, social and environmental goals. The proposed project would be subject to the following applicable policies and implementation measures of the MBGP, with respect to hydrology and water quality.

Chapter V. Conservation Element

A. Biological Resources

Policies

- **Policy 2.** Preserve areas of riparian vegetation and wildlife habitat within floodways along rivers and streams, in accordance with the Kern River Plan Element and channel maintenance programs designed to maintain flood flow discharge capacity.

B. Mineral Resources

Goals

- **Goal 4.** Protect land, water, air quality and visual resources from environmental damage resulting from mineral and energy resource development.

C. Soils and Agriculture

Policies

- **Policy 7.** Land use patterns, grading, and landscaping practices shall be designed to prevent soil erosion while retaining natural watercourses when possible.
- **Policy 12.** Prohibit premature removal of ground cover in advance of development and require measures to prevent soil erosion during and immediately after construction.

D. Water Resources

Goals

- **Goal 1.** Conserve and augment the available water resources of the planning area.
- **Goal 2.** Assure that adequate groundwater resources remain available to the planning area.
- **Goal 3.** Assure that adequate surface water supplies remain available to the planning area.
- **Goal 4.** Continue cooperative planning for and implementation of programs and projects which will resolve water resource deficiencies and water quality problems.
- **Goal 5.** Achieve a continuing balance between competing demands for water resource usage.
- **Goal 6.** Maintain effective cooperative planning programs for water resource conservation and utilization in the planning area by involving all responsible water agencies in the planning process.

Policies

- **Policy 6.** Protect planning area groundwater resources from further quality degradation.
- **Policy 8.** Consider each proposal for water resource usage within the context of total planning area needs and priorities-major incremental water transport, groundwater recharge, flood control, recreational needs, riparian habitat preservation and conservation.
- **Policy 9.** Encourage and implement water conservation measures and programs.

Implementation Measures

- **Implementation Measure 6.** Support the provision of adequate wastewater collection systems and treatment reclamation and disposal facilities which will prevent groundwater degradation by onsite wastewater systems.
- **Implementation Measure 7.** Maintain industrial waste discharge regulation and monitoring programs which protect the planning area groundwater from contaminants.
- **Implementation Measure 10.** Support additional water conservation measures and programs of benefit to the planning area.

Chapter VIII. Safety Element

A. Seismic Safety

Goals

- **Goal 7.** Protect land uses from the risk of dam failure inundation including the assurances that: the functional capabilities of essential facilities are available in the event of a flood; hazardous materials* are not released; effective measures for mitigation of dam failure inundation are incorporated into the design of critical facilities; and the rapid and orderly evacuation of populations in the inundation area will occur.

Critical Facilities Policies

Policies

- **Policy 4.** Encourage critical facilities in dam inundation areas to develop and maintain plans for safe shut-down and efficient evacuation from their facilities, as appropriate to the degree of flood hazard for each facility.

Liquefaction Policies

Policies

- **Policy 13.** Determine the liquefaction potential at sites in areas of high groundwater prior to development and determine specific mitigation to be incorporated into the foundation design, as necessary to prevent or reduce damage from liquefaction in an earthquake (I-17 through I-19).
- **Policy 14.** Route major lifeline installations around potential liquefaction areas or otherwise protect them against significant damage from liquefaction in an earthquake.

Dam Failure Inundation Risk Policies

Policies

- **Policy 18.** Design discretionary critical facilities located within the potential inundation area for dam failure in order to: mitigate the effects of inundation on the facility; promote orderly shut-down and evacuation (as appropriate); and, prevent onsite hazards from affecting building occupants and the surrounding communities in the event of dam failure.
- **Policy 19.** Design discretionary facilities in the potential dam inundation area used for the manufacture, storage or use of hazardous materials to prevent onsite hazards from affecting surrounding communities in the event of inundation.

- **Policy 20.** Require emergency response plans for the planning area to include specific procedures for the sequential and orderly evacuation of the potential dam inundation area.

Implementation Measures

- **Implementation Measure 2.** Require detailed site studies for ground shaking characteristics, liquefaction potential, dam failure inundation and flooding potential, and fault rupture potential, as background to the design process for critical facilities under city and county discretionary approval.
- **Implementation Measure 17.** Require liquefaction investigations in all areas of high groundwater potential and appropriate foundation designs to mitigate potential damage to buildings on sites with liquefaction potential.
- **Implementation Measure 20.** Route major lifeline components such as for Highways, utilities and petroleum or chemical pipelines around areas of high groundwater wherever possible. Where they must cross an area of high groundwater, plans and permits shall require design features to accommodate extensive ground rupture without prolonged disruption of an essential service or threat to health and safety.
- **Implementation Measure 26.** Develop procedures for the discretionary review of critical facilities proposed in an area of potential dam inundation. Approvals shall include requirements that emergency shut-down and facility evacuation plans be developed, maintained and exercised for each facility, and the potential effects of inundation on essential facility functions and the safety of occupants and the community in general are addressed.
- **Implementation Measure 27.** Facilities used for the manufacture, storage or use of hazardous materials shall comply with the uniform fire code, with requirements for siting or design to prevent onsite hazards from affecting surrounding communities in the event of inundation.
- **Implementation Measure 28.** Incorporate Specific Plans for the sequential and orderly evacuation of the potential dam inundation area into emergency response plans.

B. Flooding

Goals

- **Goal 1.** Minimize hazards to planning area residents resulting from flooding.
- **Goal 2.** Reduce the risk of flooding to land uses.

Policies

- **Policy 1.** Develop specific standards which apply to development located in flood hazard areas, as defined by Federal Flood Insurance maps and most recent information as adopted by the responsible agency.

Implementation Measures

- **Implementation Measure 2.** Develop procedures for the review of proposed facilities which use, manufacture or store hazardous materials proposed in areas of identified flood hazard.

D. Storm Drainage

Goals

- **Goal 1.** Ensure the provision of adequate storm drainage facilities to protect planning area residents from flooding resulting from storm water excess.

4.9.4 Impacts and Mitigation Measures

This section analyzes impacts on hydrology and water quality as a result of the proposed project. Mitigation measures are included, as needed, to avoid or lessen potentially significant impacts.

Methodology

This analysis first established baseline conditions for the affected environment relevant to hydrology and water quality, as presented above in Section 4.9.2, *Environmental Setting*. The current condition and quality of these water resources was used as the baseline against which to compare the potential impacts of the proposed project. These baseline conditions were evaluated based on their potential to be affected by the activities under each alternative, including construction activities as well as operation activities. The evaluation of project impacts is based on professional judgment, analysis of Kern County's hydrology and water quality policies, and the significance criteria established by Appendix G of the California Environmental Quality Act (CEQA), which the lead agency has determined to be appropriate criteria for this EIR.

Development Standards Related to Hydrology and Water Quality

Option A

Option A of the proposed project would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Therefore, no development standards are identified in the proposed Zoning Ordinance; refer to Appendix B for specific wording of the proposed ordinance under Option A.

Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, testing, and retail cannabis stores with or without mobile delivery facilities. Development standards provided in the proposed Zoning Ordinance, that pertain to hydrology and water quality include, but are not limited to, the following (refer to Appendix C for specific working of the proposed ordinance under Option B):

- All cannabis facilities must be 0.5 mile from any school, park, day care center or youth center.
- The applicant must demonstrate compliance with all applicable mitigation measures prior to the issuance of a grading or building permit for any future cannabis related facility.
- The project operator must comply with the National Pollutant Discharge Elimination System Permit, and the associated SWPPP for any construction-related activities.
- A Fire Safety Plan must be approved by the Kern County Fire Department for future cannabis related facilities.

- A Hazardous Materials Business Plan must be approved by the Kern County Environmental Health Services Division/Hazardous Materials Section.
- For future cannabis related facilities, if construction is required, debris and waste generated would be recycled to the extent feasible.

Thresholds of Significance

The Kern County CEQA Implementation Document and Kern County Environmental Checklist state that a project would normally be considered to have a significant impact if it would:

- Violate any water quality standards or waste discharge requirements;
- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted);
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation onsite or offsite;
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on site or off site;
- Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;
- Otherwise substantially degrade water quality;
- Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map;
- Place within a 100-year flood hazard area structures which would impede or redirect flood flows;
- Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam; or,
- Inundation by seiche, tsunami, or mudflow.

The lead agency determined in the NOP/IS (see Appendix A of this EIR) that the following environmental issues areas resulted in no impact and were scoped out of requiring further review in this Program EIR. Please refer to Appendix A of this Draft EIR for a copy of the NOP/IS and additional information regarding the following impact:

- Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map.

The proposed project is not anticipated to place housing within a 100-year floodplain. Neither Option A nor Option B are housing projects and would not result in significant residentially related flood impacts.

Project Impacts

Impact 4.9-1: Violate Any Water Quality Standards or Waste Discharge Requirements

Development of the proposed project would result in a significant impact to hydrology and water quality if associated construction, operation, and maintenance activities would result in the violation of any water quality or waste discharge standards. Such violations could occur through the creation of erosion, sedimentation, and/or polluted runoff, through the accidental release of potentially hazardous materials required during construction or operational activities. Applicable water quality standards and regulations are presented in Section 4.9.3, *Regulatory Setting*. Potential impacts associated with water quality or waste discharge violations are described below.

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A does not provide opportunities for business development. Option A would continue to allow individuals to cultivate up to six plants on private property. Any wastewater generated would be similar to wastewater generated from residential gardens and the residential gardening standards would continue to apply. Therefore, Option A would not exceed wastewater treatment requirements for either the Central Valley RWQCB or the Lahontan RWQCB. Impacts would be less than significant in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis stores with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 square feet (ft^2) of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft^2 of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for up to 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total

of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

New future cannabis-related facilities, not located within existing structures, would cause an increase in impervious surfaces; however, compliance with federal, State, and local requirements on a project-by-project basis and by minimizing the amount of grading and utilizing existing drainage patterns projects should be able to minimize their effect on downstream water courses, as well as their impacts on water quality.

Construction Related Impacts

Temporary construction related impacts are anticipated to involve grading to construct buildings, access roads, signage, lighting, landscaping, onsite utilities, and necessary infrastructure improvements to support implementing projects. The potential for water quality impacts would be significant during the earthwork and construction phase, when the potential for erosion, siltation, and sedimentation would be the greatest and following construction, but prior to the establishment of any ground cover, when erosion potential may remain relatively high.

Disturbance of soil during construction could result in soil erosion and subsequent water quality degradation through increased turbidity and sediment deposition into local waterways. Potential impacts on water quality arising from erosion and sedimentation are expected to be localized and temporary during construction. The implementation of the project would be conducted in accordance with the Kern County Grading Ordinance and a grading plan would be required to be submitted to the County for approval prior to commencement of any construction activities. A General Construction Permit would be required for the project, which requires BMPs and NPDES Permit with the associated SWPPP. The SWPPP would ensure incorporation of BMPs and adherence to NPDES requirements. In addition, as part of the SWPPP, a Construction Site Monitoring Program would be prepared, which identifies monitoring and sampling requirements during construction. Construction-related erosion and sedimentation impacts as a result of soil disturbance would be less than significant following implementation of a SWPPP and BMPs required by the Kern County Grading Ordinance. Further, implementation of Mitigation Measure MM 4.3-2 would require activities to reduce the potential for fugitive dust to be released into the air or transported to on-site or off-site water bodies through wind or runoff (refer to Section 4.3, *Air Quality*, for further detail).

During construction, there is the potential for an increase in trash and debris. The SWPPP and BMPs would contain trash control measures such as, catch basin inserts, good housekeeping practices such as sweeping and trash bins. Compliance with the permit requirements, Mitigation Measure MM 4.9-1, and BMPs would reduce impacts to a less than significant level.

During construction, any activity which results in the accidental release of hazardous or potentially hazardous materials could result in water quality degradation. Materials that could contribute to this impact include, but are not limited to, the following: lead-based paint flakes, diesel fuel, gasoline, lubricating fluids, solvents, hydraulic fluid, antifreeze, transmission fluid, cement slurry, and other fluids utilized by construction and maintenance vehicles and equipment; however, the potential consequences of any spill or release of these types of materials are generally small due to the localized, short-term nature of such releases. Furthermore, implementation of the SWPPP would identify measures regarding the handling of these types of materials and the protocols for actions taken if a spill or release does occur. Therefore, with implementation of mitigation

measures, impacts associated with these types of pollutants would be considered less than significant.

During construction, hazardous materials from historic land uses (legacy hazards) could be encountered. In addition, pesticides are potentially present in soils on future cannabis related sites within zones A (Exclusive Agriculture) and A-1 (Limited Agriculture) due to past and on-going agricultural activities. In addition, portions of the County, mostly in the Valley Region, contain large oil fields and many oil and gas extraction wells. To reduce potential release of hazardous materials associated with potential hazards, Mitigation Measures MM 4.8-2 through MM 4.8-7 would require that if petroleum products or other suspect materials or wastes of unknown origin are discovered during ground disturbing activities, all work would immediately halt and proper handling or treatment of the materials shall be determined. Such measures would assist in reducing the potential for the implementation of the project to violate any water quality standards or waste discharge requirements (with regard to the release of hazardous materials) to less than significant.

Groundwater depths vary throughout the County, with greater depths occurring in the desert area. Some areas of the Valley Region contain shallow ground water as identified on the Seismic Hazard Atlas and the KCGP land use maps and depicted on Figure 4.6-2, *Shallow Groundwater Areas within Kern County*. Surface water resources could be degraded through the discharge of contaminated groundwater during dewatering activities required for construction. If dewatering is found to be required, it is not expected that any contaminated groundwater or hazardous substances would be encountered during activities associated with construction of the proposed project; however, improper design and/or implementation of the dewatering plan could result in discharge of contaminated groundwater to a surface waterbody, which would subsequently lead to degradation of surface water quality. A proper dewatering plan would include testing of the groundwater to be dewatered, and subsequent treatment of that groundwater prior to discharge if contamination is discovered. Discharge of the dewatered effluent would be regulated under the NPDES General Permit for Storm Water Discharges Associated with Construction Activity (Construction General Permit), as well as the Dewatering General Permit, both issued by the RWQCB. Compliance with the conditions of the Construction General Permit would ensure that contaminated groundwater is properly tested and treated, if necessary, prior to discharge to any surface water. The Dewatering General Permit also requires complying with numeric effluent limitations, conducting effluent and receiving water monitoring during the discharge, and submitting a discharge report to either the Central Valley RWQCB or the Lahontan RWQCB, depending on the future cannabis-related facility's location, for every discharge.

Operations

Future cultivation, processing and packaging, distribution, and adult use retail cannabis stores with or without mobile delivery operations within the Bakersfield Urbanized Area must comply with the requirements of the City of Bakersfield and County of Kern 2014 Storm Water Management Plan (SWMP). The County is one of the permittees under the primary Kern County NPDES permit (Municipal Stormwater Discharge Permit No. CA0083399), and projects in the Bakersfield Urbanized Area are subject to SWMP requirements. In general, the Kern County SWMP requirements are met in the County through implementation of the Grading and Floodplain Ordinances contained within Title 17 of the Kern County Code of Ordinances.

Currently, the Central Valley RWQCB has a waste discharge program that includes permits addressing controllable water quality factors associated with cultivation. As of February 2016, cultivators must enroll in the Cannabis Cultivation Waste Discharge Regulatory Program, General

Order No. R5-2015-0113 from the Central Valley RWQCB. General Order No. R5-2015-0113 includes requirements for outdoor and outdoor/indoor mix cultivation activities that occupy and/or disturb more than 1,000 ft². Indoor and outdoor commercial medical and adult use cannabis cultivation facilities within the Central Valley RWQCB jurisdiction would be required to comply with General Order No. R5-2015-0113 if the operation is 1,000 ft² or larger (Central Valley RWQCB, 2015a and 2015b). The Lahontan RWQCB does not currently have a waste discharge regulatory program. In addition, the State Water Resources Board (SWRB) began development of a Statewide General Order for cannabis cultivation in the Fiscal Year 2016-2017, with an anticipated completion goal of August 2017 (Central Valley RWQCB, 2016). With the incorporation of mitigation measures, future commercial medical and adult use cannabis cultivation under Option B would not exceed water quality or waste discharge requirements for either the Central Valley RWQCB or the Lahontan RWQCB and impacts would be less than significant.

Future medical and adult use retail cannabis stores with or without mobile delivery would be allowed in areas where commercial and industrial land uses are allowed. Future retail cannabis stores with or without mobile delivery would have similar wastewater generation as the existing dispensaries. These facilities generate low amounts of wastewater as they typically service only the employees. Consumers at these facilities typically do not stay longer than is necessary to acquire the products being sold. Therefore, retail cannabis stores with or without mobile delivery are not anticipated to generate wastewater beyond what is currently generated. In addition, there is an existing overconcentration of medical cannabis dispensaries in unincorporated communities within the County. Option B would result in up to two retail cannabis stores per unincorporated community. Thus, an overconcentration would not occur and any wastewater generation would be distributed evenly throughout the County and throughout the Community Service Areas (CSAs), Community Service Districts (CSDs), and Public Utility Districts (PUDs) within the County. Future retail cannabis stores would not result in wastewater treatment facilities exceeding treatment requirements for either the Central Valley RWQCB or the Lahontan RWQCB. Impact are less than significant in this regard.

Certain future cannabis-related activities and facilities would require processing a Conditional Use Permit (CUP) and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing before the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to exceedance of water quality or waste discharge requirements from the Central Valley RWQCB or Lahontan RWQCB would be considered and mitigated during the CUP process.

Contamination of Surface Waters

Direct or indirect contact of surface water with potentially harmful or hazardous materials could result in water quality degradation. A direct impact from the release of potentially harmful or hazardous materials requires that there be flow present in the affected waterway. An accidental release of a potentially harmful or hazardous material into a dry stream bed or wash would not directly impact water quality. Similarly, an accidental spill or release of hazardous materials

outside of a stream channel would not directly impact water quality. However, such a spill could indirectly impact water quality through runoff during a subsequent storm event, if the spilled material is washed into a stream or waterbody. Some of the potentially hazardous substances that could be released include: nutrients, pesticides, herbicides, rodenticides, petroleum hydrocarbons, sediment, trash and debris, and constituents of emerging concerns. In addition, land use changes that would change water temperature and turbidity could also result in impacts to water quality.

Compliance with permit requirements, development standards, BMPs, Mitigation Measures MM 4.4-8 and MM 4.4-12 (as described in Section 4.4, *Biological Resources*), and Mitigation Measure MM 4.9-1 would reduce the amount of potentially hazardous substances in runoff. Therefore, post-development impacts to water quality would be less than significant to receiving waters.

Summary of Applicable Existing Regulations and Policies Related to Water Quality Standards or Waste Discharge Requirements

1. Section 401 of the CWA requires discharges to obtain a State water quality certification.
2. Section 402, NPDES, of the CWA regulates point-source and nonpoint-source discharges to waters of the U.S., including stormwater provisions.
3. Section 404 of the CWA regulates discharges of Waters of the U.S.
4. Porter-Cologne Water Quality Control Act Basin Plans.
5. Section 1602 of the California Fish and Game Code Streambed Alteration Agreement.
6. California Water Code Section 13260 requires a person who discharges waste that could affect the quality of water to submit a report of waste discharge to the applicable RWQCB.
7. California Antidegradation Policy.
8. Kern County Grading and Development Standards.
9. KCGP Land Use, Open Space, and Conservation Element Section 1.3, Physical and Environmental Constraints Goals 5 and 9; Policies 7 and 11; and Implementation Measures E, I, and N relate to development with steep slopes, flood channel and water course preservation, and soil disturbance requirements.
10. KCGP Land Use, Open Space, and Conservation Element Section 1.10, General Provisions Goal 1 relates to preservation of natural resources.
11. KCGP Land Use, Open Space, and Conservation Element Section 1.10.5, General Provisions, Threatened and Endangered Species Policy 32 relates to management of riparian areas.
12. KGCP Land Use, Open Space, and Conservation Element Section 1.10.6, General Provisions, Surface Water and Groundwater Policies 34, 39, 43, and 44 relate to water quality and drainage standards.
13. MBGP Conservation Element, Soils and Agriculture Policies 7 and 12 relate to land use patterns, grading, and landscaping practice to prevent soil erosion.
14. MBGP Conservation Element, Water Resources Goal 4; Policy 6; and Implementation Measure 6 and 7 ensures adequate wastewater collection, treatment and disposal.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

Implement Mitigation Measure MM 4.3-2, as described in Section 4.3, *Air Quality*, Mitigation Measures MM 4.4-8 and MM 4.4-12, as described in Section 4.4, *Biological Resources*, Mitigation Measures MM 4.8-2 through MM 4.8-7, as described in the Section 4.8, *Hazards and Hazardous Materials*.

MM 4.9-1 Prior to the issuance of grading permits, the project applicant shall comply with the National Pollutant Discharge Elimination System General Construction Storm Water Permit from the State Water Resources Control Board. The project applicant shall comply with applicable permit coverage and notice requirements and construction-period management requirements, including the preparation and implementation of a stormwater pollution prevention plan and the identification of erosion and sediment control options that meet applicable best available technology economically achievable and best conventional pollutant control technology (BAT/BCT) standards.

Level of Significance after Mitigation

Impacts would be less than significant with respect to Option A. Impacts regarding Option B would be less than significant.

Impact 4.9-2: Substantially Deplete Groundwater Supplies or Interfere Substantially with Groundwater Recharge Such That There Would be a Net Deficit in Aquifer Volume or a Lowering of the Local Groundwater Table Level

Water supply for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities would be site specific and dependent on the location of the facility. Therefore, this analysis looks at the program in general and the overall water supply based on region: Valley Region, Mountain Region, Desert Region. This section generally identifies water supply and areas where groundwater supply may be overextended, including adjudicated groundwater basins.

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on commercial cannabis-related

activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. The cultivation of a cannabis plant would consume approximately the same amount of water as a tomato plant. Therefore, up to six cannabis plants grown on individual properties would be similar to a personal garden. Thus, Option A would not result in an increased demand for groundwater and would have no impact on groundwater supply within the County. Impacts would be less than significant in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis stores with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed under Option B).

The proposed project would result in an impact to groundwater supplies if construction or operation (implementation of Option B to countywide maximums) activities require a substantial supply of local groundwater resources or alter existing groundwater recharge, such as through the creation of substantial new impermeable areas.

The County has a variety of water purveyors and relies mainly on SWP and CVP water, as well as the Kern River and groundwater. With respect to groundwater, in January 2016, the Kern County Subbasin (DWR Groundwater Basin 5-022.14) and the Indian Wells Valley Basin (DWR Groundwater Basin 6-054), were identified by DWR as subject to critical conditions of overdraft. In addition, the Kern County Subbasin was also subject to major boundary modifications to address jurisdictional, geologic, hydrologic, and other considerations (DWR, 2016). This resulted in reducing the size of the Kern County Subbasin (5-022.14) and adding the White Wolf Subbasin (DWR Groundwater Subbasin 5-022.18); refer to Section 4.16.2, *Utilities and Service Systems*, for further detail.

Water demand for cannabis crops varies based on cultivation location (i.e., Valley, Mountain, or Desert Region), cultivation structures (i.e., greenhouse, warehouse, or outdoors), cultivation methods (i.e., hydroponics, drip irrigation, use of recycled water, etc.). Table 4.9-1, *Agricultural Crops and Estimated Water Demands* (which is repeated as Table 4.16-2 in Section 4.16, *Utilities and Service Systems*), provides estimates of water demand per unit of cannabis (one joint, or approximately 0.5 grams) as compared to other agricultural crops. Water demand estimates for cannabis range from less than one gallon of water per plant per day to as high as six gallons of water per plant per day, with an average of approximately 2.3 gallons of water per plant per day (California NORML [CA NORML], 2015).

Table 4.9-1. Agricultural Crops and Estimated Water Demands		
Crop Type	Crop Unit	Water Demands to Produce Crop Unit (gallons)
Cannabis	One joint (approximately 0.5 gram)	0.167 to 0.5
Wine Grapes	One glass of wine	15 to 30
Tomato	One tomato	3.3 gallons
Almonds	One almond	1 to 1.1
Pistachio	One pistachio	0.75 gallons
Strawberry	One strawberry	0.4 gallons
Cattle – beef	1/3-pound hamburger	330 gallons

Source: CA NORML, 2015.

As shown in Table 4.9-1, this is approximately equivalent to the water demand of tomato plants. Therefore, for the purposes of this analysis, water demand for future commercial cannabis cultivation is assumed to be equivalent to the tomato cultivation water demand of 3.3 gallons of water per tomato.

For indoor cannabis cultivation, on average a 10,000 ft² facility contains approximately 3,000 cannabis plants (Conran, 2016). Water demand estimates for indoor cannabis cultivation range from 610 gallons (0.002 acre-feet) per year to 586,000 gallons (1.8 acre-feet) per year, with an average of 52,300 gallons (0.16 acre-feet) per year (Bustic and Brenner, 2016).

For outdoor cannabis cultivation, according to *BioScience*, 130,000 plants on approximately 247 acres would require approximately 113,593,100 gallons (348.6 acre-feet) per growing season (Carah et. al, 2015). This assumes a growing season is June through October (153 days) and only one growing season would occur annually. Therefore, 1 acre of property would require approximately 459,891 gallons per acre (1.41 acre-feet) per year. Colorado State University Extension determined that the water use for outdoor cannabis is similar to corn, alfalfa, tomato, peach, and hops crops (Hammon et. al, 2015); refer to Table 4.9-2, *Outdoor Cultivation Water Use Requirements* (which is repeated as Table 4.16-3 in section 4.16, *Utilities and Service Systems*)

Table 4.9-2. Outdoor Cultivation Water Use Requirements		
Crop Type	Water Use Requirements	
	Inches per year	Acre-Feet ¹
Hemp	12-15	1-1.25
Cannabis	25-35	2.1 – 2.9
Corn	20-25	1.7 – 2.1
Alfalfa	30-40	2.5 – 3.3
Tomato	15-25	1.25 – 2.1
Peach	30-40	2.5 – 3.3
Hops	20-30	1.7 – 2.5

Source: Hammon et. al, 2015.

¹ Conversion from inches per year to acre-feet for outdoor cultivation was calculated as follows: 12 inches (1 foot) per year applied to 1 acre = 1 acre-foot; 15 inches (1.25 feet) per year applied to 1 acre = 1.25 acre-feet

Using the largest water consumption rate of 586,000 gallons (1.8 acre-feet) per year of water use for 1 acre (325,900 ft²) for indoor cannabis cultivation, a 10,000 ft² indoor cannabis cultivation facility would require approximately 17,981 gallons (0.55 acre-feet) of water per year. The largest water consumption rate for future outdoor cannabis cultivation is approximately 459,891 gallons per acre (1.41 acre-feet) per year. Option B allows for a countywide maximum of 2,000,000 ft² (approximately 45.9 acres) of future indoor cultivation and 150 acres of future outdoor cultivation. Therefore, future indoor cannabis cultivation facilities under Option B would result in a total demand of 3,596,200 gallons (11.04 acre-feet) of water per year. Future outdoor cannabis cultivation facilities

under Option B would result in a total demand of 68,983,650 gallons per acre (211.7 acre-feet) of water per year.

A future cannabis processing facility's water demand would be dependent on the number of employees, the size of the facility, and the specific process used (i.e., carbon dioxide [CO₂], alcohol, heat presses, ice water extractions, liquid nitrogen, or dry ice processes); refer to Section 4.8, *Hazards and Hazardous Materials*, for details regarding cannabis processing. The variables in water demand for processing and packaging facilities are similar to industrial and manufacturing processes. Thus, future processing and packaging facilities would be treated as industrial and manufacturing facilities.

Distribution facilities would be similar in nature to existing distribution facilities, such that the largest water demand would be from employees because a distribution center would provide a location for transport operations to take cannabis and cannabis products from one facility to another.

Future cannabis-related activities could occur within a water district, CSA, CSD, PUD, or groundwater basin that does not have sufficient water supply for the demand of a future cannabis facility. For a future cannabis-related facilities and activities, a Water Supply Assessment (WSA) would be triggered through SB 610 if the cannabis-related facility included one or more of the following:

- A proposed business establishment employing more than 1,000 persons or having more than 500,000 ft² of floor space.
- A proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 ft² of floor area.
- A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500-dwelling-unit project.

Mitigation Measures are required to reduce impacts related to water demand (including groundwater) and sufficient water supply. Cultivation facilities would be required use water efficient methods such as hydroponics, the use of recycled water when applicable, or equivalent technology to reduce the demand on water. In addition, mitigation measures would require all future cultivation and processing and packaging facilities to obtain a will serve letter from the appropriate water district, CSA, CSD, or PUD, or to provide proof of rights to pump sufficient water from the Groundwater Sustainability Authority or Water Master in an adjudicated basin. Mitigation measures would require future cultivation facilities of more than 40 acres or processing, packaging, and distribution facilities 500,000 ft² or more to either provide evidence they are covered by an adopted Urban water Management Plan or conduct a WSA in addition to the obtaining a will serve letter from the appropriate water district, CSA, CSD, or PUD, or to provide proof of rights to pump sufficient water. Even with mitigation measures, impacts could be significant depending size of the facility, location within the County, groundwater basin, and water district, CSA, CSD, or PUD.

Future retail cannabis stores with or without mobile delivery would be allowed in areas where commercial and industrial land uses are allowed with a CUP. Future retail cannabis stores with or without mobile delivery would have similar water uses and demand as the existing dispensaries. These facilities generally generate low demand for water as they typically service only the employees. Consumers at these facilities typically do not stay longer than is necessary to acquire the products being sold. Therefore, retail cannabis stores with or without mobile delivery are not anticipated to use water supplies beyond what is currently used. In addition, there is an existing overconcentration

of medical cannabis dispensaries in unincorporated communities within the County. Option B would result in up to two retail cannabis stores per unincorporated community with a countywide maximum of 40 retail cannabis stores. Thus, an overconcentration would not occur and any water demand on the water supply would be distributed evenly throughout the County and, thus, throughout the water districts, CSAs, CSDs, PUDs, and groundwater basins within the County. Future retail cannabis stores would result in an increased use in water because Option B would increase the number of retail cannabis stores by a maximum of 18 retail stores; however, these stores would have similar water uses and demand as existing dispensaries and would be distributed evenly throughout unincorporated Kern County. Each retail cannabis store would require a CUP (as outlined in Chapter 3, *Project Description*, and further explained in the Option B proposed ordinance language provided in Appendix C of this EIR). Therefore, all future retail cannabis stores would require project-specific review under CEQA, which would further analyze groundwater demand and supply.

Changes in irrigation practices associated with outdoor cultivation and greenhouses also have the potential to affect groundwater recharge. Future outdoor cultivation is limited to a Countywide maximum of 150 acres and would be allowed only in zone classification A (Exclusive Agriculture). Future indoor cultivation, including greenhouses, warehouses, and other structures, is limited to a combined Countywide maximum of 2,000,000 ft². Greenhouses would be allowed only in zone classifications A (Exclusive Agriculture) and A-1 (Limited Agriculture).

Much of the land within zone classification A and A-1 consists of agriculture and rural uses that permit water infiltration. Future cannabis outdoor cultivation activities is consistent with agriculture activities and irrigated areas would potentially infiltrate and ultimately recharge the underlying groundwater aquifers. Future cannabis indoor cultivation, processing and packaging, and distribution facilities are anticipated to use existing structures first and then potentially construct new facilities, especially where processing, packaging, and distribution can be provided adjacent to cultivation activities. Future cannabis related facilities that would require construction would increase the impervious surfaces in the County. However, for the purposes of this analysis, assuming new impervious surfaces for all future cannabis indoor cultivation, processing and packaging, and distribution facilities, a total of 2,500,000 ft² (or approximately 58 acres), within zone classifications A and A-1, would result in the development of 58 acres of impervious surfaces within agricultural lands. This accounts for less than 0.007 percent of the total acreage of agricultural land in Kern County that is currently available for future cannabis-related activities (refer to Section 4.2, *Agriculture and Forest Resources*, for further detail).

Option B is not anticipated to substantially interfere with groundwater recharge and impacts would be less than significant. With respect to groundwater supply, as discussed above and further detailed in Section 4.16, *Utilities and Service Systems*, Option B could have significant impacts on groundwater supply depending on size of the facility, location within the County, groundwater basin, and water district, CSA, CSD, or PUD. The Kern County Subbasin (DWR Groundwater Basin 5-022.14) and the Indian Wells Valley Basin (DWR Groundwater Basin 6-054) were identified by DWR as subject to critical conditions overdraft. Therefore, even with implementation of mitigation measures, impacts resulting from Option B would be significant with respect to the depletion of groundwater supply.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing for the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or

other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to groundwater supply and recharge would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Groundwater Supply and Recharge

1. SGMA require that all groundwater basins designated as high or medium priority in the DWR CASGEM Program be managed under a Groundwater Sustainability Plan.
2. The Recycled Water Policy increases the amount of recycled water used for new development and provides direction to the RWQCBs.
3. SB 610 and 221 promote collaborative planning between local water suppliers and local agencies (cities and counties) by requiring water supply assessments for specific development projects.
4. California Drought Regulations, EO B-40-17 and EO B-37-16 provide water use reduction targets and emphasizes long-term water conservation measures.
5. KCGP Land Use, Open Space, and Conservation Element Section 1.3, Physical and Environmental Constraints Goals 5 and 9; and Implementation Measure C relate to providing adequate supplies of quality water in a manner that does not degrade water supply and the environment and protect public health and safety.
6. KCGP Land Use, Open Space, and Conservation Element Section 1.9, Resource Goal 1 and Policy 10 relate to effective groundwater resource management for the long-term economic benefit of the County.
7. KCGP Land Use, Open Space, and Conservation Element Section 1.10.6, General Provisions, Surface Water and Groundwater Policies 34, 39, 44 and Implementation Measure Y ensure that water quality standards are met for existing and future development, encourage development of sustainable groundwater supply, and promote of efficient water use,
8. MBGP Conservation Element, Water Resources Goals 1 through 6; Policies 6, 8, and 9; and Implementation Measures 6, 7, and 10 assure adequate surface and groundwater supplies and support treatment activities to prevent groundwater degradation.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

Implement Mitigation Measure MM 4.9-1, as described above.

MM 4.9-2 Prior to issuance of any site development plan or other building permits, the project applicant will provide written verification to the Kern County Planning and Natural

Resources Department of compliance with applicable water efficiency design standards required by the California Uniform Building Code.

- MM 4.9-3** Prior to issuance of any site development plan or other building permits, the applicant will provide written verification to the Kern County Planning and Natural Resources Department of indoor water use compliance with the Kern County Code of Building Regulations, which specify the maximum allowable flowrates for indoor fittings and fixtures consistent with the California Health and Safety Code, California Plumbing Code, and the California Energy Commission's proposed Appliance Efficiency Regulations.
- MM 4.9-4** For any cannabis cultivation operations, prior to issuance of any site development plan or other building permits, the applicant will provide written verification to the Kern County Planning and Natural Resources Department that cultivation facility is designed to use water efficient methods such as hydroponics, the use of recycled water, or equivalent technology to reduce the demand on water.
- MM 4.9-5** In conjunction with the application for a site plan or conditional use permit for all proposed cannabis-related facilities, a water use report shall be submitted that details the amount and source of water needed for the dust control during construction and operation of the facility.
1. The project applicant shall provide one of the following:
 - A. Will-serve letter for continuous water service from the appropriate water district, community service district, community service area, or public utilities district that confirms the availability of water for the facility site in sufficient quantities for the construction and operation or
 - B. Written evidence from the designated water-master in an adjudicated basin of the continuous allocated quantity of water necessary for the construction and operation of the facility or
 - C. If the project is located in an area with an established Groundwater Sustainability Agency, and a Groundwater Sustainability Plan has been adopted, then written evidence shall be provided from the GSA of the allocation to the project for the necessary quantity of water for construction and operation.
 2. If the proposed cannabis processing and preparation facility is more than 40 acres in size or the indoor cultivation is more than 500,000 square feet, in addition to compliance with the requirements to provide evidence of a sufficient supply of water, then a Water Supply Assessment shall be prepared that complies with the Water Code. If there is a public water district that includes the proposed property, then the Water Supply Assessment shall be reviewed and approved by the Water District.

Level of Significance after Mitigation

With respect to Option A, impacts would be less than significant. Impacts resulting from Option B regarding groundwater recharge would be less than significant. Impacts resulting from Option B regarding groundwater supply would be significant and unavoidable.

Impact 4.9-3: Substantially Alter the Existing Drainage Pattern of the Site or Area, Including through the Alteration of the Course of a Stream or River, or Substantially Increase the Rate or Amount of Surface Runoff in a Manner Which Would Result in Substantial Erosion or Siltation On-site or Off-site

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A would continue to allow individuals to cultivate up to six plants on private property. Up to six cannabis plants grown on individual properties would be similar to a personal garden and would not result in new development. Thus, Option A would not result in an increase in runoff. Therefore, Option A would not substantially alter existing drainage patterns, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in substantial erosion or siltation. Impacts would be less than significant in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis stores with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

New future cannabis-related facilities, not located within existing structures, would cause an increase in impervious surfaces and an increase in stormwater runoff, depending on the proposed facility type and size. Future activities could, depending on location relative to existing infrastructure, require

construction of new or expanded stormwater drainage facilities. However, by complying with federal, State, and local requirements and minimizing the amount of grading and utilizing existing drainage patterns, future cannabis operations and facilities would minimize effects on downstream water courses, as well as impacts on water quality. All applicable federal, State, and local requirements and best management practices (BMPs) would be incorporated into construction of new or modified structures, along with Mitigation Measures MM 4.9-1 through MM 4.9-5 to reduce impacts resulting from the need to construct stormwater drainage facilities.

If future cannabis-related facilities are located within existing structures, then it is not anticipated that stormwater runoff would change from existing conditions. Therefore, any existing stormwater drainage facilities would be able to accommodate stormwater runoff upon implementation and buildout of Option B.

Future Cannabis Cultivation within the Central Valley RWQCB jurisdiction would comply with the Cannabis Cultivation Waste Discharge Regulatory Program, General Order No. R5-2015-0113 from the Central Valley RWQCB. General Order No. R5-2015-0113 includes requirements for outdoor and outdoor/indoor mix cultivation activities that occupy and/or disturb more than 1,000 ft². Indoor and outdoor commercial medical and adult use cannabis cultivation facilities within the Central Valley RWQCB jurisdiction would be required to comply with General Order No. R5-2015-0113 if the operation is 1,000 ft² or larger (Central Valley RWQCB, 2015a and 2015b). The Lahontan RWQCB does not currently have a waste discharge regulatory program. The SWRB began development of a Statewide General Order for cannabis cultivation in the Fiscal Year 2016-2017, with an anticipated completion goal of August 2017 (Central Valley RWQCB, 2016). With the incorporation of mitigation measures, future commercial medical and adult use cannabis cultivation under Option B would not substantially alter existing drainage patterns, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in substantial erosion or siltation. Therefore, impacts in this regard would be less than significant.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing before the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to the need for new or expanded stormwater drainage facilities and infrastructure would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Drainage, Siltation, and Erosion

Refer to Impact 4.9-1, above, for a summary of applicable existing regulations and policies related to drainage, siltation, and erosion. In addition, the following are also applicable.

1. Kern County Grading, Floodplain Management, and Zoning Ordinances.

2. KCGP Land Use, Open Space, and Conservation Element Section 1.3, Physical and Environmental Constraints Goals 5 and 9; Policies 6 through 11; and Implementation Measures E, F, H, I, J and N relate to development with steep slopes, flood channel and water course preservation, and soil disturbance requirements.
3. KCGP Land Use, Open Space, and Conservation Element Section 1.9, Resource Policy 11 and Implementation Measure C relates to preservation of natural resources.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

Implement Mitigation Measures MM 4.9-1 through MM 4.9-5, as described above, Mitigation Measures MM 4.4-2 and MM 4.4-12, as described in Section 4.4, *Biological Resources*, and Mitigation Measure MM 4.16-1, as described in the Section 4.16, *Utilities and Service Systems*.

Level of Significance

Impacts would be less than significant with respect to Option A. Impacts regarding Option B would be less than significant.

Impact 4.9-4: Substantially Alter the Existing Drainage Pattern of the Site or Area, Including through the Alteration of the Course of a Stream or River, or Substantially Increase the Rate or Amount of Surface Runoff in a Manner Which Would Result in Substantial Flooding On-site or Off-site

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A would continue to allow individuals to cultivate up to six plants on private property. Up to six cannabis plants grown on individual properties would be similar to a personal garden and would not result in new development. Thus, Option A would not result in an increase in runoff. Therefore, Option A would not substantially alter existing drainage patterns, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in substantial flooding on-site or offsite. Impacts would be less than significant in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis stores with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

New future cannabis-related facilities, not located within existing structures, would cause an increase in impervious surfaces and an increase in stormwater runoff, depending on the proposed facility type and size. Future activities could, depending on location relative to existing infrastructure, require construction of new or expanded stormwater drainage facilities. However, by complying with federal, State, and local requirements on a project-by-project basis and minimizing the amount of grading and utilizing existing drainage patterns, projects should be able to minimize their effect on downstream water courses. All applicable federal, State, and local requirements and BMPs would be incorporated into construction of new or modified structures, along with Mitigation Measures MM 4.9-1 through MM 4.9-5 to reduce impacts resulting from the need to construct stormwater drainage facilities.

If future cannabis-related facilities are located within existing structures, then it is not anticipated that stormwater runoff would change from existing conditions. Therefore, any existing stormwater drainage facilities would be able to accommodate stormwater runoff upon implementation and buildout of Option B.

Future Cannabis Cultivation within the Central Valley RWQCB jurisdiction would comply with the Cannabis Cultivation Waste Discharge Regulatory Program, General Order No. R5-2015-0113 from the Central Valley RWQCB. General Order No. R5-2015-0113 includes requirements for outdoor and outdoor/indoor mix cultivation activities that occupy and/or disturb more than 1,000 ft². Indoor and outdoor commercial medical and adult use cannabis cultivation facilities within the Central Valley RWQCB jurisdiction would be required to comply with General Order No. R5-2015-0113 if the operation is 1,000 ft² or larger (Central Valley RWQCB, 2015a and 2015b). The Lahontan RWQCB does not currently have a waste discharge regulatory program. The SWRB began development of a Statewide General Order for cannabis cultivation in the Fiscal Year 2016-2017, with an anticipated completion goal of August 2017 (Central Valley RWQCB, 2016). With the incorporation of mitigation measures, future commercial medical and adult use cannabis cultivation under Option B would not substantially alter existing drainage patterns, including through the alteration of the course of a stream or river, or substantially increase the rate or amount

of surface runoff in a manner which would result in substantial flooding on-site or off-site. Therefore, impacts in this regard would be less than significant.

New future cannabis-related activities and facilities comply with Section 404 of the CWA which regulates the discharge of dredged and fill material in waters of the U.S., including wetlands; Section 1602 of the California Fish and Game Code which protects the natural flow, bed, channel, and bank of any river, stream, or lake as designated by CDFW; and Kern County Grading and Floodplain Ordinances. Option B would implement Mitigation Measures MM 4.4-8 and MM 4.4-12, as described in Section 4.4, *Biological Resources*, pertaining to jurisdictional waters.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing for the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to the need for new or expanded stormwater drainage facilities and infrastructure would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Stormwater Drainage Facilities

Refer to Impact 4.9-1 and 4.9-3, above, for a summary of applicable existing regulations and policies related to stormwater drainage facilities. In addition, the following are also applicable.

1. KCGP Land Use, Open Space, and Conservation Element Section 1.3, Physical and Environmental Constraints Goal 9; Policies 1 through 3, 8 through 11; and Implementation Measures F, H, I, J and N relate to development with steep slopes, flood channel and water course preservation, and floodplain management.
2. MBGP Conservation Element, Biological Resources Policy 2 relates preservation of habitat within floodways along rivers and streams.
3. MBGP Safety Element, Flooding Goals 1 and 2; Policy 1; Implementation Measure 2 relate to minimizing flood risk and development in flood hazard areas.
4. MBGP Safety Element, Drainage Goal 1 provides for adequate storm drainage facilities to protect residents from flooding resulting from storm water excess.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

Implement Mitigation Measures MM 4.9-1 through MM 4.9-5, as described above, Mitigation Measures MM 4.4-8 and MM 4.4-12, as described in Section 4.4, *Biological Resources*, and Mitigation Measure MM 4.16-1, as described in the Section 4.16, *Utilities and Service Systems*.

Level of Significance

Impacts would be less than significant with respect to Option A. Impacts regarding Option B would be less than significant.

Impact 4.9-5: Create or Contribute Runoff Water Which Would Exceed the Capacity of Existing or Planned Stormwater Drainage Systems or Provide Substantial Additional Sources of Polluted Runoff

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A would continue to allow individuals to cultivate up to six plants on private property. Up to six cannabis plants grown on individual properties would be similar to a personal garden and would not result in new development. Thus, Option A would not result in an increase in runoff. Therefore, Option A would not substantially create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. Impacts would be less than significant in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis stores with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

As discussed in Impact 4.9-3, new future cannabis-related facilities, not located within existing structures, would cause an increase in impervious surfaces and an increase in stormwater runoff, depending on the proposed facility type and size. Future cannabis-related activities could, depending on location relative to existing infrastructure, require construction of new or expanded stormwater drainage facilities. However, by complying with federal, State, and local requirements on a project-by-project basis and minimizing the amount of grading and utilizing existing drainage patterns, future cannabis related facilities would minimize their effect on downstream water courses, as well as their impacts on water quality. All applicable federal, State, and local requirements and BMPs would be incorporated into construction of new or modified structures, along with Mitigation Measures MM 4.9-1 through MM 4.9-5 to reduce impacts resulting from the need to construct stormwater drainage facilities.

If future cannabis-related facilities are located within existing structures, then it is not anticipated that stormwater runoff would change from existing conditions. Therefore, any existing stormwater drainage facilities would be able to accommodate stormwater runoff upon implementation and buildout of Option B.

Future cannabis cultivation within the Central Valley RWQCB jurisdiction would comply with the Cannabis Cultivation Waste Discharge Regulatory Program, General Order No. R5-2015-0113 from the Central Valley RWQCB. General Order No. R5-2015-0113 includes requirements for outdoor and outdoor/indoor mix cultivation activities that occupy and/or disturb more than 1,000 ft². Indoor and outdoor commercial medical and adult use cannabis cultivation facilities within the Central Valley RWQCB jurisdiction would be required to comply with General Order No. R5-2015-0113 if the operation is 1,000 ft² or larger (Central Valley RWQCB, 2015a and 2015b). The Lahontan RWQCB does not currently have a waste discharge regulatory program. The SWRB began development of a Statewide General Order for cannabis cultivation in the Fiscal Year 2016-2017, with an anticipated completion goal of August 2017 (Central Valley RWQCB, 2016). With the incorporation of mitigation measures, future commercial medical and adult use cannabis cultivation under Option B would not create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. Therefore, impacts in this regard would be less than significant.

In addition, as discussed above, the proposed project would not result in a significant impact to water quality, including through the introduction of a source of polluted runoff, with the implementation of Mitigation Measures MM 4.9-1 through MM 4.9-5. Therefore, the proposed project would not overwhelm stormwater drainage systems or create a substantial additional source of polluted runoff. Impacts would be less than significant with the implementation of mitigation measures.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing for the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to exceedance of water quality or waste discharge requirements from the Central Valley RWQCB or Lahontan RWQCB would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Drainage and Water Quality

Refer to Impact 4.9-1, 4.9-3, and 4.9-4, above, for a summary of applicable existing regulations and policies related to drainage and water quality.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

Implement Mitigation Measures MM 4.9-1 through MM 4.9-5, as described above, Mitigation Measures MM 4.4-8 and MM 4.4-12, as described in Section 4.4, *Biological Resources*, Mitigation Measures MM 4.8-2 through MM 4.8-7, as described in the Section 4.8, *Hazards and Hazardous Materials*.

Level of Significance After Mitigation

Impacts would be less than significant with respect to Option A. Impacts regarding Option B would be less than significant.

Impact 4.9-6: Otherwise Substantially Degrade Water Quality

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A would continue to allow individuals to cultivate up to six plants on private property. Up to six cannabis plants grown on individual properties would be similar to a personal garden and would not result in new development. Any wastewater generated would be similar to wastewater generated from residential gardens and the residential gardening standards would continue to apply. Thus, Option A would not result in an increase in runoff. Therefore, Option A would not result in an increase in runoff or substantially degrade water quality. Impacts would be less than significant in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis stores with or

without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

New future cannabis-related facilities, not located within existing structures, would cause an increase in impervious surfaces and an increase in stormwater runoff or additional sources of polluted runoff, depending on the proposed facility type and size. Future activities could, depending on location relative to existing infrastructure, require construction of new or expanded stormwater drainage facilities. However, by complying with federal, State, and local requirements on a project-by-project basis and minimizing the amount of grading and utilizing existing drainage patterns, projects should be able to minimize their effect on downstream water courses. All applicable federal, State, and local requirements and BMPs would be incorporated into construction of new or modified structures, along with Mitigation Measures MM 4.9-1 through MM 4.9-5 to reduce impacts resulting from the need to construct stormwater drainage facilities.

If future cannabis-related facilities are located within existing structures, then it is not anticipated that stormwater runoff quality would change from existing conditions.

Future cannabis cultivation within the Central Valley RWQCB jurisdiction would comply with the Cannabis Cultivation Waste Discharge Regulatory Program, General Order No. R5-2015-0113 from the Central Valley RWQCB. General Order No. R5-2015-0113 includes requirements for outdoor and outdoor/indoor mix cultivation activities that occupy and/or disturb more than 1,000 ft². Indoor and outdoor commercial medical and adult use cannabis cultivation facilities within the Central Valley RWQCB jurisdiction would be required to comply with General Order No. R5-2015-0113 if the operation is 1,000 ft² or larger (Central Valley RWQCB, 2015a and 2015b). The Lahontan RWQCB does not currently have a waste discharge regulatory program. The SWRB began development of a Statewide General Order for cannabis cultivation in the Fiscal Year 2016-2017, with an anticipated completion goal of August 2017 (Central Valley RWQCB, 2016). With the incorporation of mitigation measures, future commercial medical and adult use cannabis cultivation under Option B would not substantially degrade water quality. Impacts would be less than significant.

In addition, as discussed above, the proposed project would not result in a significant impact to water quality, including through the introduction of a source of polluted runoff, with the implementation of Mitigation Measures MM 4.9-1 through MM 4.9-5. Therefore, the proposed project would not create a substantial additional source of polluted runoff. Impacts would be less than significant with the implementation of mitigation measures.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing for the Kern County Planning Commission. The CUP process, with CEQA

review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to the need for new or expanded stormwater drainage facilities and infrastructure would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Water Quality

Refer to Impact 4.9-1, above, for a summary of applicable existing regulations and policies related to water quality.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

Implement Mitigation Measures MM 4.9-1 through MM 4.9-5, as described above, Mitigation Measures MM 4.4-8 and MM 4.4-12, as described in Section 4.4, *Biological Resources*, Mitigation Measures MM 4.8-2 through MM 4.8-7, as described in the Section 4.8, *Hazards and Hazardous Materials*.

Level of Significance

Impacts would be less than significant with respect to Option A. Impacts regarding Option B would be less than significant.

Impact 4.9-7: Place Structures within a 100-year Flood Hazard Area Which Would Impede or Redirect Flood Flows

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A does not provide opportunities for business development and thus would not

result in an increase in residents or employees within the County, as discussed in detail in Section 4.12, *Population and Housing*. Option A would continue to allow individuals to cultivate up to six plants on private property. Up to six cannabis plants grown on individual properties would be similar to a personal garden and would not result in new development. Therefore, Option A would not place structures within the 100-year flood hazard area. Impacts would be less than significant in this regard.

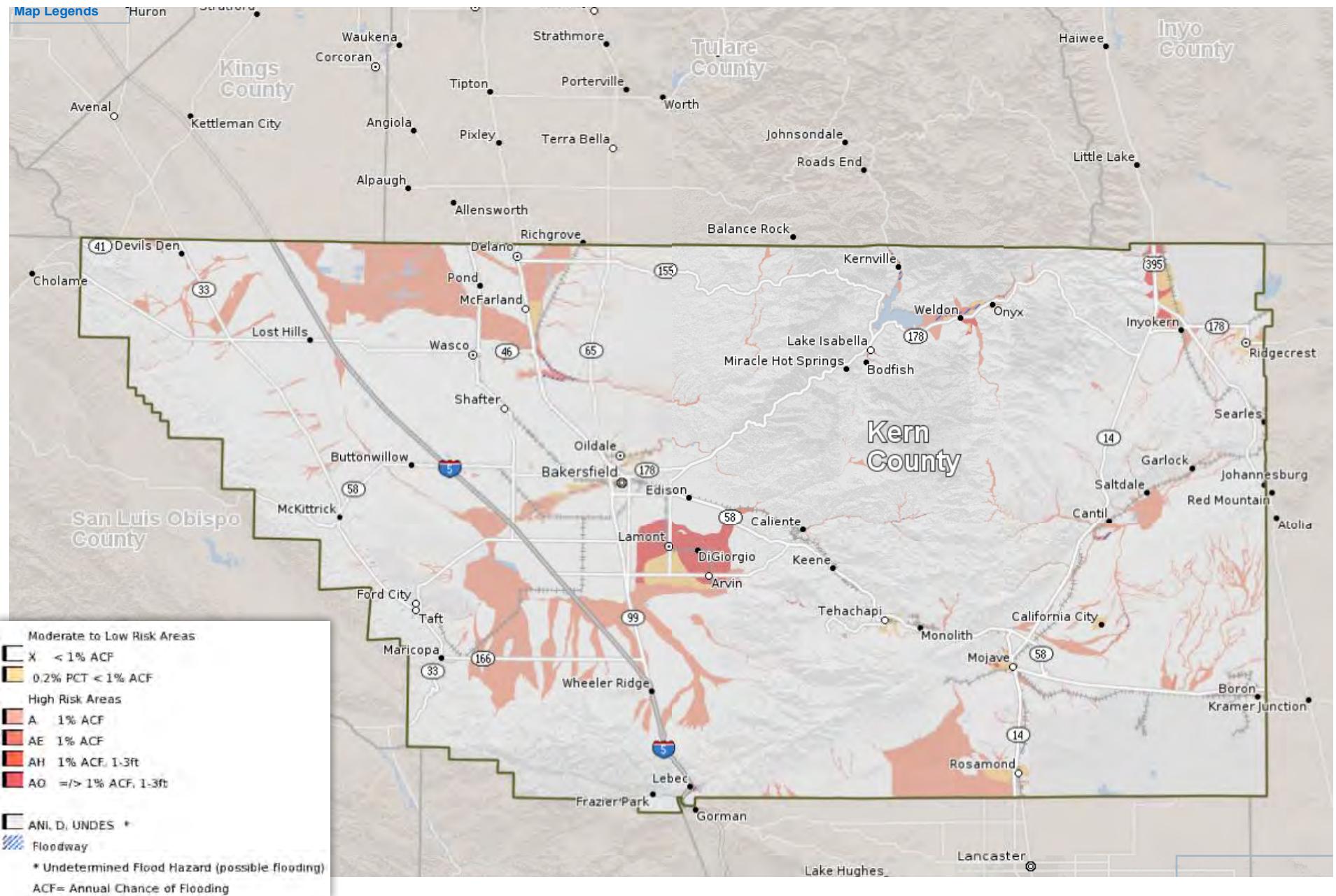
Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis stores with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

Future cannabis-related activities that would be authorized under Option B are not anticipated to result in a substantial population increase, as further explained in Section 4.12, *Population and Housing*. As a result, the proposed project would not substantially affect the number of residents or employees within the County. Thus, Option B would not result in the exposure of people or structures to substantial adverse effects involving the placement of structures within the 100-year floodplain that would impede or redirect flows. Impacts would be less than significant in this regard.

New future cannabis-related facilities, not located within existing structures, could be located within areas of special flood hazards and would be required to comply with the Kern County Grading and Development Standards and Grading, Floodplain Management, and Zoning Ordinances. Any activity that requires fill to be placed within a FEMA Floodplain which alters the limits of the floodplain is required to process a Letter of Map Revision based on Fill (LOMR-F) with FEMA. Therefore, Mitigation Measure MM 4.9-7 requires protection measures for any new cannabis-related facility located within a FEMA Floodplain; refer to Figure 4.9-2, *Countywide Floodplain Boundaries*. This measure would ensure that locations that could alter floodplain boundaries would be considered for approval, denial or conditional approval only after preparation of further environmental review and public discussion. All applicable federal, State, and local requirements and BMPs would be incorporated into construction of new or modified structures, along with implementation of mitigation measures. Therefore, impacts would be less than significant.

Future cannabis-related facilities located within existing structures within a special flood hazards area would comply with all applicable federal, State, and local requirements, along with Mitigation Measures MM 4.9-1 through MM 4.9-7. Therefore, impacts would be less than significant.



SOURCE: Property Shark, <http://www.propertyshark.com/mason/ca/Kern-County/Maps/Fema-Flood-Hazard-Areas>

KERN COUNTY CANNABIS LAND USE ORDINANCE PROJECT EIR
AMENDMENT TO TITLE 19 – KERN COUNTY ZONING
ORDINANCE FOCUSED ON CHAPTER 19.120 (CANNABIS LAND USE REGULATION)

Countywide Floodplain Boundaries

Figure 4.9-2

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing for the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to the need for new or expanded stormwater drainage facilities and infrastructure would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Stormwater Drainage Facilities

Refer to Impacts 4.9-1, 4.9-3, and 4.9-4, above, for a summary of applicable existing regulations and policies related to stormwater drainage facilities.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

Implement Mitigation Measures MM 4.9-1 through MM 4.9-5, as described above, and Mitigation Measure MM 4.16-1, as described in the Section 4.16, *Utilities and Service Systems*.

MM 4.9-6 Prior to issuance of any site development plan or other building permits, the project applicant will provide written verification to the Kern County Planning and Natural Resources Department of compliance with applicable design standards required by the California Uniform Building Code and the Kern County Code of Ordinances, including but not limited to, Grading and Development Standards, Grading Ordinance, Floodplain Management Ordinance, and Zoning Ordinance.

MM 4.9-7 For any cannabis facility on property that contains special flood hazards zones, particularly within the 100-year flood hazard zone, as delineated on the Federal Emergency Management Agency Flood Insurance Rate Maps, the project applicant shall ensure that all facilities are protected from the maximum potential elevation of flooding during a 100-year flood by elevating structures or by implementing containment berms or other protective measures in compliance with the standards in the Kern County Floodplain Management Code and Chapters 19.50 and 19.70 of the Kern County Zoning Code.

Level of Significance

Impacts would be less than significant with respect to Option A. Impacts regarding Option B would be less than significant.

Impact 4.9-8: Expose People or Structures to a significant risk of Loss, Injury, or Death Involving Flooding, Including Flooding as a Result of the Failure of a Levee or Dam

Lake Isabella is located in the Mountain Region, approximately 40 miles northeast of the City of Bakersfield. In the event of a catastrophic failure of the Lake Isabella dam facilities, released water would flow southeast along the Kern River towards the City of Bakersfield and eventually flood downstream locations with the Valley Region; refer to Figure 4.9-3, *Lake Isabella Dam Inundation Map*.

Proposed Project Option A

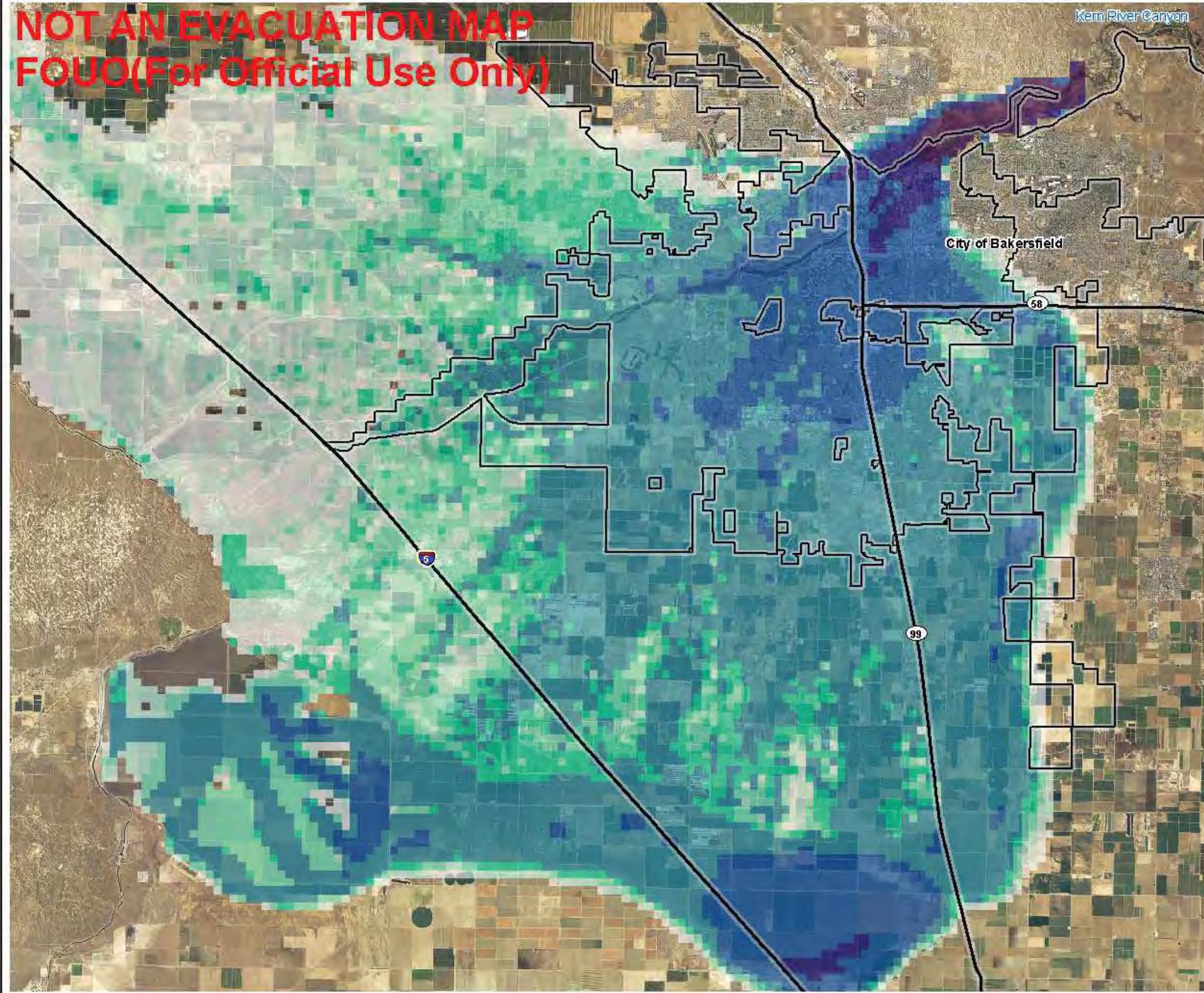
Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A does not provide opportunities for business development and thus would not result in an increase in residents or employees within the County, as discussed in detail in Section 4.12, *Population and Housing*. Therefore, Option A would not expose people or structures to significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam. Existing residences and businesses would continue to have the same exposure to flooding as existing conditions. No impact would occur in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis stores with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

**NOT AN EVACUATION MAP
FOUO(For Official Use Only)**



Future cannabis-related activities that would be authorized under Option B are not anticipated to result in a substantial population increase, as further explained in Section 4.12, *Population and Housing*. As a result, the proposed project would not substantially affect the number of residents or employees within the County. Thus, Option B would not result in the exposure of people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam. Impacts would be less than significant in this regard.

Future cannabis-related facilities and activities located within areas of flooding as a result of the failure of a levee or dam would comply with the requirements and construction design specifications of Kern County Grading and Development Standards and Floodplain Management, Grading, and Zoning Ordinances. In addition, the proposed project is not anticipated to result in a substantial population increase, as further explained in Section 4.12, *Population and Housing*. As a result, the proposed project would not substantially affect the number of residents or employees within the County that are located within areas on inundation as a result of the failure of a levee or dam. Impacts would be less than significant in this regard.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing for the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to the need for new or expanded stormwater drainage facilities and infrastructure would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Flooding from the Failure of a Levee or Dam

Refer to Impacts 4.9-1, 4.9-3, and 4.9-4, above, for a summary of applicable existing regulations and policies related to flooding from the failure of a levee or dam. In addition, the following are also applicable.

1. MBGP Safety Element, Seismic Safety Goal 7 protects land uses from risk of dam failure inundation.
2. MBGP Safety Element, Dam Failure Inundation Risk Policies Policy 20 and Implementation Measures 20, 27 requires emergency response and evacuation plans for dam inundation areas as well as hazardous material storage requirements.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

Implement Mitigation Measures MM 4.9-1 through MM 4.9-7, as described above, and Mitigation Measure MM 4.16-1, as described in the Section 4.16, *Utilities and Service Systems*.

Level of Significance

No impacts would occur with respect to Option A. Impacts regarding Option B would be less than significant.

Impact 4.9-9: Result in Inundation by Seiche, Tsunami, or Mudflow

A tsunami is typically a wave, or series of waves, generated in a large body of water (typically the ocean) by fault displacement or major ground movement. The County is between approximately 50 and 170 miles from the nearest coastline, surrounded by valley and mountainous terrain. The County ranges in elevation from 206 to 8,755 feet amsl. Given the distance, as well as the topography, between the County and the coastline, it unlikely that the County would be inundated by a tsunami. Therefore, impacts under both Option A and Option B would be less than significant.

A seiche is defined as a large, standing wave in an enclosed or partially enclosed body of water, such as a lake or reservoir. Lakes within the County, including Lake Isabella, is located within the project site. Impacts are further discussed below.

A mudflow or a mudslide is a rapid downhill movement of a large mass of mud formed from loose soil and water. The County contains mountainous terrain with steep slopes and areas of loose soil. Impacts are further discussed below.

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A would continue to allow individuals to cultivate up to six plants on private property. Up to six cannabis plants grown on individual properties would be similar to a personal garden and would not result in new development. Therefore, Option A would not place structures in areas of inundation by seiche or mudflow beyond what currently exists. Impacts would be less than significant in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis stores with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or

without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

As stated above, a seiche is a large, standing wave generated in an enclosed, or partially enclosed, body of water in response to ground shaking. The only major reservoir within Kern County is the Isabella Reservoir. As depicted in Appendices D, E, and F, there are areas of potential future cannabis facilities surrounding County lakes, including Lake Isabella, that could be within areas on inundation if a seiche were to occur as a result of strong ground shaking. The areas with potential for future cannabis-related facilities and activities are generally in areas already developed within the communities that surround the County's lakes, including Lake Isabella. Because the proposed project would not result in an increase in population, the proposed project would not expose people or structures to the risk of a seiche, beyond what currently exists. Hazards from seiche events would be mitigated to less than significant levels by a combination of compliance with federal, State, and local regulations and policies, as well as implementation of Mitigation Measures MM 4.9-1 through MM 4.9-7, and Mitigation Measures MM 4.6-1 through MM 4.6-7 as required in Section 4.6, *Geology and Soils*.

Mudflows are a type of mass wasting or landslide, where earth and surface materials are rapidly transported downhill under the force of gravity. Mudflow events are caused by a combination of factors, including soil type, soil profile, precipitation, and slope. Mudflow may be triggered by heavy rainfall that the soil is not able to sufficiently drain or absorb. As a result of this supersaturation, soil and rock materials become unstable and eventually slide away from their existing location. Soils most susceptible to mudflow are saturated, loose, non-plastic, uniformly graded, and fine-grained sand deposits. As discussed in Chapter 4.6, *Geology and Soils*, mud and debris flow hazards are present to a variable degree within the project area; refer to Figure 4.6-3, *Kern County Landslide Areas*. The majority of the landslide hazard areas are located within the Mountain Region. While there may be localized areas of landslide hazard within the Valley and Desert Regions, those areas typically do not experience landslide events. Typical landslide hazard areas are as shown on Figure 4.6-3, *Kern County Landslide Areas*, and are generally found within the Mountain Region. Landslides that become reactivated are likely to shed large earthflows and debris flows to the toe of the mountain front and adjacent land. Debris flow hazards are present to a variable degree within the project area. The highest-level debris flow hazards occur at the mouths of incised alluvial fan channels. Impacts from hazards associated with landslides and debris flows would be potentially significant, and Mitigation Measures MM 4.9-1 through MM 4.9-7, as well as Mitigation Measures MM 4.6-1 through MM 4.6-7, would be required.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing for the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any

future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to the need for new or expanded stormwater drainage facilities and infrastructure would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Seiches, Tsunamis, and Mudflows

Refer to Impacts 4.9-1, 4.9-3, and 4.9-4, above, for a summary of applicable existing regulations and policies related to seiches, tsunamis, and mudflows.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

Implement Mitigation Measures MM 4.9-1 through MM 4.9-7, as described above, and Mitigation Measures MM 4.6-1 through MM 4.6-7, as described in the Section 4.6, *Geology and Soils*.

Level of Significance

Impacts would be less than significant with respect to Option A. Impacts regarding Option B would be less than significant.

Cumulative Setting Impacts and Mitigation Measures

Cumulative Setting

The geographic scope for cumulative impacts on hydrology and water quality includes both the KCGP and the regional growth plan and projections included in the Kern COG Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) approved in 2014, as defined in Section 3.7, *Cumulative Projects*. This is a large enough area to encompass any effects of the proposed project on adult use resources that may combine with similar effects caused by other projects, and provides a reasonable context wherein cumulative actions could affect these resources. The cumulative analyses consider whether the proposed project, Option A or Option B, in combination with the past, present, and reasonably foreseeable projects, could cumulatively affect hydrology and water quality.

Cumulative Impacts and Mitigation Measures

Impact 4.9-10: Contribute to Cumulative Hydrology and Water Quality Impacts

Proposed Project Option A

Option A of the proposed project would ban all commercial medical and adult use cannabis-related activities other than what is allowed for personal use under Proposition 64. Option A would not result in an increase in residents or employees within the County. As discussed above, Option A would not violate water quality standards or waste discharge requirements (Impact 4.9-1), substantially deplete groundwater supplies (Impact 4.9-2), substantially alter existing drainage patterns which would result

in erosion or siltation (Impact 4.9-3), substantially alter existing drainage patterns which would result in flooding (Impact 4.9-4), create or contribute runoff which would exceed the capacity of drainage systems or provide substantial additional sources of polluted runoff (Impact 4.9-5), otherwise substantially degrade water quality (Impact 4.9-6), place structures within the 100-year flood areas which would impede or redirect flood flows (Impact 4.9-7), expose people or structures to flooding from failure of levee or dam (Impact 4.9-8), or inundation by seiche, tsunami, or mudflow (Impact 4.9-7). Therefore, Option A would not contribute to cumulative impacts when combined with past, present, or reasonably foreseeable projects. No impacts would occur in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B). The County currently allows medical cannabis dispensaries.

Implementation of Option B would result in a less than significant impact on water quality and runoff (Impacts 4.9-1, 4.9-5, and 4.9-6). Future cannabis-related activities and facilities requiring construction would be required to incorporate BMPs and an NPDES Permit, with associated SWPPP. Future cannabis-related activities within the Central Valley RWQCB requires that cannabis cultivators enroll in the Cannabis Cultivation Waste Discharge Regulatory Program. Future cannabis-related facilities and activities could result in water quality degradation during construction or operation as a result of runoff and wastewater generation. Mitigation Measures MM 4.9-1 through MM 4.9-5 would reduce the severity of impacts. Other projects in the cumulative area would be required to comply with BMPs, NPDES Permit, and SWPPP, as well as runoff and wastewater BMPs. Therefore, Option B would not combine with those impacts of other past, present, and reasonably foreseeable future projects to result in a significant cumulative impact.

Regarding groundwater recharge and groundwater supplies (Impact 4.9-2), Option B would not substantially interfere with groundwater recharge and impacts would be less than significant. However, Option B would result in impacts to groundwater supply. The majority of the water demand would result from future cannabis cultivation activities (indoor and outdoor), processing and packaging, and distribution operations. Future indoor cultivation would have a countywide total water demand of 3,596,200 gallons (11.04 acre-feet) per year and future outdoor cannabis cultivation facilities would have a total water demand of 68,983,650 gallons per acre (211.7 acre-feet) per year. Future activities could occur within a water district, CSA, PUD, or groundwater basin that does not have sufficient water supply for the demand of a future cannabis facility. Option B would require the implementation of mitigation measures; however, because the proposed project would potentially develop cannabis-related facilities and activities within areas that do not have sufficient water supply, there could be a significant and unavoidable impact. Impacts to groundwater supply, when combined with past, present, or reasonably foreseeable projects could result in groundwater demand that exceeds the groundwater supply, especially in areas where groundwater basins are identified as not having sufficient water supply or are considered in overdraft. Therefore, Option B would contribute to cumulative impacts when combined with past, present, or reasonably foreseeable projects. Cumulative impacts would be significant.

Regarding altering drainage patterns such that runoff results in increased erosion, siltation, or flooding (Impacts 4.9-3 and 4.9-4), Option B would require that future cannabis-related facilities and activities comply with federal, State, and local requirements and BMPs, and well as incorporate Mitigation Measures MM 4.9-1 through MM 4.9-5. Future cannabis cultivators within the Central Valley RWQCB would also be required to enroll in the Cannabis Cultivation Waste Discharge Regulatory Program. Other projects in the cumulative area would be required to comply with federal, State, and local requirements, as well as requirements from the Central Valley and Lahontan RWQCBs and project-appropriate mitigation measures. Therefore, Option B would not combine with those impacts of other past, present, and reasonably foreseeable future projects to result in a significant cumulative impact.

Regarding impeding or redirecting flood flows and exposing people and structures to flooding (Impacts 4.9-7 and 4.9-8), Option B would be required to adhere to federal, State, and local requirements and proposed Mitigation Measures MM 4.9-1 through MM 4.9-7. In addition, protection measures are required if any new cannabis-related facility is proposed to be located within a FEMA Floodplain as required in Mitigation Measure MM 4.9-7. Other projects in the cumulative area would be required adhere to federal, State, and local requirements, as well as project-specific mitigation measures. Therefore, Option B would not combine with those impacts of other past, present, and reasonably foreseeable future projects to result in a significant cumulative impact.

Regarding inundation by seiche, tsunami, or mudflow (Impact 4.9-9), Hazards from seiche and mudflow events would be mitigated to less than significant levels by a combination of compliance with federal, State, and local regulations and policies, as well as implementation of Mitigation Measures MM 4.9-1 through MM 4.9-9, and Mitigation Measures MM 4.6-1 through MM 4.6-7 as required in Section 4.6, *Geology and Soils*. Other projects in the cumulative area would be required adhere to federal, State, and local requirements, as well as project-specific mitigation measures. Therefore, Option B would not combine with those impacts of other past, present, and reasonably foreseeable future projects to result in a significant cumulative impact.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

Implement Mitigation Measures MM 4.9-1 through MM 4.9-7, as described above, Mitigation Measures MM 4.4-8 and MM 4.4-12, as described in Section 4.4, *Biological Resources*, Mitigation Measures MM 4.6-1 through MM 4.6-7, as described in Section 4.6, *Geology and Soils*, Mitigation Measures MM 4.8-2 through MM 4.8-7, as described in the Section 4.8, *Hazards and Hazardous Materials*, and Mitigation Measure MM 4.16-1, as described in Section 4.16, *Utilities and Service Systems*.

Level of Significance after Mitigation

With respect to Option A, cumulative impacts would be less than significant. Cumulative impacts resulting from Option B would be less than significant with the exception of cumulative impacts regarding groundwater supply, which would be significant and unavoidable.

Section 4.10

Land Use and Planning

Section 4.10

Land Use and Planning

4.10.1 Introduction

This section of the Draft Environmental Impact Report (EIR) addresses potential land use impacts that would result from the implementation of the Kern County Cannabis Land Use Ordinance Project (proposed project). The following discussion addresses existing environmental conditions in the affected environment, evaluates the project's consistency with applicable goals and policies, identifies and analyzes environmental impacts, and recommends measures to reduce or avoid adverse impacts anticipated from project implementation.

A description of the environmental setting (affected environment) is presented below in Section 4.10.2, *Environmental Setting*, and the regulatory setting is presented in Section 4.10.3, *Regulatory Setting*, while the project impacts and associated Mitigation Measures are analyzed in Section 4.10.4, *Impacts and Mitigation Measures*.

4.10.2 Environmental Setting

Kern County

Kern County is California's third largest county in land area, encompassing 8,202 square miles, with a width of approximately 67 miles and a length of approximately 120 miles, located at the southern end of the Central Valley. The County contains 11 incorporated cities with Arvin, Bakersfield, Delano, Maricopa, McFarland, Shafter, Taft, and Wasco located within the Valley Region; Tehachapi located in the Mountain Region; and California City and Ridgecrest located in the Desert Region. Bakersfield is the largest city by population and serves as the County seat. The unincorporated area is 6,156 square miles. Kern County has three distinct geographical regions: a Valley Region (San Joaquin Valley); a Mountain Region (Tehachapi Mountains, Sierra Nevada Mountains, San Emigdio Mountains, Coast Ranges); and a Desert Region (Mojave Desert, Indian Wells Valley, Antelope Valley). Dominant land uses within the County include agriculture, petroleum exploration and extraction, and alternative energy (i.e., wind and solar) facilities; however, over the last several decades, urban development has occurred in and adjacent to the County's 11 incorporated cities, including the City of Bakersfield. In addition, Kern County contains land under the jurisdiction of various State and federal agencies. These include military facilities and lands managed by the Bureau of Land Management (BLM), the U.S. Fish and Wildlife Service (USFWS), and U.S. Forest Service (USFS).

Project Area

Although the project site encompasses the entire approximately 8,202 square miles, the project site includes only unincorporated County land. Therefore, the project site includes unincorporated County land within the 409-square-mile Metropolitan Bakersfield Planning Area (a joint planning area containing both County and City land), but excludes all adjacent City of Bakersfield land. The EIR analysis also excludes all other city jurisdictions. Lands under the jurisdiction of various State and federal agencies, including the BLM, USFWS, USFS, U.S. Department of Defense (China Lake Naval Air Weapons Station [NAWS] and the Edwards Air Force Base [AFB]), California Department of Parks and Recreation, and the California State Lands Commission, are also included

within the project site but are excluded from the EIR impact analysis. By conservatively assuming all new cannabis-related activities in Kern County would occur in the project site of the County's jurisdictional lands, this EIR presents a conservative analysis of likely impacts in the project site.

Valley Region

The San Joaquin Valley is located in the central portion of the County and is bounded by several mountain ranges which intersect forming a horseshoe shaped valley. The Kern County General Plan (KCGP) Update describes the San Joaquin Valley region as "the southern San Joaquin Valley below an elevation of 1,000 feet mean sea level" within Kern County. The lowest point in the County is located in the Valley Region and is 206 feet above mean sea level (AMSL). The Valley Region is characterized by relatively low rainfall, averaging less than 10 inches per year. Summers are relatively cloudless, hot, and dry. Winter is generally mild, but an occasional freeze does occur and may cause substantial agricultural damage.

The Valley Region includes the Bakersfield metropolitan area, the dominant urban area in Kern County, as well as scattered smaller cities including: Taft, Delano, Shafter, Arvin, McFarland, Maricopa, and Wasco. The region also includes all unincorporated County lands within the 409-square-mile Metropolitan Bakersfield General Plan (MBGP). Besides urban areas, other major land uses in the region include agriculture, oil extraction and production, and undeveloped land.

The landscape of the Valley region is mostly flat, lacking significant topographic relief, and tends to be visually monotonous because of the repetitive expanse of agricultural and extractive land uses. There is little variety of vegetative covers (i.e., grazing grasses, croplands, solitary trees, and residential landscaping) and few panoramic views.

Over the years, Kern County has experienced a great deal of urbanization, resource extraction, and renewable energy development. Urbanization has resulted in the introduction of numerous man-made modifications into the area, including residential, commercial, and industrial uses; roadways and highways; and utilities to support development. In addition, mineral, oil, and natural gas extraction and agricultural activities are common to the region. Common visual elements include oil wells, storage tank batteries, access roads, utility infrastructure, barns and other agricultural-related buildings tend to dominate the visual landscape in the western Valley region. In general, the aesthetic features of the regional visual environment are relatively uniform, with broad, flat landscapes leading to distant mountains and interspersed with urban, rural, and industrial development in varying densities and intensities.

Mountain Region

The Mountain Region is defined by the KCGP as "[t]he westernmost and central portions of the County above the 1,000 foot [mean sea level] contour in the valley and western region of the County and west of the primary alignment of the Los Angeles Aqueduct in the eastern County, including the southernmost portion of the County." The Mountain Region, from east to west, includes the Sierra Nevada Mountains, Tehachapi Mountains, San Emigdio Range, Temblor Range, and parts of the Coast Range. The highest point in the County is 8,831 feet AMSL at the summit of Mount Pinos. The average rainfall is approximately 15 inches, but can be as high as 35 or more inches. Snow accounts for much of the precipitation above 6,000 feet AMSL.

In the middle of this rugged high desert and mountainous terrain of the region are the valleys of Tehachapi, Cummings, Brite, and Bear. The higher elevations of the region support a variety of

forests which contain predominantly evergreen tree species. Lower elevations support dense brush and Pinyon pines on lower slopes, as well as oak trees, willows, grasses and shrubs in flatter areas and on canyon bottoms. The easterly portion of the Mountain Region fronts the Mojave Desert and is sparsely forested at higher elevations while lower elevations support chaparral, pinyon pine, and juniper tree species.

Existing development in the area consists largely of rural and semi-rural communities spread throughout the region. Population densities are generally low, with most housing consisting of single-family homes. The largest community in the region is the City of Tehachapi.

Desert Region

The Desert Region, including the Mojave Desert with Indian Wells Valley and Antelope Valley, is located in the eastern portion of Kern County, east of the Sierra Nevada and Tehachapi ranges and south of the short transverse range that connects the southernmost Sierra Nevada Mountains with the San Emigdio Mountains. The KCGP defines the Desert Region as “[t]he eastern section of the County east of the primary alignment of the Los Angeles Aqueduct.” The Desert Region is characterized by less than 10 inches of annual rainfall, and an evaporation rate that exceed precipitation.

Antelope Valley encompasses approximately 2,400 square miles in northern Los Angeles County, southern Kern County, and western San Bernardino County. Antelope Valley is on the south side of the Tehachapi Mountains, and is dominated by desert vegetation. Topography is relatively flat, but elevations gradually rise towards the northwest. The topographic characteristics of the region allow for open, expansive views of hills and mountains to the north and south of the valley. These include the Tehachapi Mountain Range to the north, Fairmont Butte and Antelope Butte to the south-southeast, and the Transverse Ranges to south. Portions of the Antelope Valley close to the cities of Lancaster and Palmdale have seen substantial urban development in recent decades; however, this urbanization has not affected the more northerly areas of the desert region within Kern County.

Indian Wells Valley is located along U.S. Route (US) 395 in northeastern Kern County, adjacent to the China Lake Naval Air Weapons Station (NAWS). The Indian Wells Valley is surrounded by four mountain ranges; the Sierra Nevada on the west, the Cosos on the north, the Argus Range on the east, and the El Paso Mountains on the south. It is approximately 82 miles from the Lancaster/Palmdale area and approximately 145 miles from both Bakersfield and San Bernardino, the three nearest major urban centers.

Land uses in the Desert Region include a mix of vacant land, agriculture, low-density residential uses, recreational and public facilities, and nature preserves. The region has experienced significant growth of man-made features, particularly powerlines. High-tension transmission corridors are found in several areas, and additional similar uses are underway or planned. A major regional Southern California Edison (SCE) transmission corridor containing multiple 500-kV and 220-kV lines with lattice towers traverses the desert region. Several existing wind farm developments are located in the Desert Region. These structures, which typically rise over 100 feet in height, dominate views from some viewpoints in the area and limit or interrupt the visibility of hills located in the distance. These windmills also impact the night sky, with flashing lights scattered throughout the wind farms, which total more than 65,000 acres. Due to the area’s predominant low-lying desert vegetation, scattered farm areas and overall limited topography in the area’s landscape and visual

character lacks distinct qualities, and no unique aesthetic features or scenic resources have been identified in the region.

Kern County General Plan Land Use Designations

The KCGP provides the land use designations for unincorporated Kern County. Table 4.10-1, *KCGP Land Use Designations within the Project Site*, lists only the land use designations that correspond to the proposed project's clarification for the appropriate zone classifications where future commercial cannabis related facilities would occur.

Table 4.10-1. KCGP Land Use Designations within the Project Site	
Map Code	Land Use Designation
6	Commercial
6.1	Regional Commercial
6.2	General Commercial
6.3	Highway Commercial
7	Industrial
7.1	Light Industrial
7.2	Service Industrial
7.3	Heavy Industrial
8	Resource
8.1	Intensive Agriculture (Min. 20-Acre Parcel Size)
8.2	Resource Reserve (Min. 20- or 80-Acre Parcel Size)
8.3	Extensive Agriculture (Min. 20- or 80-Acre Parcel Size)

Existing Zoning

The Kern County Zoning Ordinance regulates land uses within the project site, implements the underlying KCGP land use designations for applicable locations in the County, and is consistent with the KCGP. The project site is made up of the following zone classifications: A (Exclusive Agriculture); A-1 (Limited Agriculture); C-1 (Neighborhood Commercial); C-2 (General Commercial); CH (Highway Commercial); M-1 (Light Industrial); M-2 (Medium Industrial); and M-3 (Heavy Industrial).

Surrounding Land Uses

The project site is bordered on the west by San Luis Obispo and Santa Barbara counties. The border between the counties approximates the San Andreas Fault line. The Temblor Range forms a general barrier between the counties. Carizo Plain National Monument is located along the western boundary of Kern County between Kern and San Luis Obispo counties.

To the north, the project site is bordered by Kings, Tulare, and Inyo counties. The bordering areas of these three counties contain agriculture and oil and gas operations, as well as dispersed rural residences. The incorporated City of Delano is located on the northern border of Kern County and adjacent land uses in Tulare County consist of large lot residential, agriculture, and industrial

uses. Sequoia National Forest is located in the northeastern portion of the project site, within Kern and Tulare counties. Owens Lake and Owens Valley are located within Inyo County, approximately 40 miles north of the project site, while Death Valley National Park is located approximately 30 miles north and east of the project site, in Inyo and San Bernardino counties. China Lake NAWS is in the northeastern corner of Kern County and extends north in Inyo County.

To the east, the project site is bordered by San Bernardino County, and generally parallels US-395. Ridgecrest and Boron are within Kern County, on the eastern border. This area is within the Mojave Desert and includes rural desert lands, as well as solar energy facilities. Barstow, within San Bernardino County, is located approximately 35 miles east of Boron and the Project site.

Los Padres National Forest is located along the southwestern and southern project site, within the Santa Barbara, Ventura, Los Angeles, and Kern counties. In general, the southwestern boundary generally follows the San Emigdio Mountains and the Tehachapi Mountains. The southeastern boundary is within the Mojave Desert and follows the Kern/Los Angeles County line, which generally parallels, and is to the north of, SR-138. The City of Lancaster is located within Los Angeles County, approximately six miles south of the project site. Edwards AFB is located within the southeastern corner of Kern County.

4.10.3 Regulatory Setting

Federal

As explained in Section 3.2, *Regulatory History and Background*, even though cannabis is “decriminalized” under State law, and even with the U.S. Department of Justice (USDOJ) issuance of memoranda guiding federal law enforcement related to cannabis activities within jurisdictions that have legalized cannabis, cannabis activities continue to be illegal at the federal level and subject to the prosecutorial discretion of the federal government.

While land use and planning for federal lands adjacent to the project site are regulated by a variety federal agencies and programs, including National Forest management plans and federal preserve management plans, there are no applicable federal regulations for land use and planning for the proposed project, because the project site does not contain federal lands.

State

The California Environmental Quality Act (CEQA) establishes that a significant effect on the environment involves an adverse change to the physical environment. Pursuant to the CEQA Guidelines, a project’s impact related to land use planning is evaluated in terms of compatibility with existing land uses and consistency with local plans and other local land use controls (i.e., general plans, zoning codes, specific plans, etc.).

California Government Code §6586021 requires zoning to be consistent with the general plan. Consistency with the general plan is possible only if the local government, in this case Kern County, has officially adopted a general plan. The land uses authorized in the Kern County Zoning Ordinance must then be compatible with the objectives, policies, general land uses, and programs specified in the KCGP. This consistency is completed at the County level during the approval process of a general plan, general plan element (such as a housing element), general plan amendment, or zone code change.

Specific to the project, there are no applicable State regulations for Land Use and Planning.

California Proposition 64, Adult Use of Marijuana Act

California voters approved Proposition 215, the Compassionate Use Act (CUA), in 1996. The CUA allows a qualified patient and primary caregiver to possess and cultivate as much cannabis as is needed for personal medical use so long as they have a doctor's recommendation. Seven years later, in 2003, the California Legislature enacted the Medical Marijuana Program (MMP) which refined the CUA. Then on November 8, 2016, California voters approved Proposition 64, also known as the AUMA. Proposition 64 legalized adult use cannabis for persons age 21 and sales by State-licensed establishments scheduled to begin on January 1, 2018.

In response to recent State laws legalizing medicinal and/or adult use cannabis use, the USDOJ has issued memoranda regarding guidance for federal law enforcement as it relates to cannabis activities. A memorandum dated August 29, 2013, *Guidance Regarding Marijuana Enforcement*, stated in part..." (U.S. Department of Justice [USDOJ], 2013). The guidance memo further stated that “[t]he Department’s guidance in this memorandum rests on its expectation that states and local governments that have enacted laws authorizing marijuana-related conduct will implement strong and effective regulatory and enforcement systems that will address the threat those State laws could pose to public safety, public health, and other law enforcement interests” (USDOJ, 2013).

As part of proposition 64 the California Legislature included numerous environmental protections associated with the production and sales of cannabis within the State. More specially, Section 26066 [Environmental Protection] states the following:

“Indoor and outdoor marijuana cultivation by persons and entities licensed under this division shall be conducted in accordance with state and local laws related to land conversion, grading, electricity usage, water usage, water quality, woodland and riparian habitat protection, agricultural discharges, and similar matters. State agencies, including, but not limited to, the State Board of Forestry and Fire Protection, the Department of Fish and Wildlife, the State Water Resources Control Board, the California regional water quality control boards, and traditional state law enforcement agencies, shall address environmental impacts of marijuana cultivation and shall coordinate when appropriate with cities and counties and their law enforcement agencies in enforcement efforts”

Section 3.2, *Regulatory History and Background*, provides additional detail regarding Proposition 64.

Local

Applicable goals, policies, and implementation measures for each resource analyzed have been identified in their respective *Regulatory Setting* section in Chapter 4, Sections 4.1 through 4.16 of this EIR. This section lists all applicable goals, objectives, policies, and implementation measures adopted for the purpose of avoiding or mitigating an environmental effect not previously identified in the above-referenced chapters as they relate to land use planning and the project. A complete listing of applicable goals and policies is provided in Table 4.10-2, *Project Consistency with the Kern County General Plan*, and Table 4.10-3, *Project Consistency with the Metropolitan Bakersfield General Plan*.

Land use and planning for areas within and adjacent to the project site are regulated by a variety of jurisdictional planning agencies, programs, and documents including the KCGP, the MBGP, Specific Plans, and the Kern County Zoning Ordinance. Regional land use decisions within the project site are also influenced by the Kern Council of Governments (COG) 2014 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS).

Kern County General Plan (KCGP)

The project site is located within the KCGP. The State of California Government Code 65300 requires Kern County to prepare and adopt a general plan. Its purpose is to give long-range guidance to County officials making decisions affecting the growth and resources of unincorporated Kern County. The KCGP helps to ensure that day-to-day planning and land use decisions are in conformance with the long-range program designed to protect and further the public interest. It will be periodically reviewed and updated as the goals and requirements of the community evolve and change.

The goals, policies, and implementation measures in the KCGP applicable to land use and planning, as related to the proposed project, are provided below. Resource specific goals, policies, and implementation measures are provided in Sections 4.1 through 4.16, for each specific resource area. The KCGP contains additional policies, goals, and implementation measures that are more general in nature and not specific. Therefore, they are not listed below, but, as discussed in Chapter 2, *Introduction*, all policies, goals, and implementation measures in the KCGP are incorporated by reference.

Chapter 1. Land Use, Open Space, and Conservation Element

Section 1.3 Physical and Environmental Constraints

Goal

- **Goal 1.** To strive to prevent loss of life, reduce personal injuries, and property damage, minimize economic and social diseconomies resulting from natural disaster by directing development to areas which are not hazardous.

Policies

- **Policy 1.** Kern County will ensure that new developments will not be sited on land that is physically or environmentally constrained ((Map Code 2.1 (Seismic Hazard), Map Code 2.2 (Landslide), Map Code 2.3 (Shallow Groundwater), Map Code 2.5 (Flood Hazard), Map Codes from 2.6 – 2.9, Map Code 2.10 (Nearby Waste Facility), and Map Code 2.11 (Burn Dump Hazard)) to support such development unless appropriate studies establish that such development will not result in unmitigated significant impact.
- **Policy 2.** In order to minimize risk to Kern County residents and their property, new development will not be permitted in hazard areas in the absence of implementing ordinances and programs. These ordinances will establish conditions, criteria, and standards for the approval of development in hazard areas.
- **Policy 3.** Zoning and other land use controls will be used to regulate and, in some instances, to prohibit development in hazardous areas.

- **Policy 6.** Regardless of percentage of slope, development on hillsides will be sited in the least obtrusive fashion, thereby, minimizing the extent of topographic alteration required and reducing soil erosion while maintaining soil stability.
- **Policy 7.** Ensure effective slope stability, wastewater drainage, and sewage treatments in areas with steep slopes are adequate for development.
- **Policy 8.** Encourage the preservation of the floodplain's flow conveyance capacity, especially in floodways, to be open space/passive recreation areas throughout the County.
- **Policy 9.** Construction of structures that impede water flow in a primary floodplain will be discouraged.
- **Policy 10.** The County will allow lands which are within flood hazard areas, other than primary floodplains, to be developed in accordance with the General Plan and Floodplain Management Ordinance, if mitigation measures are incorporated so as to ensure that the proposed development will not be hazardous within the requirements of the Safety Element (Chapter 4) of this General Plan.
- **Policy 11.** Protect and maintain watershed integrity within Kern County.

Implementation Measures

- **Implementation Measure A.** Adopt requirements and procedures in zoning, subdivision, and site development regulation and building criteria for Seismic Hazard designated areas.
- **Implementation Measure B.** A seismic analysis may be required for those areas in Kern County, which are susceptible to landslides.
- **Implementation Measure C.** Cooperate with the Kern County Water Agency to classify lands in the County overlying groundwater according to groundwater quantity and quality limitations.
- **Implementation Measure D.** Review and revise the County's current Grading Ordinance as needed to ensure that its standards minimize permitted topographic alteration and soil erosion while maintaining soil stability.
- **Implementation Measure E.** Development proposed in areas with steep slopes (Map Code 2.4) will be reviewed for conformity to Chapter 19.88 Hillside Development Ordinance or Chapter 19.52 Special Planning (SP) District to ensure that appropriate soil stability, drainage, and sewage treatment will result.
- **Implementation Measure F.** The County will comply with the Colbey-Alquist Floodplain Management Act in regulating land use within designated floodways.
- **Implementation Measure H.** Development within areas subject to flooding, as defined by the appropriate agency, will require necessary flood evaluations and studies.
- **Implementation Measure J.** Compliance with the Floodplain Management Ordinance prior to grading or improvement of land for development or the construction, expansion, conversion or substantial improvements of a structure is required.

- **Implementation Measure N.** Applicants for new discretionary development should consult with the appropriate Resource Conservation District and the California Regional Water Quality Control Board regarding soil disturbances issues.

Section 1.4 Public Facilities and Services

Goals

- **Goal 1.** Kern County residents and businesses should receive adequate and cost- effective public services and facilities. The County will compare new urban development proposals and land use changes to the required public services and facilities needed for the proposed project.
- **Goal 2.** Promote an urban growth pattern in areas where adequate public service infrastructure exists or can be provided.
- **Goal 3.** Distribute the cost of new services or facilities equitably among the beneficiaries.
- **Goal 5.** Ensure that adequate supplies of quality (appropriate for intended use) water are available to residential, industrial, and agricultural users within Kern County.
- **Goal 9.** Serve the needs of industries and Kern County residents in a manner that does not degrade the water supply and the environment and protect the public health and safety by avoiding surface and subsurface nuisances resulting from the disposal of hazardous wastes, irrespective of the geographic origin of the waste.
- **Goal 10.** Ensure landfill capacity for Kern County residents and industries.

Policies

- **Policy 1.** New discretionary development will be required to pay its proportional share of the local costs of infrastructure improvements required to service such development.
- **Policy 2.** The efficient and cost-effective delivery of public services and facilities will be promoted by designating areas for urban development that occur within or adjacent to areas with adequate public service and facility capacity.
 - a) Ensure that water quality standards are met for existing users and future development.
 - b) Ensure that adequate storage, treatment, and transmission facilities are constructed concurrently with planned growth.
 - c) Ensure the maintenance and repair of existing water systems.
 - d) Encourage the utilization of wastewater treatment facilities which provide for the reuse of wastewater.
 - e) Encourage the consolidation or elimination of small water systems.
 - f) Encourage the conversion of private sewer systems (septic tanks) to public systems.
 - g) Ensure that adequate collection, treatment, and disposal facilities are constructed concurrently with planned growth.
 - h) Ensure that appropriate funding mechanisms are in place to fund the needed improvements which result from development and subsequent growth.

- **Policy 3.** Individual projects will provide availability of public utility service as per approved guideline of the serving utility.
- **Policy 6.** The County will ensure adequate fire protection to all Kern County residents.
- **Policy 7.** The County will ensure adequate police protection to all Kern County residents.
- **Policy 13.** The County shall ensure landfill capacity for the residents and industry of Kern County.

Implementation Measures

- **Implementation Measure A.** Continue to administer the Capital Improvement Program (CIP) and coordinate with public utility providers, listing the necessary improvements to Kern County's public services and facilities in collaboration with key service-providing agencies and the County Administrative Office as a first step toward the preparation of a long-term Public Services Plan for Kern County. This plan addresses the projected demand for public services throughout the County in comparison with projected revenues and identifies long-term financial trends for the major public service providers. The CIP and general plan can ensure compliance with the provisions of Government Code Sections 65401 and 65402, which require review of all capital facility decisions for consistency with the General Plan.
- **Implementation Measure C.** Project developers shall coordinate with the local utility service providers to supply adequate public utility services.
- **Implementation Measure D.** Involve utility providers in the land use and zoning review process.
- **Implementation Measure L.** Prior to the approval of development projects, the County shall determine the need for fire protection services. New development in the County shall not be approved unless adequate fire protection facilities and resources can be provided.
- **Implementation Measure N.** Secure complete and accurate information on all hazardous wastes generated, handled, stored, treated, transported, and disposed of within or through Kern County.
- **Implementation Measure O.** Reduce to the greatest degree possible the amount of waste to be disposed of by encouraging private industry to construct and manage a high-quality system of transfer stations, recycling facilities, treatment plants, and incinerators located near the generators of hazardous waste.
- **Implementation Measure R.** Roads and highways utilized for commercial shipping of hazardous waste destined for disposal will be designated as such pursuant to Vehicle Code Sections 31303 et seq. Permit applications shall identify commercial shipping routes they propose to utilize for particular waste streams.

Section 1.5 Special Treatment Areas

Policy

- **Policy 5.** Specific Plan Areas guidelines shall be used to ensure adequate consideration of the General Plan goals and policies governing development and resource management.

*Section 1.6 Residential*Goal

- **Goal 7.** Minimize land use conflicts between residential and resource, commercial, or industrial land uses.

*Section 1.7 Commercial*Goals

- **Goals 1.** Ensure that an adequate and geographically balanced supply of land is designated for a range of commercial uses.
- **Goal 2.** Pursue a strong economy through logical placement and distribution of commercial development within the rural and urban areas of Kern County.
- **Goal 3.** Ensure that adequate infrastructure and public services are available for all proposed commercial projects.
- **Goal 4.** Diversify and broaden the commercial base within Kern County.
- **Goal 5.** Provide highway commercial along interstates and highways to provide services for the traveling public without being a detriment to existing rural communities.
- **Goal 6.** Ensure compatible land uses around airports through the use of the Airport Land Use Compatibility Plan.

Policies

- **Policy 1.** Kern County will promote a pattern of commercial development that contributes to the economic and physical development of existing unincorporated communities as well as to the incorporated cities.
- **Policy 3.** The development of specialized clusters of related and mutually supportive commercial activities will be encouraged and supported in appropriate locations by means of the Zoning Ordinance and Specific Plans.
- **Policy 4.** Prior to approval, all new discretionary commercial projects located in the Airport Influence areas will be compatible with the Airport Land Use Compatibility Plan.
- **Policy 5.** Regional Commercial may be sited in urban areas with adequate infrastructure and should consist of at least 20 acres.
- **Policy 6.** Linear commercial development of shallow depth, lacking demonstrated demand, will be discouraged along streets or highways when it can be shown that it impairs the traffic-carrying functions of the highways, it detracts from the aesthetic enjoyment of the surroundings, or if it can be demonstrated that equally effective services can be provided in an alternative configuration.
- **Policy 7.** The development of Highway Commercial (Map Code 6.3) shall demonstrate adequate infrastructure.
- **Policy 8.** All commercial development equal to or greater than 40 acres in a rural area will require the adoption of a Specific Plan prior to development approval.

Implementation Measures

- **Implementation Measure B.** Evaluation of applications for any General or Specific Plan Amendment to commercial designation will include sufficient data for review of new commercial development proposals consistent with General Plan policies, using the following criteria and guidelines on:
 - i. Location suitability with respect to market area demand.
 - ii. Provision of adequate ingress and egress and the mitigation of traffic impacts.
 - iii. Provision of adequate water, sewer, and other public services to be used.
 - iv. Provision of adequate on-site nonpublic water supply and sewage disposal, if no public systems are available or used.
 - v. Compatibility with adjacent uses (scale, noise, other nuisances, etc.) and methods for buffering.
 - vi. Design, layout, and visual appearance within a coordinated commercial setting.
 - vii. Overall consistency with the General Plan.
- **Implementation Measure C.** The depth of new commercial developments shall be at least half the length of the street frontage. Exceptions may be made where existing development or physical constraints provide a more logical shape.
- **Implementation Measure D.** Requests for commercial designations and zoning adjacent to residentially designated and other sensitive uses should incorporate a Precise Development Combining District as a means to ensure land use compatibility.
- **Implementation measure E.** Require all new commercial designations be assigned to sites where the aggregate of all contiguous parcels designated for commercial use is no less than five (5) acres, except for:
 - i. Commercial development located within an approved Specific Plan
 - ii. Commercial development for highway-oriented service uses at freeway on and off ramps
 - iii. Where physical conditions are such that commercial is the only logical use of the property.
 - iv. Neighborhood commercial areas approved in accordance to Residential Policy 4.
- **Implementation Measure F.** Proposed commercial developments shall demonstrate compatibility with adjacent residential development through:
 - i. Attention to noise impacts
 - ii. Reduction or minimization of light and glare
 - iii. Buffering of residential from the commercial development through use of walls, landscaping, etc.
 - iv. Placing loading/unloading areas as far as practicable from residences.
- **Implementation Measure G.** All General Plan Amendments, zone changes, conditional use permit, discretionary commercial developments, and variations from height limits

established by zoning for properties which are located in the Airport Influence areas or near a military airport shall be reviewed by the Planning Department for compatibility with the Kern County Airport Land Use Compatibility Plan.

- **Implementation Measure H.** Discretionary applications for all commercial projects shall provide documentation of adequate public infrastructure and services which include, but are not limited to: 1. Fire protection 2. Police protection 3. Sewage disposal 4. Water service including quality and quantity.
- **Implementation Measure I.** New General Plan Amendments for Regional Commercial (Map Code 6.1) sited in urban areas shall demonstrate adequate infrastructure and consist of a minimum of 20 acres.
- **Implementation Measure J.** Discretionary projects located within a Moderate, High, or Extreme Fire Hazard Zone shall abide by building materials and construction requirements set forth by the Kern County Fire Department and Office of Emergency Services.

Section 1.8 Industrial

Goals

- **Goal 1.** Ensure that an adequate and geographically balanced supply of land is designated for a range of industrial purposes
- **Goal 2.** Promote the future economic strength and well-being of Kern County and its residents without detriment to its environmental quality.
- **Goal 3.** Ensure compatibility with land use designations such as residential, commercial or other land uses that may be affected by such activities.

Policies

- **Policy 1.** Locations for new industrial activities shall be provided with adequate infrastructure (water, sewage disposal systems, roads, drainage, etc.) to minimize effects on County services.
- **Policy 3.** The land areas best suited for industrial activity by virtue of their location and other criteria will be protected from residential and other incompatible development.
- **Policy 6.** Encourage upgrading the visual character of existing industrial areas through the use of landscaping, screening, or buffering.
- **Policy 7.** Require that industrial uses provide design features such as screen walls, landscaping, increased height and/or setbacks, and lighting restrictions between the boundaries of adjacent residential land use designations so as to reduce impacts on residences due to light, noise, sound, and vibration.
- **Policy 9.** Prior to approval, all new discretionary industrial projects located in the Airport Influence Areas will be reviewed for compatibility with the Airport Land Use Compatibility Plan.
- **Policy 12.** All industrial development equal to or greater than 40 acres in a rural area will require the adoption of a Specific Plan prior to development approval.

- **Policy 13.** Where feasible, locate future industrial activities in close proximity to railroad facilities and inter- and intra-State transportation corridors to minimize extensive travel through urban areas and to promote alternative transportation of goods.

Implementation Measures

- **Implementation Measure A.** Evaluation of applications for any General or Specific Plan Amendment to an industrial designation will include sufficient data for review to facilitate desirable new industrial development proposals consistent with General Plan policies, using the following criteria and guidelines:
 - i. Location suitability with respect to market demand area.
 - ii. Provision of adequate access, ingress and egress facilities and services, and the mitigation of traffic impacts.
 - iii. Provision of adequate water, sewer, and other public services to be used.
 - iv. Provision of adequate on-site, nonpublic water supply and sewage disposal if no public systems are available or used.
 - v. Compatibility with adjacent uses (scale, noise, emissions, or other nuisances, etc.) and methods for buffering.
 - vi. Design, layout, and visual appearance coordinated with existing adjacent industrial uses.
 - vii. Overall consistency with the General Plan.
- **Implementation Measure F.** All General Plan Amendments, zone changes, conditional use permits, discretionary industrial developments, and variations from height limits established by zoning for properties which are located in the Airport Influence areas or near a military airport shall be reviewed by the Planning Department for compatibility with the Kern County Airport Land Use Compatibility Plan.
- **Implementation Measure G.** Require a Specific Plan for industrial land projects (as defined in the Assumption Section of the Special Treatment Areas) to identify site specific issues and implementation, such as infrastructure, circulation, compatibility, and public services and facilities.
- **Implementation Measure H.** Requests for industrial designations and zoning adjacent to residentially designated and other sensitive uses should incorporate a Precise Development Combining District as a means to ensure land use compatibility.
- **Implementation Measure I.** Discretionary projects located within an Extreme, High, or Moderate Fire Hazard Zone shall abide by building materials and construction requirements set forth by the Kern County Fire Department and Office of Emergency Services.

Section 1.9 Resource

Goals

- **Goal 1.** To contain new development within an area large enough to meet generous projections of foreseeable need, but in locations which will not impair the economic

strength derived from the petroleum, agriculture, rangeland, or mineral resources, or diminish the other amenities which exist in the County.

- **Goal 2.** Protect areas of important mineral, petroleum, and agricultural resource potential for future use.
- **Goal 3.** Ensure the development of resource areas minimize effects on neighboring resource lands.
- **Goal 5.** Conserve prime agriculture lands from premature conversion.

Policies

- **Policy 2.** In areas with a resource designation on the General Plan map, only industrial activities which directly and obviously relate to the exploration, production, and transportation of the particular resource will be considered to be consistent with this General Plan.
- **Policy 7.** Areas designated for agricultural use, which include Class I and II and other enhanced agricultural soils with surface delivery water systems, should be protected from incompatible residential, commercial, and industrial subdivision and development activities.
- **Policy 10.** To encourage effective groundwater resource management for the long-term economic benefit of the County the following shall be considered:
 - a. Promote groundwater recharge activities in various zone districts.
 - b. Support for the development of Urban Water Management Plans and promote Department of Water Resources grant funding for all water providers.
 - c. Support the development of groundwater management plans.
 - d. Support the development of future sources of additional surface water and groundwater, including conjunctive use, recycled water, conservation, additional storage of surface water and groundwater and desalination.
- **Policy 11.** Minimize the alteration of natural drainage areas. Require development plans to include necessary mitigation to stabilize runoff and silt deposition through utilization of grading and flood protection ordinances.
- **Policy 12.** Areas identified by the Natural Resource Conservation Service (formerly Soil Conservation Service) as having high range-site value should be conserved for Extensive Agriculture uses or as Resource Reserve, if located within a County water district.
- **Policy 24.** Urban residential or commercial development on property contiguous to property designated Map Code 8.1 (Intensive Agriculture) should employ landscaping, lot size, open space buffering, increased building setbacks, or other techniques to reduce the potential for land use conflicts when it can be demonstrated that such measures will provide for public welfare and benefit and promote continued agricultural uses.

Implementation Measures

- **Implementation Measure B.** Areas designated as Resource Reserve (Map Code 8.2), Extensive Agriculture (Map Code 8.3), Resource Management (Map Code 8.5) that are under Williamson Act Contracts or Farmland Security Zone Contracts will have a

minimum parcel size of 80 acres until such time as a contract is expired or is cancelled, at which time the minimum parcel size will become 20 acres.

- **Implementation Measure C.** The County Planning Department will seek review and comment from the County Engineering and Survey Services Department on the implementation of the National Pollution Discharge Elimination System for all discretionary projects.
- **Implementation Measure F.** Prime agricultural lands, according to the Kern County Interim-Important Farmland map produced by the Department of Conservation, which have Class I or II soils and a surface delivery water system shall be conserved through the use of agricultural zoning with minimum parcel size provisions.

Section 1.10.1 General Provisions, Public Services and Facilities

Goal

- **Goal 1.** Ensure that the County can accommodate anticipated future growth and development while maintaining a safe and healthful environment and a prosperous economy by preserving valuable natural resources, guiding development away from hazardous areas, and assuring the provision of adequate public services.

Policies

- **Policy 8.** The County shall ensure that new industrial uses and activities are sited to avoid or minimize significant hazards to human health and safety in a manner that avoids over concentrating such uses in proximity to schools and residents.
- **Policy 9.** New development should pay its pro rata share of the local cost of expansions in services, facilities, and infrastructure that it generates and upon which it is dependent.
- **Policy 15.** Prior to approval of any discretionary permit, the County shall make the finding, based on information provided by the California Environmental Quality Act (CEQA) documents, staff analysis, and the applicant, that adequate public or private services and resources are available to serve the proposed development.
- **Policy 16.** The developer shall assume full responsibility for costs incurred in service extension or improvements that are required to ensure the project. Cost sharing or other forms of recovery shall be available when the service extensions or improvements have a specific quantifiable regional significance.

Section 1.10.2 Air Quality

Policies

- **Policy 18.** The air quality implications of new discretionary land use proposals shall be considered in approval of major developments. Special emphasis will be placed on minimizing air quality degradation in the desert to enable effective military operations and in the valley region to meet attainment goals.
- **Policy 19.** In considering discretionary projects for which an environmental impact report must be prepared pursuant to the California Environmental Quality Act, the appropriate decision-making body, as part of its deliberations, will ensure that:

- a) All feasible mitigation to reduce significant adverse air quality impacts have been adopted; and
- b) The benefits of the proposed project outweigh any unavoidable significant adverse effects on air quality found to exist after inclusion of all feasible mitigation. This finding shall be made in a statement of overriding considerations and shall be supported by factual evidence to the extent that such a statement is required pursuant to the California Environmental Quality Act.
- **Policy 21:** The County shall support air districts' efforts to reduce PM10 and PM2.5 emissions.
- **Policy 22.** Kern County shall continue to work with the San Joaquin Valley Unified Air Pollution Control District and the Kern County Air Pollution Control District toward air quality attainment with federal, State, and local standards.
- **Policy 23.** The County shall continue to implement the local government control measures in coordination with the Kern Council of Governments and the San Joaquin Valley Unified Air Pollution Control District.

Implementation Measures

- **Implementation Measure F:** All discretionary permits shall be referred to the appropriate air district for review and comment.
- **Implementation Measure G:** Discretionary development projects involving the use of tractor-trailer rigs shall incorporate diesel exhaust reduction strategies, including, but not limited to:
 - a) Minimizing idling time, and
 - b) Electrical overnight plug-ins.
- **Implementation Measure H:** Discretionary projects may use one or more of the following to reduce air quality effects:
 - a) Pave dirt roads within the development,
 - b) Pave outside storage areas,
 - c) Provide additional low volatile organic compound-producing trees on landscape plans,
 - d) Use alternative fuel fleet vehicles or hybrid vehicles,
 - e) Use emission control devices on diesel equipment,
 - f) Develop residential neighborhoods without fireplaces or with the use of Environmental Protection Agency-certified low-emission natural gas fireplaces,
 - g) Provide bicycle lockers and shower facilities on-site,
 - h) Increase the amount of landscaping beyond what is required in the Zoning Ordinance (Chapter 19.86),
 - i) Use and develop park-and-ride facilities in outlying areas, and
 - j) Other strategies that may be recommended by the local Air Pollution Control Districts.

- **Implementation Measure J:** The County should include PM10 control measures as conditions of approval for subdivision maps, site plans, and grading permits.

Section 1.10.3. Archaeological, Paleontological, Cultural, and Historical Preservation Policy

- **Policy 25.** The County will promote the preservation of cultural and historic resources that provide ties with the past and constitute a heritage value to residents and visitors.

Implementation Measures

- **Implementation Measure K.** Coordinate with the California State University, Bakersfield's Archaeology Inventory Center.
- **Implementation Measure L.** The County shall address archaeological and historical resources for discretionary projects in accordance with CEQA.
- **Implementation Measure M.** In areas of known paleontological resources, the County should address the preservation of these resources where feasible.
- **Implementation Measure N.** The County shall develop a list of Native American organizations and individuals who desire to be notified of proposed discretionary projects. This notification will be accomplished through the established procedures for discretionary projects and CEQA documents.
- **Implementation Measure O.** On a project-specific basis, the County Planning Department shall evaluate the necessity for the involvement of a qualified Native American monitor for grading or other construction activities on discretionary projects that are subject to a CEQA document.

Section 1.10.5 Threatened and Endangered Species Policies

Policies

- **Policy 27.** Threatened or endangered plant and wildlife species should be protected in accordance with State and federal laws.
- **Policy 28.** County should work closely with State and federal agencies to assure that discretionary projects avoid or minimize impacts to fish, wildlife, and botanical resources.
- **Policy 29.** The County will seek cooperative efforts with local, State, and federal agencies to protect listed threatened and endangered plant and wildlife species through the use of conservation plans and other methods promoting management and conservation of habitat lands.
- **Policy 31.** Under the provisions of the California Environmental Quality Act (CEQA), the County, as lead agency, will solicit comments from the California Department of Fish and Game and the U.S. Fish and Wildlife Service when an environmental document (Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report) is prepared.
- **Policy 32.** Riparian areas will be managed in accordance with United States Army Corps of Engineers, and the California Department of Fish and Wildlife rules and regulations to enhance the drainage, flood control, biological, recreational, and other beneficial uses while acknowledging existing land use patterns.

Implementation Measures

- **Implementation Measure Q.** Discretionary projects shall consider effects to biological resources as required by the California Environmental Quality Act.
- **Implementation Measure R.** Consult and consider the comments from responsible and trustee wildlife agencies when reviewing a discretionary project subject to the California Environmental Quality Act.
- **Implementation Measure S.** Pursue the development and implementation of conservation programs with State and federal wildlife agencies for property owners desiring streamlined endangered species mitigation programs.

Section 1.10.6 Surface Water and Groundwater

Policies

- **Policy 34.** Ensure that water quality standards are met for existing users and future development.
- **Policy 40.** Encourage utilization of community water systems rather than the reliance on individual wells.
- **Policy 41.** Review development proposals to ensure adequate water is available to accommodate projected growth.
- **Policy 43.** Drainage shall conform to the Kern County Development Standards and the Grading Ordinance.
- **Policy 44.** Discretionary projects shall analyze watershed impacts and mitigate for construction-related and urban pollutants, as well as alterations of flow patterns and introduction of impervious surfaces as required by the California Environmental Quality Act (CEQA), to prevent the degradation of the watershed to the extent practical.

Implementation Measures

- **Implementation Measure Y.** Promote efficient water use by utilizing measures such as:
 - i. Requiring water-conserving design and equipment in new construction.
 - ii. Encouraging water-conserving landscaping and irrigation methods.
 - iii. Encouraging the retrofitting of existing development with water conserving devices.

Section 1.10.7. Light and Glare

Policies

- **Policy 47.** Ensure that light and glare from discretionary new development projects are minimized in rural as well as urban areas.
- **Policy 48.** Encourage the use of low-glare lighting to minimize nighttime glare effects on neighboring properties.

Implementation Measures

- **Implementation Measure AA.** The County shall utilize CEQA Guidelines and the provisions of the Zoning Ordinance to minimize the impacts of light and glare on adjacent properties and in rural undeveloped areas.

Section 1.10.8 Smart Growth

Policies

- **Policy 49.** Discretionary development projects should be encouraged to incorporate innovative or “smart growth” land use planning techniques as design features, as follows:
 - a. Higher Density development, where compatible, to maximize the efficient use of land.
 - b. Mixed use developments that promote reduced vehicle trips by having residential, commercial, and public uses proximate to each other.
 - c. Variety of housing types, including those using energy efficient design, and densities to address Kern County’s housing needs.
 - d. Master planned communities that feature interconnected roads, transit stops, sidewalks, landscaping, and trails to encourage efficient vehicle and pedestrian movement.
 - e. Compact development that conserves open space, agricultural land, flood prone areas, creeks, hillsides, ridge tops, wetlands, and other natural features.
 - f. Adequate infrastructure (i.e. roads, sewer, water, parks, etc.) is provided as a condition of development approval by the project proponent.
 - g. Aesthetically pleasing and unifying design features that promote a visually pleasing environment.

Section 1.10.10. Oak Tree Conservation

Policies

- **Policy 65.** Oak woodlands and large oak trees shall be protected where possible and incorporated into project developments.
- **Policy 66.** Promote the conservation of oak tree woodlands for their environmental value and scenic beauty.

Implementation Measures

- **Implementation Measure KK.** The following applies to discretionary development projects (General Plan Amendment, zone change, conditional use permit, tract maps, parcel maps, precise development plan) that contains oak woodlands, which are defined as development parcels having canopy cover by oak trees of at least ten percent (10%), as determined from base line aerial photography or by site survey performed by a licensed or certified arborist or botanist. If this study is used in an Environmental Impact Report, then a Registered Professional Forester (RPF) shall perform the necessary analysis.
 - Development parcels containing oak woodlands are subject to a minimum canopy coverage retention standard of thirty percent (30%). The consultant shall include

recommendations regarding thinning and diseased tree removal in conjunction with the discretionary project.

- Use of aerial photography and a dot grid system shall be considered adequate in determining the required canopy coverage standard.
- Adjustments below thirty percent (30%) minimum canopy standard may be made based on a report to assess the management of oak woodlands.
- Discretionary development, within areas designated as meeting the minimum canopy standard, shall avoid the area beneath and within the trees unaltered drip line unless approved by a licensed or certified arborist or botanist.
- **Implementation Measure LL.** The following applies to development of parcels having oak tree canopy cover of less than ten percent (10%), but containing individual oak trees equal to or greater than a 12-inch diameter trunk at 4.5 feet breast height.
 - Such trees shall be identified on plot plans.
 - Discretionary development shall avoid the area beneath and within the trees unaltered drip line unless approved by a licensed or certified arborist or botanist.
 - Specified tree removal related to the discretionary action may be granted by the decision-making body upon showing that a hardship exists based on substantial evidence in the record.

Chapter 2. Circulation Element

Section 2.1 Introduction

Objective

- **Objective 5.** Maintain a minimum Level of Service (LOS) D for all roads throughout the County.

Section 2.3.3 Highway Plan

Goals

- **Goal 5.** Maintain a minimum Level of Service (LOS) D.

Implementation Measures

- **Implementation Measure A.** The Planning Department shall carry out the road network Policies by using the Kern County Land Division Ordinance and Zoning Ordinance, which implements the Kern County Development Standards that includes road standards related to urban and rural planning requirements. These ordinances also regulate access points. Planning Department can help developers and property owners in identifying where planned circulation is to occur.
- **Implementation Measure B.** Continuity and integrity of the arterial and collector system at the mountain/valley region and the mountain/desert region boundary must be reviewed and approved in conjunction with project adoption on an individual basis.
- **Implementation Measure C.** Conformance to alignment minimum design standards, where roadways that deviate from section and mid-section lines intersect those lines,

must be reviewed and approved in conjunction with project adoption on an individual basis.

Section 2.3.4 Future Growth

Policies

- **Policy 2.** The County should monitor development applications as they relate to traffic estimates developed for this plan. Mitigation is required if development causes affected roadways to fall below LOS D. Utilization of the California Environmental Quality Act (CEQA) process would help identify alternatives to or mitigation for such developments. Mitigation could involve amending the Land Use, Open Space, and Conservation Element to establish jobs/housing balance if projected trips in any traffic zone exceed trips identified for this Circulation Element. Mitigation could involve exactions to build off-site transportation facilities. These enhancements would reduce traffic congestion to an acceptable level.
- **Policy 4.** As a condition of private development approval, developers shall build roads needed to access the existing road network. Developers shall build these roads to County standards unless improvements along State routes are necessary then roads shall be built to Caltrans standards. Developers shall locate these roads (width to be determined by the Circulation Plan) along centerlines shown on the circulation diagram map unless otherwise authorized by an approved Specific Plan Line. Developers may build local roads along lines other than those on the circulation diagram map. Developers would negotiate necessary easements to allow this.
- **Policy 5.** When there is a legal lot of record, improvement of access to county, city or State roads will require funding by sources other than the County. Funding could be by starting a local benefit assessment district or, depending on the size of a project, direct development impact fees.
- **Policy 6.** The County may accept a developer's road into the County's maintained road system. This is at Kern County's discretion. Acceptance would occur after the developer follows the above requirements.

Implementation Measures

- **Implementation Measure C.** Project development shall comply with the requirements of the Kern County Zoning Ordinance, Land Division Ordinance, and Development Standards.

Section 2.3.10 Congestion Management Programs

Goals

- **Goal 1.** To satisfy the trip reduction and travel demand requirements of the Kern Council of Government's Congestion Management Program.
- **Goal 2.** To coordinate congestion management and air quality requirements and avoid multiple and conflicting requirements.

Implementation Measures

- **Implementation Measure.** The elements within the Kern Congestion Management Program are to be implemented by each incorporated city and the County of Kern. Specifically, the land use analysis program, including the preparation and adoption of deficiency plans is required. Additionally, the adoption of trip reduction and travel demand strategies are required in the Congestion Management Program.

Section 2.5.2 Airport Land Use Compatibility (ALUCP)

Goal

- **Goal 1.** Plan for land uses that are compatible with public airport and military bases and mitigate encroachment issues.

Policies

- **Policy 1.** Review land use designations and zoning near public and private airports, Edwards Air Force Base and Naval Air Weapons Station (NAWS) China Lake for compatibility.
- **Policy 2.** To the extent legally allowable, prevent encroachment on public airport and military base operations from incompatible, unmitigated land uses.

Implementation Measures

- **Implementation Measure A.** Review discretionary land use development applications within the airports influence area and the military base operating area as shown in the Airport Land Use Compatibility Plan (ALUCP) for consistency.
- **Implementation Measure B.** Coordinate and cooperate with airport operators, the County Department of Airports, the California Department of Transportation, Division of Aeronautics, affected cities, Edwards Air Force Base, NAWS China Lake, and the U.S. Department of Defense on ALUCP, review of land use applications, public education, and encroachment issues.

Section 2.5.4 Transportation of Hazardous Materials

Goal

- **Goal 1.** Reduce risk to public health from transportation of hazardous materials.

Policies

- **Policy 1.** The commercial transportation of hazardous material, identification, and designation of appropriate shipping routes will be in conformance with the adopted Kern County and Incorporated Cities Hazardous Waste Management Plan.

Implementation Measures

- **Implementation Measure A.** Roads and highways utilized for commercial shipping of hazardous waste destined for disposal will be designated as such pursuant to California Vehicle Code Sections 31303 et seq. Permit applications shall identify commercial shipping routes they propose to utilize for particular waste streams.

Chapter 3. Noise Element

Section 3.2 Noise Sensitive Areas

Policy

- **Policy 4.** Utilize good land use planning principles to reduce conflicts related to noise emissions.
- **Policy 6.** Ensure that new development in the vicinity of airports will be compatible with existing and projected airport noise levels as set forth in the ALUCP.

Implementation Measures

- **Implementation Measure A.** Utilize zoning regulations to assist in achieving noise-compatible land use patterns.
- **Implementation Measure C.** Review discretionary development plans, programs and proposals, including those initiated by both the public and private sectors, to ascertain and ensure their conformance to the policies outlined in this element.

Chapter 4. Safety Element

Section 4.1 Introduction

Goals

- **Goal 1.** Minimize injuries and loss of life and reduce property damage.
- **Goal 2.** Reduce economic and social disruption resulting from earthquakes, fire, flooding, and other geologic hazards by assuring the continuity of vital emergency public services and functions.
- **Goal 3.** Assist in the allocation of public resources in Kern County to develop information regarding geologic, fire, and flood safety hazards and to develop a systematic approach toward the project of public health, safety, and welfare from such hazards.
- **Goal 5.** Ensure the availability and effective response of emergency services following a catastrophic event.
- **Goal 7.** Ensure that adequate emergency services and facilities are available to the residents of Kern County through the coordination of planning and development of emergency facilities and services.
- **Goal 8.** Reduce the public's exposure to fire, explosion, blowout, and other hazards associated with the accidental release of crude oil, natural gas, and hydrogen sulfide gas.

Section 4.2 General Policies and Implementation Measures, Which Apply to More Than One Safety Constraint

Policies

- **Policy 5.** The adopted Kern County, California Multi-Hazard Mitigation Plan is incorporated by reference. This multi-jurisdictional plan, approved in compliance with the "Disaster Mitigation Act of 2000, provides long-term planning to reduce the impacts of future disasters."

Implementation Measures

- **Implementation Measure A.** All hazards (geologic, fire, and flood) should be considered whenever a Planning Commission or Board of Supervisor's action could involve the establishment of a land use activity susceptible to such hazards.
- **Implementation Measure B.** The Safety Element should be reviewed and comprehensively revised every five years, or whenever substantially new scientific evidence becomes available.
- **Implementation Measure C.** Require detailed site studies for ground shaking characteristics, liquefaction potential, dam failure inundation, flooding potential, and fault rupture potential as background to the design process for critical facilities under County discretionary approval.
- **Implementation Measure D.** Require seismic review prior to major addition, renovation, or increase in occupancy of buildings.
- **Implementation Measure F.** The adopted multi-jurisdictional Kern County, California Multi- Hazard Mitigation Plan, as approved by FEMA, shall be used as a source document for preparation of environmental documents pursuant to CEQA, evaluation of project proposals, formulation of potential mitigation, and identification of specific actions that could, if implemented, mitigate impacts from future disasters and other threats of public safety.

Section 4.3 Seismically Induced Surface Rupture, Ground Shaking, and Ground Failure

Policy

- **Policy 1.** The County shall require development for human occupancy to be placed in a location away from an active earthquake fault in order to minimize safety concerns.

Implementation Measures

- **Implementation Measure A.** Known geologic hazards within the area of a proposed subdivision should be referenced on the final subdivision map.
- **Implementation Measure B.** Require geological and soils engineering investigations in identified significant geologic hazard areas in accordance with the Kern County Code of Building Regulations.
- **Implementation Measure C.** The fault zones designated in the Kern County Seismic Hazard Atlas should be considered significant geologic hazard areas. Proper precautions should be instituted to reduce seismic hazard, whenever possible in accordance with State and County regulations.
- **Implementation Measure D.** Detailed geologic investigations shall be conducted in conformance with guidelines of the California Geological Survey for all discretionary permits and construction designed for human occupancy in an Alquist-Priolo Earthquake Fault Zone.
- **Implementation Measure E.** Revise building codes and zoning ordinances to prohibit construction of buildings for human occupancy within 50 foot of the trace of an active fault. For critical facilities, the setback should be at least 300 feet.

- **Implementation Measure F.** Reflect the location of active faults in zoning and subdivision approvals, through low-density zoning designations, and through locations of lot lines and public ways to allow adequate flexibility in placement of buildings, such that active fault traces can be avoided.
- **Implementation Measure L.** Require seismic review prior to major addition, renovation, or increase in occupancy of buildings.

Section 4.5 Landslides, Subsidence, Seiche, and Liquefaction

Implementation Measures

- **Implementation Measure D.** Discretionary actions will be required to address and mitigate impacts from inundation, land subsidence, landslides, high groundwater areas, liquefaction and seismic events through the CEQA process.

Section 4.6 Wildland and Urban Fire

Policies

- **Policy 1.** Require discretionary projects to assess impacts on emergency services and facilities.
- **Policy 2.** The County will encourage the promotion of public education about fire safety at home and in the work place.
- **Policy 3.** The County will encourage the promotion of fire prevention methods to reduce service protection costs and costs to taxpayers.
- **Policy 4.** Ensure that new development of properties have sufficient access for emergency vehicles and for the evacuation of residents.
- **Policy 6.** All discretionary projects shall comply with the adopted Fire Code and the requirements of the Fire Department.

Implementation Measures

- **Implementation Measure A.** Require that all development comply with the requirements of the Kern County Fire Department or other appropriate agency regarding access, fire flows, and fire protection facilities.

Section 4.9 Hazardous Materials

Policy

- **Policy 2.** Innovative technologies to manage hazardous waste streams generated in Kern County will be encouraged.

Implementation Measures

- **Implementation Measure A.** Facilities used to manufacture, store, and use of hazardous materials shall comply with the Uniform Fire Code, with requirements for siting or design to prevent onsite hazards from affecting surrounding communities in the event of inundation.

Kern County Specific Plans

Kern County has adopted 39 Specific Plans, 10 Rural Community Plans, and 14 Interim Rural Community Plan Maps. The Specific Plans and Rural Community Plans are intended to be an amplification of the goals and policies of the KCGP and are, therefore, consistent therewith. Interim Rural Community Plan Maps are areas where a specific plan has not been formally adopted, thus the goals and policies of the KCGP govern these areas. Future commercial cannabis cultivation, processing/packaging, and sales activities that would be authorized under the proposed project that would be located within the boundary of an adopted Specific Plan would be regulated according to County zoning.

Kern County Code of Ordinances

Chapter 17.48 Kern County Floodplain Management Ordinance

Any construction that takes place within areas of special flood hazards, areas of flood-related erosion hazards, and areas of mudslide (i.e., mudflow) hazards within the jurisdiction of unincorporated Kern County would comply with the requirements and construction design specifications of this ordinance. Any required development permits would be obtained prior to commencement of construction activities.

Title 19 Kern County Zoning Ordinance

The Kern County Zoning Ordinance establishes the basic regulations under which land is developed. This includes allowable uses, building setback requirements, and development standards. Pursuant to State law, the zoning ordinance must be consistent with the KCGP.

Section 19.12 Exclusive Agriculture (A) District

The purpose of the Exclusive Agriculture (A) District is to designate areas suitable for agricultural uses and to prevent the encroachment of incompatible uses onto agricultural lands and the premature conversion of such lands to nonagricultural uses.

Section 19.14 Limited Agriculture (A-1) District

The purpose of the Limited Agriculture (A-1) District is to designate areas suitable for a combination of estate-type residential development, agricultural uses, and other compatible uses. Final map residential subdivisions are not allowed in the A-1 District.

Section 19.30 Neighborhood Commercial (C-1) District

The purpose of the Neighborhood Commercial (C-1) district is to designate areas for low-intensity commercial activities oriented to serving nearby residential areas. The C-1 district may also be combined with the Cluster (CL) combining district to achieve innovative, creative office or commercial developments. Uses in the C-1 district typically include small retail, service-oriented commercial activities, including small shopping centers. The C-1 district generally will be located on major or secondary highways.

Section 19.32 General Commercial (C-2) District

The purpose of the General Commercial (C-2) District is to designate areas for the widest range of retail commercial activities, including regional shopping centers and heavy commercial uses. The

C-2 District may also be combined with the Cluster (CL) combining district to achieve innovative, creative office or commercial development. The C-2 District should be located on major highways.

Section 19.34 Highway Commercial (CH) District

The purpose of the Highway Commercial (CH) district is to designate areas for uses and services normally associated with the traveling public. The CH district shall be located adjacent to or in close proximity to major highways. The CH district may be combined with the Cluster (CL) combining district to achieve innovative, creative commercial development. The CH district is intended to promote a unified grouping of travel-oriented uses such as gas stations, restaurants and motels. It is also intended to permit limited urban type uses in rural areas adjacent to highways with a minimum of encroachment on surrounding agricultural activities.

Section 19.36 Light Industrial (M-1) District

The purpose of the Light Industrial (M-1) district is to designate areas for wholesale commercial, storage, trucking, assembly-type manufacturing, and other similar industrial uses. Processing or fabrication will be limited to activities conducted within a building that does not emit fumes, odor, dust, smoke or gas beyond the confines of the building within which the activities occur or produce significant levels of noise or vibration.

Section 19.38 Medium Industrial (M-2) District

The purpose of the Medium Industrial (M-2) district is to designate areas for general manufacturing, processing and assembly activities. Uses may not produce fumes, odor, dust, smoke, gas or vibrations extending beyond zoning district boundaries.

Section 19.40 Heavy Industrial (M-3) District

The purpose of the Heavy Industrial (M-3) district is to designate areas suitable for heavy manufacturing and industrial uses which have the greatest potential for producing undesirable or adverse by-products, including traffic, noise, odors, dust and vibrations. The M-3 district should be located in places substantially removed from residential areas.

Metropolitan Bakersfield General Plan (MBGP)

The Metropolitan Bakersfield General Plan (MBGP) is a policy document designed to give long-range guidance for decision-making affecting the future character of the Metropolitan Bakersfield planning area. The MBGP is a joint effort between the Kern County Planning Department and the City of Bakersfield Planning Division. It was last adopted on December 11, 2007, includes both city and unincorporated County lands, and is currently undergoing an update.

Background information and policy information from the MBGP are cited in several sections with respect to land use and planning. The goals, policies, and implementation measures in the MBGP applicable to land use as related to the proposed project are provided below. Goals, policies, and implementation measures associated with specific resource areas are provided for the appropriate resources in Sections 4.1 through 4.16 of this EIR. The MBGP contains additional policies, goals, and implementation measures that are more general in nature and not specific. Therefore, they are not listed below, but, as stated in Chapter 2, *Introduction*, all policies, goals, and implementation measures in the MBGP are incorporated by reference.

Chapter II Land Use Element

Goals and Policies

Goals

- **Goal 2.** Accommodate new development which provides a full mix of uses to support its population.
- **Goal 3.** Accommodate new development which is compatible with and complements existing land uses.
- **Goal 4.** Accommodate new development which channels land uses in a phased, orderly manner and is coordinated with the provision of infrastructure and public improvements.
- **Goal 6.** Accommodate new development that is sensitive to the natural environment, and accounts for environmental hazards.
- **Goal 7.** Establish a built environment which achieves a compatible functional and visual relationship among individual buildings and sites.
- **Goal 8.** Target growth companies that meet clean air requirements, and create sustainable employment in jobs paying higher wages.

Policies

- **Policy 16.** Allow for the development of a variety of commercial uses, including those which serve residents (groceries, clothing, etc.), highway users, and tourists-visitors.
- **Policy 19.** Allow for the intensification and development of existing commercial areas in an infill fashion.
- **Policy 25.** Provide for infill of commercial land uses to be compatible with the scale and character of existing commercial districts and corridors.
- **Policy 26.** Encourage adjacent commercial land uses to be of compatible height, setback, color and materials.
- **Policy 27.** Require that new commercial uses maintain visual compatibility with single-family residences in areas designated for historic preservation.
- **Policy 28.** Require that commercial development provide design features such as screen walls, landscaping and height, setback and lighting restrictions between the boundaries of adjacent residential land use designations so as to reduce impacts on residences due to noise, traffic, parking, and differences in scale.

Industrial Development

Policies

- **Policy 31.** Allow for a variety of industrial uses, including land-extensive mineral extraction and processing, heavy manufacturing, light manufacturing, warehousing and distribution, transportation-related, and research and development uses.
- **Policy 32.** Protect existing industrial designations from incompatible land use intrusions
- **Policy 33.** Encourage the efficient use of existing industrial land uses through consolidation of building and storage facilities.

- **Policy 34.** Provide for the clustering of new industrial development adjacent to existing industrial uses and along major transportation corridors
- **Policy 35.** Encourage upgrading of visual character of heavy manufacturing industrial areas through the use of landscaping or screening-of visually unattractive buildings and storage areas.
- **Policy 36.** Require that industrial uses provide design features, such as screen walls, landscaping and height, setback and lighting restrictions between the boundaries of adjacent residential land use designations so as to reduce impacts on residences due to light, noise, sound and vibration.
- **Policy 37.** Street frontages along all new industrial development shall be landscaped.

*Public Facilities*Policies

- **Policy 52.** Locate new development where infrastructure is available or can be expanded to serve the proposed development.
- **Policy 53.** Ensure that land use and infrastructure development are coordinated.

*General*Policies

- **Policy 82.** Preserve existing significant sound residential neighborhoods, commercial districts, and industrial area.
- **Policy 85.** Encourage the revitalization of deteriorated land uses and buildings.
- **Policy 86.** Encourage infill of vacant parcels.
- **Policy 88.** Encourage the recycling of dilapidated and economically-depressed residential neighborhoods, commercial districts, and industrial areas, where preservation is not an achievable or desirable objective.
- **Policy 95.** When planning for new development, coordinate with utility companies to designate potential electrical transmission line corridors as needed to serve the metropolitan area.
- **Policy 100.** Encourage the use of reflective roofing material and other measures that reduce the “heat island effect.”
- **Policy 104.** As part of the environmental review procedure, an evaluation of the significance of paleontological, archaeological, and historical resources and the impact of proposed development on those resources shall be conducted and appropriate mitigation and monitoring included for development projects.
- **Policy 105.** Development on land containing known archaeological resources (i.e., high sensitivity areas) shall utilize methodology set forth, as described necessary by a qualified archaeologist, to locate proposed structures, paving, landscaping, and fill dirt in such a way as to preserve these resources undamaged for future generations when it is the recommendation of a qualified archaeologist that said resources be preserved in situ.

- **Policy 106.** The preservation of significant historical resources as identified on Table 4.10-1 shall be encouraged by developing and implementing incentives such as building and planning application permit fee waivers, Mills Act contracts, grants and loans, implementing the State Historic Building Code and other incentives as identified in the City's Historic Preservation Ordinance.
- **Policy 107.** The preservation of significant historical resources shall be promoted and other public agencies or private organizations shall be encouraged to assist in the purchase and/or relocation of sites, buildings, and structures deemed to be of historical significance.

Implementation Measures

- **Implementation Measure 1.** Amend the Zoning Ordinance.

The principal method by which cities and counties implement land use policy is through the zoning ordinance. The authority to zone is inherent in the police power delegated to cities by the California Constitution and is authorized by the Government Code.

The zoning ordinance consists of two basic elements: (1) a map which delineates the boundaries of districts in which like uses developed at like standards are permitted and (2) text which explains the purpose of the zoning district, lists permitted uses and those permitted under special conditions, and standards for development (e.g., minimum lot size, density, height, setbacks, lot coverage, parking requirements, and so on). By law (G.C. Sec. 65860), the zoning ordinance must be consistent with the general plan.

The City of Bakersfield and Kern County will routinely evaluate their ordinances and prepare revised zoning ordinances to reflect the land use policies and standards contained in this plan.

The following lists the principal changes to the zoning ordinances that may be necessary.

- a) The zoning maps required revision to reflect the land use plan map.
 - b) Land use zoning and development standards have been changed to reflect general plan land use policies and designations.
 - c) The floor area ratio approach to height and bulk regulation has been adopted as an alternative to present restrictions of height, bulk and coverage.
- **Implementation Measure 6.** Development Review. b) In the county, any development within the following county zone classifications requires approval of a Special Development Standards Plot Plan Review: R-2, R-3, C-O, C-1, C-2, CH, M-1, M-2, and M-3. This review enables the county to formally review projects for compliance with urban development standards and obtain necessary street dedications and improvements. The review is performed at the staff level, therefore public hearings are not held on these projects. Projects within most other zone classifications are not formally reviewed, rather the project is reviewed at the building permit stage. Urban development standards are not imposed. Site zoning that requires a Precise Development Plan or Conditional Use Permit are discretionary projects that must be found consistent with the general plan.
 - **Implementation Measure 7.** Environmental Review. Local guidelines for project processing shall reflect California Environmental Quality Act (CEQA) Guidelines which

state that the environmental effects of a project must be taken into account as part of project consideration.

- **Implementation Measure 8.** Design Review. The goals, objectives, policies, and standards contained in the Land Use Element encourage architectural and site compatibility in designated areas. Procedures of the respective jurisdictions will provide the vehicle by which the concept is implemented. These procedures should encourage the use of various water elements, private courtyards, and landscaped spaces to provide enhanced opportunities for formal and informal leisure use and activities.
- **Implementation Measure 9.** Code Enforcement. The City of Bakersfield and County of Kern shall maintain an on-going program of code enforcement to help maintain neighborhoods and enhance economic vitality.
- **Implementation Measure 12.** Review of discretionary development projects proposing urban densities and land use intensities shall consider the ability of local jurisdictions to provide logical, economic extensions of urban services to such development.

Chapter III. Circulation Element

A. Streets

Goals

- **Goal 3.** Minimize the impact of truck traffic on circulation, and on noise sensitive land uses.

Policies

- **Policy 6.** Design and locate site access driveways to minimize traffic disruption where possible considering items such as topography, past parcelization and other factors.
- **Policy 7.** Minimize direct and uncontrolled property access from arterials.
- **Policy 12.** Maintain the integrity of the circulation system.
- **Policy 16.** Require that truck access to commercial and industrial properties be designed to minimize impacts on adjacent residential parcels.
- **Policy 36.** Prevent streets and intersections from degrading below Level of Service "C" where possible due to physical constraints (as defined in a Level of Service Standard) or when the existing Level of Service is below "C" prevent where possible further degradation due to new development or expansion of existing development with a three-part mitigation program: adjacent right-of-way dedication, access improvements and/or an area-wide impact fee. The area-wide impact fee would be used where the physical changes for mitigation are not possible due to existing development and/or the mitigation measure is part of a larger project, such as freeways, which will be built at a later date.
- **Policy 37.** Require new development and expansion of existing development to pay for necessary access improvements, such as street extensions, widenings, turn lanes, signals, etc., as identified in the transportation impact report as may be required for a project.
- **Policy 39.** Require new development and expansion of existing development to pay or participate in its pro rata share of the costs of expansions in area-wide transportation facilities and services which it necessitates.

Implementation Measures

- **Implementation Measure 7.** Review all site plans for compliance with adopted drive approach design standards.
- **Implementation Measure 8.** Review site plans, rezonings, and subdivision requests, with respect to access from arterials. Consider conditions of approval to minimize uncontrolled property access.
- **Implementation Measure 14.** Amend the city and county Zoning Ordinances as needed to regulate truck access on properties adjacent to residential areas.
- **Implementation Measure 25.** Maintain records of existing traffic volume and cumulative projections of traffic from new development to schedule projects for the Capital Improvement Program.
- **Implementation Measure 26.** Establish guidelines for project design review based on traffic engineering standards (e.g., driveway design, onsite circulation) and the Level of Service Ordinance.
- **Implementation Measure 28.** Periodic review and if needed, revision of adopted ordinances that includes a Level of Service standard for the city and county to include a definition of Level of Service "C", procedures for how it is measured, and mitigation measures to keep from exceeding the standard.
- **Implementation Measure 29.** Periodic review and, if needed, revision of adopted guidelines for preparation of transportation impact reports, definition of undesirable impacts, and identification of mitigation procedures.
- **Implementation Measure 33.** Periodic review and, if needed, revision of adopted Transportation Impact Fee Ordinance for the city and county, which specifies the area wide impact fee schedule and how the fees will be used.

D. Parking

Goal

- **Goal 2.** Satisfy parking requirements in all new developments (residential, commercial, industrial, etc.) through off-street facilities.

Policies

- **Policy 3.** Ensure that adequate onsite parking supply and parking lot circulation is provided on all site plans in accordance with the adopted parking standards.
- **Policy 4.** Discourage the intrusion of non-neighborhood parking in residential areas.

Implementation Measure

- **Implementation Measure 3.** Review all site plans for conformance with adopted parking standards.

Chapter V. Conservation Element

A. Biological Resources

Goals

- **Goal 1.** Conserve and enhance Bakersfield's biological resources in a manner which facilitates orderly development and reflects the sensitivities and constraints of these resources.
- **Goal 2.** To conserve and enhance habitat areas for designated "sensitive" animal and plant species.

Policies

- **Policy 1.** Direct development away from "sensitive biological resource" areas, unless effective mitigation measures can be implemented.
- **Policy 2.** Preserve areas of riparian vegetation and wildlife habitat within floodways along rivers and streams, in accordance with the Kern River Plan Element and channel maintenance programs designed to maintain flood flow discharge capacity.

Implementation Measures

- **Implementation Measure 1.** When considering discretionary development proposals, consult available biological resource data covering the area. Determine the potential impacts and necessary mitigation measures for identified biological resources, as requiring in the California Environmental Quality Act. Regularly consult with responsible resource agencies.
- **Implementation Measure 3.** Preserve habitat and avoid "take" of protected species as required in the Metropolitan Bakersfield Habitat Conservation Plan.

C. Soils and Agriculture

Goals

- **Goal 1.** Provide for the planned management, conservation, and wise utilization of agricultural land in the Planning Area.
- **Goal 2.** Promote soil conservation and minimize development of prime agricultural land as defined by the following criteria:
 - Capability Class I and/or II irrigated soils.
 - 80-100 Storie Index rating.
 - Gross crop return of \$200 or more per acre per year.
 - Annual carrying capacity of 1 animal unit per acre per year.

Policies

- **Policy 2.** Review projects that propose subdividing or urbanizing prime agricultural land to ascertain how continued commercial agricultural production in the Project vicinity will be affected.

- **Policy 4.** Monitor the amount of prime agricultural land taken out of production for urban uses or added within the plan area.
- **Policy 7.** Land use patterns, grading, and landscaping practices shall be designed to prevent soil erosion while retaining natural watercourses when possible.
- **Policy 12.** Prohibit premature removal of ground cover in advance of development and require measures to prevent soil erosion during and immediately after construction.

Implementation Measures

- **Implementation Measure 2.** Evaluate discretionary projects for their impact on agricultural resources.
- **Implementation Measure 3.** Document urban expansion and changes in the amount of agricultural land for purposes of determining cumulative impacts to prime agricultural land.

D. Water Resources

Goals

- **Goal 1.** Conserve and augment the available water resources of the planning area.
- **Goal 2.** Assure that adequate groundwater resources remain available to the planning area.
- **Goal 3.** Assure that adequate surface water supplies remain available to the planning area.

Policies

- **Policy 6.** Protect planning area groundwater resources from further quality degradation.
- **Policy 8.** Consider each proposal for water resource usage within the context of total planning area needs and priorities-major incremental water transport, groundwater recharge, flood control, recreational needs, riparian habitat preservation and conservation.
- **Policy 9.** Encourage and implement water conservation measures and programs.

Implementation Measures

- **Implementation Measure 6.** Support the provision of adequate wastewater collection systems and treatment reclamation and disposal facilities which will prevent groundwater degradation by onsite wastewater systems.
- **Implementation Measure 7.** Maintain industrial waste discharge regulation and monitoring programs which protect the planning area groundwater from contaminants.
- **Implementation Measure 10.** Support additional water conservation measures and programs of benefit to the planning area.

E. Air Quality

Goals

- **Goal 1.** Promote air quality that is compatible with health, well-being, and enjoyment of life by controlling point sources and minimizing vehicular trips to reduce air pollutants.

- **Goal 2.** Continue working toward attainment of federal, State and Local standards as enforced by the San Joaquin Valley Air Pollution Control District.
- **Goal 4.** Reduce air pollution associated with agricultural activities.

Policies

- **Policy 1.** Comply with and promote San Joaquin Valley Unified Air Pollution Control District (SJVAPCD) control measures regarding Reactive Organic Gases (ROG). Such measures are focused on: (a) steam driven well vents, (b) Pseudo-cyclic wells, (c) natural gas processing plant fugitives, (d) heavy oil test stations, (e) light oil production fugitives, (f) refinery pumps and compressors, and (g) vehicle inspection and maintenance.
- **Policy 2.** Encourage land uses and land use practices which do not contribute significantly to air quality degradation.
- **Policy 3.** Require dust abatement measures during significant grading and construction operations.
- **Policy 4.** Consider air pollution impacts when evaluating discretionary permits for land use proposals. Considerations should include: a) Alternative access routes to reduce traffic congestion, b) Development phasing to match road capacities, c) Buffers including increase vegetation to increase emission dispersion and reduce impacts of gaseous or particulate matter on sensitive uses.
- **Policy 5.** Consider the location of sensitive receptors such as schools, hospitals, and housing developments when locating industrial uses to minimize the impact of industrial sources of air pollution.

Chapter VI. Open Space Element

Goal

- **Goal 3.** Locate and site development to minimize the disruption of open space areas.

Policies

- **Policy 5.** Development location and siting should be sensitive to its relationship to the Kern River.

Chapter VII. Noise Element

Goals

- **Goal 1.** Ensure that residents of the Bakersfield metropolitan area are protected from excessive noise and existing moderate levels of noise are maintained.
- **Goal 2.** Protect the citizens of the planning area from the harmful effects of exposure to excessive noise, and protect the economic base of the area by preventing the encroachment of incompatible land uses near known noise-producing roadways, industries, railroads, airports and other sources.

Policies

- **Policy 1.** Identify noise-impact areas exposed to existing or projected noise levels exceeding 65 dB CNEL (exterior) or the performance standards described in Table VII-2. The noise exposure contour maps on file at the City of Bakersfield and County of Kern indicate areas where existing and projected noise exposures exceed 65 dB CNEL (exterior) for the major noise sources identified.
- **Policy 3.** Review discretionary industrial, commercial or other noise-generating land use projects for compatibility with nearby noise-sensitive land uses. Additionally, the development of new noise-generating land uses which are not preempted from local noise regulation will be reviewed if resulting noise levels will exceed the performance standards contained within Table VII-2 in areas containing residential or other noise-sensitive land uses.
- **Policy 5.** Encourage vegetation and landscaping along roadways and adjacent to other noise sources in order to increase absorption of noise.

Implementation Measures

- **Implementation Measure 2.** Review discretionary development plans, programs and proposals, including those initiated by both the public and private sectors, to ascertain and ensure their conformance to the policy framework outlined in this element.
- **Implementation Measure 4.** Require proposed commercial and industrial uses or operations to be designed or arranged so that they will not subject residential or other noise sensitive land uses to exterior noise levels in excess of 65 dB CNEL and interior noise levels in excess of 45 dB CNEL and so that impacts on noise sensitive uses shall not exceed the performance standards in Table VII-2.

At time of any discretionary approval, such as a request for zone change or subdivision, the developer may be required to submit an acoustical report indicating the means by which the developer proposes to comply with the noise standards. The acoustical report shall:

- a) Be the responsibility of the applicant.
- b) Be prepared by a qualified acoustical consultant experienced in the fields of environmental noise assessment and architectural acoustics.
- c) Include representative noise level measurements with sufficient sampling periods and locations to adequately describe local conditions.
- d) Include estimated noise levels in terms of CNEL and the standards of Table VII-2 (if applicable) for existing and projected future (10-20 years hence) conditions, with a comparison made to the adopted policies of the Noise Element.
- e) Include recommendations for appropriate mitigation to achieve compliance with the adopted policies and standards of the Noise Element.
- f) Include estimates of noise exposure after the prescribed mitigation measures have been implemented. If compliance with the adopted standards and policies of the

Noise Element will not be achieved, a rationale for acceptance of the project must be provided.

- **Implementation Measure 5.** Develop implementation procedures to ensure that requirements imposed pursuant to the findings of an acoustical analysis are conducted as part of the project permitting process.
- **Implementation Measure 6.** Enforce the Noise Insulation Standards (California Administrative Code, Title 24) and Chapter 35 of the Uniform Building Code concerning the construction of new multiple-occupancy dwellings such as hotels, apartments, and condominiums.
- **Implementation Measure 10.** The following standards shall be used to determine the existence of significant cumulative noise impacts expected to result from proposed construction or development projects. The projected occurrence of such significant cumulative impacts shall require the adoption of practical and feasible mitigation measures to be identified in an Environmental Impact Report or Negative Declaration, whichever is applicable:

Standards for Cumulative Noise Impacts. A significant increase of existing noise-sensitive land uses (receptors), requiring the adoption of practical and feasible mitigation measures, is deemed to occur where a project will cause:

- An increase of the existing ambient noise level by 1 dB or more over 65 dB CNEL, where the existing ambient level is 65 dB CNEL or less;
or
- The ambient noise level is less than 60 dB CNEL and the project increases noise levels by 5 dB or more;
- The ambient noise level is 60 to 65 dB CNEL and the project increases noise levels by 3 dB or more;
- The ambient noise level is greater than 65 dB CNEL and the project increases noise levels by 1.5 dB or more.

Chapter VIII. Safety Element

General Provisions

Goal

- **Goal 1.** To develop sustainable communities to preserve life, protect property, the environment, and the economy from natural hazards.

A. Seismic Safety – Hazardous Buildings

Policy

- **Policy 8.** Require seismic review or other potentially hazardous buildings upon any change in their use or occupancy status.

*A. Seismic Safety – Fault Rupture*Policy

- **Policy 10.** Prohibit development designed for human occupancy within 50 feet of a known active fault and prohibit any buildings from being placed astride an active fault.

*Public Safety*Policies

- **Policy 2.** Require discretionary projects to assess impacts on police and fire services and facilities.
- **Policy 6.** Promote fire prevention methods to reduce service protection costs and costs to the taxpayer.
- **Policy 12.** Where recommended by appropriate local, State or federal agencies for discretionary projects, soils shall be tested for concentrations of agricultural chemicals prior to grading permit approval whenever feasible. Contaminated soils shall be excavated and disposed of at a certified hazardous waste disposal facility whenever necessary.
- **Policy 13.** Fugitive dust emissions shall be controlled through applicable requirements (Regulation VIII) set forth by the San Joaquin Valley Unified Air Pollution Control District, including but not limited to; irrigation, paving of construction roads, and limiting grading activities during periods of high wind. These practices would reduce potential adverse health effects resulting from the development of agricultural property.
- **Policy 15.** Fugitive dust emissions shall be controlled through applicable requirements set forth by the San Joaquin Valley Unified Air Pollution Control District (Regulation VIII), including but not limited to; irrigation, paving of construction roads, and limiting grading activities during periods of high wind. These practices would reduce potential adverse health effects as a result of exposure to Coccidioidomycosis.
- **Policy 16.** All new discretionary development projects shall be subject to environmental and design review on a site-specific, project-by-project basis, including but not limited to an assessment to determine whether hazardous materials present potential health effects to human health as required by the Department of Environmental Services.

Chapter X. Public Services and Facilities Element

*A. General Utility Services*Policy

- **Policy 5.** Require all new development to pay its pro rata share of the cost of necessary expansion in municipal utilities, facilities and infrastructure for which it generates demand and upon which it is dependent.

Implementation Measure

- **Implementation Measure 4.** Create benefit assessment districts or establish service fees for the distribution of costs to users for capital improvement replacement costs and

maintenance, utilizing such districts for the financing of improvements which are essential to planning area development.

B. Water Distribution

Policy

- **Policy 3.** Require that all new development proposals have an adequate water supply available.

Habitat Conservation Plans, Natural Community Conservation Plans or other Approved Local, Regional, or State HCP in the County

Commercial cannabis activities could take place in areas within the boundaries of an approved HCP and/or Natural Community Conservation Plan (NCCP). As discussed in the regulatory setting below, HCPs are approved by the USFWS in conjunction with providing incidental take permit coverage for listed species and to also foster the conservation of other covered species. NCCPs are approved by the CDFW and are intended to function in a manner similar to the federal a HCP for State listed and other covered species. The CDFW may also issue incidental take permits for State covered species that are based on and coordinated with an approved federal HCP under section 2081(b) of the CESA. HCPs and NCCPs typically have permits terms ranging from 30 to 50 years. The HCPs, NCCPs, and recovery plans discussed below are incorporated by reference.

There are multiple conservation programs or mitigation requirements that have been approved or proposed to comply with State and federal Endangered Species laws within Kern County, including the issuance of incidental take coverage through habitat conservation plans, federal Section 7 Consultations, Biological Opinions and mitigation measures that are a part of the CEQA and NEPA environmental documents. The following Habitat Conservation Plans (HCPs) and Natural Community Conservation Plans (NCCPs) have been approved within Kern County:

Draft Valley Floor HCP

The Valley Floor (VF) HCP encompasses 3,110 square miles and generally includes most of the San Joaquin Valley Floor portion of Kern County up to an elevation of 2,000 feet. The 2,000-foot elevation line was selected as the elevation limit for the VFHCP because (1) this border would, based on the professional judgment of resource agency personnel (including USFWS, CDFW, and BLM) encompass most locations in the Kern County valley floor likely to be subject to potential take of threatened and endangered species during the 30-year term of the proposed program; and (2) the 2,000-foot level approximates the elevation at which the species compositions of valley floor flora and fauna transition to foothill species. The HCP is intended to provide federal and State protected species incidental take authorization for covered activities throughout the valley floor area over a 30-year period. The VFHCP has not yet been approved by the CDFW, USFWS, Kern County, or other applicable local, State, and federal agencies.

Chevron North American Exploration and Production Loker HCP (LHCP)

Chevron has prepared an HCP and applied to the USFWS and CDFW for State and/or federally protected species incidental take authorization under Section 10(a)(1)(B) of the federal ESA and Section 2081(b) of the CFGC of the CESA over a 50-year permit term.

The Chevron Lokern Lands consist of 13,333 acres, including 13,090 acres of currently undisturbed, high quality habitat, located north of the existing Elk Hills oil field and east of the existing Cymric-McKittrick oil fields and would be used primarily for conservation purposes. Chevron proposes to limit development in the Chevron Lokern Lands to 10 percent of the existing undisturbed habitat, or 1,309 acres. In addition, no more than 25 percent of any single section (or proportionately less if Chevron owns only part of a section) would be subject to impacts in the Chevron Lokern Lands. As a result, 11,781 of the Chevron Lokern Lands would be reserved for conservation and mitigation purposes, including mitigation for Chevron oil and gas activities within the Chevron Lokern Lands, the Lokern Contiguous Area, and the four oil fields covered by the HCP as a part of its permit area.

California Resources Corporation Elk Hills HCP (EHHCP)

California Resources Corporation - Elk Hills (CRC) is applying for an incidental take permit (ITP) from CDFW, pursuant to Section 2081(b) of the Fish and CFGC. The Section 2081 application, which includes an associated HCP that supports the proposed conservation and management program for the proposed Elk Hills Oil Field (EHOF), was deemed complete by CDFW on March 3, 2014. The area covered by the proposed EHOF ITP encompasses the EHOF which is approximately 47,884 acres; facility rights-of-way (ROWs) located outside of the EHOF; and any Conservation Lands located within a Target Acquisition Area inside the 2-mile buffer and within a second Target Acquisition Area located outside the 2-mile buffer that are dedicated pursuant to the proposed EHOF and managed for the mitigation of impacts (the EHOF ITP Covered Lands).

Freeport-McMoRan Oil & Gas (formerly Nuevo-Torch then Plains Exploration and Production Company) HCP

The Freeport-McMoRan Oil & Gas (formerly Nuevo-Torch then Plains Exploration and Production Company) HCP was adopted in 1999 and addresses ongoing oilfield exploration and production activities on oilfield properties located in western Kern County. The HCP encompasses 21,900 acres, including an initial 839.9 acres of conservation area lands in the Lokern area that will be set aside incrementally to compensate for habitat disturbances from oilfield activities.

CRC Non-Unity HCP (Formerly Occidental of Elk Hills, Inc.)

The CRC Non-Unit HCP is a conservation plan that covers 7,050 acres. The HCP was originally prepared for Nuevo-Torch in February 1999. Incidental take authorization and responsibilities under the HCP were transferred to Plains Exploration and Production Company (PXP) on May 9, 2005. PXP subsequently transferred 300 acres of authorized incidental take and 15 acres of conservation lands to CRC on August 3, 2009. PXP retained take authorization and responsibilities on the remaining 1,400 acres of the original 1,700 acres authorized for incidental take, and these interests were subsequently conveyed to Freeport-McMoRan. In December 2009 USFWS approved the inclusion of 3,504 acres of new properties located in the vicinity of McKittrick Valley and the EHOF into the CRC Non-Unit HCP; 1,134 acres of the 3,504 acres were designated for use as mitigation land. No increase in the initially authorized 1,700 acres of take was included in the 2009 approval.

Aera Coles Levee Ecosystem Preserve HCP (previously Arco Western Energy HCP)

The Coles Levee Ecosystem Preserve HCP conserved 6,059 acres under an existing oil and gas HCP to the east of the Elk Hills Oil Field (EHO) and south of the Kern Water Bank.

Chevron Pipeline HCP

The Chevron Pipeline HCP includes 25.5 acres of valley saltbrush scrub (USFWS, 2017d).

Kern County Waste Facilities HCP

The Kern County Waste Management Department (KCWMD) is responsible for the construction and management of 14 sanitary solid waste facilities (landfills) in Kern County, including seven closed or inactive sites where transfer stations may be operated. The Kern County Waste Facilities HCP covering these locations was adopted in 1997 and is in the process of being amended to cover expansion at the remaining active landfills and the closure of historic burn dumps.

Kern Water Bank HCP/NCCP

The Kern Water Bank HCP/Natural Community Conservation Plan (HCP/NCCP) is managed by the Kern Water Bank Authority and covers 19,900 acres. The plan was approved in 1997 and covers water conservation by developing water recharge and recovery facilities, the conservation and restoration of upland, intermittent wetland/rangeland, and other sensitive habitat.

Pacific Gas and Electric (PG&E) San Joaquin Valley Operations and Maintenance Program HCP

The PG&E San Joaquin Valley region HCP was approved in early 2008 and covers routine operations and maintenance and minor new construction activities related to PG&E's electrical system in the San Joaquin Valley for 30 years. The HCP covers 23 wildlife and 42 plant species, including the San Joaquin kit fox, California red-Legged frog, vernal pool fairy shrimp, and Western burrowing owl. PG&E facilities that are covered by the HCP occur throughout the Project Area, generally within existing ROWs owned by the company.

Metropolitan Bakersfield HCP (MBHCP)

Implemented in 1994, the MBHCP (City of Bakersfield and County of Kern 1994) covers both federally and State-listed species in the 408-square-mile Metropolitan Bakersfield area, which includes both City land and unincorporated County land. The goal of the MBHCP is to allow urban development consistent with the Metropolitan Bakersfield 2010 General Plan and offset habitat loss by acquiring, preserving, and enhancing habitat for sensitive species.

San Joaquin Field Division Aqueduct HCP

The San Joaquin Field Division Aqueduct HCP area occupies approximately 11,816 acres. It is located within Kings and Kern counties and includes approximately 121 miles of California Aqueduct right-of-way, 15 miles of Coastal Branch Phase I, and land around pumping plants and operations and maintenance centers that serve these two portions of the State Water Project (Toyon, Environmental Consultants, Inc., 2004).

Tejon Ranch Comprehensive Land Use and Conservation Agreement

In June 2008, Tejon Ranch Company entered into a Comprehensive Land Use and Conservation Agreement (Ranchwide Agreement) with the Audubon California, the Endangered Habitats League,

Natural Resources Defense Council, Planning and Conservation League, and the Sierra Club. The Ranchwide Agreement covers the entirety of Tejon Ranch, and provides for the permanent preservation of over 90 percent of Tejon Ranch (approximately 240,000 acres) through a combination of donated and acquired conservation easements, and designated open space areas within the remaining areas of Tejon Ranch. The Ranchwide Agreement also designates areas for potential future development that would not be opposed by the signatories to the Ranchwide Agreement. These areas include Tejon Mountain Village, Centennial (a project in Los Angeles County), and Grapevine. The Ranchwide Agreement does not authorize development, nor does it create any exemptions from applicable local, State, and federal governmental environmental review or permitting processes. The Ranchwide Agreement allows the Tejon Ranchcorp to continue existing uses on Conserved Lands as follows: grazing, game management, and filming activities, which are permitted throughout Tejon Ranch; farming, sand and gravel mining, and oil and gas extraction activities, which are permitted within existing areas and defined expansion areas.

Tehachapi Uplands Multiple Species Habitat Conservation Plan

The Tehachapi Uplands Multiple Species Habitat Conservation Plan (TUMSHCP), which was approved by the USFWS in 2013, is a habitat conservation plan (HCP) intended to meet recovery goals of multiple special-status species. On April 29, 2013, the USFWS issued Incidental Take Permit (ITP) No. TE198636, pursuant to FESA, for incidental take of 25 covered species described in the TUMSHCP. The covered lands include a combination of foothill grasslands and montane woodlands that make up the Tehachapi Uplands component of Tejon Ranch. The covered lands include 141,866 acres of the 270,365-acre Tejon Ranch and are generally above 2,000 feet amsl near the San Joaquin Valley floor, and to the south by the Antelope Valley floor, where the elevation ranges from about 3,200 to 4,700 feet amsl, following the Los Angeles County line, with an average elevation of 4,100 feet amsl. The HCP is designed primarily to preclude development and protect as open space in perpetuity 91 percent of the covered lands (Dudek, 2013).

West Mojave Plan and West Mojave HCP

In response to concerns regarding impacts on species, diminishing habitat, and difficulty in complying with the FESA and CESA on public and private land within the Mojave Desert, a consortium of government agencies has initiated preparation of the West Mojave Plan. The West Mojave Plan covers approximately 9.4 million acres encompassing most of California's western Mojave Desert. It extends from Olancha in Inyo County on the north to the San Gabriel and San Bernardino Mountains on the south, and from the Antelope Valley on the west to the Mojave National Preserve on the east. About one third of this area is private land, another third lies within military bases, and the final third consists of public land managed by the federal Bureau of Land Management (BLM). 1.5 million acres are located in Kern County.

The West Mojave Plan Habitat Conservation was proposed on both private and public land but never adopted or completed for private land. The plan adopted on BLM public land is an attempt to define a regional strategy for conserving 58 plant and animal species and their habitats, and to define a process for complying with threatened and endangered species laws.

Desert Renewable Energy Conservation Plan (DRECP) NCCP

The DRECP NCCP includes a Conceptual Plan-Wide NCCP Reserve Design and describes a regional strategy for the protection of plants, animals, and their habitats. The NCCP also

addresses renewable energy and transmission covered activities (California Energy Commission, 2014).

Recovery Plan for Upland Species for the San Joaquin Valley, California

In 1998, the USFWS published an ecosystem-oriented recovery plan for 11 threatened and endangered species (one, Hoover's woolley star, since delisted) and 23 other native plants and animals in the San Joaquin Valley, including the California jewelflower, palmate-bracted bird's-beak, Kern mallow, San Joaquin woolly-threads, Bakersfield cactus, Hoover's woolly-star, giant kangaroo rat, Fresno kangaroo rat, Tipton kangaroo rat, blunt-nosed leopard lizard, San Joaquin kit fox, lesser saltscale, Bakersfield smallscale, Lost Hills saltbush, Vaseks clarkia, Temblor buckwheat, Tejon poppy, diamond-petaled California poppy, Comanche Point lavia, Munz's tidy-tips, jared's peppergrass, Merced monardella, Merced phacelia, oil neststraw, San Joaquin dune beetle, Dovens dune weevil, San Joaquin antelope squirrel, short-nosed kangaroo rat, riparian woodrat, Tulare grasshopper mouse, Buena Vista Lake shrew, riparian brush rabbit, and San Joaquin Le Conte's thrasher.

Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon

The Vernal Pool Recovery Plan (USFWS, 2005) seeks to protect known and potential habitat for vernal pools and associated sensitive species. The plan recommends the preparation and adoption of an HCP in areas potentially containing the listed species.

California Condor Recovery Plan

The California Condor Recovery Plan was developed in 1984 and last revised in April 1996 (USFWS, 1996). The plan calls for a multi-pronged recovery strategy for the California condor, including (1) increasing reproduction in captivity to provide condors for release, (2) the release of condors to the wild, (3) minimizing condor mortality factors in wild populations, (4) maintaining habitat for condor recovery, and (5) implementing condor information and education programs. The primary objective of the recovery plan is the down-list of the condor to threatened status; with the minimum criterion for achieving this objective being the maintenance of at least two non-captive populations and one captive population. USFWS is responsible for implementation of the California Condor Recovery Plan.

Pacific Bald Eagle Recovery Plan

The United States published five bald eagle recovery plans for various regions of the United States. The Pacific Bald Eagle (*Haliaeetus leucocephalus*) Recovery Plan (USFWS, 1986) covers the western states including California. The primary objectives of The Pacific Bald Eagle Recovery Plan are to provide secure habitat for bald eagles in the Pacific recovery area and to increase the bald eagle population size to a level that warrants delisting of the species. Subsequent to the publication of the plan, the bald eagle was delisted under the ESA, but remains protected under the federal Bald and Golden Eagle Protection Act.

Kern County Emergency Plan

The Kern County Emergency Plan, Section 4.7 in the Safety Element of the KCGP, indicates emergency evacuation routes that would be used in emergency situations, as well as other specific measures related to emergency.

Regional Transportation Plan

The Regional Transportation Plan (RTP) for Kern County identifies the future transportation improvements that will be needed to serve the projected transportation needs of the County. The RTP details the existing transportation systems, sets goals and policies, defines projects, and identifies funding mechanisms for these projects. Transportation projects identified in the RTP include highway, street, and roadway projects; mass transportation projects; railroad projects; and other programs and projects related to the transportation needs of the County.

Solid Waste Management Plan

The Solid Waste Management Plan (SWMP) is a comprehensive guide for all solid waste management activities in the County. The plan identifies the existing solid waste generation and disposal facilities in Kern County, estimates future solid waste disposal demand, and identifies programs to meet this future need.

Hazardous Waste Management Plan

The Hazardous Waste Management Plan (HWMP) focuses on the siting of hazardous waste disposal facilities, the transport of hazardous waste in the County, the protection of water resources from hazardous waste contamination, and public education concerning the disposal of hazardous waste.

Kern County Airport Land Use Compatibility Plan (ALUCP)

The Kern County ALUCP establishes procedures and criteria to assist Kern County and affected incorporated cities in addressing compatibility issues between airports and surrounding land uses. Land Use Compatibility Maps for all airports in Kern County depict each airport's area of influence. Future cannabis related activities that would be located within an airport influence area would be subject to ALUCP policies.

Chapter 3 Supporting Compatibility Criteria

3.2. Safety

3.2.1. Objective

The intent of land use safety compatibility criteria is to minimize the risks associated with an off-airport aircraft accident or emergency landing.

- a. Risks both to people and property in the vicinity of an airport and to people on board the aircraft shall be considered.
- b. More stringent land use controls shall be applied to the areas with greater potential risk.

3.2.4. Other Risks

Storage of fuel or other hazardous materials shall be prohibited in Compatibility Zone A and subject to restrictions in the B zones as identified in Table 3A of the ALUCP.

3.3. Airspace Protection

3.3.1. Height Limits

The criteria for limiting the height of structures, trees, and other objects in the vicinity of an airport shall be set in accordance with Part 77, Subpart C, of the Federal Aviation Regulations and with the United States Standard for Terminal Instrument Procedures.

3.3.4. FAA Notifications

Proponents of a project which may exceed a Part 77 surface must notify the Federal Aviation Administration as required by FAR Part 77, Subpart B, and by the California State Public Utilities Code Sections 21658 and 21659.

3.3.5. Other Flight Hazards

Land use characteristics which may produce hazards to aircraft in flight shall not be permitted within any airport's influence area. Specific characteristics to be avoided include:

- a. Glare, distracting lights, or light patterns which could be mistaken for airport lights;
- b. Sources of dust, steam, or smoke which may impair pilot visibility;
- c. Sources of electrical interference with aircraft communications or navigation;
- d. Any use, especially landfills and certain agricultural uses, which may attract large flocks of birds; and
- e. Any light or series of lights which may cause visual discomfort or loss of orientation during critical phases of flight.

Chapter 4 Public Use Airport and Military Aviation

4.17 Military Aviation

4.17.2 Encroachment

Commercial Development – Creation of a development that attracts large concentrations of people in a sensitive low flight corridor. Height of structures and signs that penetrate into airspace in low flight corridor.

4.17.36 Notification

China Lake NAWS and Edwards AFB both shall be notified of development that falls within any of the following categories:

- Any structure within 75 miles of the R-2508 complex that is greater than 50 feet tall.
- Any project within 50 miles of R-2508 that emit radio and communication frequencies.
- Any environmental document or discretionary project within 25 miles of the military installation boundaries.
- Any project that would create environmental impacts (e.ee. visibility, elevated obstructions) within 25 miles of the R-2508 complex)
- Any project within 25 miles of the centerline of any route/corridor.
- Any project with the potential to impact the utilities of the military installation (water, gas, electricity, phone, roads, railway, etc.) required for normal bases operations.

- Any environmental document within the R-2515 complex requires a copy sent to Edwards AFB and primary notification to China Lake NAWS.
- Any environmental document within the R-2505 and R-2506 complexes requires a copy sent to China Lake NAWS and primary notification to Edwards AFB.

4.10.4 Impacts and Mitigation Measures

This section describes the methodology used in conducting the impact analysis for land use and planning, the thresholds of significance used in assess impacts to land use and planning, and the assessment of impacts to land use and planning. Measures to mitigate (i.e., avoid, minimize, rectify, reduce, eliminate, or compensate for) significant impacts accompany each impact discussion, where applicable.

Methodology

For the purposes of this analysis, relevant documents, particularly the KCGP, MBGP, Kern County Zoning Ordinance, NCCPs and HCPs, were consulted. A discussion of the project's consistency with plans and policies for each environmental topic area is summarized below and is described in greater detail in the relevant environmental topic sections (Sections 4.1 through 4.16) of this EIR.

Development Standards Related to Land Use and Planning

Option A

Option A of the proposed project would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Therefore, no development standards are identified in the proposed Zoning Ordinance; refer to Appendix B for specific wording of the proposed ordinance under Option A.

Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, testing, and retail cannabis stores with or without mobile delivery facilities. Development standards provided in the proposed Zoning Ordinance, that pertain to land use and planning activities, include, but are not limited to, the following (refer to Appendix C for specific working of the proposed ordinance under Option B):

- All cannabis facilities must be 0.5 mile from any school, park, day care center or youth center.
- The applicant must demonstrate compliance with all applicable mitigation measures prior to the issuance of a grading or building permit for any future cannabis related facility.
- A Fire Safety Plan must be approved by the Kern County Fire Department for future cannabis related facilities.
- All entrances to the future cannabis facility shall be clearly marked and legibly posted. No minors or adults below the age of 21 years old will be allowed on the premises.
- A Hazardous Materials Business Plan must be approved by the Kern County Environmental Health Services Division/Hazardous Materials Section.

- Noise from mechanical equipment shall not exceed 30 A-weighted decibels when measured at the property line, between 10 PM and 7 AM.
- Future cannabis related facilities shall be equipped with an effective odor control system which at all times must prevent unreasonable interference with neighbors' use and enjoyment of their property. The odor control system shall: consist of one or more fans; utilize an alternative method or technology to achieve equal to or greater odor mitigation than provided by the fan system; and the system must be maintained in working order and in use.
- For indoor cultivation, processing and packaging, and distribution facilities, the project applicant must prepare an Odor Complaint Management Plan prior to approval of a site plan or issuance of a grading or building permit.
- For cannabis cultivation (indoor and outdoor), processing and packaging, and distribution facilities, on-site energy shall be provided or offset with a solar photovoltaic system; small wind generators may be used only in appropriate areas of Eastern Kern County.
- No cannabis related facility shall have a private patio or café seating.
- The entire property, including the parking and landscaped areas, shall be lighted such that all areas are clearly visible at all times during business hours and shall comply with the Dark Skies Ordinance.
- No organized and advertised tours shall be permitted.
- For cultivation (indoor and outdoor), processing and packaging, and distribution facilities, recycled water use is required.
- Trash dumpsters shall be enclosed and not accessible to the public.

Thresholds of Significance

The Kern County CEQA Implementation Document and Kern County Environmental Checklist state that a project would have a significant impact on land use if it would:

- Physically divide an established community;
- Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect; or
- Conflict with any applicable habitat conservation plan or natural community conservation plan.

The lead agency determined in the NOP/IS (see Appendix A) that the following environmental issue area resulted in no impact and was scoped out of requiring further review in this draft EIR. Please refer to Appendix A of this draft EIR for a copy of the NOP/IS and additional information regarding the following impacts:

- Physically divide an established community;

The proposed project would not result in the division of established communities. The proposed project would amend the Kern County Zoning Ordinance and any other related County ordinances to either: (A) ban all medical and adult use cannabis related activities other than what is allowed under Proposition 64; or (B) include updated standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis stores. Therefore, no impact would occur with respect to physically dividing an established community and no further analysis is warranted.

Project Impacts

Impact 4.10-1: Conflict with Any Applicable Land Use Plan, Policy, or Regulation of an Agency with Jurisdiction over the Project Adopted for the Purpose of Avoiding or Mitigating an Environmental Effect

The KCGP and MBGP, as well as other land use plans such as specific plans, establish land use patterns for development, as well as goals and policies related to the prescribed land uses within their respective jurisdictions. The Kern County Zoning Ordinance then implements the underlying KCGP land use designations for applicable locations in unincorporated Kern County.

Land use compatibility is a function of how well a project adheres to designated land uses and how well it integrates with surrounding land uses. Impacts to land use compatibility can be measured in terms of specific environmental effects to resource areas such noise, air quality, visual resources, and traffic, and how those effects may impact the existing land uses. The land use compatibility analysis is therefore supported by other specific discussions within this EIR. All development proposed in the County is reviewed for consistency with land use controls and development standards during the course of the project review and approval process. Development related to the implementation of the proposed project would require consultation and acquisition of required permits and approvals by the lead agency, as well as responsible and trustee agencies that have jurisdiction over the future cannabis related facility's site.

General plan consistency, however, does not require perfect conformity of a project with each general plan objective and policy. Rather, a project is consistent if it is in agreement or harmony with the general plan when considered as a whole. In other words, a project may not strictly or substantially conform to every particular general plan goal or policy, but may still be in agreement or harmony with the general plan as a whole, and thus a project may be found to be consistent.

The following discussion briefly summarizes each proposed project Option's consistency with the appropriate, goals, policies, and regulations.

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current

ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A does not provide opportunities for business development. Option A would continue to allow individuals to cultivate up to six plants on private property. Option A would result in the closure of existing cannabis dispensaries over a one- to two-year timeframe, to allow for amortization of the business investment, which would result in existing and potential cannabis customers driving far distances to retail cannabis stores located either within the incorporated areas of the City of Bakersfield or City of California City, which currently have ordinances allowing sales, or to retail cannabis stores outside the Kern County boundaries. Therefore, Option would not result in any conflicts with an applicable land use plan, policy, or regulation. No impacts associated with Option A would occur in this regard.

Option A was evaluated for consistency with plans, policies, and goals of both the KCGP, Kern County Zoning Ordinance, and MBGP. Specific goals and policies listed in these plans that are directly applicable to the proposed project are analyzed in Table 4.10-2, *Project Consistency with the Kern County General Plan*, and Table 4.10-3, *Project Consistency with the Metropolitan Bakersfield General Plan* at the end of this section.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 square feet (ft^2) of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft^2 of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

The proposed project would regulate the location, operation, and establishment of commercial medical and adult use cannabis outdoor cultivation facilities, indoor cultivation facilities, processing and packaging facilities, distribution facilities, testing facilities, and retail marijuana stores or dispensaries with or without mobile delivery, in order to promote the health, safety, and general welfare of the citizens of the County. Option B would guide future cannabis industry development within the County in order to comply with not only the KCGP and the MBGP goals and policies, but also to comply with Proposition 64. Thus, as discussed in Chapter 3, *Project Description*, Option B would regulate which future commercial cannabis facilities and activities

would be allowed to occur within the following zone classifications: A (Exclusive Agriculture); A-1 (Limited Agriculture); C-1 (Neighborhood Commercial); C-2 (General Commercial); CH (Highway Commercial); M-1 (Light Industrial); M-2 (Medium Industrial); and M-3 (Heavy Industrial). In addition, it would provide for development standards, countywide maximum development allotments, and appropriate setbacks dependent on the type of cannabis facility being proposed. Therefore, impacts related to conflicts with an applicable land use plan, policy, or regulation, would be less than significant.

Option B does not specify individual future cannabis facility sizes, but rather a countywide maximum for future cannabis operations: 2,000,000 ft² of cannabis indoor cultivation; 150 acres of cannabis outdoor cultivation; 500,000 ft² of processing, packaging, and distribution facilities; and up to 40 retail cannabis stores, with a maximum of 2 stores per unincorporated community. Because individual sizes are not regulated under the proposed project, Mitigation Measures MM 4.10-1 would require any future cannabis facility development greater than 40 acres to develop a specific plan per the KCGP, Section 1.7, *Commercial*, Policy 8, and Section 1.8, *Industrial*, Policy 12.

Option B was evaluated for consistency with plans, policies, and goals of both the KCGP, Kern County Zoning Ordinance, and MBGP. Specific goals and policies listed in these plans that are directly applicable to the proposed project are analyzed in Table 4.10-2, *Project Consistency with the Kern County General Plan*, and Table 4.10-3, *Project Consistency with the Metropolitan Bakersfield General Plan* at the end of this section.

Certain future cannabis-related activities and facilities also would require processing a Conditional Use Permit (CUP) and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing before the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to land use and planning would be considered and mitigated during the CUP process.

Proposition 64

In part, Proposition 64 includes language requiring that future cannabis related business do so in an environmentally sensitive manner. Proposition 64 has certain requirements regarding environmental protection and emphasis placed on reducing environmental impacts through analysis and agency coordination.

As discussed and analyzed within the various sections of this EIR, the proposed project would be sensitive to and responsive in addressing any environmental consequences that could result from the proposed project. Accordingly, the proposed project incorporates agency cooperation, plan checks, and review processes in an effort to reduce environmental impacts. When necessary, the proposed project has included mitigation measures in accordance with CEQA requirements.

Therefore, the proposed project has been found to be responsive and consistent with the environmental requirements of Proposition 64 that future cannabis related businesses are operated in an environmentally sensitive way and impacts would be less than significant.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

- MM 4.10-1** To address mineral resources ownership, a title report or other deed information shall be provided that details the ownership of the minerals. If the minerals and surface ownership have not been severed, then evidence of a consultation and an accommodation with the mineral owner for extraction of oil and gas shall be required.

Level of Significance

No impacts would occur with respect to Option A. Impacts regarding Option B would be less than significant.

Impact 4.10-2: Conflict with Any Applicable Habitat Conservation Plan or Natural Community Conservation Plan

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A does not provide opportunities for commercial cannabis activities and thus would not result in an increase in the need of land for the cultivation, processing and packaging, distribution, and sale of cannabis. Therefore, Option A would not conflict with an adopted HCP or NCCP. No impact would occur in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B,

within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

The following HCPs and NCCPs have been approved within Kern County; for additional details related to the HCPs and NCCPs, refer to Section 4.4, *Biological Resources*.

Valley HCPs:

- Draft Valley Floor HCP (currently under development)
- Chevron North American Exploration and Production Lokern HCP
- California Resources Corporation Elk Hills HCP
- Freeport-McMoRan Oil & Gas (formerly Nuevo-Torch then Plains Exploration and Production Company) HCP
- CRC Non-Unity HCP (formerly Occidental of Elk Hills, Inc. HCP)
- Aera Coles Levee Ecosystem Preserve HCP (previously Arco Western Energy HCP)
- Chevron Pipeline HCP
- Kern County Waste Facilities HCP
- Kern Water Bank HCP/NCCP
- Pacific Gas and Electric (PG&E) San Joaquin Valley Operations and Maintenance Program HCP
- Metropolitan Bakersfield HCP
- San Joaquin Field Division Aqueduct HCP

Mountain HCPs:

- Tejon Ranch Comprehensive Land Use and Conservation Agreement
- Tehachapi Uplands Multiple Species HCP

Desert HCPs/NCCPs:

- West Mojave Plan and West Mojave HCP for BLM land only
- Desert Renewable Energy Conservation Plan a joint State and Federal NCCP (within BLM's California Desert Conservation Area)

Kern County is also covered by the following recovery plans:

- Recovery Plan for Upland Species of the San Joaquin Valley, California

- Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon
- California Condor Recovery Plan
- Pacific Bald Eagle Recovery Plan

Future cannabis-related activities could, depending on location relative to existing infrastructure, require construction of new or expanded facilities. Future activities and facilities would be required to comply with federal, State, and local laws and regulations, including, but not limited to, KCGP, MBGP, Kern County Code of Ordinances, and any applicable specific plan, HCP and/or NCCP. Mitigation Measure MM 4.4-13 would require that the project applicant provide evidence of compliance with the applicable adopted HCP, MCCP, or recovery plan. Therefore, future development resulting from implementation of the proposed project would not conflict with any adopted HCPs, NCCPs, or other adopted recovery plans and impacts would be less than significant.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing before the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to conflicts with a local policy or ordinance protecting biological resources, an adopted HCP, NCCP, or a recovery plan, would be considered and mitigated during the CUP process.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

Implement Mitigation Measure MM 4.4-13, as described in Section 4.4, *Biological Resources*.

Level of Significance after Mitigation

No impact would occur with respect to Option A. Impacts regarding Option B would be less than significant.

Cumulative Setting Impacts and Mitigation Measures

Cumulative Setting

The geographic scope for cumulative impacts on land use and planning includes both the KCGP and the regional growth plan and projections included in the Kern COG Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) approved in 2014, as defined in Section 3.7, *Cumulative Projects*. This is a large enough area to encompass any effects of the proposed project

on land use and planning that may combine with similar effects caused by other projects, and provides a reasonable context wherein cumulative actions could affect these resources. The cumulative analyses consider whether the proposed project, Option A or Option B, in combination with the past, present, and reasonably foreseeable projects, could cumulatively affect land use and planning.

Cumulative Impacts and Mitigation Measures

Impact 4.10-3: Contribute to Cumulative Land Use Impacts

Proposed Project Option A

Option A of the proposed project would ban all medical and adult use cannabis-related activities other than what is allowed under Proposition 64. Option A does not provide opportunities for business development and thus would not conflict with any land use plan, policies, or regulations of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect (Impact 4.10-1) and would not conflict with any applicable habitat conservation plan or natural community conservation plan (Impact 4.10-2). Therefore, Option A would not contribute to cumulative impacts when combined with past, present, or reasonably foreseeable projects. No impacts would occur in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B). The County currently allows medical cannabis dispensaries.

With regard to conflicts with any land use plan, policies, or regulations of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect (Impact 4.10-1), the proposed project would regulate the location, operation, and establishment of commercial medical and recreational marijuana outdoor cultivation facilities, indoor cultivation facilities, processing and packaging facilities, distribution facilities, and retail cannabis stores with or without mobile delivery, in order to promote the health, safety, and general welfare of the citizens of the County. Option B would guide future cannabis industry development within the County in order to comply with not only the KCGP and the MBGP goals and policies, but also to comply with Proposition 64. Therefore, Option B would not contribute to cumulative impacts when combined with past, present, or reasonably foreseeable projects. Impacts would be less than significant in this regard.

With regard to conflicts with any applicable habitat conservation plan or natural community conservation plan (Impact 4.10-2), future cannabis related facilities and activities resulting from the implementation of Option B would be required to comply with federal, State, and local laws and regulations, including, but not limited to, KCGP, MBGP, Kern County Code of Ordinances, and any applicable specific plan, HCP and/or NCCP. Mitigation Measure MM 4.4-13 would require

that the project applicant provide evidence of compliance with the applicable adopted HCP, NCCP, or recovery plan. Therefore, with the implementation of mitigation measures, Option B would not conflict with any adopted HCPs, NCCPs, or other adopted recovery plans. Therefore, Option B would not contribute to cumulative impacts when combined with past, present, or reasonably foreseeable projects. Impacts would be less than significant in this regard.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

Implement Mitigation Measure MM 4.10-1, as described above, and Mitigation Measure MM 4.4-13, as described in Section 4.4, *Biological Resources*.

Level of Significance after Mitigation

No cumulative impacts would occur with respect to Option A. Option B cumulative impacts would be less than significant.

Table 4.10-2. Project Consistency with the Kern County General Plan

Goals and Policies	Proposed Project Consistency	
	Option A	Option B
KERN COUNTY GENERAL PLAN		
Chapter 1. Land Use, Open Space, and Conservation Element		
1.3 Physical and Environmental Constraints		
Goal 1. To strive to prevent loss of life, reduce personal injuries, and property damage, minimize economic and social diseconomies resulting from natural disaster by directing development to areas which are not hazardous.	CONSISTENT. Implementation of Option A would not result in new development beyond which is currently projected. Option A would not result in new development within unincorporated Kern County. See Sections, 4.6 <i>Geology and Soils</i> , 4.8 <i>Hazards and Hazardous Materials</i> and 4.9 <i>Hydrology and Water Quality</i> , for further discussion. Option A would be consistent with Goal 1.	CONSISTENT. Development of Option B would occur within unincorporated Kern County, which contains areas considered hazardous. Implementation of mitigation measures would regulate development of future cannabis facilities and direct development away from hazardous areas to the greatest extend feasible. Refer to Section 4.6, <i>Geology and Soils</i> , Section 4.8, <i>Hazards and Hazardous Materials</i> , and Section 4.9, <i>Hydrology and Water Quality</i> . Option B would be consistent with Goal 1.
Policy 1. Kern County will ensure that new developments will not be sited on land that is physically or environmentally constrained (Map Code 2.1 [Seismic Hazard], Map Code 2.2 [Landslide], Map Code 2.3 [Shallow Groundwater], Map Code 2.5 [Flood Hazard], Map Codes from 2.6 – 2.9, Map Code 2.10 [Nearby Waste Facility], and Map Code 2.11 [Burn Dump Hazard]) to support such development unless appropriate studies establish that such development will not result in unmitigated significant impact.	CONSISTENT. Implementation of Option A would not result in new development beyond which is currently projected. Option A would allow for personal cannabis use and cultivation of up to six plants. Option A would not result in new development in areas that are physically or environmentally constrained by hazards beyond what is already allowed within current plans and policies. See Sections 4.6, <i>Geology and Soils</i> , 4.8, <i>Hazards and Hazardous Materials</i> , and 4.9, <i>Hydrology and Water Quality</i> , for further discussion. Option A would be consistent with Policy 1.	CONSISTENT. The area covered by Option B includes locations that are designated as physically or environmentally constrained. As described in Sections 4.6, <i>Geology and Soils</i> , 4.8, <i>Hazards and Hazardous Materials</i> , and 4.9, <i>Hydrology and Water Quality</i> , Option B would include development standards and require mitigation measures to reduce impacts if future cannabis related facilities are proposed within these constrained areas. Therefore, Option B would be consistent with Policy 1.
Policy 2. In order to minimize risk to Kern County residents and their property, new development will not be permitted in hazard areas in the absence of implementing ordinances and programs. These ordinances will establish conditions, criteria, and standards for the approval of development in hazard areas.	CONSISTENT. Implementation of Option A would not result in new development beyond which is currently projected. Option A would allow for personal cannabis use and cultivation of up to six plants. Option A would not result in new development in hazard areas beyond what is already allowed within current plans and policies. See Sections 4.6, <i>Geology and Soils</i> , 4.8, <i>Hazards and Hazardous Materials</i> , and 4.9, <i>Hydrology and Water Quality</i> , for further discussion. Therefore, Option A would be consistent with Goal 1.	CONSISTENT. Option B would include development standards and require mitigation measures to reduce impacts if future cannabis related facilities are proposed within hazard areas; therefore, Option B would establish conditions, criteria and standards for the approval of future cannabis related facilities. Refer to Sections 4.6, <i>Geology and Soils</i> , Section 4.8, <i>Hazards and Hazardous Materials</i> , and Section 4.9, <i>Hydrology and Water Quality</i> , for details. Therefore, Option B would be consistent with Policy 2.

Table 4.10-2. Project Consistency with the Kern County General Plan

Goals and Policies	Proposed Project Consistency	
	Option A	Option B
Policy 3. Zoning and other land use controls will be used to regulate and, in some instances, to prohibit development in hazardous areas.	CONSISTENT. Implementation of Option A would not result in new development beyond what is currently projected. Option A would allow for personal cannabis use and cultivation of up to six plants. Option A would not result in new development in hazard areas beyond what is already allowed within current plans and policies. See Sections 4.6, <i>Geology and Soils</i> , 4.8, <i>Hazards and Hazardous Materials</i> , and 4.9 <i>Hydrology and Water Quality</i> , for further discussion. Therefore, Option A would be consistent with Policy 3.	CONSISTENT. Option B would update standards and conditions within the Kern County Zoning Ordinance to regulate future cannabis facilities and activities. In addition, as discussed in Sections 4.8, <i>Hazards and Hazardous Materials</i> , 4.6, <i>Geology and Soils</i> , and 4.9, <i>Hydrology and Water Quality</i> , mitigation measures would also be required. Therefore, Option B would be consistent with Policy 3.
Policy 6. Regardless of percentage of slope, development on hillsides will be sited in the least obtrusive fashion, thereby minimizing the extent of topographic alteration required and reducing soil erosion while maintaining soil stability.	CONSISTENT. Implementation of Option A would not result in new development beyond what is currently projected. Option A would allow for personal cannabis use and cultivation of up to six plants. Option A would not result in new development on hillsides beyond what is already allowed within current plans and policies. See Sections 4.6, <i>Geology and Soils</i> , and 4.9, <i>Hydrology and Water Quality</i> , for further discussion. Therefore, Option A would be consistent with Policy 6.	CONSISTENT. As described in Section 4.6, <i>Geology and Soils</i> , and Section 4.9, <i>Hydrology and Water Quality</i> Option B would require future cannabis related development to implement erosion control measures, including a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP would include an Erosion Control Plan, the implementation of which would reduce topographic alteration and soil erosion. In addition, any future cannabis related facility construction would be required to implement with mitigation measures related to reducing hydrological and water quality impacts. Therefore, Option B would be consistent with Policy 6.
Policy 7. Ensure effective slope stability, wastewater drainage, and sewage treatments in areas with steep slopes are adequate for development.	CONSISTENT. Implementation of Option A would not result in new development beyond what is currently projected. Option A would allow for personal cannabis use and cultivation of up to six plants. Option A would not result in new development that could create issues with slope stability, wastewater draining, or sewage treatment beyond what is already allowed within current plans and policies. See Sections 4.6, <i>Geology and Soils</i> , Section 4.8, <i>Hazards and Hazardous Materials</i> , 4.9, <i>Hydrology</i> , <i>Water Quality</i> , 4.13, <i>Public Services</i> , and 4.16, <i>Utilities and Service Systems</i> , for further discussion. Therefore, Option A would be consistent with Policy 7.	CONSISTENT. Option B would update standards and conditions within the Kern County Zoning Ordinance to regulate future cannabis facilities and activities. The area covered by Option B includes locations that are designated as steep slopes. As described in Section 4.6, <i>Geology and Soils</i> , future businesses would implement a SWPPP which would include an Erosion Control Plan to reduce slope instability. In addition, any future cannabis related development would be required to comply with the California Building Code, Kern County Building Regulations, and any other applicable building regulations. Additionally, future cannabis facilities would be required to implement appropriate mitigation measures. Refer to Section 4.9, <i>Hydrology Water Quality</i> , Section 4.8, <i>Geology and Soils</i> , Section 4.13, <i>Public Services</i> , and Section 4.16, <i>Utilities and Service Systems</i> . Therefore, Option B would be consistent with Policy 7.

Table 4.10-2. Project Consistency with the Kern County General Plan

Goals and Policies	Proposed Project Consistency	
	Option A	Option B
Policy 8. Encourage the preservation of the floodplain's flow conveyance capacity, especially in floodways, to be open space/passive recreation areas throughout the County.	CONSISTENT. Implementation of Option A would not result in new development beyond which is currently projected. Option A would allow for personal cannabis use and cultivation of up to six plants. Option A would not result in new development in floodplains beyond what is already allowed within current plans and policies. See Sections 4.6, <i>Geology and Soils</i> , 4.8, <i>Hazards and Hazardous Materials</i> , and 4.9, <i>Hydrology and Water Quality</i> , for further discussion. Therefore, Option A would be consistent with Policy 8.	CONSISTENT. Option B would update standards and conditions within the Kern County Zoning Ordinance to regulate future cannabis facilities and activities. As described in Section 4.6, <i>Geology and Soils</i> , and Section 4.9 <i>Hydrology and Water Quality</i> , future cannabis facilities would implement a SWPPP. Implementation of a SWPPP would reduce the potential impacts to floodplain. In addition, future cannabis related facilities and activities would be required to implement mitigation measures. Refer to Sections 4.6 <i>Geology and Soils</i> , and Section 4.9, <i>Hydrology and Water Quality</i> , for further details. Therefore, Option B would be consistent with Policy 8.
Policy 9. Construction of structures that impede water flow in a primary floodplain will be discouraged.	CONSISTENT. Implementation of Option A would not result in new development beyond which is currently projected. Option A would allow for personal cannabis use and cultivation of up to six plants. Option A would not result in new development in a primary floodplain beyond what is already allowed within current plans and policies. See Sections 4.6, <i>Geology and Soils</i> , and 4.8, <i>Hazards and Hazardous Materials</i> , and 4.9, <i>Hydrology and Water Quality</i> , for further discussion. Therefore, Option A would be consistent with Policy 9.	CONSISTENT. Option B would update standards and conditions within the Kern County Zoning Ordinance to regulate future cannabis facilities and activities. As described in further detail in Section 4.6, <i>Geology and Soils</i> , and Section 4.9 <i>Hydrology and Water Quality</i> , future cannabis related facilities and activities would comply with development standards and would implement mitigation measures, including a SWPPP. Implementation of a SWPPP would reduce the potential to impede water flow in a primary floodplain. Therefore, Option B would be consistent with Policy 9.
Policy 10. The County will allow lands which are within flood hazard areas, other than primary floodplains, to be developed in accordance with the General Plan and Floodplain Management Ordinance, if mitigation measures are incorporated so as to ensure that the proposed development will not be hazardous within the requirements of the Safety Element (Chapter 4) of this General Plan.	CONSISTENT. Implementation of Option A would not result in new development beyond which is currently projected. Option A would allow for personal cannabis use and cultivation of up to six plants. Option A would not result in new development in a flood hazard area beyond what is already allowed within current plans and policies. See Sections 4.6, <i>Geology and Soils</i> , 4.8, <i>Hazards and Hazardous Materials</i> , and 4.9, <i>Hydrology and Water Quality</i> , for further discussion. Therefore, Option A would be consistent with Policy 10.	CONSISTENT. Option B would update standards and conditions within the Kern County Zoning Ordinance to regulate future cannabis facilities and activities. Option B would include development standards and require mitigation measures, including a SWPPP, to reduce impacts if future cannabis related facilities are proposed within flood hazard areas. In addition, any future cannabis related development would be required to comply with the California Building Code, Kern County Building Regulations, and any other applicable building regulations. See Sections 4.6, <i>Geology and Soils</i> , 4.8, <i>Hazards and Hazardous Materials</i> , and 4.9, <i>Hydrology and Water Quality</i> , for further discussion. Therefore, Option B would be consistent with Policy 10.
Policy 11. Protect and maintain watershed integrity within	CONSISTENT. Implementation of Option A would not result in new development beyond which is currently	CONSISTENT. Option B requires implementation of mitigation measures, including implementation of a

Table 4.10-2. Project Consistency with the Kern County General Plan

Goals and Policies	Proposed Project Consistency	
	Option A	Option B
Kern County.	<p>projected. Option A would allow for personal cannabis use and cultivation of up to six plants. Option A would not result in new development that would harm the integrity of a watershed. See Section 4.6, <i>Geology and Soils</i>, and Section 4.9, <i>Hydrology and Water Quality</i>, for further discussion. Therefore, Option A would be consistent with Policy 11.</p>	<p>SWPPP. In addition, future cannabis facilities would comply with all applicable federal, State, regional, and local agency water quality protection laws and regulations. Future Cannabis cultivation activities within the Central Valley Regional Water Quality Control Board (RWQCB) jurisdiction would comply with the Cannabis Cultivation Waste Discharge Regulatory Program, General Order No. R5-2015-0113 from the Central Valley RWQCB. Future cannabis facilities would also implement best management practices, such as those set forth in the Kern County Grading Ordinance. See Section 4.6, <i>Geology and Soils</i>, and Section 4.9, <i>Hydrology and Water Quality</i>, for further discussion. Therefore, Option B would be consistent with Policy 11.</p>
1.4 Public Facilities and Services		
Goal 1. Kern County residents and businesses should receive adequate and cost effective public services and facilities. The County will compare new urban development proposals and land use changes to the required public services and facilities needed for the proposed project.	<p>CONSISTENT. Implementation of Option A would not result in new development beyond which is currently projected. Option A would allow for personal cannabis use and cultivation of up to six plants. Option A would not substantially impact public services and utilities beyond what is already planned within current plans and policies. See Sections 4.13, <i>Public Services</i>, and 4.16, <i>Utilities and Service Systems</i>. for further discussion. Therefore, Option A would be consistent with Goal 1.</p>	<p>CONSISTENT. Option B would regulate the location, operation, and establishment of commercial cannabis facilities. Implementation of Option B is not expected to result in substantial population increases. Future cannabis facilities would be required to pay a pro rata share Public Facilities Mitigation Program, as well as any site development fee. However, implementation of Option B may result in increased demand beyond supply for water and energy public services. Mitigation measures would be required for any future cannabis related facility. See Sections 4.13, <i>Public Services</i>, and 4.16, <i>Utilities and Service Systems</i>. for further discussion. Option B would be consistent with Goal 1.</p>
Goal 2. Promote an urban growth pattern in areas where adequate public service infrastructure exists or can be provided.	<p>CONSISTENT. Implementation of Option A would not result in new development beyond which is currently projected. Option A would allow for personal cannabis use and cultivation of up to six plants. Option A would not promote urban growth beyond what is already planned within current plans and policies. See Sections, 4.13, <i>Public Services</i>, and Section 4.16, <i>Utilities and Service Systems</i>, for further discussion. Therefore, Option A would be consistent with Goal 2.</p>	<p>CONSISTENT. Option B would regulate the location, operation, and establishment of commercial cannabis facilities. Implementation of Option B would require future cannabis facilities to pay fees for necessary services. Refer to Section 4.13, <i>Public Services</i>, and Section 4.16, <i>Utilities and Service Systems</i>. Therefore, Option B would be consistent with Goal 2.</p>
Goal 3. Distribute the cost of new services or facilities	<p>CONSISTENT. Refer to Goals 1 and 2, above. Option A</p>	<p>CONSISTENT. Refer to Goals 1 and 2, above. Option B</p>

Table 4.10-2. Project Consistency with the Kern County General Plan

Goals and Policies	Proposed Project Consistency	
	Option A	Option B
equitably among the beneficiaries.	would be consistent with Goal 3.	would be consistent with Goal 3.
Goal 5. Ensure that adequate supplies of quality (appropriate for intended use) water are available to residential, industrial, and agricultural users within Kern County.	CONSISTENT. Implementation of Option A would not result in new development beyond which is currently projected. Option A would allow for personal cannabis use and cultivation of up to six plants. Option A would not require new water use beyond that which would be needed for a small garden. As described in Sections 4.9, <i>Hydrology and Water Quality</i> , and 4.16 <i>Utilities and Service Systems</i> , Option A would not increase demand for water. Therefore, Option A would be consistent with Goal 5.	CONSISTENT. Option B would result in an increase in water use, specifically as related to future cultivation and processing and packaging. Option B could have significant impacts on water supply depending on size of the facility, location within the County, groundwater basin, and water district, CSA, CSD, or PUD. Option B would require the implementation of mitigation measures for future cannabis related facilities, including requiring a will serve letter and/or the completion of a Water Supply Assessment for cannabis facilities more than 40 acres or 500,000 ft ² . In addition, future cannabis related development would adhere to existing laws and regulations. Sections 4.9, <i>Hydrology and Water Quality</i> , and 4.16 <i>Utilities and Service Systems</i> , Therefore, Option B would be consistent with Goal 5.
Goal 9. Serve the needs of industries and Kern County residents in a manner that does not degrade the water supply and the environment and protect the public health and safety by avoiding surface and subsurface nuisances resulting from the disposal of hazardous wastes, irrespective of the geographic origin of the waste.	CONSISTENT. Implementation of Option A would not result in new development beyond which is currently projected. Option A would allow for personal cannabis use and cultivation of up to six plants. Option A would not result in substantial impacts to water supply or public health and safety beyond that which would be needed for a small garden or what is already planned within current plans and policies. See Sections, 4.6, <i>Hazards and Hazardous Materials</i> , and 4.9, <i>Hydrology and Water Quality</i> , for further discussion. Therefore, Option A would be consistent with Goal 9.	CONSISTENT. Option B would regulate the location, operation, and establishment of commercial cannabis facilities. Implementation of Option B would require future cannabis facilities to comply with all applicable federal, State, regional, and local agency water quality protection laws and regulations, and commonly utilized industry standards, including obtaining all applicable storm water construction permits from the Central Valley or Lahontan RWQCB per mitigation measures. Future Cannabis cultivation activities within the Central Valley Regional Water Quality Control Board (RWQCB) jurisdiction would comply with the Cannabis Cultivation Waste Discharge Regulatory Program, General Order No. R5-2015-0113 from the Central Valley RWQCB. Option B would require future cannabis related facilities and activities to implement mitigation measures. See Sections, 4.6, <i>Hazards and Hazardous Materials</i> , and 4.9, <i>Hydrology and Water Quality</i> , for further discussion. Therefore, Option B would be consistent with Goal 9.
Goal 10. Ensure landfill capacity for Kern County residents and industries.	CONSISTENT. Implementation of Option A would not result in new development beyond which is currently projected. Option A could result in demolition waste associated with the closure of existing cannabis	CONSISTENT. Under Option B, solid waste disposal would occur in accordance with the Kern County and Incorporated Cities Integrated Waste Management Plan. Solid waste generated by implementing Option B would be collected,

Table 4.10-2. Project Consistency with the Kern County General Plan

Goals and Policies	Proposed Project Consistency	
	Option A	Option B
	dispensaries; however, this would not exceed current landfill capacity. Option A would allow for personal cannabis use and cultivation of up to six plants. See Sections 4.8, <i>Hazards and Hazardous Materials</i> , and 4.16, <i>Utilities and Service Systems</i> , for further discussion. Therefore, Option A would be consistent with Goal 10.	managed, and disposed of in accordance existing federal, State, and local regulations and policies. See Sections 4.8, <i>Hazards and Hazardous Materials</i> , and 4.16, <i>Utilities and Service Systems</i> , for further discussion. Therefore, Option B would be consistent with Goal 10.
Policy 1. New discretionary development will be required to pay its proportional share of the local costs of infrastructure improvements required to service such development.	CONSISTENT. Refer to Goals 1, 2, 3, 5, 9, and 10, above. In addition, as described in Section 4.15, <i>Transportation and Traffic</i> , even though vehicle miles travelled (VMT) would increase, Option A would not generate a volume of traffic sufficient require payment of fees to address increased traffic. See Sections 4.13, <i>Public Services</i> , 4.15, <i>Transportation and Traffic</i> , and 4.16, <i>Utilities and Service Systems</i> , for further discussion. Therefore, Option A would be consistent with Policy 1.	CONSISTENT. Refer to Goals 1, 2, 3, 5, 9, and 10, above. In addition, as described in Section 4.15, <i>Transportation and Traffic</i> , Option B would not generate a volume of traffic sufficient to require payment of fees to address increased traffic. Mitigation measures are required under Option B. See Section 4.13, <i>Public Services</i> , Section 4.15, <i>Transportation and Traffic</i> , and Section 4.16, <i>Utilities and Service Systems</i> , for further discussion. Therefore, Option B would be consistent with Policy 1.
Policy 2. The efficient and cost-effective delivery of public services and facilities will be promoted by designating areas for urban development that occur within or adjacent to areas with adequate public service and facility capacity. a) Ensure that water quality standards are met for existing users and future development. b) Ensure that adequate storage, treatment, and transmission facilities are constructed concurrently with planned growth. c) Ensure the maintenance and repair of existing water systems. d) Encourage the utilization of wastewater treatment facilities which provide for the reuse of wastewater. e) Encourage the consolidation or elimination of small water systems. f) Encourage the conversion of private sewer systems (septic tanks) to public systems. g) Ensure that adequate collection, treatment, and disposal facilities are constructed concurrently with planned growth.	CONSISTENT. Refer to Goals 1, 2, 3, 5, 9, and 10, and Policy 1, above. Option A would be consistent with Policy 2.	CONSISTENT. Refer to Goals 1, 2, 3, 5, 9, and 10, and Policy 1, above. Option B would be consistent with Policy 2.

Table 4.10-2. Project Consistency with the Kern County General Plan

Goals and Policies	Proposed Project Consistency	
	Option A	Option B
h) Ensure that appropriate funding mechanisms are in place to fund the needed improvements which result from development and subsequent growth.		
Policy 3. Individual projects will provide availability of public utility service as per approved guidelines of the serving utility.	CONSISTENT. Refer to Goals 1, 2, 3, 5, 9, and 10, and Policy 1, above. Option A would be consistent with Policy 3.	CONSISTENT. Refer to Goals 1, 2, 3, 5, 9, and 10, and Policy 1, above. Option B would be consistent with Policy 3.
Policy 6. The County will ensure adequate fire protection to all Kern County residents.	CONSISTENT. Refer to Goals 1, 2, 3, 5, 9, and 10, and Policy 1, above. See Section 4.6, <i>Hazards and Hazardous Materials</i> , Section 4.13, <i>Public Services</i> , and Section 4.16, <i>Utilities and Service Systems</i> , for further discussion. Therefore, Option A would be consistent with Policy 6.	CONSISTENT. Refer to Goals 1, 2, 3, 5, 9, and 10, and Policy 1, above. Option B would require mitigation measures associated with public services and utilities, including fire protection. See Section 4.6, <i>Hazards and Hazardous Materials</i> , Section 4.13, <i>Public Services</i> , and Section 4.16, <i>Utilities and Service System</i> for further discussion. Therefore, Option B would be consistent with Policy 6.
Policy 7. The County will ensure adequate police protection to all Kern County residents.	CONSISTENT. Refer to Goals 1, 2, 3, 5, 9, and 10, and Policy 1, above. See Section 4.6, <i>Hazards and Hazardous Materials</i> , Section 4.13, <i>Public Services</i> , and Section 4.16, <i>Utilities and Service Systems</i> , for further discussion. Therefore, Option A would be consistent with Policy 7.	CONSISTENT. Refer to Goals 1, 2, 3, 5, 9, and 10, and Policy 1, above. Option B would require mitigation measures associated with public services and utilities, including police protection. See Section 4.6, <i>Hazards and Hazardous Materials</i> , Section 4.13, <i>Public Services</i> , and Section 4.16, <i>Utilities and Service System</i> for further discussion. Therefore, Option B would be consistent with Policy 7.
Policy 13. The County shall ensure landfill capacity for the residents and industry of Kern County.	CONSISTENT. Refer to Goal 10, above. Option A would be consistent with Policy 13.	CONSISTENT. Refer to Goal 10, above. Option B would be consistent with Policy 13.
1.5 Special Treatment Areas		
Policy 5. Specific Plan Areas guidelines shall be used to ensure adequate consideration of the General Plan goals and policies governing development and resources management.	CONSISTENT. Implementation of Option A would not result in new development beyond which is currently projected. Option A would not change the designation of future land uses, including those identified in Specific Plan areas. See Chapter 3, <i>Project Description</i> , and Sections 4.1 through 4.16 of this EIR for further discussion regarding the proposed project and resources. Therefore, Option A would be consistent with Policy 5.	CONSISTENT. Option B would regulate the location, operation, and establishment of commercial cannabis facilities. Option B would not change the designation of future land uses, including those identified in Specific Plan areas. Option B would require any future cannabis related facilities and activities to adhere to goals and policies within a Specific Plan, if the future cannabis facility is located within a Specific Plan boundary. See Chapter 3, <i>Project Description</i> , and Sections 4.1 through 4.16 of this EIR for further discussion regarding the proposed project and resources. Therefore, Option B would be consistent with Policy 5.

Table 4.10-2. Project Consistency with the Kern County General Plan

Goals and Policies	Proposed Project Consistency	
	Option A	Option B
1.6 Residential		
Goal 7. Minimize land use conflicts between residential and resource, commercial, or industrial land uses.	CONSISTENT. Implementation of Option A would not result in new development beyond which is currently projected. Option A would not change the designation of future land uses. Option A would not result in conflicts between land uses beyond what is already planned within current plans and policies. In addition, Proposition 64 provides basic regulations regarding distances between cannabis facilities and sensitive land uses. See Chapter 3, <i>Project Description</i> , and Sections 4.1 through 4.16 of this EIR for further discussion regarding the proposed project and resources. Therefore, Option A would be consistent with Goal 7.	CONSISTENT. Option B would regulate the location, operation, and establishment of commercial cannabis facilities. Option B would not change the designation of future land uses, including those identified in Specific Plan areas. Option B would require any future cannabis related facilities and activities to adhere to federal, State, and local rules and regulations. Option B would require future cannabis related facilities to implement mitigation measures, which would further reduce any conflicts between land uses. Additionally, Proposition 64 provides basic regulations regarding distances between cannabis facilities and sensitive land uses. See Chapter 3, <i>Project Description</i> , and Sections 4.1 through 4.16 of this EIR for further discussion regarding the proposed project and resources. Therefore, Option B would be consistent with Goal 7
1.7 Commercial		
Goal 1. Ensure that an adequate and geographically balanced supply of land is designated for a range of commercial uses.	CONSISTENT. Implementation of Option A would not result in new development beyond which is currently projected. Option A would not change the designation of future land uses. See Chapter 3, <i>Project Description</i> , for further discussion. Therefore, Option A would be consistent with Goal 1.	CONSISTENT. Option B would regulate the location, operation, and establishment of commercial cannabis facilities. Option B would not change the amount of land designated for commercial uses, but rather, would guide development of the future cannabis industry. In addition, as described in detail in Chapter 3, <i>Project Description</i> , Future indoor cultivation and retail cannabis stores would be allowed in several land use designations and zone classifications, including commercial areas. Indoor cultivation in an existing structure or existing building would be allowed in zone classifications C-2 (General Commercial) and CH (Highway Commercial); countywide indoor cultivation would not exceed up to 2,000,000 ft ² . Future retail cannabis stores would be allowed in C-1 (Neighborhood Commercial); C-2 (General Commercial); and CH (Highway Commercial); with a countywide maximum of 40 stores, 2 per unincorporated community. However, for future cannabis facilities within commercial areas, Option B would require the facilities to complete a conditional use permit (CUP). Therefore, Option B would

Table 4.10-2. Project Consistency with the Kern County General Plan

Goals and Policies	Proposed Project Consistency	
	Option A	Option B
		be consistent with Goal 1.
Goal 2. Pursue a strong economy through logical placement and distribution of commercial development within the rural and urban areas of Kern County.	CONSISTENT. Refer to Goal 1, above. See Appendix K, of this EIR, for a fiscal analysis of the proposed project. Option A would be consistent with Goal 2.	CONSISTENT. Refer to Goal 1, above. See Appendix K, of this EIR, for a fiscal analysis of the proposed project. Option B would be consistent with Goal 2.
Goal 3. Ensure that adequate infrastructure and public services are available for all proposed commercial projects.	CONSISTENT. Refer to 1.4, <i>Public Facilities and Services</i> , Goals 1, 2, 3, 5, 9, and 10, and Policies 1, 2, 3, 6, 7, and 13, above. See Section 4.13, <i>Public Services</i> , and Section 4.16, <i>Utilities and Service Systems</i> , for further discussion. Option A would be consistent with Goal 3.	CONSISTENT. Refer to 1.4, <i>Public Facilities and Services</i> , Goals 1, 2, 3, 5, 9, and 10, and Policies 1, 2, 3, 6, 7, and 13, above. See Section 4.13, <i>Public Services</i> , and Section 4.16, <i>Utilities and Service Systems</i> , for further discussion. Option B would be consistent with Goal 2.
Goal 5. Provide highway commercial along interstate and highways to provide services for the traveling public without being a detriment to existing rural communities.	CONSISTENT. Refer to Goal 1, above. Option A would be consistent with Goal 5.	CONSISTENT. Refer to Goal 1, above. Option B would be consistent with Goal 5.
Goal 6. Ensure compatible land uses around airports through the use of the Airport Land Use Compatibility Plan.	CONSISTENT. Implementation of Option A would not result in new development beyond which is currently projected. Option A would not change the designation of future land uses, including those within the Airport Land Use Compatibility Plan (ALUCP). See Section 4.8, <i>Hazards and Hazardous Materials</i> , Section 4.10, <i>Land Use and Planning</i> , and Section 4.15, <i>Transportation and Traffic</i> , for further discussion. Therefore, Option A would be consistent with Goal 6.	CONSISTENT. Option B would regulate the location, operation, and establishment of commercial cannabis facilities. Option B would not change the designation of future land uses, including those identified in the ALUCP. Option B includes development standards as well as required mitigation measures to ensure compatibility with the ALUCP. See Section 4.8, <i>Hazards and Hazardous Materials</i> , and Section 4.10, <i>Land Use and Planning</i> , and Section 4.15, <i>Transportation and Traffic</i> , for further discussion. Therefore, Option B would be consistent with Goal 6.
Policy 1. Kern County will promote a pattern of commercial development that contributes to the economic and physical development of existing unincorporated communities as well as the incorporated cities.	CONSISTENT. Refer to Goals 1, 2, 3, 5, and 6, above. Option A would be consistent with Policy 1.	CONSISTENT. Refer to Goals 1, 2, 3, 5, and 6, above. Option B would be consistent with Policy 1.
Policy 3. The development of specialized clusters of related and mutually supportive commercial activities will be encouraged and supported in appropriate locations by means of the zoning ordinance and specific plans.	CONSISTENT. Refer to Goals 1, 2, 3, 5, and 6, above. Option A would be consistent with Policy 2.	CONSISTENT. Refer to Goals 1, 2, 3, 5, and 6, above. Option B would be consistent with Policy 3.
Policy 4. Prior to approval, all new discretionary commercial projects located in the Airport Influence areas will be compatible with the Airport Land Use Compatibility Plan.	CONSISTENT. Refer to Goal 6, above. Option A would be consistent with Policy 4.	CONSISTENT. Refer to Goal 6 above. Option B would be consistent with Policy 4
Policy 7. The development of Highway Commercial (map)	CONSISTENT. Refer to 1.4, <i>Public Facilities and</i>	CONSISTENT. Refer to 1.4, <i>Public Facilities and</i>

Table 4.10-2. Project Consistency with the Kern County General Plan

Goals and Policies	Proposed Project Consistency	
	Option A	Option B
Code 6.3) shall demonstrate adequate infrastructure.	Services, Goals 1, 2, 3, 5, 9, and 10, and Policies 1, 2, 3, 6, 7, and 13, and 1.7, <i>Commercial</i> , Goals 1, 2, 3, 5, and 6, above. Option A would be consistent with Policy 7.	Services, Goals 1, 2, 3, 5, 9, and 10, and Policies 1, 2, 3, 6, 7, and 13, and 1.7, <i>Commercial</i> , Goals 1, 2, 3, 5, and 6, above. Option B would be consistent with Policy 7.
Policy 8. All commercial development equal to or greater than 40 acres in a rural area will require the adoption of a Specific Plan prior to development approval.	CONSISTENT. Implementation of Option A would not result in new development beyond which is currently projected. Personal cultivation of cannabis of up to six plants would not require a Specific Plan. See Chapter 3, <i>Project Description</i> , and Section 4.10, <i>Land Use and Planning</i> , for further discussion. Therefore, Option A would be consistent with Policy 8.	CONSISTENT. Option B would regulate the location, operation, and establishment of commercial cannabis facilities. Option B would not change the designation of future land uses. Option B would require that future cannabis related facilities comply to federal, State, and local regulations. In addition, mitigation measures would be required. See Chapter 3, <i>Project Description</i> , and Section 4.10, <i>Land Use and Planning</i> , for further discussion. Therefore, Option B would be consistent with Policy 7.
1.8 Industrial		
Goal 1. Ensure that an adequate and geographically balanced supply of land is designated for a range of industrial purposes.	CONSISTENT. Implementation of Option A would not result in new development beyond which is currently projected. Option A would not change the designation of future land uses. See Chapter 3, <i>Project Description</i> , for further discussion. Therefore, Option A would be consistent with Goal 1.	CONSISTENT. Option B would regulate the location, operation, and establishment of commercial cannabis facilities. Option B would not change the amount of land designated for industrial uses, but rather, would guide development of the future cannabis industry. In addition, as described in detail in Chapter 3, <i>Project Description</i> , Future indoor cultivation and retail cannabis stores would be allowed in several land use designations and zone classifications, including industrial areas. Indoor cultivation would be allowed in zone classifications M-1 (Light Industrial), M-2 (Medium Industrial), and M-3 (Heavy Industrial); countywide indoor cultivation would not exceed up to 2,000,000 ft ² . Future processing, packaging, and distribution facilities would be allowed in zone classifications M-2 (Medium Industrial), and M-3 (Heavy Industrial); countywide maximum would not exceed 500,000 ft ² . These facilities would comply with Option B development standards, as well as mitigation measures identified in Section 4.1 through 4.16 of this EIR. Future retail cannabis stores would be allowed in would be allowed in zone classifications M-1 (Light Industrial), M-2 (Medium Industrial), and M-3 (Heavy Industrial) with a countywide maximum of 40 stores, 2 per unincorporated community; however, for future retail cannabis stores Option B would require the facilities to complete a

Table 4.10-2. Project Consistency with the Kern County General Plan

Goals and Policies	Proposed Project Consistency	
	Option A	Option B
		conditional use permit (CUP). Therefore, Option B would be consistent with Goal 1.
Goal 2. Promote the future economic strength and well-being of Kern County and its residents without detriment to its environmental quality.	CONSISTENT. Refer to Goal 1, above. See Appendix K, of this EIR for a fiscal analysis of the proposed project. Option A would be consistent with Goal 2.	CONSISTENT. Refer to Goal 1, above. See Appendix K, of this EIR, for a fiscal analysis of the proposed project. Option B would be consistent with Goal 2.
Goal 3. Ensure compatibility with land use designation such as residential, commercial or other land uses that may be affected by such activities.	CONSISTENT. Refer to Section 1.6, <i>Residential</i> , Goal 7, above. Option A would be consistent with Goal 3.	CONSISTENT. Refer to Section 1.6, <i>Residential</i> , Goal 7, above. Option B would be consistent with Goal 3.
Policy 1. Locations for new industrial activities shall be provided with adequate infrastructure to minimize effects on County services.	CONSISTENT. Refer to 1.4, <i>Public Facilities and Services</i> , Goals 1, 2, 3, 5, 9, and 10, and Policies 1, 2, 3, 6, 7, and 13, and 1.7, <i>Commercial</i> , Goals 1, 2, 3, 5, and 6, above. See Section 4.13, <i>Public Services</i> , and Section 4.16, <i>Utilities and Service Systems</i> , for further discussion. Therefore, Option A would be consistent with Policy 1.	CONSISTENT. Refer to 1.4, <i>Public Facilities and Services</i> , Goals 1, 2, 3, 5, 9, and 10, and Policies 1, 2, 3, 6, 7, and 13, and 1.7, <i>Commercial</i> , Goals 1, 2, 3, 5, and 6, above. See Section 4.13, <i>Public Services</i> , and Section 4.16, <i>Utilities and Service Systems</i> , for further discussion. Therefore, Option B would be consistent with Policy 1.
Policy 3. The land areas best suited for industrial activity by virtue of their location and other criteria will be protected from residential and other incompatible development.	CONSISTENT. Refer to Section 1.6, <i>Residential</i> , Goal 7, above. Option A would be consistent with Policy 3.	CONSISTENT. Refer to Section 1.6, <i>Residential</i> , Goal 7, above. Option B would be consistent with Policy 3.
Policy 6. Encourage upgrading the visual character of existing industrial areas through the use of landscaping, screening, or buffering.	CONSISTENT. Implementation of Option A would not result in new development beyond which is currently projected. Option A would not allow future cannabis facilities and activities beyond what is allowed under Proposition 64 regarding personal cultivation of up to six plants. Option A would not result in development of industrial areas beyond what is already planned within current plans and policies. See Chapter 3, <i>Project Description</i> , and Section 4.1, <i>Aesthetics</i> , for further discussion. Therefore, Option A would be consistent with Policy 6.	CONSISTENT. Option B would regulate the location, operation, and establishment of commercial cannabis facilities. Option B would not change the amount of land designated for industrial uses, but rather, would guide development of the future cannabis industry. Option B would require compliance with development standards as well as implementation of mitigation measures. In addition, Proposition 64 requires screening of cultivation areas. See Chapter 3, <i>Project Description</i> , and Section 4.1, <i>Aesthetics</i> , for further discussion. Therefore, Option B would be consistent with Policy 6.
Policy 7. Require that industrial uses provide design features such as screen walls, landscaping, increased height and/or setbacks, and lighting restrictions between the boundaries of adjacent residential land use designations so as to reduce impacts on residences due to light, noise, sound, and vibration.	CONSISTENT. Refer to Policy 6, above. See Chapter 3.0, <i>Project Description</i> , and Section 4.1, <i>Aesthetics</i> , further discussion. Therefore, Option A would be consistent with Policy 7.	CONSISTENT. Refer to Policy 6, above. Option B would provide development standards including requirements for screening, landscaping, height requirements, and setbacks. Future cannabis facilities would also be required to implement mitigation measures. See Chapter 3.0 <i>Project Description</i> , and Section 4.1, <i>Aesthetics</i> , further discussion. Therefore, Option B would be consistent with Policy 7.

Table 4.10-2. Project Consistency with the Kern County General Plan

Goals and Policies	Proposed Project Consistency	
	Option A	Option B
Policy 12. All industrial development equal to or greater than 40 acres in a rural area will require adoption of a Specific Plan prior to development approval.	CONSISTENT. Refer to 1.7, <i>Commercial</i> , Policy 8, above. Option A would be consistent with Implementation Policy 12.	CONSISTENT. Refer to 1.7, <i>Commercial</i> , Policy 8, above. Option B would be consistent with Policy 8.
Policy 13. Where feasible, locate future industrial activities in close proximity to railroad facilities and inter-and intra-State transportation corridors to minimize extensive travel through urban areas and to promote alternative transportation of goods.	CONSISTENT. Implementation of Option A would not result in new development beyond which is currently projected. Option A would allow for personal cannabis use and cultivation of up to six plants. Option A would not promote industrial activities beyond what is already planned within current plans and policies. See Chapter 3.0, <i>Project Description</i> , Section 4.10, <i>Land Use and Planning</i> , and Section 4.15, <i>Transportation and Traffic</i> , for further discussion. Therefore, Option A would be consistent with Policy 13.	CONSISTENT. Option B would regulate the location, operation, and establishment of commercial cannabis facilities. Option B would not change the amount of land designated for industrial uses, but rather, would guide development of the future cannabis industry. Option B would require compliance with development standards as well as implementation of mitigation measures. Therefore, Option B would be consistent with Policy 13.
1.9 Resource		
Goal 1. To contain new development within an area large enough to meet generous projections of foreseeable need, but in locations which will not impair the economic strength derived from the petroleum, agriculture, rangeland, or mineral resources, or diminish the other amenities which exist in the County.	CONSISTENT. Implementation of Option A would not result in new development beyond which is currently projected. Option A would allow for personal cannabis use and cultivation of up to six plants. Option A would not promote development activities beyond what is already planned within the KCGP and MBGP. See Chapter 3.0, <i>Project Description</i> , Section 4.2, <i>Agriculture and Forest Resources</i> , and Section 4.10, <i>Land Use and Planning</i> , for further discussion. Therefore, Option A would be consistent with Goal 1.	CONSISTENT. Option B would allow up to 2,000,000 ft ² for indoor cultivation, 150 acres for outdoor cultivation, 500,000 ft ² for processing, packaging, and distribution, and up to 40 store (2 per unincorporated community). It is anticipated that this would meet the cannabis industry demand within the County while not impairing any potential economic benefits from petroleum or mineral resources. Mitigation measure would be required to reduce impacts to agricultural lands and oak woodlands. This would only preserve farmland and oak woodlands that otherwise might be converted and would not create new farmland. See Chapter 3.0, <i>Project Description</i> , Section 4.2, <i>Agriculture and Forest Resources</i> , and Section 4.10, <i>Land Use and Planning</i> , for further discussion. Therefore, Option B would be consistent with Goal 1.
Goal 2. Protect areas of important mineral, petroleum, and agricultural resource potential for future use.	CONSISTENT. Refer to Goal 1, above. Option A would be consistent with Goal 1.	CONSISTENT. Refer to Goal 1, above. Option B would be consistent with Goal 2.
Goal 3. Ensure the development of resource areas minimize effects on neighboring resources lands.	CONSISTENT. Implementation of Option A would not result in new development beyond which is currently projected. Option A would allow for personal cannabis use and cultivation of up to six plants. Option A would not promote development activities beyond what is already planned within the KCGP and MBGP. Thus,	CONSISTENT. Option B could result in the direct conversion of prime agriculture to a non-agricultural use. Mitigation measures require one to one preservation. This would preserve farmland that otherwise might be converted; however, it would not create new farmland. In addition, cultivation activities would be similar to other

Table 4.10-2. Project Consistency with the Kern County General Plan

Goals and Policies	Proposed Project Consistency	
	Option A	Option B
	Option A would not result in an increase in the need for land for non-agricultural purposes. See Section 4.2, <i>Agriculture and Forest Resources</i> , for further detail. Refer to Goal 1, above. Option A would be consistent with Goal 3.	agricultural crop activities and thus would not indirectly convert agricultural land to non-agricultural land. Option B would not impair any mineral or petroleum production. Refer to Goal 1, above. See Section 4.2, <i>Agriculture and Forest Resources</i> , for further detail. Therefore, Option B would be consistent with Goal 3.
Goal 5. Conserve prime agriculture lands from premature conversion.	CONSISTENT. Refer to Goals 1, 2, and 3, above. Option A would be consistent with Goal 5.	CONSISTENT. Refer to Goals 1, 2, and 3, above. Option B would be consistent with Goal 5.
Policy 2. In areas with a resource designation on the General Plan map, only industrial activities which directly and obviously relate to the exploration, production, and transportation of the particular resource will be considered to be consistent with the General Plan.	CONSISTENT. Refer to Goals 1, 2, 3, and 5, above. Option A would be consistent with Goal 1.	CONSISTENT. Refer to Goals 1, 2, 3, and 5, above. Option B would be consistent with Resource Policy 2.
Policy 7. Areas designated for agricultural use, which include Class I and II and other enhanced agricultural soils with surface delivery water systems, should be protected from incompatible residential, commercial, and industrial subdivision and development activities.	CONSISTENT. Refer to Goals 1, 2, 3, and 5, and Policy 2 above. Option A would be consistent with Policy 7.	CONSISTENT. Refer to Goals 1, 2, 3, and 5, and Policy 2 above. Option B would be consistent with Policy 7.
Policy 11. Minimize the alteration of natural drainage areas. Require development plans to include necessary mitigation to stabilize runoff and silt deposition through utilization of grading and flood protection ordinances.	CONSISTENT. Refer to 1.4, Public Facilities and Services, Goals 5 and 9, above. See Section 4.2, <i>Agriculture and Forest Resources</i> , Section 4.6, <i>Geology and Soils</i> , and Section 4.9, <i>Hydrology and Water Quality</i> , fur further detail. Therefore, Option A would be consistent with Policy11.	CONSISTENT. Refer to 1.4, Public Facilities and Services, Goals 5 and 9, above. See Section 4.2, <i>Agriculture and Forest Resources</i> , Section 4.6, <i>Geology and Soils</i> , and Section 4.9, <i>Hydrology and Water Quality</i> , fur further detail. Therefore, Option B would be consistent with Policy 11.
Policy 12. Areas identified by the Natural Resources Conservation Service (NRCS) (formerly Soil Conservation Service) as having high range-site value should be conserved for Extensive Agriculture uses or as Resource Reserve, if located within a County water district.	CONSISTENT. Refer to Goals 1, 2, 3, and 5, and Policy 2 above. See Section 4.2, <i>Agriculture and Forest Resources</i> , for further detail. Therefore, Option A would be consistent with Policy12.	CONSISTENT. Refer to Goals 1, 2, 3, and 5, and Policy 2 above. See Section 4.2, <i>Agriculture and Forest Resources</i> , for further detail. Option B would be consistent with Policy 12.
Policy 24. Urban residential or commercial development on property contiguous to property designated Map Code 8.1 (Intensive Agriculture) should employ landscaping, lot size, open space buffering, increased building setbacks, or other techniques to reduce the potential for land use conflicts when it can be demonstrated that such measures will provide for public welfare and benefit and promote continued agricultural uses.	CONSISTENT. Refer to 1.7, Commercial, Policies 1, 3, and 8; and 1.8, Industrial, Policies 6 and 7, above. Option A would be consistent with Policy 24.	CONSISTENT. Refer to 1.7, Commercial, Policies 1, 3, and 8; and 1.8, Industrial, Policies 6 and 7, above. Option B would be consistent with Policy 24.

Table 4.10-2. Project Consistency with the Kern County General Plan

Goals and Policies	Proposed Project Consistency	
	Option A	Option B
1.10 General Provisions		
Section 1.10.1 General Provisions, Public Services and Facilities		
Goal 1. Ensure that the County can accommodate anticipated future growth and development while maintaining a safe and healthful environment and a prosperous economy by preserving viable natural resources, guiding development away from hazardous areas, and assuring the provision of adequate public services.	CONSISTENT. Implementation of Option A would not result in new development beyond which is currently projected. See Section 4.6, <i>Geology and Soils</i> , Section 4.8, <i>Hazards and Hazardous Materials</i> , and Section 4.9, <i>Hydrology and Water Quality</i> , for further discussion. Therefore, Option A would be consistent with Goal 1.	CONSISTENT. Option B would allow new cannabis facilities, providing business opportunity. Option B would require future cannabis facilities to comply with development standards and mitigation measures that would ensure the health and safety of residents, preserve and protect potentially effected resources, and ensure provisions of public services. Therefore, Option B would be consistent with Goal 1.
Policy 8. The County shall ensure that new industrial uses and activities are sited to avoid or minimize significant hazards to human health and safety in a manner that avoids over concentrating such uses in proximity to schools and residents.	CONSISTENT. Refer to 1.6, Residential, Goal 7; 1.8, Industrial, Goal 1, and Policy 3, above. See Section 4.6, <i>Geology and Soils</i> , Section 4.8, <i>Hazards and Hazardous Materials</i> , and Section 4.9, <i>Hydrology and Water Quality</i> , for further discussion. Therefore, Option A would be consistent with Policy 8.	CONSISTENT. Refer to 1.6, Residential, Goal 7; 1.8, Industrial, Goal 1, and Policy 3, above. See Section 4.6, <i>Geology and Soils</i> , Section 4.8, <i>Hazards and Hazardous Materials</i> , and Section 4.9, <i>Hydrology and Water Quality</i> , for further discussion. Option B would be consistent with Policy 8.
Policy 9. New development should pay its pro rata share of the local cost of expansions in services, facilities, and infrastructure that it generates and upon which it is dependent.	CONSISTENT. Refer to 1.4, Public Facilities and Services, Goals 1, 2, 3, 5, 9, and 10, and Policies 1, 2, 3, 6, 7, and 13. Option A would be consistent with Policy 9.	CONSISTENT. Refer to 1.4, Public Facilities and Services, Goals 1, 2, 3, 5, 9, and 10, and Policies 1, 2, 3, 6, 7, and 13. Option B would be consistent with Policy 9.
Policy 15. Prior to approval of any discretionary permit, the County shall make the finding, based on information provided by the California Environmental Quality Act (CEQA) documents, staff analysis, and the applicant, that adequate public or private services and resources are available to serve the proposed development.	CONSISTENT. Refer to 1.4, Public Facilities and Services, Goals 1, 2, 3, 5, 9, and 10, and Policies 1, 2, 3, 6, 7, and 13. Option A would be consistent with Policy 15.	CONSISTENT. Refer to 1.4, Public Facilities and Services, Goals 1, 2, 3, 5, 9, and 10, and Policies 1, 2, 3, 6, 7, and 13. Option B would be consistent with Policy 15.
Policy 16. The developer shall assume full responsibility for costs incurred in service extension or improvements that are required to ensure the project. Cost sharing or other forms of recovery shall be available when the service extensions or improvements have a specific quantifiable regional significance.	CONSISTENT. Refer to 1.4, Public Facilities and Services, Goals 1, 2, 3, 5, 9, and 10, and Policies 1, 2, 3, 6, 7, and 13. Option A would be consistent with Policy 16.	CONSISTENT. Refer to 1.4, Public Facilities and Services, Goals 1, 2, 3, 5, 9, and 10; Policies 1, 2, 3, 6, 7, and 13. Option B would be consistent with Policy 16.
1.10.2 Air Quality		
Policy 18. The air quality implications of new discretionary land use proposals shall be considered in approval of major developments. Special emphasis will be placed on minimizing air quality degradation in the desert	CONSISTENT. Option A would not result in new development beyond what is already planned. Option A would result in the closure of existing medical cannabis dispensaries, and thus would result in an increase in	CONSISTENT. Option B would result in cumulatively considerable impacts related to net increase of any criteria pollutant in both the SJVAPCD and the EKAPCD. Mitigation measures are provided to help reduce impacts

Table 4.10-2. Project Consistency with the Kern County General Plan

Goals and Policies	Proposed Project Consistency	
	Option A	Option B
to enable effective military operations and the valley region to meet attainment goals.	VMT by customers purchasing cannabis products. Mitigation measures are provided to help reduce impacts to air quality; however, Option A would continue to exceed the EKAPCD thresholds. See Section 4.3, <i>Air Quality</i> , and Section 4.7, <i>Greenhouse Gas Emissions</i> , for further details. Therefore, Option A would be consistent with Policy 18 as the program EIR provides mitigation measures to reduce air quality impacts.	to air quality; however, Option A would continue to exceed the EKAPCD thresholds. See Section 4.3, <i>Air Quality</i> , and Section 4.7, <i>Greenhouse Gas Emissions</i> , for further details. Therefore, Option B would be consistent with Policy 18 as the program EIR provides mitigation measures to reduce air quality impacts.
Policy 19. In considering discretionary projects for which an Environmental Impact Report must be prepared pursuant to the California Environmental Quality Act, the appropriate decision making body, as part of its deliberations, will ensure that: <ol style="list-style-type: none"> All feasible mitigation to reduce significant adverse air quality impacts have been adopted; and The benefits of the proposed project outweigh any unavoidable significant adverse effects on air quality found to exist after inclusion of all feasible mitigation. This finding shall be made in a statement of overriding considerations and shall be supported by factual evidence to the extent that such a statement is required pursuant to the California Environmental Quality Act. 	CONSISTENT. This EIR serves to comply with this policy. The EIR has included all feasible mitigation measures associated with air quality and greenhouse gas emissions. Refer to Section 4.3, <i>Air Quality</i> , and Section 4.7, <i>Greenhouse Gas Emissions</i> , for further detail. Refer to Policy 18, above. Therefore, Option A is consistent with Policy 19.	CONSISTENT. This EIR serves to comply with this policy. The EIR has included all feasible mitigation measures associated with air quality and greenhouse gas emissions impacts. Refer to Section 4.3, <i>Air Quality</i> , and Section 4.7, <i>Greenhouse Gas Emissions</i> , for further detail. Refer to Policy 18, above. Therefore, Option B would be consistent with Policy 19.
Policy 21. The County shall support air districts' efforts to reduce PM ₁₀ and PM _{2.5} emissions.	INCONSISTENT. Refer to Policies 18 and 19, above. While the proposed project would not preclude the County from working with the SJVAPCD or the EKAPCD, it would result in significant impacts, even with the implementation of mitigation measures, at the program level. Mitigation measures have been included for this program regarding air quality and greenhouse gas emissions. Refer to Section 4.3, <i>Air Quality</i> , and Section 4.7, <i>Greenhouse Gas Emissions</i> , for further detail. Option A would be inconsistent with Policy 20.	CONSISTENT. Refer to Policies 18 and 19, above. While the proposed project would not preclude the County from working with the SJVAPCD or the EKAPCD, it would result in significant impacts, even with the implementation of mitigation measures, at the program level. Mitigation measures have been included for this program regarding air quality and greenhouse gas emissions. Refer to Section 4.3, <i>Air Quality</i> , and Section 4.7, <i>Greenhouse Gas Emissions</i> , for further detail. Therefore, Option B would be consistent with Policy 21.

Table 4.10-2. Project Consistency with the Kern County General Plan

Goals and Policies	Proposed Project Consistency	
	Option A	Option B
Policy 22. Kern County shall continue to work with the San Joaquin Valley Unified Air Pollution Control District and the Kern County Air Pollution Control District towards air quality attainment with federal, State and local standards.	INCONSISTENT. Refer to Policy 18, above. While the proposed project would not preclude the County from working with the SJVAPCD or the EKAPCD, it would result in significant impacts, even with the implementation of mitigation measures, at the program level. See Section 4.3, <i>Air Quality</i> , and Section 4.7, <i>Greenhouse Gas Emissions</i> , for further details. Therefore, Option A would be inconsistent with Policy 22.	INCONSISTENT. Refer to Policy 18, above. While the proposed project would not preclude the County from working with the SJVAPCD or the EKAPCD, it would result in significant impacts, even with the implementation of mitigation measures, at the program level. See Section 4.3, <i>Air Quality</i> , and Section 4.7, <i>Greenhouse Gas Emissions</i> , for further details. Therefore, Option B would be inconsistent with Policy 22
Policy 23. The County shall continue to implement the local government control measures in coordination with the Kern Council of Governments and the San Joaquin Valley Unified Air Pollution Control District.	CONSISTENT. Refer to Policies 18, 19, 21, and 22, above. The Kern Council of Governments (COG) and the SJVAPCD received a copy of the NOP in 2017 and were given the opportunity to provide input into the EIR. The County will continue to implement air quality regulations and require program mitigation measures. Therefore, Option A would be consistent with Policy 23.	CONSISTENT. Refer to Policies 18, 19, 21, and 22, above. The Kern COG and the SJVAPCD received a copy of the NOP in 2017 and were given the opportunity to provide input into the EIR. The County will continue to implement air quality regulations and require program mitigation measures. Therefore, Option B would be consistent with Policy 23.
1.10.3 Archaeological, Paleontological, Cultural, and Historical Preservation		
Policy 25. The County will promote the preservation of cultural and historic resources which provide ties with the past and constitute a heritage value to residents and visitors.	CONSISTENT. Implementation of Option A would not result in new development beyond which is currently projected. Option A would allow for personal cannabis use and cultivation of up to six plants. Option A would not impact cultural and historic resources as a result of new development, beyond what is already allowed within current plans and policies. Refer to Section 4.5, <i>Cultural and Tribal Cultural Resources</i> , for additional discussion. Therefore, Option A would be consistent with Policy 25.	CONSISTENT. Option B would allow for the development of future cannabis facilities. These future cannabis facilities would be required to comply with development standards outlined in the proposed ordinance, as well as implement mitigation measures to preserve cultural and tribal cultural resources. Refer to Section 4.5, <i>Cultural and Tribal Cultural Resources</i> , for additional discussion. Therefore, Option B would be consistent with Policy 25.
1.10.5 Threatened and Endangered Species		
Policy 27. Threatened or endangered plant and wildlife species should be protected in accordance with State and federal laws.	CONSISTENT. Implementation of Option A would not result in new development beyond which is currently projected. Option A would allow for personal use and cultivation of cannabis of up to six plants. Option A would not impact special-status species as a result of new development. Refer to Section 4.4, <i>Biological Resources</i> , for further details. Therefore, Option A would be consistent with Policy 27.	CONSISTENT. Option B would allow for the development of future cannabis facilities. These future cannabis facilities would be required to comply with development standards outlined in the proposed ordinance, as well as implement mitigation measures to reduce impacts to special-status species. Refer to Section 4.4, <i>Biological Resources</i> , for further details. Therefore, the Option B would be consistent with Policy 27.
Policy 28. County should work closely with State and federal agencies to assure that discretionary projects	CONSISTENT. The Notice of preparation for this EIR was sent to appropriate agencies requesting their input	CONSISTENT. The Notice of preparation for this EIR was sent to appropriate agencies requesting their input on the

Table 4.10-2. Project Consistency with the Kern County General Plan

Goals and Policies	Proposed Project Consistency	
	Option A	Option B
avoid or minimize impacts to fish, wildlife, and botanical resources.	on the biological resources; refer to Appendix A of this EIR. This EIR will be circulated to these agencies and staff will have the opportunity to comment on the biological resources evaluation. In addition, implementation of Option A would not result in new development beyond which is currently projected. Option A would allow for personal use and cultivation of cannabis of up to six plants. Option A would not impact special-status species as a result of new development and there would be no need for coordination because of personal cannabis use and cultivation. Refer to Section 4.4, <i>Biological Resources</i> , for further details. Therefore, Option A would be consistent with Policy 28.	biological resources; refer to Appendix A of this EIR. This EIR will be circulated to these agencies and staff will have the opportunity to comment on the biological resources evaluation. Refer to Section 4.4, <i>Biological Resources</i> , for further details. Therefore, the Option B would be consistent with Policy 28.
Policy 29. The County will seek cooperative efforts with local, State, and federal agencies to protect listed threatened and endangered plant and wildlife species through the use of conservation plans and other methods promoting management and conservation of habitat lands.	CONSISTENT. Refer to Policy 28 above. Refer to Section 4.4, <i>Biological Resources</i> , for further details. Option A would be consistent with Policy 29.	CONSISTENT. Refer to Policy 28, above. Refer to Section 4.4, <i>Biological Resources</i> , for further details. Option B would be consistent with Policy 29.
Policy 31. Under the provisions of the California Environmental Quality Act, the County, as lead agency, will solicit comments from the California Department of Fish and Game and the U.S. Fish and Wildlife Service when an environmental document is prepared.	CONSISTENT. Refer to Policy 28 above. Option A would be consistent with Policy 31	CONSISTENT. Refer to Policy 28 above. Option B would be consistent with Policy 31.
Policy 32. Riparian areas will be managed in accordance with United States Army Corps of Engineers, and the California Department of Fish and Game rules and regulations to enhance drainage, flood control, biological, recreational, and other beneficial uses while acknowledging existing land use patterns.	CONSISTENT. Refer to Policies 28, 29, and 31, as well as 1.4, <i>Physical and Environmental Constraints</i> , Goal 1 and Policies 1 through 3 and 6 through 11, above. Implementation of Option A would not result in new development beyond which is currently projected. Option A would allow for personal use and cultivation of cannabis of up to six plants. Option A would not impact riparian areas as a result of new development. Refer to Section 4.4, <i>Biological Resources</i> , Section 4.6, <i>Geology and Soils</i> , and Section 4.9, <i>Hydrology and Water Quality</i> , for further details. Therefore, Option A would be consistent with Policy 32.	CONSISTENT. Refer to Policies 28, 29, and 31, as well as 1.4, Physical and Environmental constraints, Goal 1 and Policies 1 through 3 and 6 through 11, above. Future cannabis facilities would be required to comply with development standards outlined in the proposed ordinance, as well as implement mitigation measures to reduce impacts to riparian areas. Refer to Section 4.4, <i>Biological Resources</i> , Section 4.6, <i>Geology and Soils</i> , and Section 4.9, <i>Hydrology and Water Quality</i> , for further details. Therefore, Option B would be consistent with Policy 32.
1.10.6 Surface Water and Groundwater		
Policy 34. Ensure that water quality standards are met for	CONSISTENT. Implementation of Option A would not	CONSISTENT. Future cannabis facilities would be

Table 4.10-2. Project Consistency with the Kern County General Plan

Goals and Policies	Proposed Project Consistency	
	Option A	Option B
existing users and future development.	result in new development beyond which is currently projected. Option A would allow for personal use and cultivation of cannabis of up to six plants. Option A would not affect water quality. See Section 4.6, <i>Geology and Soils</i> , Section 4.9, <i>Hydrology and Water Quality</i> , Section 4.13, <i>Public Services</i> , and Section 4.16, <i>Utilities and Service Systems</i> , for further discussion. Therefore, Option A would be consistent with Policy 34.	required to comply with development standards outlined in the proposed ordinance. Mitigation measures would be required to be implemented and would include a SWPPP, when necessary. In addition, Option B would require future cannabis facilities to comply with all applicable federal, State, regional, and local agency water quality protection laws and regulations, and commonly utilized industry standards, including obtaining all applicable stormwater construction permits from the appropriate RWQCB. Therefore, Option B would be consistent with Policy 33.
Policy 40. Encourage utilization of community water systems rather than the reliance on individual wells.	CONSISTENT. Implementation of Option A would not result in new development beyond which is currently projected. Option A would allow for personal cannabis use and cultivation of up to six plants. Option A would not require new water use beyond what is already planned within current plans and policies and that which would be needed for a personal garden. See Section 4.16, <i>Utilities and Service Systems</i> , for further details. Therefore, Option A would be consistent with Policy 40.	CONSISTENT. Under Option B, the majority of water demand would result from future cannabis cultivation activities (indoor and outdoor) and processing and packaging operations. Also, a Water Supply Assessment would be triggered through SB 610 for cannabis facilities employing more than 1,000 persons, occupying more than 40 acres or 500,000 ft ² , or having a water demand equivalent to, or greater than, 500 dwelling units. In addition, mitigation measures would require a future cannabis facility to obtain a will serve letter from the appropriate water district, CSA, CSD, or PUD, or to provide proof of water rights. See Section 4.16, <i>Utilities and Service Systems</i> , for further details. Therefore, Option B would be consistent with Policy 40.
Policy 41. Review development proposals to ensure adequate water is available to accommodate projected growth.	CONSISTENT. Refer to Policy 40, above. Option A would be consistent with Policy 41.	CONSISTENT. Refer to Policy 40, above. Option B would be consistent with Policy 41.
Policy 43. Drainage shall conform to the Kern County Development Standards and the Grading Ordinance.	CONSISTENT. Implementation of Option A would not result in new development beyond which is currently projected. Option A would allow for personal cannabis use and cultivation of up to six plants. No impacts would occur as it would be similar in scale to a personal garden and would not result changes to drainage as a result of ground disturbance. Refer to 1.3, <i>Physical and Environmental Constraints</i> , Policies 6 and 7, above. See Section 4.6, <i>Geology and Soils</i> , Section 4.9, <i>Hydrology and Water Quality</i> , Section 4.13, <i>Public Services</i> , and Section 4.16, <i>Utilities and Service Systems</i> , for further discussion.	CONSISTENT. Under Option B, future development would be required to comply with development standards outlined in the proposed ordinance. In addition, future cannabis facilities would be required to comply with local laws and ordinances, including the Kern County Grading Ordinance. Refer to 1.3, <i>Physical and Environmental Constraints</i> , Policies 6 and 7, above. See Section 4.6, <i>Geology and Soils</i> , Section 4.9, <i>Hydrology and Water Quality</i> , Section 4.13, <i>Public Services</i> , and Section 4.16, <i>Utilities and Service Systems</i> , for further discussion.

Table 4.10-2. Project Consistency with the Kern County General Plan

Goals and Policies	Proposed Project Consistency	
	Option A	Option B
	Systems, for further discussion. Therefore, Option A would be consistent with Policy 43.	Therefore, Option B would be consistent with Policy 43.
Policy 44. Discretionary projects shall analyze watershed impacts and mitigate for construction-related and urban pollutants, as well as alterations of flow patterns and introduction of impervious surfaces as required by the California Environmental Quality Act, to prevent the degradation of the watershed to the extent practical.	CONSISTENT. Refer to Policy 43 and 1.3, <i>Physical and Environmental Constraints</i> , Policy 11, above. See Section 4.6, <i>Geology and Soils</i> , and Section 4.9, <i>Hydrology and Water Quality</i> , for further discussion. Therefore, Option A would be consistent with Policy 44.	CONSISTENT. Refer to Policy 43 and 1.3, <i>Physical and Environmental Constraints</i> , Policy 11, above. See Section 4.6, <i>Geology and Soils</i> , and Section 4.9, <i>Hydrology and Water Quality</i> , for further discussion. Option B would be consistent with Policy 44.
1.10.7 Light and Glare		
Policy 47. Ensure that light and glare from discretionary new development projects are minimized in rural as well as urban areas.	CONSISTENT. Implementation of Option A would not result in new development beyond which is currently projected. Option A would allow for personal cannabis use and cultivation of up to six plants. Option A would not impact light and glare as a result of new development. Refer to Section 4.1, <i>Aesthetics</i> , for further detail. Therefore, Option A would be consistent with Policy 47.	CONSISTENT. Under Option B, future development would be required to comply with development standards outlined in the proposed ordinance. Mitigation measures would require all outdoor and exterior lighting to be the minimum required to meet safety and security standards. All outdoor lighting would be required to comply with the County's Dark Sky Ordinance. Refer to Section 4.1, <i>Aesthetics</i> , for further details. Therefore, Option B would be consistent with Policy 47.
Policy 48. Encourage the use of low-glare lighting to minimize nighttime glare effects on neighboring properties.	CONSISTENT. Refer to Policy 47 above. Option A would be consistent with Policy 47.	CONSISTENT. Refer to Policy 47, above. Option B would be consistent with Policy 48.
1.10.8 Smart Growth		
Policy 49. Discretionary development projects should be encouraged to incorporate innovative or "smart growth" land use planning techniques as design features, as follows: a. Higher Density development, where compatible, to maximize the efficient use of land. b. Mixed use developments that promote reduced vehicle trips by having residential, commercial, and public uses proximate to each other. c. Variety of housing types, including those using energy efficient design, and densities to address Kern County's housing needs. d. Master planned communities that feature interconnected roads, transit stops, sidewalks,	CONSISTENT. Implementation of Option A would not result in new development beyond which is currently projected. Option A would allow for personal cannabis use and cultivation of up to six plants. Option A would not result in a new discretionary development project. The County would continue to evaluate each project for smart growth features. Therefore, Option A would be consistent with Policy 49.	CONSISTENT. Option B does not include mixed use development, high density development, or residential development. Option B does not include a master planned community. Option B does provide for cannabis-related business development. Future development would be required to comply with development standards outlined in the proposed ordinance. These development standards include aspects of smart growth, regarding infrastructure and aesthetics. In addition, mitigation measures provided within this EIR for each individual resource area, which includes also smart growth. Therefore, Option B would be consistent with Policy 49.

Table 4.10-2. Project Consistency with the Kern County General Plan

Goals and Policies	Proposed Project Consistency	
	Option A	Option B
landscaping, and trails to encourage efficient vehicle and pedestrian movement. e. Compact development that conserves open space, agricultural land, floodprone areas, creeks, hillsides, ridge tops, wetlands, and other natural features. f. Adequate infrastructure (i.e. roads, sewer, water, parks, etc.) is provided as a condition of development approval by the project proponent. g. Aesthetically pleasing and unifying design features that promote a visually pleasing environment.		
1.10.10 Oak Tree Conservation		
Policy 65. Oak woodlands and large oak trees shall be protected where possible and incorporated into project developments.	CONSISTENT. Refer to 1.9, <i>Resource</i> , Goals 1, 2, 3, and 5, and Policies 2, 7, 11, 12, and 24, above. Option A would be consistent with policy 65.	CONSISTENT. Refer to 1.9, <i>Resource</i> , Goals 1, 2, 3, and 5, and Policies 2, 7, 11, 12, and 24, above. Option B would be consistent with Policy 65.
Policy 66. Promote the conservation of oak tree woodlands for their environmental value and scenic beauty.	CONSISTENT Refer to Policy 65, and .9, <i>Resource</i> , Goals 1, 2, 3, and 5, and Policies 2, 7, 11, 12, and 24, above. Option A would be consistent with Policy 66.	CONSISTENT. Refer to Policy 65, and .9, <i>Resource</i> , Goals 1, 2, 3, and 5, and Policies 2, 7, 11, 12, and 24, above. Option B would be consistent with Policy 66.
Chapter 2. Circulation Element		
Section 2.1 Introduction.		
Objective 5. Maintain a minimum Level of Service (LOS).	CONSITENT. Option A's generated vehicle trips, while increasing VMT, would not reach the established threshold for further LOS study. Option A would not conflict with applicable plans and ordinances related to the performance of the circulation system. Refer to Section 4.15, <i>Transportation and Traffic</i> , for further details. Therefore, Option A would be consistent with Objective 5.	CONSISTENT. Similar to Option A, Option B's generated vehicle trips would not reach the established threshold for further LOS study. Option B would not conflict with applicable plans and ordinances related to the performance of the circulation system. Refer to Section 4.15, <i>Transportation and Traffic</i> , for further details. Therefore, Option B would be consistent with Objective 5.
2.3.3 Highway Plan		
Goal 5. Maintain a minimum LOS D.	CONSITENT. Refer to Objective 5, above. Option A would be consistent with Goal 5.	CONSISTENT. Refer to Objective 5, above. Option B would be consistent with Goal 5.
2.3.4 Future Growth		
Policy 2. The County should monitor development applications as they relate to traffic estimates developed for this plan. Mitigation is required if development causes affected roadways to fall below LOS D. Utilization of the California Environmental Quality Act (CEQA) process	CONSISTENT. Refer to Objective 5, above. Refer to Section 4.15, <i>Transportation and Traffic</i> , for further details. Therefore, Option A would be consistent with Policy 2.	CONSISTENT. Refer to Objective 5, above. Mitigation measures would be implemented under Option B as they relate to transportation and traffic. Refer to Section 4.15, <i>Transportation and Traffic</i> , for further details. Therefore,

Table 4.10-2. Project Consistency with the Kern County General Plan

Goals and Policies	Proposed Project Consistency	
	Option A	Option B
would help identify alternatives to or mitigation for such developments. Mitigation could involve amending the Land Use, Open Space, and Conservation Element to establish jobs/housing balance if projected trips in any traffic zone exceed trips identified for this Circulation Element. Mitigation could involve exactions to build off-site transportation facilities. These enhancements would reduce traffic congestion to an acceptable level.		Option B would be consistent with Policy 2.
2.5.2 Airport Land Use Compatibility Plan (ALUCP)		
Goal 1. Plan for land uses that are compatible with public airport and military bases and mitigate encroachment issues.	CONSISTENT. Implementation of Option A would not result in new development beyond which is currently projected. Option A would allow for personal cannabis use and cultivation of up to six plants. Option A would not result in a new discretionary development project. The County would continue to evaluate each project for compatibility with the ALUCP. See Section 4.8, <i>Hazards and Hazardous Materials</i> , Section 4.10, <i>Land Use and Planning</i> , and Section 4.15, <i>Transportation and Traffic</i> , for further discussion. Therefore, Option A would be consistent with Goal 1.	CONSISTENT. Under Option B, future development would be required to comply with development standards outlined in the proposed ordinance, including complying with height restrictions within the ALUCP. In addition, mitigation measures would be implemented to ensure compatibility between future cannabis facilities and the County's ALUCP. Refer to Section 4.8, <i>Hazards and Hazardous Materials</i> , Section 4.10, <i>Land Use and Planning</i> , and Section 4.15, <i>Transportation and Traffic</i> , for further discussion. Therefore, Option B would be consistent with Goal 1.
Policy 1 Review land use designations and zoning near public and private airports, Edwards Air Force Base and Naval Air Weapons (NAWS) China Lake for compatibility.	CONSISTENT. Refer to Goal 1, above. Option A would be consistent with Policy 1.	CONSISTENT. Refer to Goal 1, above. Option B would be consistent with Policy 1.
Policy 2. To the extent legally allowable prevent encroachment on public airport and military base operations from incompatible, unmitigated land uses.	CONSISTENT. Refer to Goal 1, above. Option A would be consistent with Policy 2.	CONSISTENT. Refer to Goal 1, above. Option B would be consistent with Policy 2.
2.5.4 Transportation of Hazardous Materials		
Goal 1. Reduce risk to public health from transportation of hazardous materials.	CONSISTENT. Implementation of Option A would not result in new development beyond what is currently projected. Option A would allow for personal cannabis use and cultivation of up to six plants. Option A would not result in a new discretionary development project and therefore would not result in transportation of hazardous materials. See Section 4.8, <i>Hazards and Hazardous Materials</i> , and Section 4.15, <i>Transportation and Traffic</i> , for further discussion. Therefore, Option A would be consistent with Goal 1.	CONSISTENT. Option B would allow for the development of future cannabis businesses and associated facilities. These future cannabis facilities would comply with development standards outlined in the proposed ordinance, as well as implement mitigation measures. Mitigation measures under Option B including requiring future cannabis operations to prepare a Hazardous Materials Business Plan and coordination with the Kern County Health Services Department and the Kern County Planning and Natural Resources Department regarding hazardous materials. See Section 4.8, <i>Hazards and Hazardous</i>

Table 4.10-2. Project Consistency with the Kern County General Plan

Goals and Policies	Proposed Project Consistency	
	Option A	Option B
		<i>Materials, and Section 4.15, Transportation and Traffic, for further discussion. Therefore, Option B would be consistent with Goal 1.</i>
Policy 1. The commercial transportation of hazardous material, identification, and designation of appropriate shipping routes will be in conformance with the adopted Kern County and Incorporated Cities Hazardous Waste Management Plan.	CONSISTENT. Refer to Goal 1 above. Option A would be consistent with Policy 1.	CONSISTENT. Refer to Goal 1, above. Option B would be consistent with Policy 1.
Chapter 3. Noise Element		
Goal 1. Ensure that residents of Kern County are protected from excessive noise and that moderate levels of noise are maintained.	CONSISTENT. Implementation of Option A would not result in new development beyond which is currently projected. Option A would allow for personal cannabis use and cultivation of up to six plants. Option A would not result in an adverse change in noise levels beyond those that already exist. See Section 4.11, <i>Noise</i> , for further discussion. Therefore, Option A would be consistent with Goal 1.	CONSISTENT. Option B would allow for the development of future cannabis businesses and associated facilities. These future cannabis facilities would comply with development standards outlined in the proposed ordinance, as well as implement mitigation measures. The mitigation measures associated with Option B would ensure that residents of Kern County are protected from excessive noise generated by future cannabis related activities. See Section 4.11, <i>Noise</i> , for further discussion. Therefore, Option B would be consistent with Goal 1.
Goal 2. Protect the economic base of Kern County by preventing the encroachment of incompatible land uses near known noise producing roadways, industries, railroads, airports, oil and gas extraction, and other sources.	CONSISTENT. Refer to Goal 1, above; as well as 1.6, <i>Residential</i> , Goal 7; 1.7, <i>Commercial</i> , Goals 1, 2, and 5, and Policies 1 and 3; and 1.8, <i>Industrial</i> , Goals 1, 2, and 3, and Policies 1 and 3; and 1.9, <i>Resource</i> , Goals 1, 2, and 3 and Policies 2 and 24, above. Option A would be consistent with Goal 2.	CONSISTENT. Refer to Goal 1, above; as well as 1.6, <i>Residential</i> , Goal 7; 1.7, <i>Commercial</i> , Goals 1, 2, and 5, and Policies 1 and 3; and 1.8, <i>Industrial</i> , Goals 1, 2, and 3, and Policies 1 and 3; and 1.9, <i>Resource</i> , Goals 1, 2, and 3 and Policies 2 and 24, above. Option B would be consistent with Goal 2.
Policy 1. Review discretionary industrial, commercial, or other noise-generating land use projects for compatibility with nearby noise-sensitive land uses.	CONSISTENT. Refer to Goal 1, above; as well as 1.6, <i>Residential</i> , Goal 7; 1.7, <i>Commercial</i> , Goals 1, 2, and 5, and Policies 1 and 3; and 1.8, <i>Industrial</i> , Goals 1, 2, and 3, and Policies 1 and 3; and 1.9, <i>Resource</i> , Goals 1, 2, and 3 and Policies 2 and 24, above. Option A would be consistent with Policy 1.	CONSISTENT. Refer to Goal 1, above; as well as 1.6, <i>Residential</i> , Goal 7; 1.7, <i>Commercial</i> , Goals 1, 2, and 5, and Policies 1 and 3; and 1.8, <i>Industrial</i> , Goals 1, 2, and 3, and Policies 1 and 3; and 1.9, <i>Resource</i> , Goals 1, 2, and 3 and Policies 2 and 24, above. Option B would be consistent with Policy 1.
Policy 3. Encourage vegetation and landscaping along roadways and adjacent to other noise sources in order to increase absorption of noise.	CONSISTENT. Refer to Goal 1, above; as well as 1.6, <i>Residential</i> , Goal 7; 1.7, <i>Commercial</i> , Goals 1, 2, 5, and 6, and Policies 1, 3, and 4; and 1.8, <i>Industrial</i> , Goals 1, 2, and 3, and Policies 1 and 3; 1.9, <i>Resource</i> , Goals 1, 2, and 3 and Policies 2 and 24, and 2.5.2, <i>Airport Land Use Compatibility Plan</i> , Goal 1 and Policies 1 and 2, above. Option A would be consistent with Policy 3.	CONSISTENT. Refer to Goal 1, above; as well as 1.6, <i>Residential</i> , Goal 7; 1.7, <i>Commercial</i> , Goals 1, 2, 5, and 6, and Policies 1, 3, and 4; and 1.8, <i>Industrial</i> , Goals 1, 2, and 3, and Policies 1 and 3; 1.9, <i>Resource</i> , Goals 1, 2, and 3 and Policies 2 and 24, and 2.5.2, <i>Airport Land Use Compatibility Plan</i> , Goal 1 and Policies 1 and 2, above. Option B would be consistent with Policy 3.

Table 4.10-2. Project Consistency with the Kern County General Plan

Goals and Policies	Proposed Project Consistency	
	Option A	Option B
Policy 4. Utilize good land use planning principles to reduce conflicts related to noise emissions.	CONSISTENT. Refer to Goal 1, above; as well as 1.6, <i>Residential</i> , Goal 7; 1.7, <i>Commercial</i> , Goals 1, 2, and 5, and Policies 1 and 3; and 1.8, <i>Industrial</i> , Goals 1, 2, and 3, and Policies 1 and 3; 1.9, <i>Resource</i> , Goals 1, 2, and 3 and Policies 2 and 24, above. Option A would be consistent with Policy 4.	CONSISTENT. Refer to Goal 1, above; as well as 1.6, <i>Residential</i> , Goal 7; 1.7, <i>Commercial</i> , Goals 1, 2, and 5, and Policies 1 and 3; and 1.8, <i>Industrial</i> , Goals 1, 2, and 3, and Policies 1 and 3; 1.9, <i>Resource</i> , Goals 1, 2, and 3 and Policies 2 and 24, above. Option B would be consistent with Policy 4.
Policy 6. Ensure that new development in the vicinity of airports will be compatible with existing and projected airport noise levels as set forth in the ALUCP.	CONSISTENT. Refer to Goal 1, above; as well as 1.6, <i>Residential</i> , Goal 7; 1.7, <i>Commercial</i> , Goals 1, 2, 5, and 6, and Policies 1, 3, and 4; and 1.8, <i>Industrial</i> , Goals 1, 2, and 3, and Policies 1 and 3; 1.9, <i>Resource</i> , Goals 1, 2, and 3 and Policies 2 and 24, and 2.5.2, <i>Airport Land Use Compatibility Plan</i> , Goal 1 and Policies 1 and 2, above. Option A would be consistent with Goal 6.	CONSISTENT. Refer to Goal 1, above; as well as 1.6, <i>Residential</i> , Goal 7; 1.7, <i>Commercial</i> , Goals 1, 2, 5, and 6, and Policies 1, 3, and 4; and 1.8, <i>Industrial</i> , Goals 1, 2, and 3, and Policies 1 and 3; 1.9, <i>Resource</i> , Goals 1, 2, and 3 and Policies 2 and 24, and 2.5.2, <i>Airport Land Use Compatibility Plan</i> , Goal 1 and Policies 1 and 2, above. Option B would be consistent with Policy 6.
Policy 7. Employ the best available methods of noise control.	CONSISTENT Refer to Goals 1 and 2, and Policies 1, 3, 4, and 6, above; as well as 1.6, <i>Residential</i> , Goal 7; 1.7, <i>Commercial</i> , Goals 1, 2, and 5, and Policies 1 and 3; and 1.8, <i>Industrial</i> , Goals 1, 2, and 3, and Policies 1 and 3; 1.9, <i>Resource</i> , Goals 1, 2, and 3 and Policies 2 and 24, above. Option A would be consistent with Policy 7.	CONSISTENT. Refer to Goals 1 and 2, and Policies 1, 3, 4, and 6, above; as well as 1.6, <i>Residential</i> , Goal 7; 1.7, <i>Commercial</i> , Goals 1, 2, and 5, and Policies 1 and 3; and 1.8, <i>Industrial</i> , Goals 1, 2, and 3, and Policies 1 and 3; 1.9, <i>Resource</i> , Goals 1, 2, and 3 and Policies 2 and 24, above. Option B would be consistent with Policy 7.
Chapter 4. Safety Element		
4.1 Introduction		
Goal 1. Minimize injuries and loss of life and reduce property damage.	CONSISTENT. Refer to 1.3, <i>Physical and Environmental Constraints</i> , Goal 1 and Policies 1, 2, 3, and 6 through 11; 1.4, <i>Public Facilities and Services</i> , Policies 6 and 7; 1.10.1, <i>General Provisions</i> , <i>Public Services and Facilities</i> , Goal 1 and Policies 8 and 15, above. Implementation of Option A would not result in new development beyond which is currently projected. Option A would not result in new development within unincorporated Kern County. See EIR Section 4.1 through 4.16, specifically Section 4.6, <i>Geology and Soils</i> , and Section 4.8, <i>Hazards and Hazardous Materials</i> , for further discussion. Therefore, Option A would be consistent with Goal 1.	CONSISTENT. Refer to 1.3, <i>Physical and Environmental Constraints</i> , Goal 1 and Policies 1, 2, 3, and 6 through 11; 1.4, <i>Public Facilities and Services</i> , Policies 6 and 7; 1.10.1, <i>General Provisions</i> , <i>Public Services and Facilities</i> , Goal 1 and Policies 8 and 15, above. Option B would include development standards and require mitigation measures to reduce impacts of future cannabis related facilities as related to hazards, including injuries and loss of life and reduce property damage. See EIR Section 4.1 through 4.16, specifically Section 4.6, <i>Geology and Soils</i> , and Section 4.8, <i>Hazards and Hazardous Materials</i> , for further discussion. Therefore, Option B would be consistent with Goal 1.
Goal 2. Reduce economic and social disruption resulting from earthquakes, fire, flooding, and other geologic hazards by assuring the continuity of vital emergency	CONSISTENT. Refer to Goal 1, above. See Section 4.6, <i>Geology and Soils</i> , Section 4.8, <i>Hazards and Hazardous Materials</i> , Section 4.9, <i>Hydrology and Water</i>	CONSISTENT. Refer to Goal 1, above. See Section 4.6, <i>Geology and Soils</i> , Section 4.8, <i>Hazards and Hazardous Materials</i> , Section 4.9, <i>Hydrology and Water Quality</i> ,

Table 4.10-2. Project Consistency with the Kern County General Plan

Goals and Policies	Proposed Project Consistency	
	Option A	Option B
public services and functions.	<i>Quality, Section 4.13, Public Services, and Section 4.16, Utilities and Service Systems, for further discussion. Option A would be consistent with Goal 2.</i>	<i>Section 4.13, Public Services, and Section 4.16, Utilities and Service Systems, for further discussion. Option B would be consistent with Goal 2.</i>
Goal 3. Assist in the allocation of public resources in Kern County to develop information regarding geologic, fire, and flood safety hazards and to develop a systematic approach toward the project of public health, safety, and welfare from such hazards.	<i>CONSISTENT. Refer to Goal 1, above; as well as Refer to 1.3, Physical and Environmental Constraints, Goal 1 and Policies 1, 2, 3, and 6 through 11; 1.4, Public Facilities and Services, Policies 6 and 7; 1.10.1, General Provisions, Public Services and Facilities, Goal 1 and Policies 8 and 15, above. See Section 4.6, Geology and Soils, Section 4.8, Hazards and Hazardous Materials, Section 4.9, Hydrology and Water Quality, Section 4.13, Public Services, and Section 4.16, Utilities and Service Systems, for further discussion. Option A would be consistent with Goal 3.</i>	<i>CONSISTENT. Refer to Goal 1, above; as well as Refer to 1.3, Physical and Environmental Constraints, Goal 1 and Policies 1, 2, 3, and 6 through 11; 1.4, Public Facilities and Services, Policies 6 and 7; 1.10.1, General Provisions, Public Services and Facilities, Goal 1 and Policies 8 and 15, above. See Section 4.6, Geology and Soils, Section 4.8, Hazards and Hazardous Materials, Section 4.9, Hydrology and Water Quality, Section 4.13, Public Services, and Section 4.16, Utilities and Service Systems, for further discussion. Option B would be consistent with Goal 3.</i>
Goal 5. Ensure the availability and effective response of emergency services following a catastrophic event.	<i>CONSISTENT. Refer to Goals 1, 2, and 3, above. Option A would be consistent with Goal 5.</i>	<i>CONSISTENT. Refer to Goals 1, 2, and 3, above. Option B would be consistent with Goal 5.</i>
Goal 7. Ensure that adequate emergency services and facilities are available to the residents of Kern County through the coordination of planning and development of emergency facilities and services.	<i>CONSISTENT. Refer to Goal 1, 2, and 3, above. Option A would be consistent with Goal 7.</i>	<i>CONSISTENT. Refer to Goals 1, 2, and 3, above. Option B would be consistent with Goal 7.</i>
Goal 8. Reduce the public's exposure to fire, explosion, blowout, and other hazards associated with the accidental release of crude oil, natural gas, and hydrogen sulfide gas.	<i>CONSISTENT. Refer to Goal 1, 2, and 3, above. Option A would be consistent with Goal 8.</i>	<i>CONSISTENT. Refer to Goals 1, 2, and 3, above. Option B would be consistent with Goal 8.</i>
4.2 General Policies and Implementation Measure, Which Apply to More than One Safety Constraint		
Policy 5. The adopted Kern County, California Multi-Hazard Mitigation Plan is incorporated by reference. This multi-jurisdictional plan, approved in compliance with the "Disaster Mitigation Act of 2000, provides long-term planning to reduce the impacts of future disasters."	<i>CONSISTENT. Refer to 1.3, Physical and Environmental Constraints, Goal 1 and Policies 1, 2, 3, and 6 through 11; 1.4, Public Facilities and Services, Policies 6 and 7; 1.10.1, General Provisions, Public Services and Facilities, Goal 1 and Policies 8 and 15, above. Refer to See Section 4.6, Geology and Soils, Section 4.8, Hazards and Hazardous Materials, Section 4.9, Hydrology and Water Quality, Section 4.13, Public Services, and Section 4.16, Utilities and Service Systems, for further discussion. Option A would be consistent with Policy 5.</i>	<i>CONSISTENT. Refer to 1.3, Physical and Environmental Constraints, Goal 1 and Policies 1, 2, 3, and 6 through 11; 1.4, Public Facilities and Services, Policies 6 and 7; 1.10.1, General Provisions, Public Services and Facilities, Goal 1 and Policies 8 and 15, above. See Section 4.6, Geology and Soils, Section 4.8, Hazards and Hazardous Materials, Section 4.9, Hydrology and Water Quality, Section 4.13, Public Services, and Section 4.16, Utilities and Service Systems, for further discussion. Option B would be consistent with Policy 5.</i>

Table 4.10-2. Project Consistency with the Kern County General Plan

Goals and Policies	Proposed Project Consistency	
	Option A	Option B
4.3 Seismically Induced Surface Rupture, Ground Shaking, and Ground Failure		
Policy 1. The County shall require development for human occupancy to be placed in a location away from an active earthquake fault in order to minimize safety concerns.	CONSISTENT. Refer to 1.3, <i>Physical and Environmental Constraints</i> , Goal 1 and Policies 1, 2, 3, and 6 through 11, above. Implementation of Option A would not result in new development beyond what is currently projected. Option A would allow for personal cannabis use and cultivation of up to six plants. Option A would not result in new development within unincorporated Kern County. See EIR Section 4.1 through 4.16, specifically Section 4.6, <i>Geology and Soils</i> , for further discussion. Therefore, Option A would be consistent with Policy 1.	CONSISTENT. Refer to 1.3, <i>Physical and Environmental Constraints</i> , Goal 1 and Policies 1, 2, 3, and 6 through 11, above. Option B would update the Kern County Zoning Ordinance as it relates to future cannabis facility development. Option B would include development standards and require mitigation measures to reduce impacts if future cannabis related facilities are proposed within, or in close proximity to, an active earthquake fault. See EIR Section 4.1 through 4.16, specifically Section 4.6, <i>Geology and Soils</i> , for further discussion. Option B would be consistent with Policy 1.
4.5 Landslides, Subsidence, Seiche, and Liquefaction		
Policy 1. Determine the liquefaction potential at sites in areas of shallow groundwater (Map Code 2.3) prior to discretionary development and determine specific mitigation to be incorporated into the foundation design, as necessary, to prevent or reduce damage from liquefaction in an earthquake.	CONSISTENT. Refer to 1.3, <i>Physical and Environmental Constraints</i> , Goal 1 and Policies 1, 2, 3, and 6 through 11, above. Implementation of Option A would not result in new development beyond what is currently projected. Option A would allow for personal cannabis use and cultivation of up to six plants. Option A would not result in new development within unincorporated Kern County. See Section 4.6, <i>Geology and Soils</i> , Section 4.8, <i>Hazards and Hazardous Materials</i> , and Section 4.9, <i>Hydrology and Water Quality</i> , for further discussion. Therefore, Option A would be consistent with Policy 1.	CONSISTENT. Refer to 1.3, <i>Physical and Environmental Constraints</i> , Goal 1 and Policies 1, 2, 3, and 6 through 11, above. Option B would include development standards and require mitigation measures to reduce the potential of Option B to result in significant damage from liquefaction. See Section 4.6, <i>Geology and Soils</i> , Section 4.8, <i>Hazards and Hazardous Materials</i> , and Section 4.9, <i>Hydrology and Water Quality</i> , for further discussion. Therefore, Option B would be consistent with Policy 1.
Policy 3. Reduce potential for exposure of residential, commercial, and industrial development to hazards of landslide, land subsidence, liquefaction, and erosion.	CONSISTENT. Refer to 1.3, <i>Physical and Environmental Constraints</i> , Goal 1 and Policies 1, 2, 3, and 6 through 11, above. Implementation of Option A would not result in new development beyond what is currently projected. Option A would allow for personal cannabis use and cultivation of up to six plants. Option A would not result in new development within unincorporated Kern County. See Section 4.6, <i>Geology and Soils</i> , Section 4.8, <i>Hazards and Hazardous Materials</i> , and Section 4.9, <i>Hydrology and Water Quality</i> , for further discussion. Therefore, Option A would be consistent with Policy 3.	CONSISTENT. Refer to 1.3, <i>Physical and Environmental Constraints</i> , Goal 1 and Policies 1, 2, 3, and 6 through 11, above. Option B would include development standards and require mitigation measures to reduce the potential of exposing commercial, agricultural, and industrial development to hazards of landslide, land subsidence, liquefaction, and erosion. See Section 4.6, <i>Geology and Soils</i> , Section 4.8, <i>Hazards and Hazardous Materials</i> , and Section 4.9, <i>Hydrology and Water Quality</i> , for further discussion. Therefore, Option B would be consistent with Policy 3.

Table 4.10-2. Project Consistency with the Kern County General Plan

Goals and Policies	Proposed Project Consistency	
	Option A	Option B
4.6 Wildland and Urban Fire		
Policy 1. Require discretionary projects to assess impacts on emergency services and facilities.	CONSISTENT. Refer to 1.4, <i>Public Facilities and Services</i> , Goals 1, 2, 3, 5, 9, and 10, and Policies 1, 2, 3, 6, 7, and 13, above. Implementation of Option A would not result in new development beyond which is currently projected. Option A would allow for personal cannabis use and cultivation of up to six plants. Option A would not result in new development within unincorporated Kern County. See Section 4.8, <i>Hazards and Hazardous Materials</i> , Section 4.13, <i>Public Services</i> , and Section 4.16, <i>Utilities and Service Systems</i> , for further discussion. Therefore, Option A would be consistent with Policy 1.	CONSISTENT. Refer to 1.4, <i>Public Facilities and Services</i> , Goals 1, 2, 3, 5, 9, and 10, and Policies 1, 2, 3, 6, 7, and 13, above. Option B would require mitigation measures associated with public services and utilities, including fire protection services. In addition, Option B would provide development standards and any future cannabis facility would also be required to comply with all existing federal, State, and local building and fire codes. See Section 4.8, <i>Hazards and Hazardous Materials</i> , Section 4.13, <i>Public Services</i> , and Section 4.16, <i>Utilities and Service Systems</i> , for further discussion. Therefore, Option B would be consistent with Policy 1.
Policy 3. The County will encourage the promotion of fire prevention methods to reduce service protection costs and costs to taxpayers.	CONSISTENT. Refer to Policy 1, above; as well as 1.4, <i>Public Facilities and Services</i> , Goals 1, 2, 3, 5, 9, and 10, and Policies 1, 2, 3, 6, 7, and 13, above. See Section 4.8, <i>Hazards and Hazardous Materials</i> , Section 4.13, <i>Public Services</i> , and Section 4.16, <i>Utilities and Service Systems</i> , for further discussion. Option A would be consistent with Policy 3.	CONSISTENT. Refer to Policy 1, above; as well as 1.4, <i>Public Facilities and Services</i> , Goals 1, 2, 3, 5, 9, and 10, and Policies 1, 2, 3, 6, 7, and 13, above. See Section 4.8, <i>Hazards and Hazardous Materials</i> , Section 4.13, <i>Public Services</i> , and Section 4.16, <i>Utilities and Service Systems</i> , for further discussion. Option B would be consistent with Policy 3.
Policy 4. Ensure that new development of properties have sufficient access for emergency vehicles and for the evacuation of residents.	CONSISTENT. Refer to Policy 1, above; as well as 1.4, <i>Public Facilities and Services</i> , Goals 1, 2, 3, 5, 9, and 10, and Policies 1, 2, 3, 6, 7, and 13, above. See Section 4.8, <i>Hazards and Hazardous Materials</i> , Section 4.13, <i>Public Services</i> , and Section 4.16, <i>Utilities and Service Systems</i> , for further discussion. Option A would be consistent with Policy 4.	CONSISTENT. Refer to Policy 1, above; as well as 1.4, <i>Public Facilities and Services</i> , Goals 1, 2, 3, 5, 9, and 10, and Policies 1, 2, 3, 6, 7, and 13, above. See Section 4.8, <i>Hazards and Hazardous Materials</i> , Section 4.13, <i>Public Services</i> , and Section 4.16, <i>Utilities and Service Systems</i> , for further discussion. Option B would be consistent with Policy 4.
Policy 6. All discretionary projects shall comply with the adopted Fire Code and the requirements of the Fire Department.	CONSISTENT. Refer to Policy 1, above; as well as 1.4, <i>Public Facilities and Services</i> , Goals 1, 2, 3, 5, 9, and 10, and Policies 1, 2, 3, 6, 7, and 13, above. See Section 4.8, <i>Hazards and Hazardous Materials</i> , Section 4.13, <i>Public Services</i> , and Section 4.16, <i>Utilities and Service Systems</i> , for further discussion. Option A would be consistent with Policy 6.	CONSISTENT. Refer to Policy 1, above; as well as 1.4, <i>Public Facilities and Services</i> , Goals 1, 2, 3, 5, 9, and 10, and Policies 1, 2, 3, 6, 7, and 13, above. See Section 4.8, <i>Hazards and Hazardous Materials</i> , Section 4.13, <i>Public Services</i> , and Section 4.16, <i>Utilities and Service Systems</i> , for further discussion. Option B would be consistent with Policy 6.
4.9 Hazardous Materials		
Policy 2. Innovative technologies to manage hazardous waste streams generated in Kern County will be	CONSISTENT. Refer to 1.4, <i>Public Facilities and Services</i> , Goals 9 and 10, and Policy 1; and 2.5.4,	CONSISTENT. Refer to 1.4, <i>Public Facilities and Services</i> , Goals 9 and 10, and Policy 1; and 2.5.4,

Table 4.10-2. Project Consistency with the Kern County General Plan

Goals and Policies	Proposed Project Consistency	
	Option A	Option B
encouraged.	<p><i>Transportation of Hazardous Materials</i>, Goal 1 and Policy 1, above. Implementation of Option A would not result in new development beyond which is currently projected. Option A would allow for personal cannabis use and cultivation of up to six plants. Option A would not result in new development within unincorporated Kern County. See Section 4.8, <i>Hazards and Hazardous Materials</i>, Section 4.13, <i>Public Services</i>, Section 4.15, <i>Transportation and Traffic</i>, and Section 4.16, <i>Utilities and Service Systems</i>, for further discussion. Therefore, Option A would be consistent with Policy 1.</p>	<p><i>Transportation of Hazardous Materials</i>, Goal 1 and Policy 1, above. Option B would provide development standards for future cannabis facilities and would require the implementation of mitigation measures, including requiring a Hazardous Materials Business Plan and measures ensuring that the use of pesticides, herbicides, rodenticides, and fertilizers are handled, used and disposed of properly. See Section 4.8, <i>Hazards and Hazardous Materials</i>, Section 4.13, <i>Public Services</i>, Section 4.15, <i>Transportation and Traffic</i>, and Section 4.16, <i>Utilities and Service Systems</i>, for further discussion. Therefore, Option B would be consistent with Policy 1.</p>

Table 4.10-3. Project Consistency with the Metropolitan Bakersfield General Plan

Goals and Policies	Proposed Project Consistency	
	Option A	Option B
METROPOLITAN BAKERSFIELD GENERAL PLAN		
Chapter II – Land Use Element		
Goal 2. Accommodate new development which provides a full mix of uses to support its population.	<p>CONSISTENT. Implementation of Option A would not result in new development beyond what is currently projected. Option A would allow for personal cannabis use and cultivation of up to six plants. Option A would require all medical cannabis dispensaries within unincorporated Kern County to cease operation over a one- to two-year period to allow for amortization. Certain dispensary facilities that opened after the establishment of the County's moratorium would be required to cease operation immediately. Option A would not accommodate new development related to the future cannabis industry resulting from the passing of Proposition 64; however, it would not preclude other new development within unincorporated Kern County or the Metropolitan Bakersfield Area. Refer to Chapter 3, <i>Project Description</i>, and Appendix K, <i>Fiscal Analysis</i>, for further details. Therefore, Option A would be consistent with Goal 2.</p>	<p>CONSISTENT. Option B would update the Kern County Zoning Ordinance as it relates to future cannabis facility development. Option B would provide guidance for commercial cannabis cultivation, processing/packaging, and sales facilities to accommodate the future cannabis industry resulting from the passing of Proposition 64. Refer to Chapter 3, <i>Project Description</i>, and Appendix K, <i>Fiscal Analysis</i>, for further details. Therefore, the Option B would be consistent with Goal 2.</p>
Goal 3. Accommodate new development which is compatible with and complements existing land uses	<p>CONSISTENT. Implementation of Option A would not result in new development beyond what is currently projected. Option A would allow for personal cannabis use and cultivation of up to six plants. Option A would require all medical cannabis dispensaries within unincorporated Kern County to cease operation over a one- to two-year period to allow for amortization. Certain dispensary facilities that opened after the establishment of the County's moratorium would be required to cease operation immediately. Option A would not accommodate new development related to the future cannabis industry resulting from the passing of Proposition 64; however, it would not preclude other development as outlined in both the KCGP and MBGP. Refer to Chapter 3, <i>Project Description</i>, and Appendix K, <i>Fiscal Analysis</i>, for further details. Option A would be consistent with Goal 3.</p>	<p>CONSISTENT. Refer to Goal 2, above. Option B would update the Kern County Zoning Ordinance as it relates to future cannabis facility development. Option B would provide guidance for commercial cannabis cultivation, processing/packaging, and sales facilities to ensure compatible land uses within the Metropolitan Bakersfield Area and unincorporated Kern County. Refer to Chapter 3, <i>Project Description</i>, and Appendix K, <i>Fiscal Analysis</i>, for further details. Therefore, the Option B would be consistent with Goal 3.</p>
Goal 4. Accommodate new development which channels	CONSISTENT. Refer to Goals 2 and 3, above; as well as	CONSISTENT. Refer to Goals 2 and 3, above; as well as

Table 4.10-3. Project Consistency with the Metropolitan Bakersfield General Plan

Goals and Policies	Proposed Project Consistency	
	Option A	Option B
land uses in a phased, orderly manner and is coordinated with the provision of infrastructure and public improvements.	KCGP 1.4, <i>Public Facilities and Services</i> , Goals 1, 2, 3, 5, 9, and 10, and Policies 1, 2, 3, 6, 7, and 13, in Table 4.10-2. Option A would not result in new development within unincorporated Kern County. Future development is expected to proceed in a phased, orderly manner and is coordinated with the provision of infrastructure and public improvements. See Section 4.10, <i>Land Use and Planning</i> , Section 4.13, <i>Public Services</i> , and Section 4.16, <i>Utilities and Service Systems</i> , for further details. Therefore, Option A would be consistent with Goal 4.	KCGP 1.4, <i>Public Facilities and Services</i> , Goals 1, 2, 3, 5, 9, and 10, and Policies 1, 2, 3, 6, 7, and 13, in Table 4.10-2. Option B would provide guidance for commercial cannabis cultivation, processing/packaging, and sales facilities to ensure compatible land uses within the Metropolitan Bakersfield Area and unincorporated Kern County. See Section 4.10, <i>Land Use and Planning</i> , Section 4.13, <i>Public Services</i> , and Section 4.16, <i>Utilities and Service Systems</i> , for further details. Therefore, Option B would be consistent with Goal 4.
Goal 6. Accommodate new development that is sensitive to the natural environment, and accounts for environmental hazards.	CONSISTENT. Refer to KCGP 1.3, <i>Physical and Environmental Constraints</i> , Goal 1 and Policies 1, 2, 3 and 6 through 11; 1.5, <i>Special Treatment Areas</i> , Policy 5; 1.9, <i>Resource</i> , Goals 1, 2, 3, and 5, and Policies 2, 7, 11, 12, and 2, in Table 4.10-2. Option A would not result in new development within unincorporated Kern County. See Sections 4.1 through 4.16 of this EIR, regarding the individual resources analyzed, for further discussion. Option A would be consistent with Goal 6.	CONSISTENT. Refer to KCGP 1.3, <i>Physical and Environmental Constraints</i> , Goal 1 and Policies 1, 2, 3 and 6 through 11; 1.5, <i>Special Treatment Areas</i> , Policy 5; 1.9, <i>Resource</i> , Goals 1, 2, 3, and 5, and Policies 2, 7, 11, 12, and 2, in Table 4.10-2. Option B would update the Kern County Zoning Ordinance as it relates to future cannabis facility development. Option B includes development standards and would require mitigation measures to minimize effects on the natural environment and account for environmental hazards. See Sections 4.1 through 4.16 of this EIR, regarding the individual resources analyzed, for further discussion. Option B would be consistent with Goal 6.
Goal 7. Establish a built environment which achieves a compatible functional and visual relationship among individual buildings and sites.	CONSISTENT. Implementation of Option A would not result in new development beyond what is currently projected. Option A would not allow future cannabis facilities and activities beyond what is allowed under Proposition 64 regarding personal cultivation of up to six plants. Option A would not result in development beyond what is already planned within current plans and policies, including the MBGP. See Chapter 3.0, <i>Project Description</i> , and Section 4.1, <i>Aesthetics</i> , for further discussion. Therefore, Option A would be consistent with Goal 7.	CONSISTENT. Option B would regulate the location, operation, and establishment of future cannabis facilities. Option B would not change the amount of land designated for a specific land use, but rather, would guide development of the future cannabis industry. Option B would require compliance with development standards as well as implementation of mitigation measures. In addition, Proposition 64 requires screening of cultivation areas. See Chapter 3, <i>Project Description</i> , and Section 4.1, <i>Aesthetics</i> , for further details. Therefore, Option B would be consistent with Goal 7.
Goal 8. Target growth companies that meet clean air requirements, and create sustainable employment in jobs paying higher wages.	CONSISTENT. Refer to Goals 2, 3, 4, 6, and 7, above. Option A would be consistent with Goal 8.	CONSISTENT. Refer to Goals 2, 3, 4, 6, and 7, above. Therefore, Option B would be consistent with Goal 8.
Commercial Development		

Table 4.10-3. Project Consistency with the Metropolitan Bakersfield General Plan

Goals and Policies	Proposed Project Consistency	
	Option A	Option B
Policy 16. Allow for the development of a variety of commercial uses, including those which serve residents (groceries, clothing, etc.), highway users, and tourists-visitors.	CONSISTENT. Refer to Goals 2, 3, 4, 6, 7, and 8, above. Option A would be consistent with Policy 16.	CONSISTENT. Refer to Goals 2, 3, 4, 6, 7, and 8, above. Option B would be consistent with Policy 16.
Policy 19. Allow for the intensification and development of existing commercial areas in an infill fashion.	CONSISTENT. Refer to Goals 2, 3, 4, 6, 7, and 8, above. Option A would be consistent with Policy 19.	CONSISTENT. Refer to Goals 2, 3, 4, 6, 7, and 8, above. Option B includes development standards, which identify setbacks between cannabis facilities and specific land uses. See Chapter 3.0, <i>Project Description</i> , and Section 4.10, <i>Land Use and Planning</i> , for further discussion. Therefore, Option B would be consistent with Policy 19.
Policy 25. Provide for infill of commercial land uses to be compatible with the scale and character of existing commercial districts and corridors.	CONSISTENT. Refer to Policy 19, above. Refer to Appendix B of this EIR for the full text of the proposed Kern County Cannabis Land Use Ordinance under Option A. Therefore, Option A would be consistent with Policy 25.	CONSISTENT. Refer to Policy 19. Above. Option B includes development standards. Refer to Appendix C of this EIR for the full text of the proposed Kern County Cannabis Land Use Ordinance under Option B. Therefore, Option B would be consistent with Policy 25.
Policy 26. Encourage adjacent commercial land uses to be of compatible height, setback, color and materials.	CONSISTENT. Refer to Policies 16, 19, and 25, above. Option A would be consistent with Policy 26.	CONSISTENT. Refer to Policy 16, 19, and 25, above. Refer to Appendix C of this EIR for the full text of the proposed Kern County Cannabis Land Use Ordinance under Option B. Option B would be consistent with Policy 26.
Policy 27. Require that new commercial uses maintain visual compatibility with single-family residences in areas designated for historic preservation.	CONSISTENT. Refer to Policies 16, 19, and 25, above. Also refer to KCGP 1.6, <i>Residential</i> , Goal 7, 1.7, <i>Commercial</i> , Goal 1, 2, 3, 5, and 6, and Policies 1, 3, 4, 7, and 8, and 1.10.3, <i>Archaeological, Paleontological, Cultural, and Historical Preservation</i> , Policy 25, in Table 4.10-2. See Section 4.5, <i>Cultural and Tribal Cultural Resources</i> , for further details. Option A would be consistent with Policy 27.	CONSISTENT. Refer to Policies 16, 19, and 25, above. Also refer to KCGP 1.6, <i>Residential</i> , Goal 7, 1.7, <i>Commercial</i> , Goal 1, 2, 3, 5, and 6, and Policies 1, 3, 4, 7, and 8, and 1.10.3, <i>Archaeological, Paleontological, Cultural, and Historical Preservation</i> , Policy 25, in Table 4.10-2. Option B includes development standards and mitigation measures to ensure compatibility with adjacent land uses. See Section 4.5, <i>Cultural and Tribal Cultural Resources</i> , for further details. Option B would be consistent with Policy 27.
Policy 28. Require that commercial development provide design features such as screen walls, landscaping and height, setback and lighting restrictions between the boundaries of adjacent residential land use designations so as to reduce impacts on residences due to noise, traffic, parking, and differences in scale.	CONSISTENT. Refer to Goals 2, 3, 4, 6, 7, and 8, and Policies 16, 19, 25, 26, and 27 above. See Section 4.1, <i>Aesthetics</i> , Section 4.10, <i>Land Use and Planning</i> , Section 4.11, <i>Noise</i> , and Section 4.15, <i>Transportation and Traffic</i> , for further detail. Therefore, Option A would be consistent with Policy 28.	CONSISTENT. Refer to Goals 2, 3, 4, 6, 7, and 8, and Policies 16, 19, 25, 26, and 27 above. Option B includes development standards as well as requires mitigation measures regarding aesthetics, noise, and traffic impacts. See Section 4.1, <i>Aesthetics</i> , Section 4.10, <i>Land Use and Planning</i> , Section 4.11, <i>Noise</i> , and Section 4.15, <i>Transportation and Traffic</i> , for further detail. Option B would be consistent with Policy 28.

Table 4.10-3. Project Consistency with the Metropolitan Bakersfield General Plan

Goals and Policies	Proposed Project Consistency	
	Option A	Option B
Policy 30. Street frontages along all new commercial development shall be landscaped.	CONSISTENT. Refer to Goals 2, 3, 4, 6, 7, and 8, and Policies 16, 19, 25, 26, 27, and 28, above. Option A would be consistent with Policy 30.	CONSISTENT. Refer to Goals 2, 3, 4, 6, 7, and 8, and Policies 16, 19, 25, 26, 27, and 28, above. Option B would be consistent with Policy 30.
Industrial Development		
Policy 31. Allow for a variety of industrial uses, including land-extensive mineral extraction and processing, heavy manufacturing, light manufacturing, warehousing and distribution, transportation-related, and research and development uses.	CONSISTENT. Refer to Goals 2, 3, 4, 6, 7, and 8, above. Option A would be consistent with Policy 31.	CONSISTENT. Refer to Goals 2, 3, 4, 6, 7, and 8, above. Option B would be consistent with Policy 31.
Policy 32. Protect existing industrial designations from incompatible land use intrusions.	CONSISTENT. Refer to Goals 2, 3, 4, 6, 7, and 8, above. Option A would be consistent with Policy 32.	CONSISTENT. Refer to Goals 2, 3, 4, 6, 7, and 8, above. Option B would regulate the location, operation, and establishment of future cannabis facilities. Option B would not change the amount of land designated for a specific land use, but rather, would guide development of the future cannabis industry. Option B would require compliance with development standards as well as implementation of mitigation measures. Therefore, Option B would be consistent with Policy 32.
Policy 33. Encourage the efficient use of existing industrial land uses through consolidation of building and storage facilities.	CONSISTENT. Refer to Goals 2, 3, 4, 6, 7, and 8, above. Option A would be consistent with Policy 33.	CONSISTENT. Refer to Goals 2, 3, 4, 6, 7, and 8, above. Option B would regulate the location, operation, and establishment of future cannabis facilities. Option B would not change the amount of land designated for a specific land use, but rather, would guide development of the future cannabis industry. Option B would require compliance with development standards as well as implementation of mitigation measures. Therefore, Option B would be consistent with Policy 33.
Policy 34. Provide for the clustering of new industrial development adjacent to existing industrial uses and along major transportation corridors.	CONSISTENT. Refer to Goals 2, 3, 4, 6, 7, and 8, above. Option A would be consistent with Policy 34.	CONSISTENT. Refer to Goals 2, 3, 4, 6, 7, and 8, and Policy 33, above. Option B would be consistent with Goal 34.
Policy 35. Encourage upgrading of visual character of heavy manufacturing industrial areas through the use of landscaping or screening-of visually unattractive buildings and storage areas.	CONSISTENT. Refer to Goal 7, above. See Chapter 3.0, <i>Project Description</i> , and Section 4.1, <i>Aesthetics</i> , for further discussion. Therefore, Option A would be consistent with Policy 35.	CONSISTENT. Refer to Goal 7, above. See Chapter 3.0, <i>Project Description</i> , and Section 4.1, <i>Aesthetics</i> , for further discussion. Option B would be consistent with Policy 35.
Policy 36. Require that industrial uses provide design features, such as screen walls, landscaping and height, setback and lighting restrictions between the boundaries of	CONSISTENT. Refer to Goals 2, 3, 4, 6, 7, and 8, and Policies 16, 19, 25, 26, and 27 above. See Section 4.1, <i>Aesthetics</i> , Section 4.10, <i>Land Use and</i>	CONSISTENT. Refer to Goals 2, 3, 4, 6, 7, and 8, and Policies 16, 19, 25, 26, and 27 above. Option B includes development standards as well as requires

Table 4.10-3. Project Consistency with the Metropolitan Bakersfield General Plan

Goals and Policies	Proposed Project Consistency	
	Option A	Option B
adjacent residential land use designations so as to reduce impacts on residences due to light, noise, sound and vibration.	<i>Planning</i> , Section 4.11, <i>Noise</i> , and Section 4.15, <i>Transportation and Traffic</i> , for further detail. Therefore, Option A would be consistent with Policy 36.	mitigation measures regarding aesthetics, noise, and traffic impacts. See Section 4.1, <i>Aesthetics</i> , Section 4.10, <i>Land Use and Planning</i> , Section 4.11, <i>Noise</i> , and Section 4.15, <i>Transportation and Traffic</i> , for further detail. Option B would be consistent with Policy 36.
Policy 37. Street frontages along all new industrial development shall be landscaped.	CONSISTENT. Refer to Goals 2, 3, 4, 6, 7, and 8, and Policies 31 through 36, above. Option A would be consistent with Policy 37.	CONSISTENT. Refer to Goals 2, 3, 4, 6, 7, and 8, and Policies 31 through 36, above. Option B would be consistent with Policy 37
Public Facilities		
Policy 52. Locate new development where infrastructure is available or can be expanded to serve the proposed development.	CONSISTENT. Refer to KCGP 1.4, <i>Public Facilities and Services</i> , Goals 1, 2, 3, 5, 9, and 10, and Policies 1, 2, 3, 6, 7, and 13, in Table 4.10-2. See Section 4.13, <i>Public Services</i> , and Section 4.16, <i>Utilities and Service Systems</i> , for further details. Option A would be consistent with Goal 52.	CONSISTENT. Refer to KCGP 1.4, <i>Public Facilities and Services</i> , Goals 1, 2, 3, 5, 9, and 10, and Policies 1, 2, 3, 6, 7, and 13, in Table 4.10-2. See Section 4.13, <i>Public Services</i> , and Section 4.16, <i>Utilities and Service Systems</i> , for further details. Option B would be consistent with Goal 52.
Policy 53. Ensure that land use and infrastructure development are coordinated.	CONSISTENT. Refer to KCGP 1.4, <i>Public Facilities and Services</i> , Goals 1, 2, 3, 5, 9, and 10, and Policies 1, 2, 3, 6, 7, and 13, in Table 4.10-2. See Section 4.13, <i>Public Services</i> , and Section 4.16, <i>Utilities and Service Systems</i> , for further details. Option A would be consistent with Policy 53.	CONSISTENT. Refer to KCGP 1.4, <i>Public Facilities and Services</i> , Goals 1, 2, 3, 5, 9, and 10, and Policies 1, 2, 3, 6, 7, and 13, in Table 4.10-2. See Section 4.13, <i>Public Services</i> , and Section 4.16, <i>Utilities and Service Systems</i> , for further details. Option B would be consistent with Policy 53.
General		
Policy 85. Encourage the revitalization of deteriorated land uses and buildings.	INCONSISTENT. Implementation of Option A would not result in new Option A would allow for personal cannabis use and cultivation of up to six plants. Option A would require all medical cannabis dispensaries within unincorporated Kern County to cease operation over a one- to two-year period to allow for amortization. Certain dispensary facilities that opened after the establishment of the County's moratorium would be required to cease operation immediately. Option A would not accommodate new development; however, it would not preclude other new development as outlined in both the KCGP and MBGP. Option A would not encourage the revitalization of deteriorated land uses and buildings beyond what currently exists. See Chapter 3, <i>Project Description</i> , for further details. Option A would be inconsistent with Policy 85.	CONSISTENT. Option B would update the Kern County Zoning Ordinance as it relates to future cannabis facility development. Option B would provide guidance, including development standards, for commercial cannabis cultivation, processing/packaging, and sales facilities. Option B would allow the use of existing buildings within agricultural, industrial, and commercial land uses. See Chapter 3, <i>Project Description</i> , for further details. Therefore, Option B would be consistent with Policy 85.

Table 4.10-3. Project Consistency with the Metropolitan Bakersfield General Plan

Goals and Policies	Proposed Project Consistency	
	Option A	Option B
Policy 88. Encourage the recycling of dilapidated and economically-depressed residential neighborhoods, commercial districts, and industrial areas, where preservation is not an achievable or desirable objective.	CONSISTENT. Refer to Policy 85, above. Option A would be consistent with Policy 88.	CONSISTENT. Refer to Policy 85, above. Option B would be consistent with Policy 88.
Policy 95. When planning for new development, coordinate with utility companies to designate potential electrical transmission line corridors as needed to serve the metropolitan area.	CONSISTENT. Refer to KCGP 1.4, <i>Public Facilities and Services</i> , Goals 1, 2, 3, 5, 9, and 10, and Policies 1, 2, 3, 6, 7, and 13, in Table 4.10-2. See Section 4.13, <i>Public Services</i> , and Section 4.16, <i>Utilities and Service Systems</i> , for further details. Option A would be consistent with Policy 95.	CONSISTENT. Refer to KCGP 1.4, <i>Public Facilities and Services</i> , Goals 1, 2, 3, 5, 9, and 10, and Policies 1, 2, 3, 6, 7, and 13, in Table 4.10-2. See Section 4.13, <i>Public Services</i> , and Section 4.16, <i>Utilities and Service Systems</i> , for further details. Option B would be consistent with Policy 95.
Policy 100. Encourage the use of reflective roofing material and other measures that reduce the "heat island effect."	INCONSISTENT. Implementation of Option A would not result in new Option A would allow for personal cannabis use and cultivation of up to six plants. Option A would not accommodate new development; however, it would not preclude other new development as outlined in both the KCGP and MBGP. Option A would not encourage of the reduction of the "heat island effect" beyond what currently exists. See Chapter 3, <i>Project Description</i> , for further details. Option A would be inconsistent with Policy 100.	CONSISTENT. Option B would update the Kern County Zoning Ordinance as it relates to future cannabis facility development. Option B includes development standards as well as requires mitigation measures regarding the development of cannabis facilities, including smart growth and energy efficient measures. See Chapter 3, <i>Project Description</i> , and Appendix C of this EIR for the full text of the proposed Kern County Cannabis Land Use Ordinance under Option B, for further details. Therefore, Option B would be consistent with Policy 100.
Policy 104. As part of the environmental review procedure, an evaluation of the significance of paleontological, archaeological, and historical resources and the impact of proposed development on those resources shall be conducted and appropriate mitigation and monitoring included for development projects.	CONSISTENT. Refer to Policies 16, 19, and 25, above. Also refer to KCGP 1.6, <i>Residential</i> , Goal 7, 1.7, <i>Commercial</i> , Goal 1, 2, 3, 5, and 6, and Policies 1, 3, 4, 7, and 8, and 1.10.3, <i>Archaeological, Paleontological, Cultural, and Historical Preservation</i> , Policy 25, in Table 4.10-2. See Section 4.5, <i>Cultural and Tribal Cultural Resources</i> , for further details. Therefore, Option A would be consistent with Policy 104.	CONSISTENT. Refer to Policies 16, 19, and 25, above. Also refer to KCGP 1.6, <i>Residential</i> , Goal 7, 1.7, <i>Commercial</i> , Goal 1, 2, 3, 5, and 6, and Policies 1, 3, 4, 7, and 8, and 1.10.3, <i>Archaeological, Paleontological, Cultural, and Historical Preservation</i> , Policy 25, in Table 4.10-2. See Section 4.5, <i>Cultural and Tribal Cultural Resources</i> , for further details. Therefore, Option B would be consistent with Policy 104.
Policy 105. Development on land containing known archaeological resources (i.e., high sensitivity areas) shall utilize methodology set forth, as described necessary by a qualified archaeologist, to locate proposed structures, paving, landscaping, and fill dirt in such a way as to preserve these resources undamaged for future generations when it is the recommendation of a qualified archaeologist that said resources be preserved in situ.	CONSISTENT Refer to Policies 16, 19, and 25, above. Also refer to KCGP 1.6, <i>Residential</i> , Goal 7, 1.7, <i>Commercial</i> , Goal 1, 2, 3, 5, and 6, and Policies 1, 3, 4, 7, and 8, and 1.10.3, <i>Archaeological, Paleontological, Cultural, and Historical Preservation</i> , Policy 25, in Table 4.10-2. See Section 4.5, <i>Cultural and Tribal Cultural Resources</i> , for further details. Therefore, Option A would be consistent with Policy 105.	CONSISTENT Refer to Policies 16, 19, and 25, above. Also refer to KCGP 1.6, <i>Residential</i> , Goal 7, 1.7, <i>Commercial</i> , Goal 1, 2, 3, 5, and 6, and Policies 1, 3, 4, 7, and 8, and 1.10.3, <i>Archaeological, Paleontological, Cultural, and Historical Preservation</i> , Policy 25, in Table 4.10-2. See Section 4.5, <i>Cultural and Tribal Cultural Resources</i> , for further details. Therefore, Option A would be consistent with Policy 105.
Policy 106. The preservation of significant historical	CONSISTENT. Refer to Policies 16, 19, and 25, above.	CONSISTENT. Refer to Policies 16, 19, 25, 104, and 105

Table 4.10-3. Project Consistency with the Metropolitan Bakersfield General Plan

Goals and Policies	Proposed Project Consistency	
	Option A	Option B
resources as identified on Table 4.10-1 shall be encouraged by developing and implementing incentives such as building and planning application permit fee waivers, Mills Act contracts, grants and loans, implementing the State Historic Building Code and other incentives as identified in the City's Historic Preservation Ordinance.	Also refer to KCGP 1.6, <i>Residential</i> , Goal 7, 1.7, <i>Commercial</i> , Goal 1, 2, 3, 5, and 6, and Policies 1, 3, 4, 7, and 8, and 1.10.3, <i>Archaeological, Paleontological, Cultural, and Historical Preservation</i> , Policy 25, in Table 4.10-2. See Section 4.5, <i>Cultural and Tribal Cultural Resources</i> , for further details. Therefore, Option A would be consistent with Policy 106.	above. Also refer to KCGP 1.6, <i>Residential</i> , Goal 7, 1.7, <i>Commercial</i> , Goal 1, 2, 3, 5, and 6, and Policies 1, 3, 4, 7, and 8, and 1.10.3, <i>Archaeological, Paleontological, Cultural, and Historical Preservation</i> , Policy 25, in Table 4.10-2. See Section 4.5, <i>Cultural and Tribal Cultural Resources</i> , for further details. Therefore, Option A would be consistent with Policy 106.
Policy 107. The preservation of significant historical resources shall be promoted and other public agencies or private organizations shall be encouraged to assist in the purchase and/or relocation of sites, buildings, and structures deemed to be of historical significance.	CONSISTENT. Refer to Policies 16, 19, and 25, above; as well as KCGP 1.6, <i>Residential</i> , Goal 7, 1.7, <i>Commercial</i> , Goal 1, 2, 3, 5, and 6, and Policies 1, 3, 4, 7, and 8, and 1.10.3, <i>Archaeological, Paleontological, Cultural, and Historical Preservation</i> , Policy 25, in Table 4.10-2. See Section 4.5, <i>Cultural and Tribal Cultural Resources</i> , for further details. Therefore, Option A would be consistent with Policy 107.	CONSISTENT. Refer to Policies 16, 19, and 25, above; as well as KCGP 1.6, <i>Residential</i> , Goal 7, 1.7, <i>Commercial</i> , Goal 1, 2, 3, 5, and 6, and Policies 1, 3, 4, 7, and 8, and 1.10.3, <i>Archaeological, Paleontological, Cultural, and Historical Preservation</i> , Policy 25, in Table 4.10-2. See Section 4.5, <i>Cultural and Tribal Cultural Resources</i> , for further details. Therefore, Option A would be consistent with Policy 107.
Chapter III. Circulation Element		
A. Streets		
Goal 3. Minimize the impact of truck traffic on circulation, and on noise sensitive land uses.	CONSISTENT. Refer to KCGP Chapter 2, <i>Circulation Element</i> , 2.1, <i>Introduction</i> , Objective 5; 2.3.3, <i>Highway Plan</i> , Goal 5; 2.3.4, <i>Future Growth</i> , Policy 2; 2.5.4, <i>Transportation of Hazardous Materials</i> , Goal 1 and Policy 1; Chapter 3, <i>Noise Element</i> , Goals 1, and 2, and Policies 1, 3, 4, 6, and 7, in Table 4.10-2. Implementation of Option A would not result in new development beyond which is currently projected. Option A would not provide opportunities for business development beyond what is allowed under Proposition 64 for personal use and cultivation. Option A's generated vehicle trips, while increasing VMT, would not reach the established threshold for further LOS study. See Section 4.11, <i>Noise</i> , and Section 4.15, <i>Transportation and Traffic</i> , for further details. Therefore, Option A would be consistent with Goal 3.	CONSISTENT. Refer to KCGP Chapter 2, <i>Circulation Element</i> , 2.1, <i>Introduction</i> , Objective 5; 2.3.3, <i>Highway Plan</i> , Goal 5; 2.3.4, <i>Future Growth</i> , Policy 2; 2.5.4, <i>Transportation of Hazardous Materials</i> , Goal 1 and Policy 1; Chapter 3, <i>Noise Element</i> , Goals 1, and 2, and Policies 1, 3, 4, 6, and 7, in Table 4.10-2. Option B would update the Kern County Zoning Ordinance as it relates to future cannabis facility development. Similar to Option A, Option B's generated vehicle trips would not reach the established threshold for further LOS study. Option B would include development standards as well as mitigation measures related to traffic and noise. See Section 4.11, <i>Noise</i> , and Section 4.15, <i>Transportation and Traffic</i> , for further details. Therefore, Option B would be consistent with Goal 3.
Policy 6. Design and locate site access driveways to minimize traffic disruption where possible considering items such as topography, past parcelization and other factors.	CONSISTENT. Refer to MBGP Chapter II, <i>Land Use Element</i> , Policies 28, 30, 34, 35, 36, 37, 52, and 53, above. Also refer to KCGP 1.6, <i>Residential</i> , Goal 7; 1.7, <i>Commercial</i> , Goals 3 and 5, and Policies 3, 7 and 8; 1.8, <i>Industrial</i> , Policies 1, 3, 7, and 12, in Table 4.10-2.	CONSISTENT. Refer to MBGP Chapter II, <i>Land Use Element</i> , Policies 28, 30, 34, 35, 36, 37, 52, and 53, above. Also refer to KCGP 1.6, <i>Residential</i> , Goal 7; 1.7, <i>Commercial</i> , Goals 3 and 5, and Policies 3, 7 and 8; 1.8, <i>Industrial</i> , Policies 1, 3, 7, and 12, in Table 4.10-2. Option

Table 4.10-3. Project Consistency with the Metropolitan Bakersfield General Plan

Goals and Policies	Proposed Project Consistency	
	Option A	Option B
	Option A would be consistent with Policy 6.	B would be consistent with Policy 6.
Policy 7. Minimize direct and uncontrolled property access from arterials.	CONSISTENT. Refer to Goal 3 and Policy 6, as well as Chapter II, <i>Land Use Element</i> , Policies 28, 30, 34, 35, 36, 37, 52, and 53, above. Also refer to KCGP 1.6, <i>Residential</i> , Goal 7; 1.7, <i>Commercial</i> , Goals 3 and 5, and Policies 3, 7 and 8; 1.8, <i>Industrial</i> , Policies 1, 3, 7, and 12, in Table 4.10-2. Option A would be consistent with Policy 7.	CONSISTENT. Refer to Goal 3 and Policy 6, as well as Chapter II, <i>Land Use Element</i> , Policies 28, 30, 34, 35, 36, 37, 52, and 53, above. Also refer to KCGP 1.6, <i>Residential</i> , Goal 7; 1.7, <i>Commercial</i> , Goals 3 and 5, and Policies 3, 7 and 8; 1.8, <i>Industrial</i> , Policies 1, 3, 7, and 12, in Table 4.10-2. Option B would be consistent with Policy 7.
Policy 12. Maintain the integrity of the circulation system.	CONSISTENT. Refer to Goal 3 and Policy 6, as well as Chapter II, <i>Land Use Element</i> , Policies 28, 30, 34, 35, 36, 37, 52, and 53, above. Also refer to KCGP 1.6, <i>Residential</i> , Goal 7; 1.7, <i>Commercial</i> , Goals 3 and 5, and Policies 3, 7 and 8; 1.8, <i>Industrial</i> , Policies 1, 3, 7, and 12, in Table 4.10-2. Option A would be consistent with Policy 14.	CONSISTENT. Refer to Goal 3 and Policy 6, as well as Chapter II, <i>Land Use Element</i> , Policies 28, 30, 34, 35, 36, 37, 52, and 53, above. Also refer to KCGP 1.6, <i>Residential</i> , Goal 7; 1.7, <i>Commercial</i> , Goals 3 and 5, and Policies 3, 7 and 8; 1.8, <i>Industrial</i> , Policies 1, 3, 7, and 12, in Table 4.10-2. Option B would be consistent with Policy 14.
Policy 16. Require that truck access to commercial and industrial properties be designed to minimize impacts on adjacent residential parcels.	CONSISTENT. Refer to Goal 3 and Policy 6, as well as Chapter II, <i>Land Use Element</i> , Policies 28, 30, 34, 35, 36, 37, 52, and 53, above. Also refer to KCGP 1.6, <i>Residential</i> , Goal 7; 1.7, <i>Commercial</i> , Goals 3 and 5, and Policies 3, 7 and 8; 1.8, <i>Industrial</i> , Policies 1, 3, 7, and 12, in Table 4.10-2. Option A would be consistent with Policy 16.	CONSISTENT. Refer to Goal 3 and Policy 6, as well as Chapter II, <i>Land Use Element</i> , Policies 28, 30, 34, 35, 36, 37, 52, and 53, above. Also refer to KCGP 1.6, <i>Residential</i> , Goal 7; 1.7, <i>Commercial</i> , Goals 3 and 5, and Policies 3, 7 and 8; 1.8, <i>Industrial</i> , Policies 1, 3, 7, and 12, in Table 4.10-2. Option B would be consistent with Policy 16.
Policy 36. Prevent streets and intersections from degrading below Level of Service "C" where possible due to physical constraints (as defined in a Level of Service Standard) or when the existing Level of Service is below "C" prevent where possible further degradation due to new development or expansion of existing development with a three-part mitigation program: adjacent right-of-way dedication, access improvements and/or an area-wide impact fee. The area-wide impact fee would be used where the physical changes for mitigation are not possible due to existing development and/or the mitigation measure is part of a larger project, such as freeways, which will be built at a later date.	CONSISTENT. Refer to Goal 3 and Policies 6, 7, 12, and 16, as well as Chapter II, <i>Land Use Element</i> , Policies 28, 30, 34, 35, 36, 37, 52, and 53, above. Also refer to KCGP 1.6, <i>Residential</i> , Goal 7; 1.7, <i>Commercial</i> , Goals 3 and 5, and Policies 3, 7 and 8; 1.8, <i>Industrial</i> , Policies 1, 3, 7, and 12, in Table 4.10-2. Option A would be consistent with Policy 36.	CONSISTENT. Refer to Goal 3 and Policies 6, 7, 12, and 16, as well as Chapter II, <i>Land Use Element</i> , Policies 28, 30, 34, 35, 36, 37, 52, and 53, above. Also refer to KCGP 1.6, <i>Residential</i> , Goal 7; 1.7, <i>Commercial</i> , Goals 3 and 5, and Policies 3, 7 and 8; 1.8, <i>Industrial</i> , Policies 1, 3, 7, and 12, in Table 4.10-2. Option B would be consistent with Policy 36.
Policy 37. Require new development and expansion of existing development to pay for necessary access	CONSISTENT. Refer to Policy 14 and Chapter II, <i>Land Use Element</i> , Goal 4 and Policies 52, 53, 95, above.	CONSISTENT. Refer to Policy 14 and Chapter II, <i>Land Use Element</i> , Goal 4 and Policies 52, 53, 95, above. Also

Table 4.10-3. Project Consistency with the Metropolitan Bakersfield General Plan

Goals and Policies	Proposed Project Consistency	
	Option A	Option B
improvements, such as street extensions, widenings, turn lanes, signals, etc., as identified in the transportation impact report as may be required for a project.	Also refer to KCGP 1.4, <i>Public Facilities and Services</i> , Goals 1, 2, 3, 5, 9, and 10, and Policies 1, 2, 3, 6, 7, and 13, in Table 4.10-2. See Section 4.13, <i>Public Services</i> , Section 4.15, <i>Transportation and Traffic</i> , and Section 4.16, <i>Utilities and Service Systems</i> , for further details. Option A would be consistent with Policy 37.	refer to KCGP 1.4, <i>Public Facilities and Services</i> , Goals 1, 2, 3, 5, 9, and 10, and Policies 1, 2, 3, 6, 7, and 13, in Table 4.10-2. See Section 4.13, <i>Public Services</i> , Section 4.15, <i>Transportation and Traffic</i> , and Section 4.16, <i>Utilities and Service Systems</i> , for further details. Option B would be consistent with Policy 37.
Policy 39. Require new development and expansion of existing development to pay or participate in its pro rata share of the costs of expansions in area-wide transportation facilities and services which it necessitates.	CONSISTENT. Refer to Policy 37, above. Option A would be consistent with Policy 39.	CONSISTENT Refer to Policy 37, above. Option B would be consistent with Policy 39.
D. Parking		
Goal 2. Satisfy parking requirements in all new developments (residential, commercial, industrial, etc.) through off-street facilities.	CONSISTENT. Refer to Goal 3, Policies 6 and 14, as well as Chapter II, <i>Land Use Element</i> , Goal 4 and Policies 26, 28, 35, 36, above. Also refer to KCGP 1.4, <i>Public Facilities and Services</i> , Goals 1, 2, 3, 5, 9, and 10 and Policies 1, 2, 3, 6, 7, and 13, in Table 4.10-2. Implementation of Option A would not result in new development beyond which is currently projected. Option A would allow for personal cannabis use and cultivation of up to six plants, which would not require additional parking facilities. Therefore, Option A would be consistent with Goal 2.	CONSISTENT. Refer to Goal 3, Policies 6 and 14, as well as Chapter II, <i>Land Use Element</i> , Goal 4 and Policies 26, 28, 35, 36, above. Also refer to KCGP 1.4, <i>Public Facilities and Services</i> , Goals 1, 2, 3, 5, 9, and 10 and Policies 1, 2, 3, 6, 7, and 13, in Table 4.10-2. Option B would provide guidance for commercial cannabis cultivation, processing/packaging, and sales facilities. Option B would include development standards, including facility parking requirements. See Appendix C of this EIR for the full text of the proposed Kern County Cannabis Land Use Ordinance under Option B. Option B would be consistent with Goal 2.
Policy 3. Ensure that adequate onsite parking supply and parking lot circulation is provided on all site plans in accordance with the adopted parking standards.	CONSISTENT Refer to Goal 2, above. Option A would be consistent with Policy 3.	CONSISTENT Refer to Goal 2, above. Option B would be consistent with Policy 3.
Chapter V. Conservation Element		
A. Biological Resources		
Goal 1. Conserve and enhance Bakersfield's biological resources in a manner which facilitates orderly development and reflects the sensitivities and constraints of these resources.	CONSISTENT. Refer to Chapter II, <i>Land Use Element</i> , Goal 6, above. Also refer to KCGP 1.3, <i>Physical and Environmental Constraints</i> , Goal 1 and Policies 1, 2, 3 and 6 through 11; 1.5, <i>Special Treatment Areas</i> , Policy 5; 1.9, <i>Resource</i> , Goals 1, 2, 3, and 5, and Policies 2, 7, 11, 12, and 2, and 1.10.5, <i>Threatened and Endangered Species</i> , Policies 27, 28, 29, 31, and 32, in Table 4.10-2. Option A would not result in new development within unincorporated Kern County. See Sections 4.1 through	CONSISTENT. Refer to Chapter II, <i>Land Use Element</i> , Goal 6, above. Also refer to KCGP 1.3, <i>Physical and Environmental Constraints</i> , Goal 1 and Policies 1, 2, 3 and 6 through 11; 1.5, <i>Special Treatment Areas</i> , Policy 5; 1.9, <i>Resource</i> , Goals 1, 2, 3, and 5, and Policies 2, 7, 11, 12, and 2, in Table 4.10-2. Option A would not result in new development within unincorporated Kern County. See Sections 4.1 through 4.16 of this EIR, regarding the individual resources analyzed, specifically Section 4.4,

Table 4.10-3. Project Consistency with the Metropolitan Bakersfield General Plan

Goals and Policies	Proposed Project Consistency	
	Option A	Option B
	4.16 of this EIR, regarding the individual resources analyzed, specifically Section 4.4, <i>Biological Resources</i> , for further discussion. Therefore, Option A would be consistent with Goal 1.	<i>Biological Resources</i> , for further discussion. Therefore, Option B would be consistent with Goal 1.
Goal 2. To conserve and enhance habitat areas for designated "sensitive" animal and plant species.	CONSISTENT. Refer to Goal 1, above. Also refer to KCGP 1.10.5, <i>Threatened and Endangered Species</i> , Policies 27, 28, 29, 31, and 32, in Table 4.10-2. Option A would be consistent with Goal 2.	CONSISTENT. Refer to Goal 1, above. Also refer to KCGP 1.10.5, <i>Threatened and Endangered Species</i> , Policies 27, 28, 29, 31, and 32, in Table 4.10-2. Option B would be consistent with Goal 2.
Policy 1. Direct development away from "sensitive biological resource" areas, unless effective mitigation measures can be implemented.	CONSISTENT. Refer to Goal 1, above. Also refer to KCGP 1.10.5, <i>Threatened and Endangered Species</i> , Policies 27, 28, 29, 31, and 32, in Table 4.10-2. Implementation of Option A would not result in new development beyond which is currently projected. Option A would allow for personal use and cultivation of up to six plants. Option A would not impact special-status species or their habitats, or other sensitive biological resources as a result of new development. See Section 4.4 <i>Biological Resources</i> , for further details. Therefore, Option A would be consistent with Policy 1.	CONSISTENT. Refer to Goal 1, above. Also refer to KCGP 1.10.5, <i>Threatened and Endangered Species</i> , Policies 27, 28, 29, 31, and 32, in Table 4.10-2. Option B would allow for the development of future cannabis facilities. The future cannabis facilities would be required to comply with development standards outlined in the proposed ordinance (refer to Appendix C of this EIR), as well as implement mitigation measures to reduce impacts to special-status species or their habitats, or other sensitive biological resources. See Section 4.4 <i>Biological Resources</i> , for further details. Therefore, Option B would be consistent with Policy 1.
Policy 2. Preserve areas of riparian vegetation and wildlife habitat within floodways along rivers and streams, in accordance with the Kern River Plan Element and channel maintenance programs designed to maintain flood flow discharge capacity.	CONSISTENT. Refer to Policy 1, above. Also see KCGP 1.10.5, <i>Threatened and Endangered Species</i> , Policies 28 and 32, in Table 4.10-2. See Section 4.4, <i>Biological Resources</i> , Section 4.6, <i>Geology and Soils</i> , Section 4.8, <i>Hazards and Hazardous Materials</i> , and Section 4.9, <i>Hydrology and Water Quality</i> , for further discussion. Therefore, Option A would be consistent with Policy 2.	CONSISTENT: Refer to Policy 1, above. Also see KCGP 1.10.5, <i>Threatened and Endangered Species</i> , Policies 28 and 32, in Table 4.10-2. Option B would include development standards as well as mitigation measures to reduce impacts to riparian habitat and its wildlife. See Section 4.4, <i>Biological Resources</i> , Section 4.6, <i>Geology and Soils</i> , Section 4.8, <i>Hazards and Hazardous Materials</i> , and Section 4.9, <i>Hydrology and Water Quality</i> , for further discussion. Therefore, Option B would be consistent with Policy 2.
<i>C. Soils and Agriculture</i>		
Goal 1. Provide for the planned management, conservation, and wise utilization of agricultural land in the Planning Area.	CONSISTENT. Refer to KCGP 1.9, <i>Resources</i> , Goals 1, 2, 3, and 5, and Policies 2, 7, 12, and 24, in Table 4.10-2. Implementation of Option A would not result in new development beyond which is currently projected. Option A would allow for personal cannabis use and cultivation of up to six plants. Option A would not promote development activities beyond what is already planned	CONSISTENT. Refer to KCGP 1.9, <i>Resources</i> , Goals 1, 2, 3, and 5, and Policies 2, 7, 12, and 24, in Table 4.10-2. Option B would allow for indoor and outdoor cultivation and some processing, packaging, and distribution facilities (similar to existing agricultural processing facilities) to be located on agricultural land. Option B includes development standards (refer to Appendix C of this EIR).

Table 4.10-3. Project Consistency with the Metropolitan Bakersfield General Plan

Goals and Policies	Proposed Project Consistency	
	Option A	Option B
	within the MBGP and the KCGP. See Section 4.2, <i>Agriculture and Forest Resources</i> , for further discussion. Therefore, Option A would be consistent with Goal 1.	as well as mitigation measures to reduce impacts to agricultural lands and oak woodlands. Mitigation measures would preserve farmland and oak woodlands that might otherwise be converted; it would not create new farmland. See Section 4.2, <i>Agriculture and Forest Resources</i> , for further discussion. Therefore, Option B would be consistent with Goal 1.
Goal 2. Promote soil conservation and minimize development of prime agricultural land as defined by the following criteria: <ul style="list-style-type: none"> • Capability Class I and/or II irrigated soils. • 80-100 Storie Index rating. • Gross crop return of \$200 or more per acre per year. • Annual carrying capacity of 1 animal unit per acre per year 	CONSISTENT. Refer to Goal 1, above. Also refer to KCGP 1.9, <i>Resources</i> , Goals 1, 2, 3, and 5, and Policies 2, 7, 12, and 24, in Table 4.10-2. See Section 4.2, <i>Agriculture and Forest Resources</i> , and Section 4.6, <i>Geology and Soils</i> , for further discussion. Therefore, Option A would be consistent with Goal 2.	CONSISTENT. Refer to Goal 1, above. Also refer to KCGP 1.9, <i>Resources</i> , Goals 1, 2, 3, and 5, and Policies 2, 7, 12, and 24, in Table 4.10-2. See Section 4.2, <i>Agriculture and Forest Resources</i> , and Section 4.6, <i>Geology and Soils</i> , for further discussion. Therefore, Option B would be consistent with Goal 1.
Policy 2. Review projects that propose subdividing or urbanizing prime agricultural land to ascertain how continued commercial agricultural production in the Project vicinity will be-affected.	CONSISTENT. Refer to Goals 1 and 2, above. Also refer to KCGP 1.9, <i>Resources</i> , Goals 1, 2, 3, and 5, and Policies 2, 7, 12, and 24, in Table 4.10-2. See Section 4.2, <i>Agriculture and Forest Resources</i> , and Section 4.6, <i>Geology and Soils</i> , for further discussion. Option A would be consistent with Policy 2.	CONSISTENT. Refer to Goals 1 and 2, above. Also refer to KCGP 1.9, <i>Resources</i> , Goals 1, 2, 3, and 5, and Policies 2, 7, 12, and 24, in Table 4.10-2. See Section 4.2, <i>Agriculture and Forest Resources</i> , and Section 4.6, <i>Geology and Soils</i> , for further discussion. Option B would be consistent with Policy 2.
Policy 4. Monitor the amount of prime agricultural land taken out of production for urban uses or added within the plan area.	CONSISTENT. Refer to Goals 1 and 2, above. Also refer to KCGP 1.9, <i>Resources</i> , Goals 1, 2, 3, and 5, and Policies 2, 7, 12, and 24, in Table 4.10-2. See Section 4.2, <i>Agriculture and Forest Resources</i> , and Section 4.6, <i>Geology and Soils</i> , for further discussion. Option A would be consistent with Policy 4.	CONSISTENT. Refer to Goals 1 and 2, above. Also refer to KCGP 1.9, <i>Resources</i> , Goals 1, 2, 3, and 5, and Policies 2, 7, 12, and 24, in Table 4.10-2. See Section 4.2, <i>Agriculture and Forest Resources</i> , and Section 4.6, <i>Geology and Soils</i> , for further detail. Option B would be consistent with Policy 4.
Policy 7. Land use patterns, grading, and landscaping practices shall be designed to prevent soil erosion while retaining natural watercourses when possible	CONSISTENT. Refer to Goals 1 and 2, above. Also refer to KCGP 1.3, <i>Physical and Environmental Constraints</i> , Policies 6, 7, 8, 9, and 11; 1.9, <i>Resources</i> , Goals 1, 2, 3, and 5, and Policies 2, 7, 12, and 24; and 4.5, <i>Landslides, Subsidence, Seiche, and Liquefaction</i> , Policies 1 and 3, in Table 4.10-2. See Section 4.2, <i>Agriculture and Forest Resources</i> , and Section 4.6, <i>Geology and Soils</i> , and 4.8, <i>Hazards and Hazardous Materials</i> , and 4.9, <i>Hydrology and Water Quality</i> , for further discussion. Option A would be consistent with	CONSISTENT. Refer to Goals 1 and 2, above. Also refer to KCGP 1.3, <i>Physical and Environmental Constraints</i> , Policies 6, 7, 8, 9, and 11; 1.9, <i>Resources</i> , Goals 1, 2, 3, and 5, and Policies 2, 7, 12, and 24; and 4.5, <i>Landslides, Subsidence, Seiche, and Liquefaction</i> , Policies 1 and 3, in Table 4.10-2. Option B includes development standards as well as mitigation measures, such as requiring the implementation of erosion control measures, including a SWPPP, when construction is involved. See Section 4.2, <i>Agriculture and Forest Resources</i> , and Section 4.6, <i>Geology and Soils</i> , and 4.8, <i>Hazards and Hazardous</i>

Table 4.10-3. Project Consistency with the Metropolitan Bakersfield General Plan

Goals and Policies	Proposed Project Consistency	
	Option A	Option B
Policy 7.	Policy 7.	<i>Materials, and 4.9, Hydrology and Water Quality, for further discussion. Therefore, Option B would be consistent with Policy 7.</i>
Policy 12. Prohibit premature removal of ground cover in advance of development and require measures to prevent soil erosion during and immediately after construction.	CONSISTENT. Refer to Policy 7, above. See Section 4.2, Agriculture and Forest Resources, and Section 4.6, Geology and Soils, and 4.8, Hazards and Hazardous Materials, and 4.9, Hydrology and Water Quality, for further discussion. Option A would be consistent with Policy 12.	CONSISTENT. Refer to Policy 7, above. See Section 4.2, Agriculture and Forest Resources, Section 4.6, Geology and Soils, and 4.8, Hazards and Hazardous Materials, and 4.9, Hydrology and Water Quality, for further discussion. Option B would be consistent with Policy 12.
Water Resources		
Goal 1. Conserve and augment the available water resources of the planning area.	CONSISTENT. Refer to Chapter II, <i>Land Use Element</i> , Goal 6; and Chapter V, <i>Conservation Element</i> , <i>Biological Resources</i> , Goals 1 and 2 and Policy 2, above. Also refer to KCGP 1.3, <i>Physical and Environmental Constraints</i> , Policies 8, 9, 10, and 11; 1.4, <i>Public Facilities and Services</i> , Goal 5 and Policy 2; 1.5, <i>Special Treatment Areas</i> , Policy 5; 1.9, <i>Resources</i> , Policies 7 and 11; 1.10.5, <i>Threatened and Endangered Species</i> , Policies 28, 29, 31, and 32; 1.10.6, <i>Surface Water and Groundwater</i> , Policies 34, 40, 41, 43, and 44; 1.10.8, <i>Smart Growth</i> , Policy 49, in Table 4.10-2. See Section 4.2, <i>Agriculture and Forest Resources</i> , Section 4.4, <i>Biological Resources</i> , Section 4.6, <i>Geology and Soils</i> , and 4.8, <i>Hazards and Hazardous Materials</i> , 4.9, <i>Hydrology and Water Quality</i> , and Section 4.16, <i>Utilities and Service Systems</i> , for further discussion. Option A would be consistent with Goal 1.	CONSISTENT. Refer to Chapter II, <i>Land Use Element</i> , Goal 6; and Chapter V, <i>Conservation Element</i> , <i>Biological Resources</i> , Goals 1 and 2 and Policy 2, above. Also refer to KCGP 1.3, <i>Physical and Environmental Constraints</i> , Policies 8, 9, 10, and 11; 1.4, <i>Public Facilities and Services</i> , Goal 5 and Policy 2; 1.5, <i>Special Treatment Areas</i> , Policy 5; 1.9, <i>Resources</i> , Policies 7 and 11; 1.10.5, <i>Threatened and Endangered Species</i> , Policies 28, 29, 31, and 32; 1.10.6, <i>Surface Water and Groundwater</i> , Policies 34, 40, 41, 43, and 44; 1.10.8, <i>Smart Growth</i> , Policy 49, in Table 4.10-2. See Section 4.2, <i>Agriculture and Forest Resources</i> , Section 4.4, <i>Biological Resources</i> , Section 4.6, <i>Geology and Soils</i> , and 4.8, <i>Hazards and Hazardous Materials</i> , 4.9, <i>Hydrology and Water Quality</i> , and Section 4.16, <i>Utilities and Service Systems</i> , for further discussion. Option B would be consistent with Goal 1.
Goal 2. Assure that adequate groundwater resources remain available to the planning area.	CONSISTENT. Refer to Goal 1, above. See Section 4.2, <i>Agriculture and Forest Resources</i> , Section 4.4, <i>Biological Resources</i> , Section 4.6, <i>Geology and Soils</i> , and 4.8, <i>Hazards and Hazardous Materials</i> , 4.9, <i>Hydrology and Water Quality</i> , Section 4.13, <i>Public Services</i> , and Section 4.16, <i>Utilities and Service Systems</i> , for further discussion. Option A would be consistent with Goal 2.	CONSISTENT. Refer to Goal 1, above. See Section 4.2, <i>Agriculture and Forest Resources</i> , Section 4.4, <i>Biological Resources</i> , Section 4.6, <i>Geology and Soils</i> , and 4.8, <i>Hazards and Hazardous Materials</i> , 4.9, <i>Hydrology and Water Quality</i> , Section 4.13, <i>Public Services</i> , and Section 4.16, <i>Utilities and Service Systems</i> , for further discussion. Option B would be consistent with Goal 2.
Goal 3. Assure that adequate surface water supplies remain available to the planning area.	CONSISTENT. Refer to Goals 1 and 2, above. Option A would be consistent with Goal 3.	CONSISTENT. Refer to Goals 1 and 2, above. Option B would be consistent with Goal 3.
Policy 6. Protect planning area groundwater resources from	CONSISTENT. Refer to Goals 1 through 3, above. See	CONSISTENT. Refer to Goals 1 through 3, above. See

Table 4.10-3. Project Consistency with the Metropolitan Bakersfield General Plan

Goals and Policies	Proposed Project Consistency	
	Option A	Option B
further quality degradation.	Section 4.2, <i>Agriculture and Forest Resources</i> , Section 4.4, <i>Biological Resources</i> , Section 4.6, <i>Geology and Soils</i> , and 4.8, <i>Hazards and Hazardous Materials</i> , 4.9, <i>Hydrology and Water Quality</i> , Section 4.13, <i>Public Services</i> , and Section 4.16, <i>Utilities and Service Systems</i> , for further discussion. Option A would be consistent with Policy 6.	Section 4.2, <i>Agriculture and Forest Resources</i> , Section 4.4, <i>Biological Resources</i> , Section 4.6, <i>Geology and Soils</i> , and 4.8, <i>Hazards and Hazardous Materials</i> , 4.9, <i>Hydrology and Water Quality</i> , Section 4.13, <i>Public Services</i> , and Section 4.16, <i>Utilities and Service Systems</i> , for further discussion. Option B would be consistent with Policy 6.
Policy 8. Consider each proposal for water resource usage within the context of total planning area needs and priorities- major incremental water transport, groundwater recharge, flood control, recreational needs, riparian habitat preservation and conservation.	CONSISTENT. Refer to Goals 1 through 3 and Policy 6, above. Option A would be consistent with Policy 8.	CONSISTENT. Refer to Goals 1 through 3 and Policy 6, above. Option B would be consistent with Policy 8.
Policy 9. Encourage and implement water conservation measures and programs	CONSISTENT. Refer to Goals 1 through 3 and Policy 6, above. See Section 4.2, <i>Agriculture and Forest Resources</i> , Section 4.4, <i>Biological Resources</i> , Section 4.6, <i>Geology and Soils</i> , and 4.8, <i>Hazards and Hazardous Materials</i> , 4.9, <i>Hydrology and Water Quality</i> , Section 4.13, <i>Public Services</i> , and Section 4.16, <i>Utilities and Service Systems</i> , for further discussion. Option A would be consistent with Policy 9.	CONSISTENT. Refer to Goals 1 through 3 and Policy 6, above. Option B would include development standards encouraging water efficiency (see Appendix C of this EIR) as well as requires implementation of mitigation measures that would reduce impacts to water resources. See Section 4.2, <i>Agriculture and Forest Resources</i> , Section 4.4, <i>Biological Resources</i> , Section 4.6, <i>Geology and Soils</i> , and 4.8, <i>Hazards and Hazardous Materials</i> , 4.9, <i>Hydrology and Water Quality</i> , Section 4.13, <i>Public Services</i> , and Section 4.16, <i>Utilities and Service Systems</i> , for further discussion. Option B would be consistent with Policy 9.
Air Quality		
Goal 1. Promote air quality that is compatible with health, well-being, and enjoyment of life by controlling point sources and minimizing vehicular trips to reduce air pollutants.	INCONSISTENT. Refer to KCGP 1.10.2, <i>Air Quality</i> , Policies 18, 19, 21, 22 and 23, in Table 4.10-2. Option A would not result in new development beyond which is currently projected. Option A would result in the closure of existing medical cannabis dispensaries, and thus would result in an increase in VMT by customers purchasing cannabis products. Mitigation measures would be included under Option A; however, Option A would continue to exceed the SJVAPCD thresholds. See Section 4.3, <i>Air Quality</i> , and Section 4.7, <i>Greenhouse Gas Emissions</i> , for further details. Therefore, Option A would be inconsistent with Goal 1.	CONSISTENT. Refer to KCGP 1.10.2, <i>Air Quality</i> , Policies 18, 19, 21, 22 and 23, in Table 4.10-2. Option B would result in cumulatively considerable impacts related to net increase of any criteria pollutant in the SJVAPCD. Option B would include development standards (see Appendix C of this EIR) and mitigation measures to help reduce impacts to air quality, which would reduce the significance of the impacts at the program level; however, at the cumulative level, Option B would continue to exceed the SJVAPCD thresholds. See Section 4.3, <i>Air Quality</i> , and Section 4.7, <i>Greenhouse Gas Emissions</i> , for further details. Option B would be consistent with Goal 1; however, cumulative impacts would be inconsistent with Goal 1.
Goal 2. Continue working toward attainment of federal,	INCONSISTENT. Refer to Goal 1, above. Also refer to	CONSISTENT. Refer to Goal 1, above. Also refer to

Table 4.10-3. Project Consistency with the Metropolitan Bakersfield General Plan

Goals and Policies	Proposed Project Consistency	
	Option A	Option B
State and Local standards as enforced by the San Joaquin Valley Air Pollution Control District.	KCGP 1.10.2, <i>Air Quality</i> , Policies 18, 19, 21, 22 and 23, in Table 4.10-2. While Option A would not preclude the County from working with the SJVAPCD to enforce air quality standards, Option A would result in significant impacts to air quality at the program level, even with all feasible mitigation measure implemented. See Section 4.3, <i>Air Quality</i> , and Section 4.7, <i>Greenhouse Gas Emissions</i> , for further details. Option A would be inconsistent with Goal 2.	KCGP 1.10.2, <i>Air Quality</i> , Policies 18, 19, 21, 22 and 23, in Table 4.10-2. While Option B would not preclude the County from working with the SJVAPCD to enforce air quality standards, Option B would result in significant impacts to air quality at the cumulative level, even with all feasible mitigation measure implemented. See Section 4.3, <i>Air Quality</i> , and Section 4.7, <i>Greenhouse Gas Emissions</i> , for further details. Option B would be consistent with Goal 2; however, cumulative impacts would be inconsistent with Goal 2.
Goal 4. Reduce air pollution associated with agricultural activities.	CONSISTENT. Implementation of Option A would not result in new development beyond which is currently projected. Option A would allow for personal cannabis use and cultivation of up to six plants. Option A would not impact air quality associated with agriculture. See Section 4.3, <i>Air Quality</i> , and Section 4.7, <i>Greenhouse Gas Emissions</i> , for further details. Therefore, Option A would be consistent with Goal 1.	CONSISTENT. Option B could result up to 2,000,000 ft ² of indoor cannabis cultivation and 150 acres of outdoor cannabis cultivation activities. As discussed in Goal 2, above, Option B would include development standards (refer to Appendix C of this EIR) and mitigation measures to reduce potential impacts at the program level. See Section 4.3, <i>Air Quality</i> , and Section 4.7, <i>Greenhouse Gas Emissions</i> , for further details. Therefore, Option B would be consistent with Goal 4.
Policy 1. Comply with and promote San Joaquin Valley Unified Air Pollution Control District (SJVAAPCD) control measures regarding Reactive Organic Gases (ROG). Such measures are focused on: (a) steam driven well vents, (b) Pseudo-cyclic wells, (c) natural gas processing plant fugitives, (d) heavy oil test stations, (e) light oil production fugitives, (f) refinery pumps and compressors, and (g) vehicle inspection and maintenance.	INCONSISTENT. Refer to Goals 1, 2, and 4, above. Option A would be inconsistent with Policy 1.	CONSISTENT. Refer to Goal 1, 2, and 4, above. Option B would be consistent with Policy 1; however, cumulative impacts would be inconsistent.
Policy 2. Encourage land uses and land use practices which do not contribute significantly to air quality degradation.	CONSISTENT. Refer to Goals 1, 2, and 4, above. Therefore, Option A would be consistent with Policy 2.	CONSISTENT. Refer to Goal 1, 2, and 4, above. Option B would be consistent with Policy 2.
Policy 3. Require dust abatement measures during significant grading and construction operations.	CONSISTENT. Implementation of Option A would not result in new development beyond which is currently projected. Option A would allow for personal cannabis use and cultivation of up to six plants. Option A would not impact air quality associated with substantial dust during grading and construction activities. See Section 4.3, <i>Air Quality</i> , and Section 4.7, <i>Greenhouse Gas Emissions</i> , for further details. Therefore, Option A would	CONSISTENT. Refer to Goal 1, 2, and 4, above. Option B would include development standards (refer to Appendix C of this EIR) and mitigation measures to reduce potential impacts. See Section 4.3, <i>Air Quality</i> , and Section 4.7, <i>Greenhouse Gas Emissions</i> , for further details. Therefore, Option B would be consistent with Policy 3.

Table 4.10-3. Project Consistency with the Metropolitan Bakersfield General Plan

Goals and Policies	Proposed Project Consistency	
	Option A	Option B
be consistent with Policy 3.		
Policy 4. Consider air pollution impacts when evaluating discretionary permits for land use proposals. Considerations should include: a) Alternative access routes to reduce traffic congestion, b) Development phasing to match road capacities, c) Buffers including increase vegetation to increase emission dispersion and reduce impacts of gaseous or particulate matter on sensitive uses.	CONSISTENT. This EIR serves to comply with this policy. The EIR has included all feasible mitigation measures associated with air quality and greenhouse gas emissions. See Section 4.3, <i>Air Quality</i> , and Section 4.7, <i>Greenhouse Gas Emissions</i> , for further details. Therefore, Option A would be consistent with Policy 4.	CONSISTENT. This EIR serves to comply with this policy. The proposed Cannabis Land Use Ordinance has included development standards to reduce air pollutant emissions (see Appendix C of this EIR). In addition, this EIR has included all feasible mitigation measures associated with air quality and greenhouse gas emissions. See Section 4.3, <i>Air Quality</i> , and Section 4.7, <i>Greenhouse Gas Emissions</i> , for further details. Therefore, Option B would be consistent with Policy 4.
Policy 5. Consider the location of sensitive receptors such as schools, hospitals, and housing developments when locating industrial uses to minimize the impact of industrial sources of air pollution.	CONSISTENT. Refer to Policies 2 and 4, above. Option A would not impact air quality associated with industrial land uses. Therefore, Option A would be consistent with Policy 5.	CONSISTENT. Refer to Policies 2 and 4, above. The proposed Cannabis Land Use Ordinance includes development standards, including setbacks required for future cannabis facilities in relation to sensitive receptors. In addition, Option B includes mitigation measures to further reduce air quality impacts to sensitive receptors, including setbacks, dust control measures, equipment exhaust measures, and HVAC system requirements. See Section 4.3, <i>Air Quality</i> , and Section 4.7, <i>Greenhouse Gas Emissions</i> , for further details. Therefore, Option B would be consistent with Policy 5.
Chapter VI. Open Space Element		
Goal 3. Locate and site development to minimize the disruption of open space areas.	CONSISTENT. Implementation of Option A would not result in new development beyond which is currently projected. Option A would allow for personal cannabis use and cultivation of up to six plants. Option A would not involve new development and thus would not disrupt open space areas. Option A would be consistent with Goal 3.	CONSISTENT. Option B would allow for the development of future cannabis facilities. The future cannabis facilities would be required to comply with development standards outlined in the proposed ordinance (refer to Appendix C of this EIR), as well as implement mitigation measures to reduce impacts to adjacent land uses, including open space. Option B would only allow cannabis facilities within agricultural, commercial, and industrial land uses. Therefore, Option B would be consistent with Goal 3.
Policy 5. Development location and siting should be sensitive to its relationship to the Kern River.	CONSISTENT. Refer to Goal 3, above. Option A would be consistent with Policy 5.	CONSISTENT. Refer to Goal 3, above. Option B would be consistent with Policy 5.
Chapter VII. Noise Element		
Goal 1. Ensure that residents of the Bakersfield metropolitan area are protected from excessive noise and existing moderate levels of noise are maintained.	CONSISTENT. Refer to MBGP Chapter II, <i>Land Use Element, Commercial Development</i> , Policy 28; <i>Industrial Development</i> , Policy 36; and Chapter III, <i>Circulation Element, A. Streets</i> , Goal 3, above. Also refer to KCGP	CONSISTENT. Refer to MBGP Chapter II, <i>Land Use Element, Commercial Development</i> , Policy 28; <i>Industrial Development</i> , Policy 36; and Chapter III, <i>Circulation Element, A. Streets</i> , Goal 3, above. Also refer to KCGP

Table 4.10-3. Project Consistency with the Metropolitan Bakersfield General Plan

Goals and Policies	Proposed Project Consistency	
	Option A	Option B
	1.8, <i>Industrial</i> , Policy 7; and Chapter 3, <i>Noise Element</i> , Goals 1 and 2 and Policies 1, 3, 4, 6, and 7, in Table 4.10-2. Implementation of Option A would not result in new development beyond which is currently projected. Option A would allow for personal cannabis use and cultivation of up to six plants, pursuant to Proposition 64. Option A would not result in an adverse change in noise levels beyond those that already exist. See Section 4.11, <i>Noise</i> , for further details. Therefore, Option A would be consistent with Goal 1.	1.8, <i>Industrial</i> , Policy 7; and Chapter 3, <i>Noise Element</i> , Goals 1 and 2 and Policies 1, 3, 4, 6, and 7, in Table 4.10-2. Option B would allow for the development of future cannabis businesses and associated facilities. These future cannabis facilities would comply with development standards outlined in the proposed ordinance (see Appendix C), as well as implement mitigation measures. Option B would ensure that residents of the Bakersfield Metropolitan Area, within or adjacent to unincorporated Kern County, are protected from excessive noise generated by future cannabis related activities. Refer to Section 4.11, <i>Noise</i> , for further detail. Therefore, Option B would be consistent with Goal 1.
Goal 2. Protect the citizens of the planning area from the harmful effects of exposure to excessive noise, and protect the economic base of the area by preventing the encroachment of incompatible land uses near known noise-producing roadways, industries, railroads, airports and other sources.	CONSISTENT. Refer to Goal 1, and MBGP Chapter II, <i>Land Use Element</i> , <i>Commercial Development</i> , Policy 28; <i>Industrial Development</i> , Policy 36; and Chapter III, <i>Circulation Element</i> , A. Streets, Goal 3, above. Also refer to KCGP 1.8, <i>Industrial</i> , Policy 7; and Chapter 3, <i>Noise Element</i> , Goals 1 and 2 and Policies 1, 3, 4, 6, and 7, in Table 4.10-2. Therefore, Option A would be consistent with Goal 2.	CONSISTENT. Refer to Goal 1, and MBGP Chapter II, <i>Land Use Element</i> , <i>Commercial Development</i> , Policy 28; <i>Industrial Development</i> , Policy 36; and Chapter III, <i>Circulation Element</i> , A. Streets, Goal 3, above. Also refer to KCGP 1.8, <i>Industrial</i> , Policy 7; and Chapter 3, <i>Noise Element</i> , Goals 1 and 2 and Policies 1, 3, 4, 6, and 7, in Table 4.10-2. Therefore, Option B would be consistent with Goal 2.
Policy 1. Identify noise-impact areas exposed to existing or projected noise levels exceeding 65 dB CNEL (exterior) or the performance standards described in Table VII-2. The noise exposure contour maps on file at the City of Bakersfield and County of Kern indicate areas where existing and projected noise exposures exceed 65 dB CNEL (exterior) for the major noise sources identified.	CONSISTENT. Refer to Goal 1, and MBGP Chapter II, <i>Land Use Element</i> , <i>Commercial Development</i> , Policy 28; <i>Industrial Development</i> , Policy 36; and Chapter III, <i>Circulation Element</i> , A. Streets, Goal 3, above. Also refer to KCGP 1.8, <i>Industrial</i> , Policy 7; and Chapter 3, <i>Noise Element</i> , Goals 1 and 2 and Policies 1, 3, 4, 6, and 7, in Table 4.10-2. Option A would not result in noise levels exceeding 65dB or any performance standards. Therefore, Option A would be consistent with Policy 1.	CONSISTENT. Refer to Goal 1, and MBGP Chapter II, <i>Land Use Element</i> , <i>Commercial Development</i> , Policy 28; <i>Industrial Development</i> , Policy 36; and Chapter III, <i>Circulation Element</i> , A. Streets, Goal 3, above. Also refer to KCGP 1.8, <i>Industrial</i> , Policy 7; and Chapter 3, <i>Noise Element</i> , Goals 1 and 2 and Policies 1, 3, 4, 6, and 7, in Table 4.10-2. Option B would not expose people to noise levels exceeding 65 dB. Therefore, Option B would be consistent with Policy 1.
Policy 3. Review discretionary industrial, commercial or other noise-generating land use projects for compatibility with nearby noise-sensitive land uses. Additionally, the development of new noise-generating land uses which are not preempted from local noise regulation will be reviewed if resulting noise levels will exceed the performance standards contained within Table VII-2 in areas containing	CONSISTENT. Refer to Goal 1, and MBGP Chapter II, <i>Land Use Element</i> , <i>Commercial Development</i> , Policy 28; <i>Industrial Development</i> , Policy 36; and Chapter III, <i>Circulation Element</i> , A. Streets, Goal 3, above. Also refer to KCGP 1.8, <i>Industrial</i> , Policy 7; and Chapter 3, <i>Noise Element</i> , Goals 1 and 2 and Policies 1, 3, 4, 6, and 7, in Table 4.10-2. This EIR serves to comply with this policy. See Section 4.11, <i>Noise</i> , for further details.	CONSISTENT. Refer to Goal 1, and MBGP Chapter II, <i>Land Use Element</i> , <i>Commercial Development</i> , Policy 28; <i>Industrial Development</i> , Policy 36; and Chapter III, <i>Circulation Element</i> , A. Streets, Goal 3, above. Also refer to KCGP 1.8, <i>Industrial</i> , Policy 7; and Chapter 3, <i>Noise Element</i> , Goals 1 and 2 and Policies 1, 3, 4, 6, and 7, in Table 4.10-2. This EIR serves to comply with this policy. See Section 4.11, <i>Noise</i> , for further details. OTherefore,

Table 4.10-3. Project Consistency with the Metropolitan Bakersfield General Plan

Goals and Policies	Proposed Project Consistency	
	Option A	Option B
residential or other noise-sensitive land uses.	Therefore, Option A would be consistent with Policy 3.	Option B would be consistent with Policy 3.
Policy 5. Encourage vegetation and landscaping along roadways and adjacent to other noise sources in order to increase absorption of noise.	CONSISTENT. Refer to Goal 1, and MBGP Chapter II, <i>Land Use Element, Commercial Development</i> , Policy 28; <i>Industrial Development</i> , Policy 36; and Chapter III, <i>Circulation Element, A. Streets</i> , Goal 3, above. Also refer to KCGP 1.8, <i>Industrial</i> , Policy 7; and Chapter 3, <i>Noise Element</i> , Goals 1 and 2 and Policies 1, 3, 4, 6, and 7, in Table 4.10-2. See Section 4.11, <i>Noise</i> , for further details. Option A would be consistent with Policy 5.	CONSISTENT. Refer to Goal 1, and MBGP Chapter II, <i>Land Use Element, Commercial Development</i> , Policy 28; <i>Industrial Development</i> , Policy 36; and Chapter III, <i>Circulation Element, A. Streets</i> , Goal 3, above. Also refer to KCGP 1.8, <i>Industrial</i> , Policy 7; and Chapter 3, <i>Noise Element</i> , Goals 1 and 2 and Policies 1, 3, 4, 6, and 7, in Table 4.10-2. Additionally, Option B includes development standards and incorporated mitigation measures to reduce noise impacts. Therefore, Option B would be consistent with Policy 5.
Chapter VIII. Safety Element		
General Provisions		
Goal 1. To develop sustainable communities to preserve life, protect property, the environment, and the economy from natural hazards.	CONSISTENT. Implementation of Option A would not result in new development beyond what is currently projected. Option A would allow for personal cannabis use and cultivation of up to six plants. Option A would not result in new development in areas that are environmentally sensitive or are subject to natural hazards beyond what is already allowed within current plans and policies. Option A would not provide new business opportunities. See Sections 4.1 through 4.16 of this EIR, regarding the individual resources analyzed, for further discussion. Also see Appendix K, <i>Fiscal Analysis</i> , for further economic discussion. Therefore, Option A would be consistent with Goal 1.	CONSISTENT. Option B would update the Kern County Zoning Ordinance as it relates to future cannabis facility development. Option B includes development standards and would require mitigation measures to minimize effects on the natural environment and account for environmental hazards. See Sections 4.1 through 4.16 of this EIR, regarding the individual resources analyzed, for further discussion. Also see Appendix K, <i>Fiscal Analysis</i> , for further economic discussion. Therefore, Option B would be consistent with Goal 1.
A. Seismic Safety		
Hazardous Buildings		
Policy 8. Require seismic review or other potentially hazardous buildings upon any change in their use or occupancy status.	CONSISTENT. Refer to Goal 1, above. Option A would be consistent with Policy 8.	CONSISTENT. Refer to Goal 1, above. Option B includes development standards and would require mitigation measures to minimize effects on the natural environment and account for environmental hazards. See Sections 4.6, <i>Geology and Soils</i> , and Section 4.8, <i>Hazards and Hazardous Materials</i> , for further details. Therefore, Option B would be consistent with Policy 8.
Fault Rupture		
Policy 10. Prohibit development designed for human occupancy within 50 feet of a known active fault and	CONSISTENT. Refer to Goal 1, above. Also see KCGP 1.3, <i>Physical and Environmental Constraints</i> , Goal 1 and	CONSISTENT. Refer to Goal 1, above. Also see KCGP 1.3, <i>Physical and Environmental Constraints</i> , Goal 1 and

Table 4.10-3. Project Consistency with the Metropolitan Bakersfield General Plan

Goals and Policies	Proposed Project Consistency	
	Option A	Option B
prohibit any building from being placed astride an active fault.	Policies 1, 2, and 3; 1.5, <i>Special Treatment Areas</i> , Policy 5; 1.10.1, <i>General Provisions</i> , <i>Public Services and Facilities</i> , Goal 1 and Policy 8; 4.1, <i>Introduction</i> , Goals 1, 2, 3, and 5; 4.3, <i>Seismically Induced Surface Rupture</i> , <i>Ground Shaking</i> , and <i>Ground Failure</i> , Policy 1; 4.5, <i>Landslides</i> , <i>Subsidence</i> , <i>Seiche</i> , and <i>Liquefaction</i> , Policies 1 and 3, in Table 4.10-2. Implementation of Option A would not result in new development beyond which is currently projected. Option A would allow for personal cannabis use and cultivation of up to six plants. Option A would not result in new development in areas that are within close proximity of an active fault. See Section 4.6, <i>Geology and Soils</i> , and Section 4.8, <i>Hazards and Hazardous Materials</i> , for further details. Option A would be consistent with Policy 10.	Policies 1, 2, and 3; 1.5, <i>Special Treatment Areas</i> , Policy 5; 1.10.1, <i>General Provisions</i> , <i>Public Services and Facilities</i> , Goal 1 and Policy 8; 4.1, <i>Introduction</i> , Goals 1, 2, 3, and 5; 4.3, <i>Seismically Induced Surface Rupture</i> , <i>Ground Shaking</i> , and <i>Ground Failure</i> , Policy 1; 4.5, <i>Landslides</i> , <i>Subsidence</i> , <i>Seiche</i> , and <i>Liquefaction</i> , Policies 1 and 3, in Table 4.10-2. Option B includes development standards and would require mitigation measures to minimize effects on the natural environment and account for environmental hazards, including active faults. See Sections 4.6, <i>Geology and Soils</i> , and Section 4.8, <i>Hazards and Hazardous Materials</i> , for further details. Therefore, Option B would be consistent with Policy 10.
Liquefaction	CONSISTENT. Refer to Goal 1 and Policies 8 and 10, above. Also see KCGP 1.3, <i>Physical and Environmental Constraints</i> , Goal 1 and Policies 1, 2, and 3; 1.5, <i>Special Treatment Areas</i> , Policy 5; 1.10.1, <i>General Provisions</i> , <i>Public Services and Facilities</i> , Goal 1 and Policy 8; 4.1, <i>Introduction</i> , Goals 1, 2, 3, and 5; 4.3, <i>Seismically Induced Surface Rupture</i> , <i>Ground Shaking</i> , and <i>Ground Failure</i> , Policy 1; 4.5, <i>Landslides</i> , <i>Subsidence</i> , <i>Seiche</i> , and <i>Liquefaction</i> , Policies 1 and 3, in Table 4.10-2. See Section 4.6, <i>Geology and Soils</i> , Section 4.8, <i>Hazards and Hazardous Materials</i> , and Section 4.9, <i>Hydrology and Water Quality</i> , for further details. Option A would be consistent with Policy 13.	CONSISTENT. Refer to Goal 1 and Policies 8 and 10, above. Also see KCGP 1.3, <i>Physical and Environmental Constraints</i> , Goal 1 and Policies 1, 2, and 3; 1.5, <i>Special Treatment Areas</i> , Policy 5; 1.10.1, <i>General Provisions</i> , <i>Public Services and Facilities</i> , Goal 1 and Policy 8; 4.1, <i>Introduction</i> , Goals 1, 2, 3, and 5; 4.3, <i>Seismically Induced Surface Rupture</i> , <i>Ground Shaking</i> , and <i>Ground Failure</i> , Policy 1; 4.5, <i>Landslides</i> , <i>Subsidence</i> , <i>Seiche</i> , and <i>Liquefaction</i> , Policies 1 and 3, in Table 4.10-2. See Section 4.6, <i>Geology and Soils</i> , Section 4.8, <i>Hazards and Hazardous Materials</i> , and Section 4.9, <i>Hydrology and Water Quality</i> , for further details. Option B would be consistent with Policy 13.
Dam Failure Inundation Risk Policies	CONSISTENT. Refer to Goal 1 and Policies 8, 10, and 13, above. Also see KCGP 1.3, <i>Physical and Environmental Constraints</i> , Goal 1 and Policies 1, 2, and 3; 1.5, <i>Special Treatment Areas</i> , Policy 5; 1.10.1, <i>General Provisions</i> , <i>Public Services and Facilities</i> , Goal 1 and Policy 8; 4.1, <i>Introduction</i> , Goals 1, 2, 3, and 5; 4.3, <i>Seismically Induced Surface Rupture</i> , <i>Ground Shaking</i> , and <i>Ground Failure</i> , Policy 1; 4.5, <i>Landslides</i> , <i>Subsidence</i> , <i>Seiche</i> , and <i>Liquefaction</i> , Policies 1 and 3,	CONSISTENT. Refer to Goal 1 and Policies 8, 10, and 13, above. Also see KCGP 1.3, <i>Physical and Environmental Constraints</i> , Goal 1 and Policies 1, 2, and 3; 1.5, <i>Special Treatment Areas</i> , Policy 5; 1.10.1, <i>General Provisions</i> , <i>Public Services and Facilities</i> , Goal 1 and Policy 8; 4.1, <i>Introduction</i> , Goals 1, 2, 3, and 5; 4.3, <i>Seismically Induced Surface Rupture</i> , <i>Ground Shaking</i> , and <i>Ground Failure</i> , Policy 1; 4.5, <i>Landslides</i> , <i>Subsidence</i> , <i>Seiche</i> , and <i>Liquefaction</i> , Policies 1 and 3, in Table 4.10-2. See

Table 4.10-3. Project Consistency with the Metropolitan Bakersfield General Plan

Goals and Policies	Proposed Project Consistency	
	Option A	Option B
	in Table 4.10-2. See Section 4.6, <i>Geology and Soils</i> , Section 4.8, <i>Hazards and Hazardous Materials</i> , and Section 4.9, <i>Hydrology and Water Quality</i> , for further details. Option A would be consistent with Policy 18.	Section 4.6, <i>Geology and Soils</i> , Section 4.8, <i>Hazards and Hazardous Materials</i> , and Section 4.9, <i>Hydrology and Water Quality</i> , for further details. Option B would be consistent with Policy 18.
Policy 19. Design discretionary facilities in the potential dam inundation area used for the manufacture, storage or use of hazardous materials to prevent on-site hazards from affecting surrounding communities in the event of inundation.	CONSISTENT. Refer to Goal 1 and Policies 8, 10, 13, and 18, above. Also see KCGP 1.3, <i>Physical and Environmental Constraints</i> , Goal 1 and Policies 1, 2, and 3; 1.5, <i>Special Treatment Areas</i> , Policy 5; 1.10.1, <i>General Provisions, Public Services and Facilities</i> , Goal 1 and Policy 8; 4.1, <i>Introduction</i> , Goals 1, 2, 3, and 5; 4.3, <i>Seismically Induced Surface Rupture, Ground Shaking, and Ground Failure</i> , Policy 1; 4.5, <i>Landslides, Subsidence, Seiche, and Liquefaction</i> , Policies 1 and 3, in Table 4.10-2. See Section 4.6, <i>Geology and Soils</i> , Section 4.8, <i>Hazards and Hazardous Materials</i> , and Section 4.9, <i>Hydrology and Water Quality</i> , for further details. Therefore, Option A would be consistent with Policy 19.	CONSISTENT. Refer to Goal 1 and Policies 8, 10, 13, and 18, above. Also see KCGP 1.3, <i>Physical and Environmental Constraints</i> , Goal 1 and Policies 1, 2, and 3; 1.5, <i>Special Treatment Areas</i> , Policy 5; 1.10.1, <i>General Provisions, Public Services and Facilities</i> , Goal 1 and Policy 8; 4.1, <i>Introduction</i> , Goals 1, 2, 3, and 5; 4.3, <i>Seismically Induced Surface Rupture, Ground Shaking, and Ground Failure</i> , Policy 1; 4.5, <i>Landslides, Subsidence, Seiche, and Liquefaction</i> , Policies 1 and 3, in Table 4.10-2. See Section 4.6, <i>Geology and Soils</i> , Section 4.8, <i>Hazards and Hazardous Materials</i> , and Section 4.9, <i>Hydrology and Water Quality</i> , for further details. Therefore, Option B would be consistent with Policy 19.
B. Flooding		
Goal 1. Minimize hazards to planning area residents resulting from flooding.	CONSISTENT. Refer to Goal 1 and Policies 8, 10, 13, and 18, above. Also see KCGP 1.3, <i>Physical and Environmental Constraints</i> , Goal 1 and Policies 1, 2, 3, and 6 through 11; 1.5, <i>Special Treatment Areas</i> , Policy 5; 1.10.1, <i>General Provisions, Public Services and Facilities</i> , Goal 1 and Policy 8; 4.1, <i>Introduction</i> , Goals 1, 2, 3, and 5; 4.3, <i>Seismically Induced Surface Rupture, Ground Shaking, and Ground Failure</i> , Policy 1; 4.5, <i>Landslides, Subsidence, Seiche, and Liquefaction</i> , Policies 1 and 3, in Table 4.10-2. See Section 4.6, <i>Geology and Soils</i> , Section 4.8, <i>Hazards and Hazardous Materials</i> , and Section 4.9, <i>Hydrology and Water Quality</i> , for further details. Option A would be consistent with Goal 1.	CONSISTENT. Refer to Goal 1 and Policies 8, 10, 13, and 18, above. Also see KCGP 1.3, <i>Physical and Environmental Constraints</i> , Goal 1 and Policies 1, 2, 3, and 6 through 11; 1.5, <i>Special Treatment Areas</i> , Policy 5; 1.10.1, <i>General Provisions, Public Services and Facilities</i> , Goal 1 and Policy 8; 4.1, <i>Introduction</i> , Goals 1, 2, 3, and 5; 4.3, <i>Seismically Induced Surface Rupture, Ground Shaking, and Ground Failure</i> , Policy 1; 4.5, <i>Landslides, Subsidence, Seiche, and Liquefaction</i> , Policies 1 and 3, in Table 4.10-2. See Section 4.6, <i>Geology and Soils</i> , Section 4.8, <i>Hazards and Hazardous Materials</i> , and Section 4.9, <i>Hydrology and Water Quality</i> , for further details. Option B would be consistent with Goal 1.
Goal 2. Reduce the risk of flooding to land uses.	CONSISTENT. Refer to Goal 1, above. Option A would be consistent with Goal 2.	CONSISTENT. Refer to Goal 1, above. Option B would be consistent with Goal 2.
Policy 3. Prevent urban development encroachment which would impede flood flows in the Kern River designated floodway.	CONSISTENT. Refer to Goal 1, above. Option A would be consistent with Policy 3.	CONSISTENT. Refer to Goal 1, above. Option B would be consistent with Policy 3.

Table 4.10-3. Project Consistency with the Metropolitan Bakersfield General Plan

Goals and Policies	Proposed Project Consistency	
	Option A	Option B
C. Public Safety		
Policy 2. Require discretionary projects to assess impacts on police and fire services and facilities.	CONSISTENT. This EIR serves to comply with this policy. Implementation of Option A would not result in new development beyond which is currently projected. Option A would allow for personal cannabis use and cultivation of up to six plants. Option A would not result in new development thus increasing the demand on public services. See Section 4.13, <i>Public Services</i> , for further details. Option A would be consistent with Policy 2.	CONSISTENT. This EIR serves to comply with this policy. Option B would update the Kern County Zoning Ordinance as it relates to future cannabis facility development. Option B includes development standards and would require mitigation measures to minimize effects on public service demands. See Section 4.13, <i>Public Services</i> , for further details. Option B would be consistent with Policy 2.
Policy 6. Promote fire prevention methods to reduce service protection costs and costs to the taxpayer.	CONSISTENT. Refer to Policy 2, above. See Section 4.8, <i>Hazards and Hazardous Materials</i> , Section 4.13, <i>Public Services</i> , and Section 4.16, <i>Utilities and Service Systems</i> , for further discussion. Therefore, Option A would be consistent with Implementation Policy 6.	CONSISTENT. Refer to Policy 2, above. See Section 4.8, <i>Hazards and Hazardous Materials</i> , Section 4.13, <i>Public Services</i> , and Section 4.16, <i>Utilities and Service Systems</i> , for further discussion. Therefore, Option B would be consistent with Policy 6.
Policy 12. Where recommended by appropriate local, State or federal agencies for discretionary projects, soils shall be tested for concentrations of agricultural chemicals prior to grading permit approval whenever feasible. Contaminated soils shall be excavated and disposed of at a certified hazardous waste disposal facility whenever necessary.	CONSISTENT. Refer to Policies 2, 6, and 12 and MBGP Chapter II, <i>Land Use Element</i> , Goals 4 and 6; Chapter V, <i>Conservation Element</i> , C. <i>Soils and Agriculture</i> , Goals 1 through 3, Policies 1, 2, 4, 7, and 12; and VIII, <i>Safety Element</i> , Goal 7; and B. <i>Flooding</i> , Policy 7, above. Also refer to KCGP 1.9, <i>Resource</i> , Goals 1, 2, 3, and 5 and Policies 2, 7, 11, 12, and 24; 4.2, <i>General Policies and Implementation Measures Which Apply to More than One Safety Constraint</i> , Policy 5; and 4.9, <i>Hazardous Materials</i> , Policy 2, in Table 4.10-2. See Section 4.2, <i>Agriculture and Forest Resources</i> , Section 4.4, <i>Biological Resources</i> , Section 4.6, <i>Geology and Soils</i> , Section 4.8, <i>Hazards and Hazardous Materials</i> , Section 4.13, <i>Public Services</i> , and Section 4.16, <i>Utility and Service Systems</i> , for further details. Option A would be consistent with Policy 12.	CONSISTENT. Refer to Policies 2, 6, and 12 and MBGP Chapter II, <i>Land Use Element</i> , Goals 4 and 6; Chapter V, <i>Conservation Element</i> , C. <i>Soils and Agriculture</i> , Goals 1 through 3, Policies 1, 2, 4, 7, and 12; and VIII, <i>Safety Element</i> , Goal 7; and B. <i>Flooding</i> , Policy 7, above. Also refer to KCGP 1.9, <i>Resource</i> , Goals 1, 2, 3, and 5 and Policies 2, 7, 11, 12, and 24; 4.2, <i>General Policies and Implementation Measures Which Apply to More than One Safety Constraint</i> , Policy 5; and 4.9, <i>Hazardous Materials</i> , Policy 2, in Table 4.10-2. See Section 4.2, <i>Agriculture and Forest Resources</i> , Section 4.4, <i>Biological Resources</i> , Section 4.6, <i>Geology and Soils</i> , Section 4.8, <i>Hazards and Hazardous Materials</i> , Section 4.13, <i>Public Services</i> , and Section 4.16, <i>Utility and Service Systems</i> , for further details. Option B would be consistent with Policy 12.
Policy 13. Fugitive dust emissions shall be controlled through applicable requirements (Regulation VIII) set forth by the San Joaquin Valley Unified Air Pollution Control District, including but not limited to; irrigation, paving of construction roads, and limiting grading activities during periods of high wind. These practices would reduce potential adverse health effects resulting from the	INCONSISTENT. Refer to MBGP Chapter V, <i>Conservation Element</i> , <i>Air Quality</i> , Goals 1, 2, and 4, and Policies 1, 2, 3, 4, and 5, above. Also refer to KCGP 1.10.2, <i>Air Quality</i> , Policies 18, 19, 21, 22, and 23, in Table 4.10-2. Option A would increase VMT and thus would exceed SJVAPCD thresholds. See Section 4.3, <i>Air Quality</i> , and Section 4.7, <i>Greenhouse Gas Emissions</i> , for further details. Option A would be	INCONSISTENT. Refer to MBGP Chapter V, <i>Conservation Element</i> , <i>Air Quality</i> , Goals 1, 2, and 4, and Policies 1, 2, 3, 4, and 5, above. Also refer to KCGP 1.10.2, <i>Air Quality</i> , Policies 18, 19, 21, 22, and 23, in Table 4.10-2. While Option B would not preclude the County from working with the SJVAPCD to enforce air quality standards, Option B would result in significant impacts to air quality at the cumulative level, even with all feasible mitigation measure

Table 4.10-3. Project Consistency with the Metropolitan Bakersfield General Plan

Goals and Policies	Proposed Project Consistency	
	Option A	Option B
development of agricultural property.	inconsistent with Policy 13.	implemented. See Section 4.3, <i>Air Quality</i> , and Section 4.7, <i>Greenhouse Gas Emissions</i> , for further details. Option B would be consistent with Policy 13; however, cumulative impacts would be inconsistent with Policy 13.
Policy 15. Fugitive dust emissions shall be controlled through applicable requirements set forth by the San Joaquin Valley Unified Air Pollution Control District (Regulation VIII), including but not limited to; irrigation, paving of construction roads, and limiting grading activities during periods of high wind. These practices would reduce potential adverse health effects as a result of exposure to Coccidioidomycosis.	CONSISTENT. Refer to Policy 13, above. Option A would not result in new development; however, some ground disturbing activities could result from the personal cultivation of up to six cannabis plants. This would be similar to existing conditions associated with residential gardens. See Section 4.3, <i>Air Quality</i> , and Section 4.7, <i>Greenhouse Gas Emissions</i> , and 4.8, <i>Hazards and Hazardous Materials</i> , for further discussion. Therefore, Option A would be consistent with Policy 15.	CONSISTENT. Refer to Policy 13, above. Option B would result in ground disturbing activities. Option B includes development standards as well as mitigation measures to reduce impacts related to fugitive dust and Valley Fever. See Section 4.3, <i>Air Quality</i> , and Section 4.7, <i>Greenhouse Gas Emissions</i> , and 4.8, <i>Hazards and Hazardous Materials</i> , for further discussion. Therefore, Option B would be consistent with Policy 15.
Policy 16. All new discretionary development projects shall be subject to environmental and design review on a site-specific, project-by-project basis, including but not limited to an assessment to determine whether hazardous materials present potential health effects to human health as required by the Department of Environmental Services.	CONSISTENT. This EIR serves to comply with this policy. Implementation of Option A would not result in new development beyond which is currently projected. Option A would allow for personal cannabis use and cultivation of up to six plants. Option A would not result in new development thus increasing the public risks associated with hazardous materials. See Section 4.8, <i>Hazards and Hazardous Materials</i> , for further details. Option A would be consistent with Policy 16.	CONSISTENT. This EIR serves to comply with this policy. Option B would update the Kern County Zoning Ordinance as it relates to future cannabis facility development. Option B includes development standards and would require mitigation measures to minimize effects on the public risk associated with hazardous materials. See Section 4.8, <i>Hazards and Hazardous Materials</i> , for further details. Option B would be consistent with Policy 16.
Chapter X. Public Services and Facilities Element		
A. General Utility Services		
Policy 5. Require all new development to pay its pro rata share of the cost of necessary expansion in municipal utilities, facilities and infrastructure for which it generates demand and upon which it is dependent.	CONSISTENT. Refer to MBGP Chapter II, <i>Land Use Element</i> , Goals 2, 3, and 4, above; as well as KCGP 1.4, <i>Public Facilities and Services</i> , Goals 1, 2, 3, 5, 9, and 10, and Policies 1, 2, 3, 6, 7, and 13, in Table 4.10-2. Option A would not result in new development within unincorporated Kern County. See Section 4.10, <i>Land Use and Planning</i> , Section 4.13, <i>Public Services</i> , and Section 4.16, <i>Utilities and Service Systems</i> , for further details. Therefore, Option A would be consistent with Policy 5.	CONSISTENT. Refer to MBGP Chapter II, <i>Land Use Element</i> , Goals 2, 3, and 4, above; as well as KCGP 1.4, <i>Public Facilities and Services</i> , Goals 1, 2, 3, 5, 9, and 10, and Policies 1, 2, 3, 6, 7, and 13, in Table 4.10-2. Option B would provide guidance for development of cannabis facilities to ensure adequate infrastructure within the Metropolitan Bakersfield Area and unincorporated Kern County. See Section 4.10, <i>Land Use and Planning</i> , Section 4.13, <i>Public Services</i> , and Section 4.16, <i>Utilities and Service Systems</i> , for further details. Therefore, Option B would be consistent with Policy 5.
B. Water Distribution		
Goal 1. Ensure the provision of adequate water service to all developed and developing portions of the plan area.	CONSISTENT. Implementation of Option A would not result in new development beyond which is currently	CONSISTENT. Under Option B, the majority of water demand would result from future cannabis cultivation

Table 4.10-3. Project Consistency with the Metropolitan Bakersfield General Plan

Goals and Policies	Proposed Project Consistency	
	Option A	Option B
	projected. Option A would allow for personal cannabis use and cultivation of up to six plants. Option A would not require new water use beyond what is already planned within current plans and policies and that which would be needed for a personal garden. See Section 4.16, <i>Utilities and Service Systems</i> , for further details. Therefore, Option A would be consistent with Goal 1.	activities (indoor and outdoor) and processing and packaging operations. Also, a Water Supply Assessment would be triggered through SB 610 for cannabis facilities employing more than 1,000 persons, occupying more than 40 acres or 500,000 ft ² , or having a water demand equivalent to, or greater than, 500 dwelling units. In addition, mitigation measures would require a future cannabis facility to obtain a will serve letter from the appropriate water district, CSA, CSD, or PUD, or to provide proof of water rights. See Section 4.9, <i>Hydrology and Water Quality</i> , and Section 4.16, <i>Utilities and Service Systems</i> , for further details. Therefore, Option B would be consistent with Goal 1.
Policy 3. Require that all new development proposals have an adequate water supply available.	CONSISTENT. Refer to Goal 1, above. Option A would be consistent with Policy 3.	CONSISTENT. Refer to Goal 1, above. Option B would be consistent with Policy 3.
C. Sewer Service		
Goal 1. Ensure the provision of adequate sewer service to serve the needs of existing and planned development in the planning area.	CONSISTENT. Implementation of Option A would not result in new development beyond which is currently projected. Option A would allow for personal cannabis use and cultivation of up to six plants. Option A would not substantially impact public services and utilities beyond what is already planned within current plans and policies. See Sections 4.13, <i>Public Services</i> , and 4.16, <i>Utilities and Service Systems</i> , for further discussion. Therefore, Option A would be consistent with Goal 1.	CONSISTENT. Option B would regulate the location, operation, and establishment of commercial cannabis facilities. Implementation of Option B is not expected to result in substantial population increases. Future cannabis facilities would be required to pay a pro rata share Public Facilities Mitigation Program, as well as any site development fee. However, implementation of Option B may result in increased demand beyond supply for water and energy public services. Mitigation measures would be required for any future cannabis related facility. See Sections 4.13, <i>Public Services</i> , and 4.16, <i>Utilities and Service Systems</i> , for further discussion. Option B would be consistent with Goal 1.
D. Storm Drain		
Goal 1. Ensure the provision of adequate storm drainage facilities to protect planning area residents from flooding resulting from storm water excess.	CONSISTENT. Refer to Sewer Service, Goal 1, above. Option A would be consistent with Goal 1.	CONSISTENT. Refer to Sewer Service, Goal 1, above. Option B would be consistent with Goal 1.
F. Solid Waste		
Goal 1. Ensure the provision of adequate solid waste disposal services to meet the demand for these services in the planning area.	CONSISTENT. Refer to Sewer Service, Goal 1, above. Option A would be consistent with Goal 1.	CONSISTENT. Refer to Sewer Service, Goal 1, above. Option B would be consistent with Goal 1.

Section 4.11

Noise

Section 4.11

Noise

4.11.1 Introduction

This section of the Draft Environmental Impact Report (EIR) addresses the potential noise impacts associated with the Kern County Cannabis Land Use Ordinance Project (proposed project). It describes the existing noise conditions in Kern County (County), the regulatory setting, the potential impacts from current and future ambient noise levels upon the proposed land uses, noise generation potential from proposed land uses and activities resulting from implementing the proposed project, and feasible mitigation measures to reduce impacts. A description of the environmental setting (affected environment) is presented below in Section 4.11.2, *Environmental Setting*, and the regulatory setting is presented in Section 4.11.3, *Regulatory Setting*, while the project impacts and associated Mitigation Measures are analyzed in Section 4.11.4, *Impacts and Mitigation Measures*.

Acoustical Terminology

Noise

The assessment of noise impacts uses specific terminology and fundamental descriptors not commonly used in everyday conversation. Therefore, in order to assist in a thorough understanding of the subsequent analysis, these terms are discussed in this subsection.

Acoustics is the study of sound, and noise is defined as unwanted sound.

Airborne sound is a rapid fluctuation or oscillation of air pressure above and below atmospheric pressure creating a sound wave.

The **pitch** or loudness of sound determines whether a sound is of a pleasant or objectionable nature. Pitch, which is the height or depth of a tone or sound, is louder to humans when it is high pitched versus low pitched. The loudness of a sound is determined by a combination of the intensity of the sound waves with the reception characteristics of the ear.

Measurement scales are used to describe sounds. A **decibel (dB)** is a unit used to describe the amplitude of sound, and sound levels are calculated on a logarithmic, not linear, basis. The lowest sound level that an unimpaired human ear can hear is described as zero on the decibel scale. Due to the logarithmic nature of measuring sound levels on the decibel scale, a 10-dB increase represents a tenfold increase in acoustic energy, whereas a 20-dB increase represents a hundredfold increase in acoustic energy. Because a relationship exists between acoustic energy and intensity, each 10-dB increase in sound level can have an approximate doubling effect on loudness as perceived by the human ear.

Acoustical terms used in this subsection are summarized in Table 4.11-1, *Definition of Acoustical Terms*. The most common metric is the overall **A-weighted sound level measurement (dBA)** that has been adopted by regulatory bodies worldwide. The A-weighting network measures sound in a

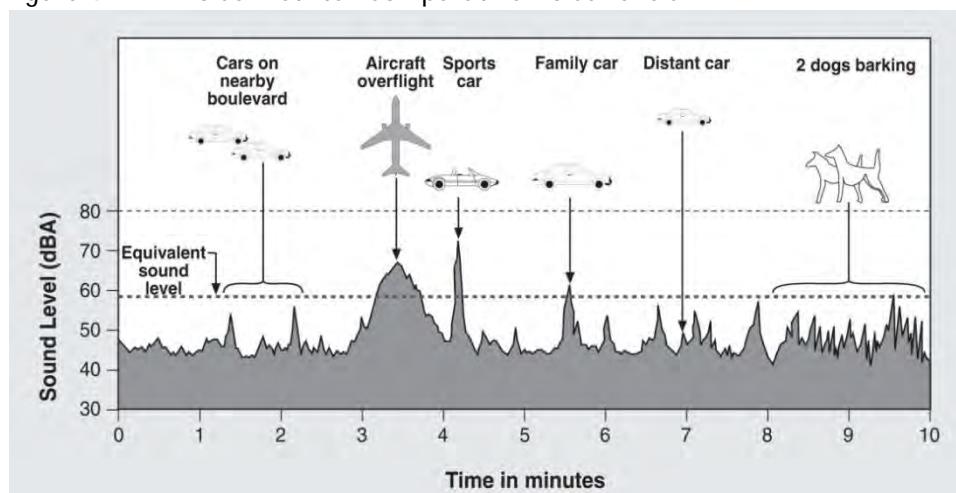
fashion similar to the way a person perceives or hears sound, thus achieving very good correlation in terms of evaluating acceptable and unacceptable sound levels.

Table 4.11-1. Definition of Acoustical Terms

Term	Definition
Ambient Noise Level	The composite noise from all sources resulting in the normal, existing level of environmental noise at a given location. The ambient level is typically defined by the L_{eq} level.
Background Noise Level	The underlying ever-present lower level noise that remains in the absence of intrusive or intermittent sounds. Distant sources, such as traffic, typically make up the background. The background level is generally defined by the L_{90} percentile noise level.
Intrusive	Noise that intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency, time of occurrence, tonal content, the prevailing ambient noise level, and the sensitivity of the receiver. The intrusive level is generally defined by the L_{10} percentile noise level.
Decibel (dB)	A unit describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure, which is 20 micropascals (20 micronewtons per square meter).
A-Weighted Sound Level (dBA)	The sound level in decibels as measured on a sound level meter using the A-weighted filter network. The A-weighted filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise. All sound levels in this report are A-weighted.
Equivalent Noise Level (L_{eq})	The average A-weighted noise level, on an equal energy basis, during the measurement period.
Percentile Noise Level (L_n)	The noise level exceeded during 'n' percent of the measurement period, where 'n' is a number between 0 and 100 (e.g., L_{90})
Day-Night Average Level (L_{dn})	The energy average A-weighted noise level during a 24-hour day, obtained after the addition of 10 decibels between the hours of 10 PM and 7 AM
Community Noise Equivalent Level (CNEL)	Represents the average daytime noise level during a 24-hour day, adjusted to an equivalent level to account for people's lower tolerance of noise during the evening and nighttime hours. Because community receptors are considered to be more sensitive to unwanted noise intrusion during the evening and night, an artificial decibel increment is added to quiet-time noise levels. Sound levels are increased by 5 dBA during the evening, from 7 PM to 10 PM and by 10 dBA during the nighttime, from 10 PM to 7 AM
Hertz (Hz)	A unit of frequency. The number of times per second that the sine wave of sound repeats itself, or that the sine wave of a vibrating object repeats itself.

One way to describe noise is to measure the **maximum sound level (L_{max})** (as represented by the 70 dBA noise level from the sports car in the example shown in Figure 4.11-1, *Noise Metrics – Comparative Noise Levels*). The L_{max} measurement does not account for the duration of the sound. Studies have shown that human response to noise involves the maximum level and its duration. For example, the aircraft in this case is not as loud as the sports car, but the aircraft sound lasts longer. For most people, the aircraft overflight would be more annoying than the shorter duration sports car event. Thus, the maximum sound level alone is not sufficient to predict reaction to environmental noise.

Figure 4.11-1. Noise Metrics - Comparative Noise Levels



A-weighted sound levels can be measured or presented as **equivalent sound pressure level (L_{eq})**. This is defined as the average noise level, on an equal-energy basis for a stated period of time and is commonly used to measure steady-state sound or noise that is usually dominant. Statistical measurements are typically denoted by L_n , where 'n' represents the percentile of time the sound level is exceeded. The measurement of L_{90} represents the noise level that is exceeded during 90 percent of the measurement period. Similarly, the L_{10} represents the noise level exceeded for 10 percent of the measurement period.

Human response to daytime and nighttime noise has been observed to vary. During the evening and nighttime, exterior background noises are generally lower than daytime levels; however, most household noise also decreases at night, and exterior noise becomes more noticeable. Furthermore, most people sleep at night and are sensitive to intrusive noises. To account for human sensitivity to evening and nighttime noise levels, the **Day-Night Level (L_{dn})** was developed. The L_{dn} is a noise index that accounts for the greater annoyance attributed to noise during the evening and nighttime hours.

L_{dn} values are calculated by averaging hourly L_{eq} sound levels for a 24-hour period and applying weighting factors to evening and nighttime L_{eq} values. The weighting factor, which reflects the increased sensitivity to noise during nighttime hours, is added to each hourly L_{eq} sound level before the 24-hour L_{dn} is calculated. For the purposes of assessing noise, the 24-hour day is divided into two time periods, with the following weightings:

- Daytime: 7 AM to 10 PM (15 hours), weighting factor of 0 dB
- Nighttime: 10 PM to 7 AM (9 hours), weighting factor of 10 dB

The time periods are then averaged (on an energy basis) to compute the overall L_{dn} value. For a continuous noise source, the L_{dn} value can be computed by adding 6.4 dB to the overall 24-hour noise level (L_{eq}). For example, if the expected continuous noise level from a power plant were 60.0 dBA L_{eq} for every hour, the resulting L_{dn} from the plant would be 66.4 dBA L_{dn} .

The **community noise equivalent level (CNEL)** metric is similar to the L_{dn} but with an additional 5 dB weighting factor between 7 PM and 10 PM and with a 10 dB weighing factor between 10 PM and 7 AM. CNEL and L_{dn} measures are frequently used interchangeably. For a continuous noise

source, the CNEL value can be computed by adding 6.7 dB to the overall 24-hour noise level (L_{eq}), meaning that the plant in the previous example would be 66.7 dBA CNEL.

The effects of noise on people can be grouped into three general categories:

- **Subjective effects** of annoyance, nuisance, dissatisfaction
- **Interference** with activities such as speech, sleep, learning
- **Physiological effects** such as startling and
- **Physical effects** such as hearing loss

In most cases, environmental noise produces effects in the first two categories of subjective effects and interference with activities only; however, workers in industrial plants might experience physiological effects of noise. No satisfactory way exists to measure the subjective effects of noise, or to measure the corresponding reactions of annoyance and dissatisfaction. This lack of a common standard is due primarily to the wide variation in individual thresholds of annoyance and habituation to noise. Thus, an important way of determining a person's subjective reaction to a new noise is by comparison with the existing or "ambient" environment to which that person has adapted. In general, the more the level or the tonal (frequency) variations of a noise exceed the existing ambient noise level or tonal quality, the less acceptable the new noise will be, as judged by the exposed individual. When comparing sound levels from similar sources (for example, changes in traffic noise levels), a 3 dBA change is considered to be a just-perceivable difference; 5 dBA is clearly perceivable, and 10 dBA is considered a doubling in loudness.

Exterior Noise Distance Attenuation

Noise sources are classified in two forms: (1) point sources, such as stationary equipment or a group of construction vehicles and equipment working within a spatially limited area at a given time; and (2) line sources, such as a roadway with a large number of pass-by sources (motor vehicles). Sound generated by a point source typically diminishes (attenuates) at a rate of 6.0 dBA for each doubling of distance from the source to the receptor at acoustically "hard" sites and at a rate of 7.5 dBA for each doubling of distance from source to receptor at acoustically "soft" sites. Sound generated by a line source (i.e., a roadway) typically attenuates at a rate of 3 dBA and 4.5 dBA per doubling distance, for hard and soft sites, respectively. Sound levels can also be attenuated by man-made or natural barriers. For the purpose of a sound attenuation discussion, a "hard" or reflective site does not provide any excess ground-effect attenuation and is characteristic of asphalt or concrete ground surfaces, as well as very hard-packed soils. An acoustically "soft" or absorptive site is characteristic of unpaved loose soil or vegetated ground.

Structural Noise Attenuation

Sound levels can also be attenuated by man-made or natural barriers. Solid walls, berms, or elevation differences typically reduce noise levels by 5 to 10 dBA. Structures can also provide noise reduction by insulating interior spaces from outdoor noise. The outside-to-inside noise attenuation provided by typical structures in California ranges between 17 to 30 dBA with open and closed windows, respectively.

Vibration

Vibration is defined as the mechanical motion of earth or ground, building, or other type of structure, induced by the operation of any mechanical device or equipment located upon or affixed thereto. Vibration generally results in an oscillatory motion in terms of the displacement, velocity, or acceleration of the ground- or structure(s) that causes a normal person to be aware of the vibration by means such as, but not limited to, sensation by touch or visual observation of moving objects.

The effects of groundborne vibration include movements of building floors, rattling of windows, and shaking of items on shelves or hangings on the walls. In extreme cases, vibration can cause damage to buildings. The noise radiated from the motion of the room surfaces is called ground-borne noise. The vibration motion normally does not provoke the same adverse human reactions as the noise unless there is an effect associated with the shaking of the building. In addition, the vibration noise can only occur inside buildings. Similar to the propagation of noise, vibration propagated from the source to the receptor depends on the receiving building (i.e., the weight of the building), soil conditions, layering of the soils, the depth of groundwater table, etc. However, the response of humans to vibration is very complex. However, it is generally accepted that human response is best approximated by the vibration velocity level associated with the vibration occurrence.

Heavy equipment operation, including stationary equipment that produces substantial oscillation or construction equipment that causes percussive action against the ground surface, may be perceived by building occupants as perceptible vibration. It is also common for groundborne vibration to cause windows, pictures on walls, or items on shelves to rattle. Although the perceived vibration from such equipment operation can be intrusive to building occupants, the vibration is seldom of sufficient magnitude to cause even minor cosmetic damage to buildings.

When evaluating human response, groundborne vibration is typically expressed in terms of root mean square (RMS) vibration velocity. RMS is defined as the average of the squared amplitude of the vibration signal. As for sound, it is common to express vibration amplitudes in terms of decibels.

To avoid confusion with sound decibels, the abbreviation VdB is used for vibration decibels. The vibration threshold of perception for most people is around 65 VdB. Vibration levels in the 70 to 75 VdB range are often noticeable but generally deemed acceptable, and levels in excess of 80 VdB are often considered unacceptable.

4.11.2 Environmental Setting

Project Site

The project site encompasses all of Kern County, approximately 8,202 square miles, and contains a diverse geography of valley areas (San Joaquin Valley), mountainous areas (Tehachapi Mountains, Sierra Nevada Mountains, San Emigdio Mountains, and Coast Ranges), and desert areas (Mojave Desert, Indian Wells Valley, Antelope Valley). The project site is divided into three geographic regions in order to facilitate detailed analysis: Valley Region, Mountain Region, and Desert Region. The project site includes all areas within unincorporated Kern County.

Noise Sensitive Land Uses

Noise sensitive land uses, as defined by Kern County General Plan (KCGP) and the Metropolitan Bakersfield General Plan (MBGP), and adopted Specific Plans within the Count, are residences, retirement homes, schools, hospitals (including convalescent, acute care, and other long-term medical or mental facilities), parks, churches, and other similar land uses. Industrial and commercial land uses are generally not considered sensitive to noise, with the exception of commercial lodging facilities.

Land uses in which groundborne vibration could potentially interfere with operations or equipment, such as research, manufacturing, hospitals, and university research operations are considered “vibration-sensitive.” The degree of sensitivity depends on the specific equipment that would be affected by the groundborne vibration.

Transportation Noise Sources

There are three major transportation noise source types in Kern County: roadway, railroad, and aviation. Noise levels from these sources are generally lower in rural portions of the County and become higher in urbanized areas.

Roadway Noise

Noise generated from roadways is dependent on the number of vehicles, the vehicle mix (proportion of trucks to cars) and speed of travel. Additional factors include gradient, road alignment, and intersection controls, and topographical barriers. Vehicles changing elevation or changing speed with an intersection control can produce more noise due to de-acceleration or acceleration. For sensitive land uses, the noise levels experienced from roadway noise is also dependent on the distance between the sensitive land use and the roadway.

Railroad Noise

Railroad operations can be a major noise source and, as with roadway noise, levels are affected by various factors such as the number and schedule of trains, speed, length of the train, railroad gradient, and topographical barriers. Railroad beds are often elevated; the typical locomotive is approximately 10 feet above the tracks; warning horns on the locomotive, which emit noise when the train comes to an at-grade crossing, are typically 15 feet above the track. For sensitive land uses, the noise levels experienced from railroad noise is also dependent on the distance between the sensitive land use and the railroad, as well as elevation of the railroad in contrast to the sensitive receptor.

Public Use Airports and Military Aviation Noise

There are more than 300 public, private, and military airports, balloonports, gliderports, heliports, and ultraflight flightparks within a 100-mile radius of the City of Bakersfield (AirNav, 2017a). Of these, more than 20 are private airports and airstrips; the majority of these are in the Valley Region, with approximately 5 in the Mountain Region and approximately 4 in the Desert Region. The Kern County Airport Land Use Compatibility Plan (ALUCP) identifies 18 airports as follows:

- **Valley Region** – Bakersfield Municipal Airport, Meadows Field Airport, Shafter-Minter Field, Wasco-Kern County Airport, Delano Municipal Public Airport, Elk Hills-Buttonwillow Airport, Poso-Kern County Airport, and Lost Hills-Kern County Airport;
- **Mountain Region** – Taft-Kern County Airport, Tehachapi Municipal Airport, Mountain Valley Airport, and Kern Valley Airport; and
- **Desert Region** – Mojave Air and Space Port Airport, Rosamond Skypark Airport, California City Municipal Airport, and InyoKern Airport.

The Desert Region also contains two military aviation facilities: China Lake Naval Air Weapons Station and Edwards Airforce Base. Both military facilities are principal bases for research and development, and testing and evaluation for air warfare and missile weapons systems. In support of these activities, many varied aircraft utilize the airfield facilities. In addition, a restricted area known as Join Service Restricted R-2508 Complex is a large area of restricted airspace which is greatly limited to civilian aircraft and only after obtaining prior permission. It encompasses 20,000 square miles of electronically surveilled ranges permitting unrestricted flight test from near ground level to near space at various locations. The R-2508 Complex covers portions of Kern, Inyo, Mono, Los Angeles, San Bernardino, and Tulare counts and a small portion of the State of Nevada.

Agricultural Noise Sources

Agricultural operations may produce significant noise during planting and harvesting times from equipment operation. Agricultural noise may be disturbing to neighboring residential areas, as urban development intrudes into agricultural lands. Agricultural areas may also have noise sensitive uses, which can be disturbed by high noise levels as is the case with the raising of animals and poultry.

Industrial Noise Sources

Heavy Industrial Facilities

Large industrial operations have the potential to generate high decibel noise impacts. Facilities such as power plants, refineries and gas plants often operate continuously and have operations that cannot be contained in structures sufficient to dampen all noise generation. Kern County has only one zoning classification M-3 (Heavy Industrial) District that allows these uses and is consistent only with the KCGP land use designation for 7.3 (Heavy Industrial). Although some uses are allowed under site plan review, there are specific siting policies in the zoning ordinance for distance from an existing residential use. Other heavy industrial facilities require a conditional use permit (CUP) which is a discretionary process as they also have other impacts that need to be evaluated under CEQA. Reduction of noise can also occur through changes in operations and installation of sound dampening equipment.

Energy Development Oil and Gas Production

Noise effects related to the exploration and production of oil and gas wells is minimal. The predominant areas where oil and gas production occurs are located in agricultural and industrially zoned areas which are generally separated from sensitive noise receptors.

Development standards in Chapter 19.98 Oil and Gas Production of the Kern County Zoning Ordinance requires spacing standards for new wells from sensitive land uses which minimizes land uses and noise conflicts. Within the residential zone districts (R-1 [Low Density Residential], R-2 [Medium Density Residential], E [Estate]), a CUP is required for oil and gas production facilities.

Energy Development Wind Turbines

Kern County has a concentration of wind turbines in the Desert and Mountain Regions, with more than 3,500 installed turbines. Turbines can generate significant noise. Development standards in Chapter 19.64 Wind Energy (WE) District of the Kern County Zoning Ordinance includes requirements and standards to address noise impacts on sensitive receptors. The siting and setback criteria in the Kern County Zoning Ordinance are designed to ensure sufficient distance from sensitive receptors.

4.11.3 Regulatory Setting

Federal

As explained in Section 3.2, *Regulatory History and Background*, even though cannabis is “decriminalized” under State law, and even with the U.S. Department of Justice (USDOJ) issuance of memoranda guiding federal law enforcement related to cannabis activities within jurisdictions that have legalized cannabis, cannabis activities continue to be illegal at the federal level and subject to the prosecutorial discretion of the federal government.

Noise Control Act of 1972 (42 USC 4910)

The Noise Control Act of 1972 establishes a national policy to promote an environment for all Americans free from noise that jeopardizes their health and welfare. To accomplish this, the act establishes a means for the coordination of federal research and activities in noise control, authorizes the establishment of federal noise emissions standards for products distributed in commerce, and provides information to the public with respect to the noise-emission and noise-reduction characteristics of such products.

U.S. Environmental Protection Agency (EPA) Recommendations

In response to a federal mandate, U.S. Environmental Protection Agency (U.S. EPA) provided guidance in Information on Levels of Environmental Noise Requisite to Protect Health and Welfare with an Adequate Margin of Safety (National Technical Information Service [NTIS], 550|9-74-004, EPA, Washington, D.C., March 1974). Commonly referenced as the “Levels Document,” it establishes an L_{dn} of 55 dBA as the requisite level, with an adequate margin of safety, for areas with outdoor uses, including residential and recreational areas. This document does not constitute EPA regulations or standards but identifies safe levels of environmental noise exposure without consideration of costs for achieving these levels or other potentially relevant considerations. It is intended to “provide State and local governments, as well as the federal government and the private sector, with an informational point of departure for the purpose of decision-making.” The agency is careful to stress that the recommendations contain a factor of safety and do not consider technical or economic feasibility issues and, therefore, should not be construed as standards or regulations.

Federal Aviation Administration Standards

Enforced by the Federal Aviation Administration (FAA), Code of Federal Regulations (CFR) Title 14, Part 150, prescribes the procedures, standards, and methodology governing the development, submission, and review of airport noise exposure maps and airport noise compatibility programs, including the process for evaluating and approving or disapproving those programs. Title 14 also identifies those land uses that are normally compatible with various levels of exposure to noise by individuals. The FAA has determined that interior sound levels up to 45 dBA L_{dn} (or CNEL) are acceptable within residential buildings. The FAA also considers residential land uses to be compatible with exterior noise levels at or less than 65 dBA L_{dn} (or CNEL).

Federal Highway Administration

The purpose of the Federal Highway Administration (FHWA) Noise Abatement Procedures (23 CFR 772) is to provide procedures for noise studies and noise abatement measures to help protect the public health and welfare, supply noise abatement criteria (NAC), and establish requirements for information to be given to local officials for use in the planning and design of highways. It establishes five categories of noise-sensitive receptors and prescribes the use of the hourly L_{eq} as the criterion metric for evaluating traffic noise impacts.

All highway projects that are developed in conformance with this regulation shall be deemed to be in conformance with the Department of Transportation-FHWA Noise Standards. Title 23 establishes an NAC of 67 dBA L_{eq(h)} applicable to federal highway projects for evaluating impacts to land uses including residences, recreational uses, hotels, hospitals, and libraries (23 CFR Chapter 1, Part 772, Section 772.19). Additionally, FHWA requires that individual states establish an allowable noise level increase (at or above which the increase is deemed to be “substantial” (between 5 and 15 dB) and abatement should be considered) for Type 1 highway projects. Type I projects include projects that would: construct a highway in a new location; physically alter an existing highway where there is a substantial horizontal or vertical alteration; add through-traffic lane(s); add auxiliary lane(s); add or relocate interchange lands or ramps; restripe pavement for the purposes of adding lane(s); and add a new, or substantially altering and existing, weigh station, rest stop, ride-share lot, or toll plaza.

Federal Transit Administration and Federal Railroad Administration

Although the Federal Transit Administration (FTA) standards are intended for federally funded mass-transit projects, the impact assessment procedures and criteria included in the FTA Transit Noise and Vibration Impact Assessment Manual (May 2006) are routinely used for projects proposed by local jurisdictions. The FTA and Federal Railroad Administration (FRA) have published guidelines for assessing the impacts of groundborne vibration associated with rail projects, which have been applied by other jurisdictions to other types of projects. The FTA measure of the threshold of architectural damage for conventional sensitive structures is 0.2 inches/second peak-particle velocity (PPV).

Occupational Safety and Health Administration (OSHA)

The OSHA Occupational Noise Exposure: Hearing Conservation Amendment (Federal Register 48 [46], 9738–9785, 1983) stipulates that protection against the effects of noise exposure shall be provided for employees when sound levels exceed 90 dBA over an 8-hour exposure period. Protection shall consist of feasible administrative or engineering controls. If such controls fail to reduce sound levels to acceptable levels, personal protective equipment shall be provided and used

to reduce exposure of the employee. Additionally, a hearing conservation program must be instituted by the employers whenever employee noise exposure equals or exceeds the action level of an 8-hour, time-weighted average sound level of 85 dBA. The hearing conservation program requirements consider periodic area and personal noise monitoring, the performance and evaluation of audiograms, the provision of hearing protection, annual employee training, and record keeping.

State

Noise Element Guidelines

The California Department of Health Services has studied the correlation of noise levels and their effects on various land uses and established guidelines for evaluating the compatibility of various land uses as a function of community noise exposure. The State requires all municipalities to prepare and adopt a comprehensive long-range general plan. General plans must contain a noise element (California Government Code Section 65302[f] and Section 46050.1 of the Health and Safety Code). The requirements for the noise element of the general plan include describing the noise environment quantitatively using a cumulative noise metric, such as CNEL or DNL, establishing noise/land use compatibility criteria, and establishing programs for achieving and/or maintaining land use compatibility. Noise elements should address all major noise sources in the community, including mobile and stationary noise sources.

The State Office of Planning and Research (OPR) Noise Element Guidelines include recommended exterior and interior noise level standards for local jurisdictions to identify and prevent the creation of incompatible land uses due to noise. The Noise Element Guidelines contain guidance on land use compatibility that describes the compatibility of various land uses with a range of environmental noise levels in terms of the CNEL. Table 4.11-2 presents a summary of guidelines for determining acceptable and unacceptable community noise exposure limits for various land use categories. The guidelines also present adjustment factors that may be used to arrive at noise acceptability standards that reflect the noise control goals of the community, the particular community's sensitivity to noise, and the community's assessment of the relative importance of noise pollution.

Table 4.11-2. Land Use Compatibility for Community Noise Environments

Land Use Category	Community Noise Exposure (L_{dn} or CNEL, dBA)			
	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable
Residential - Low Density, Single-Family, Duplex, Mobile Homes	50 – 60	55 - 70	70-75	75-85
Residential - Multiple Family	50 – 65	60 - 70	70 – 75	70 - 85
Transient Lodging - Motel, Hotels	50 – 65	60 - 70	70 – 80	80 - 85
Schools, Libraries, Churches, Hospitals, Nursing Homes	50 – 70	60 - 70	70 – 80	80 - 85
Auditoriums, Concert Halls, Amphitheaters	NA	50 - 70	NA	65 - 85
Sports Arenas, Outdoor Spectator Sports	NA	50 - 75	NA	70 - 85
Playgrounds, Neighborhood Parks	50 – 70	NA	67.5 – 75	72.5 - 85
Golf Courses, Riding Stables, Water Recreation, Cemeteries	50 – 70	NA	70 – 80	80 - 85
Office Buildings, Business Commercial and Professional	50 – 70	67.5 - 77.5	75 – 85	NA

Table 4.11-2. Land Use Compatibility for Community Noise Environments

Land Use Category	Community Noise Exposure (L_{dn} or CNEL, dBA)			
	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable
Industrial, Manufacturing, Utilities, Agriculture	50 – 75	70 - 80	75 – 85	NA
NA: Not Applicable; L_{dn} : average day/night sound level; CNEL: Community Noise Equivalent Level				
<u>Normally Acceptable</u> - Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.				
<u>Conditionally Acceptable</u> - New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.				
<u>Normally Unacceptable</u> - New construction or development should be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.				
<u>Clearly Unacceptable</u> - New construction or development should generally not be undertaken.				

California Division of OSHA

Occupational exposure to noise is regulated by the California Division of OSHA in Title 8, Group 15, Article 105, Sections 5095–5100. As mentioned above, the agency's standards stipulate that protection against the effects of noise exposure shall be provided when sound levels exceed 90 dBA over an 8-hour exposure period. Protection shall consist of feasible administrative and/or engineering controls. If such controls fail to reduce sound levels to acceptable levels, personal protective equipment shall be provided and used to reduce exposure of the employee. In addition, a hearing conservation program must be instituted by employers whenever employee noise exposure equals or exceeds the action level of an 8-hour time-weighted average sound level of 85 dBA. The hearing conservation program requirements consider periodic area and personal noise monitoring, the performance and evaluation of audiograms, the provisions of hearing protection, annual employee training, and record keeping. The California Environmental Quality Act (CEQA) (PRC Section 21000 et seq.) requires the identification of “significant” environmental impacts and their feasible mitigation.

Section XI of Appendix G to the CEQA Guidelines (CCR Title 14, Appendix G) lists some indicators of potentially significant impacts, which are included below under “Thresholds of Significance.”

CEQA does not define a threshold for “significant increase” with respect to noise exposure; however, based on human response and commonly applied industry standards, the following thresholds of significance would be applied to the project, as set forth by the CEQA Guidelines:

- The project causes the ambient noise level measured at the property line of affected uses to increase by 3 dBA in CNEL, to a level at or within the “normally unacceptable” or “clearly unacceptable” noise/land use compatibility category; or
- The project causes any 5-dBA or greater noise increase.

California Noise Control Act of 1973

Sections 46000 through 46080 of the California Health and Safety Code, known as the California Noise Control Act of 1973, declares that excessive noise is a serious hazard to the public health and welfare and that exposure to certain levels of noise can result in physiological, psychological, and economic damage. It also identifies a continuous and increasing bombardment of noise in the

urban, suburban, and rural areas. The California Noise Control Act declares that the State of California has a responsibility to protect the health and welfare of its citizens by the control, prevention, and abatement of noise. It is the policy of the State to provide an environment for all Californians free from noise that jeopardizes their health or welfare.

California Department of Transportation

The California Department of Transportation (Caltrans) has overseen the traffic noise analysis protocol for new highway construction and reconstruction projects. This protocol specifies the policies, procedures, and practices that are to be used by agencies that sponsor federal or federal-aid highway projects involving new construction or reconstruction. The NAC specified in the protocol are the same as those specified in 23 CFR 772. The protocol defines a noise increase as substantial when the predicted noise levels with project implementation exceed existing noise levels by 12 dBA. The protocol also states that a sound level is considered to approach an NAC level when the sound level is within 1 dB of the NAC identified in 23 CFR 772 (e.g., 66 dBA is considered to approach the NAC of 67 dBA, but 65 dBA is not).

Local

Most jurisdictions have unique standards and guidelines regarding noise and nuisance. These are set out in county and municipal codes and general plans. Each noise ordinance or noise element within a municipal/county code will address noise levels that create a nuisance in surrounding communities. Noise ordinances and noise elements occasionally classify different areas within these communities according to zoning standards. Such zones can include residential areas, which are analyzed further according to the density of the population; industrial areas; commercial areas; agricultural areas; and rural areas. The possible adverse effects of construction noise are included within the noise standards. The ambient noise level, type of noise source, distance to the noise source, time of day, duration of the noise, and zoning of the areas are variables that are considered when assessing the adverse effects of noise on noise-sensitive receptors. Virtually all municipal/county codes categorize noise by dBA. Many standards will use a continuous L_{eq} , CNEL, or L_{dn} to express the sound levels over a given timeframe.

Kern County General Plan (KCGP)

The KCGP Noise Element identifies goals, policies, and implementation measures that are used to guide development with regard to noise. The KCGP Noise Element identifies residential areas, schools, convalescence and acute care hospitals, parks and recreational areas, and churches as noise sensitive land uses. In noise sensitive areas, exterior noise levels generated by new projects are to be mitigated to 65 dB L_{dn} or less in outdoor activity areas and 45 dB L_{dn} or less within interior living spaces or other noise sensitive interior spaces.

Kern County includes working landscapes that have background noise levels from on-site as well as off-site (e.g., highway) uses, and also have periodic construction-related or seasonal noise levels. These ambient noise levels vary by location and over time, but are considered part of the County's setting for CEQA purposes. The KCGP Noise Element establishes the applicable CEQA significance threshold for noise impacts, and there is no actual or implied "zero decibel" or "any audible noise increase" that is appropriate or applicable to the County.

The following KCGP goals, policies, and implementation measures are applicable to the proposed project:

Chapter 3. Noise Element

Goals

- **Goal 1.** Ensure that residents of Kern County are protected from excessive noise and that moderate levels of noise are maintained.
- **Goal 2.** Protect the economic base of Kern County by preventing the encroachment of incompatible land uses near known noise producing roadways, industries, railroads, airports, oil and gas extraction, and other sources.

Policies

- **Policy 1.** Review discretionary industrial, commercial, or other noise-generating land use projects for compatibility with nearby noise-sensitive land uses.
- **Policy 2.** Require noise level criteria applied to all categories of land uses to be consistent with the recommendations of the California Division of Occupational Safety and Health (DOSH).
- **Policy 3.** Encourage vegetation and landscaping along roadways and adjacent to other noise sources in order to increase absorption of noise.
- **Policy 4.** Utilize good land use planning principles to reduce conflicts related to noise emissions.
- **Policy 5.** Prohibit new noise-sensitive land uses in noise-impacted areas unless effective mitigation measures are incorporated into the project design. Such mitigation shall be designed to reduce noise to the following levels:
 - (a) 65 dB-L_{dn} or less in outdoor activity areas.
 - (b) 45 dB-L_{dn} or less within living spaces or other noise sensitive interior spaces.
- **Policy 6:** Ensure that new development in the vicinity of airports will be compatible with existing and projected airport noise levels as set forth in the ALUCP.
- **Policy 7.** Employ the best available methods of noise control.
- **Policy 8.** Enforce the State Noise Insulation Standards (California Administrative Code, Title 24) and Chapter 35 of the Uniform Building Code concerning the construction of new multiple-occupancy dwellings such as hotels, apartments, and condominiums.

Implementation Measures

- **Implementation Measure A.** Utilize zoning regulations to assist in achieving noise-compatible land use patterns.
- **Implementation Measure C.** Review discretionary development plans, programs and proposals, including those initiated by both the public and private sectors, to ascertain and ensure their conformance to the policies outlined in this element.
- **Implementation Measure D.** Review discretionary development plans for proposed residential or other noise sensitive land uses in noise-impacted areas to ensure their conformance with the noise standards of 65 dB L_{dn} or less in outdoor activity areas and 45 dB L_{dn} or less within interior living spaces.
- **Implementation Measure E.** Review discretionary development plans to ensure compatibility with adopted Airport Land Use Compatibility Plans.

- **Implementation Measure F.** Require proposed commercial and industrial uses or operations to be designed or arranged so that they will not subject residential or other noise sensitive land uses to exterior noise levels in excess of 65 dB L_{dn} and interior noise levels in excess of 45 dB L_{dn}.
- **Implementation Measure G.** At the time of any discretionary approval, such as a request for a General Plan Amendment, zone change or subdivision, the developer may be required to submit an acoustical report indicating the means by which the developer proposes to comply with the noise standards. The acoustical report shall:
 - a) Be the responsibility of the applicant.
 - b) Be prepared by a qualified acoustical consultant experienced in the fields of environmental noise assessment and architectural acoustics.
 - c) Be subject to the review and approval of the Kern County Planning and Natural Resources Department and Kern County Public Health Services Department. All recommendations therein shall be complied with prior to final approval of the project.
- **Implementation Measure H.** Encourage cooperation between the County and the incorporated cities within the County to control noise.
- **Implementation Measure I.** Noise analyses shall include recommended mitigation, if required, and shall:
 - a) Include representative noise level measurements with sufficient sampling periods and locations to adequately describe local conditions.
 - b) Include estimated noise levels, in terms of CNEL, for existing and projected future (10 – 20 years hence) conditions, with a comparison made to the adopted policies of the Noise Element.
 - c) Include recommendations for appropriate mitigation to achieve compliance with the adopted policies and standards of the Noise Element.
 - d) Include estimates of noise exposure after the prescribed mitigation measures have been implemented. If compliance with the adopted standards and policies of the Noise Element will not be achieved, a rationale for acceptance of the project must be provided.
- **Implementation Measure J.** Develop implementation procedures to ensure that requirements imposed pursuant to the findings of an acoustical analysis are conducted as part of the project permitting process.

Kern County Specific Plans

Kern County has adopted 39 Specific Plans, 10 Rural Community Plans, and 14 Interim Rural Community Plan Maps. The Specific Plans and Rural Community Plans are intended to be an amplification of the goals and policies of the KCGP and are, therefore, consistent therewith. Interim Rural Community Plan Maps are areas where a specific plan has not been formally adopted, thus the goals and policies of the KCGP govern these areas. Future commercial cannabis cultivation, processing/packaging, and sales activities that would be authorized under the proposed project that would be located within the boundary of an adopted Specific Plan would be regulated according to County zoning.

Kern County Zoning Ordinance (Title 19 of the Kern County Code of Ordinances)

Section 19.04.252 of the Kern County Zoning Ordinance defines *exterior noise level* as “the noise level near the exterior of a structure usually within fifty (50) feet of the structure.”

Section 19.80.030.S (1) restricts noise generated by commercial or industrial uses within 500 feet of a residential use or residential zone district. The commercial or industrial use shall not generate noise that exceeds an average 65 dB L_{dn} between the hours of 7 AM and 10 PM, and shall not generate noise that exceeds 65 dB, or which would result in an increase of 5 dB or more from ambient sound levels, whichever is greater, between the hours of 10 PM and 7 AM. Commercial or industrial facilities that are located in the M-3 zone district are exempt from these noise-generation restrictions.

Kern County Noise Control Ordinance (Title 8 of the Kern County Code of Ordinances)

The Noise Control Ordinance in the Kern County Code of Ordinances (Section 8.36.020 et seq.) prohibits a variety of nuisance noises. Construction-related noise is regulated by means of a limitation on the hours of construction activity for projects located within 1,000 feet of an occupied residential dwelling. In such cases, construction is prohibited between the hours of 9 PM and 6 AM on weekdays and 9 PM and 8 AM on weekends, except as provided below:

- The development services agency director or his designated representative may for good cause exempt some construction work for a limited time.
- Emergency work is exempt from this section.

Kern County Airport Land Use Compatibility Plan

The County's Airport Land Use Compatibility Plan (ALUCP) provides noise compatibility criteria based on CNEL noise measurements. CNEL, like L_{dn}, is a measure of the cumulative 24-hour noise exposure that considers not only the variation of the A-weighted noise level but also the duration and the time of day of the disturbance. CNEL differs from L_{dn} in that it also applies a “penalty” of 5 dB to the hourly average noise levels that occur during the evening hours (7 PM to 10 PM). For many common noise sources, the levels measured in CNEL are very similar to those measured in L_{dn}. The ALUCP states that the maximum CNEL considered “normally acceptable” for residential uses outside the influence area of the airports covered by the Plan is 65 dB. The noise compatibility criteria used by the ALUCP are based on the California Land Use Compatibility Noise Guidelines.

In addition, the ALUCP recommends that single-event noise levels be considered when evaluating the compatibility of highly noise-sensitive land uses such as schools, libraries, and outdoor theaters. Flight patterns for each airport should be considered in the review process. Acoustical studies or on-site noise measurements may be required to assist in determining the compatibility of sensitive uses.

Metropolitan Bakersfield General Plan (MBGP)

The Metropolitan Bakersfield General Plan (MBGP), a joint effort between the Kern County Planning Department and the City of Bakersfield Planning Division, was last adopted on December 11, 2007. The MBGP includes both city and unincorporated County lands. The MBGP describes the community's physical development as well as its economic, social and

environmental goals and is currently undergoing an update. Project-related development on unincorporated lands within the MBGP Planning Area would be subject to the following applicable policies and implementation measures of the MBGP, with respect to noise.

Chapter III. Circulation Element, Section A. Streets

A. Streets

Goals

- **Goal 3.** Minimize the impact of truck traffic on circulation, and on noise sensitive land uses.

Chapter VII. Noise Element

Goals

- **Goal 1.** Ensure that residents of the Bakersfield metropolitan area are protected from excessive noise and existing moderate levels of noise are maintained.
- **Goal 2.** Protect the citizens of the planning area from the harmful effects of exposure to excessive noise, and protect the economic base of the area by preventing the encroachment of incompatible land uses near known noise-producing roadways, industries, railroads, airports and other sources.

Policies

- **Policy 1.** Identify noise-impact areas exposed to existing or projected noise levels exceeding 65 dB CNEL (exterior) or the performance standards described in Table VII-2. The noise exposure contour maps on file at the City of Bakersfield and County of Kern indicate areas where existing and projected noise exposures exceed 65 dB CNEL (exterior) for the major noise sources identified.
- **Policy 2.** Prohibit new noise-sensitive land uses in noise-impacted areas unless effective mitigation measures are incorporated into project design to reduce noise to acceptable levels.
- **Policy 3.** Review discretionary industrial, commercial or other noise-generating land use projects for compatibility with nearby noise-sensitive land uses. Additionally, the development of new noise-generating land uses which are not preempted from local noise regulation will be reviewed if resulting noise levels will exceed the performance standards contained within Table VII-2 in areas containing residential or other noise-sensitive land uses.
- **Policy 5.** Encourage vegetation and landscaping along roadways and adjacent to other noise sources in order to increase absorption of noise.

Implementation Measures

- **Implementation Measure 2.** Review discretionary development plans, programs and proposals, including those initiated by both the public and private sectors, to ascertain and ensure their conformance to the policy framework outlined in this element.

- **Implementation Measure 4.** Require proposed commercial and industrial uses or operations to be designed or arranged so that they will not subject residential or other noise sensitive land uses to exterior noise levels in excess of 65 dB CNEL and interior noise levels in excess of 45 dB CNEL and so that impacts on noise sensitive uses shall not exceed the performance standards in Table VII-2.

At time of any discretionary approval, such as a request for zone change or subdivision, the developer may be required to submit an acoustical report indicating the means by which the developer proposes to comply with the noise standards. The acoustical report shall:

- a) Be the responsibility of the applicant.
 - b) Be prepared by a qualified acoustical consultant experienced in the fields of environmental noise assessment and architectural acoustics.
 - c) Include representative noise level measurements with sufficient sampling periods and locations to adequately describe local conditions.
 - d) Include estimated noise levels in terms of CNEL and the standards of Table VII-2 (if applicable) for existing and projected future (10-20 years hence) conditions, with a comparison made to the adopted policies of the Noise Element.
 - e) Include recommendations for appropriate mitigation to achieve compliance with the adopted policies and standards of the Noise Element.
 - f) Include estimates of noise exposure after the prescribed mitigation measures have been implemented. If compliance with the adopted standards and policies of the Noise Element will not be achieved, a rationale for acceptance of the project must be provided.
- **Implementation Measure 5:** Develop implementation procedures to ensure that requirements imposed pursuant to the findings of an acoustical analysis are conducted as part of the project permitting process.
 - **Implementation Measure 6:** Enforce the Noise Insulation Standards (California Administrative Code, Title 24) and Chapter 35 of the Uniform Building Code concerning the construction of new multiple-occupancy dwellings such as hotels, apartments, and condominiums.
 - **Implementation Measure 10.** The following standards shall be used to determine the existence of significant cumulative noise impacts expected to result from proposed construction or development projects. The projected occurrence of such significant cumulative impacts shall require the adoption of practical and feasible mitigation measures to be identified in an Environmental Impact Report or Negative Declaration, whichever is applicable:

Standards for Cumulative Noise Impacts. A significant increase of existing noise-sensitive land uses (receptors), requiring the adoption of practical and feasible mitigation measures, is deemed to occur where a project will cause:

- An increase of the existing ambient noise level by 1 dB or more over 65 dB CNEL, where the existing ambient level is 65 dB CNEL or less;

or

- The ambient noise level is less than 60 dB CNEL and the project increases noise levels by 5 dB or more;
- The ambient noise level is 60 to 65 dB CNEL and the project increases noise levels by 3 dB or more;
- The ambient noise level is greater than 65 dB CNEL and the project increases noise levels by 1.5 dB or more.

4.11.4 Impacts and Mitigation Measures

This section describes the methodology used in conducting the CEQA impact analysis for noise; the thresholds of significance used in assessing impacts to noise; and the assessment of impacts to noise, including relevant mitigation measures.

Methodology

This analysis is based on the county-wide noise and vibration information that is publicly available. The evaluation of the proposed project's potential effects with respect to noise and vibration levels is at the program level. This EIR sets forth research criteria and report content needed to enable a project-level evaluation of resource occurrences. Any individual projects resulting from this proposed project would be required to adhere to the research criteria and report content set forth herein and could be required to undergo a separate CEQA evaluation pertaining to project-specific details.

Development Standards Related to Noise

Option A

Option A of the proposed project would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Therefore, no development standards are identified in the proposed Zoning Ordinance; refer to Appendix B for specific wording of the proposed ordinance under Option A.

Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, testing, and retail cannabis stores with or without mobile delivery facilities. Development standards provided in the proposed Zoning Ordinance, that pertain to noise include, but are not limited to, the following (refer to Appendix C for specific wording of the proposed ordinance under Option B):

- All cannabis facilities must be 0.5 mile from any school, park, day care center or youth center.
- The applicant must demonstrate compliance with all applicable mitigation measures prior to the issuance of a grading or building permit for any future cannabis related facility.
- Noise from mechanical equipment shall not exceed 30 dBA when measured at the property line, between 10 PM and 7 AM.

- For cannabis cultivation (indoor and outdoor), processing and packaging, and distribution facilities, on-site energy shall be provided or offset with a solar photovoltaic system; small wind generators may be used only in appropriate areas of Eastern Kern County.

Thresholds of Significance

The Kern County CEQA Implementation Document and Kern County Environmental Checklist state that a project would normally be considered to have a significant impact if it would result in:

- Exposure of persons to, or generate, noise levels in excess of standards established in the local general plan or noise ordinance or applicable standards of other agencies;
- Exposure of persons to, or generate, excessive ground borne vibration or ground borne noise levels;
- A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project;
- A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project;
- For a project located within the Kern County Airport Land Use Compatibility Plan, would the project expose people residing or working in the project area to excessive noise levels; or,
- For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels.

Kern County Noise Significance Criteria

As described in Section 4.11.3, *Regulatory Setting*, Policy 5 of the KCGP Noise Element specifies the exterior noise limit for noise sensitive land uses to be 65 dBA L_{dn} (or CNEL) within outdoor activity areas or 45 dBA L_{dn} (or CNEL) within interior living spaces.

For transportation-related noise, impacts are considered significant if project-generated traffic exposes existing or potential noise sensitive land uses to sound levels in excess of 65 dBA L_{dn} (or CNEL). In areas where the ambient noise exceeds 65 dBA L_{dn} (or CNEL), a three (3) dBA L_{dn} (or CNEL) or greater increase due to a proposed project is considered significant.

Impacts relating to operational noise are considered significant when project-related commercial or industrial noise would result in exposure of noise sensitive land uses to noise levels exceeding 65 dBA L_{dn} (or CNEL), as discussed in KCGP Noise Element Policy 1.

With respect to noise generation during future cannabis-related facility construction, Section 8.36.020 of the Kern County Code of Ordinances (Noise Ordinance) establishes construction noise control standards that would apply to any proposed project construction activity. Generally, noise-generating construction activities are restricted to the period between 6 AM and 9 PM weekdays and between 8 AM and 9 PM on weekends. Construction noise outside these allowable periods would be considered significant if it is audible to a person at a distance of 150 feet of the construction activity, if the construction site is within 1,000 feet of an occupied residential dwelling.

Impacts related to excessive groundborne vibration would be significant if the implementation of the proposed project results in future cannabis-related activities that result in the exposure of persons to or generation of excessive groundborne vibration equal to or in excess of 0.2 inches per

second (in/sec) PPV. Potential future cannabis-related facility construction activities within 200 feet and pile driving within 600 feet would be potentially disruptive to vibration-sensitive operations.

Project Impacts

Impact 4.11-1: Exposure of Persons to, or Generate, Noise Levels in Excess of Standards Established in the Local General Plan or Noise Ordinance or Applicable Standards of Other Agencies

Proposed Project Option A

Option A would result in no commercial medical and recreational cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A does not provide opportunities for business development and thus would not result in new businesses that could produce noise above the County's thresholds. Therefore, Option A would not result in exposing people to, or generating, noise levels in excess of standard established by the KCGP, MBGP, Kern County Noise Control Ordinance, or applicable County Specific Plans. Existing residences and other sensitive receptors would continue to have the same exposure to noise levels as existing conditions. No impact would occur in this regard.

In addition, Per Proposition 64, plants shall be kept within the person's private residence, or upon the grounds of that private residence (e.g. in an outdoor garden area), are in a locked space, and are not visible by normal unaided vision from a public place. Therefore, the implementation of Option A would result in activities that could produce noise; however, noise levels would be similar to those generated by a personal garden, and individual cultivation of up to six plants would not result in an adverse change in noise levels beyond those that already exist. No impact would occur in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and recreational cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 square feet (ft^2) of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft^2 of processing, packaging, and distribution operations, and up to 40 retail cannabis

stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

Future cannabis-related activities could, depending on location relative to sensitive noise receptors, result in noise levels in excess of the County's thresholds. Future noise-generating activities associated with Option B would occur at outdoor cultivation sites or in areas where new facilities or structures are constructed. Future cannabis-related activities such as use of construction equipment, traffic to/from facilities, and use of equipment for future cannabis cultivation, processing and packaging, and distribution may generate noise. In addition, for future indoor cultivation, processing and packaging, and distribution facilities, heating-ventilation-air-conditioning (HVAC) systems could generate noise. The duration, magnitude and proximity between these noise sources and sensitive receptors will vary significantly for projects.

If any construction is necessary for future cannabis-related facilities, typical construction equipment noise levels at a distance of 50 feet from the source can range from 74 dB for a roller to as high as approximately 101 dB for a pile driver; the majority of equipment operating at noise levels of between 76 dB and 88 dB at a distance of 50 feet from the source. Compliance to federal, State, and local laws, regulations, and policies would reduce anticipated impacts related to future cannabis-related facilities located in close proximity to sensitive receptors. Implementation of Mitigation Measure MM 4.11-1 would further reduce impacts of Option B as related to exposing people to, or generating, noise levels above the County's thresholds during any construction activities. As a result, impacts would be less than significant.

Mechanical HVAC equipment located on the ground or on rooftops of buildings have the potential to generate noise levels which average 71 dBA CNEL at a distance of 50 feet when equipment is operating continuously for 24 hours. Depending on where it is located, HVAC equipment could have the potential to generate noise that may exceed 65 dBA at nearby land uses; however, the setbacks for cannabis-related facilities are a minimum of 0.5 mile for most sensitive noise receptor land uses. For a single point source such as a piece of mechanical equipment, the sound level normally decreases by approximately 6 dBA for each doubling of distance from the source under "hard-surface" conditions typical of a developed commercial site. Therefore, it is assumed that HVAC equipment would generate noise levels that exceed 65 dBA within approximately 100 feet of the equipment. Consequently, any existing residences or noise-sensitive land uses within 100 feet of a future cannabis related facility could result in a potentially significant impact. However, compliance with the Kern County Code of Ordinances, which includes development standards, and Mitigation Measures MM 4.11-4 would reduce impacts.

Future outdoor cultivation of cannabis plants would include the use of farming equipment, including tractors, and a number of miscellaneous noise emitting equipment. Future indoor cannabis cultivation would occur in greenhouses or in other structures. These activities would include equipment typical of greenhouse activities for other agricultural crops; however, the HVAC systems could generate additional noise as compared to other agricultural crops, due to

the need for specific oxygen/nitrogen mixes as well as air filters to reduce odors. As mentioned above, these facilities would be allowed in agriculture and industrial zones only and are not anticipated to be within close proximity to sensitive receptors. However, compliance with the Kern County Code of Ordinances and implementation of Mitigation Measures MM 4.11-1 through MM 4.11-3 would help to ensure that noise levels would not exceed the County's thresholds.

Future cannabis processing, packaging, and distribution activities would occur within enclosed buildings. As is the case with other industrial buildings, noise could be produced by HVAC equipment, delivery vehicles, as well as noise associated with employees arriving and departing the facility. As mentioned above, these facilities would be allowed in agriculture and industrial zones only and are not anticipated to be within close proximity to sensitive receptors. However, compliance with the Kern County Code of Ordinances and implementation of Mitigation Measures MM 4.11-1 through MM 4.11-3 would help to ensure that noise levels would not exceed the County's thresholds.

Future retail cannabis stores would generate noise levels similar to the existing dispensaries within the County. Noise levels would include traffic operations for employees and customers, deliveries to and from the facility, HVAC equipment, and commercial truck deliveries. Future retail cannabis stores would be scattered throughout the County. Compliance with the Kern County Code of Ordinances and Mitigation Measures MM 4.11-1 through MM 4.11-3 would help to ensure that noise levels would not exceed the County's thresholds.

Traffic noise resulting from the operation of future cannabis-related facilities could generate noise at adjacent sensitive receptors sites. Traffic volumes would be a small percentage of existing traffic on existing roadways, resulting in minimal changes to the noise environment from the development of an individual traffic noise generator, as discussed in further detail in Section 4.15, *Transportation and Traffic*. Impacts in this regard are considered less than significant.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing for the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific impacts related to the exposure of people to, or generation of, noise levels in excess of established standards would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Noise Levels in Excess of Standards

1. The U.S. EPA provides guidance on noise level to protect health and welfare.
2. The FAA, FHWA, FTA, FRA, OSHA, CalOSHA, Caltrans, KCGP, Kern County Zoning Ordinance, and MBGP provide noise level thresholds for sensitive receptors and exposure time.

3. KCGP Noise Element Policies 2, 5, and 8 and Implementation Measures D and F and MBGP Noise Element Policy 1 and Implementation Measures 4, 6, and 10 provide noise level thresholds.
4. KCGP Noise Element Goals 1 and 2; Policies 1, 4, and 7; and Implementation Measures A, C, G, I, and J relate to protecting sensitive receptors from excessive noise and providing guidance related to analyzing noise impacts.
5. MBGP Noise Element Goals 1 and 2; Policies 2 and 3; and Implementation Measures 2 and 5 relate to protecting sensitive receptors from excessive noise and providing guidance related to analyzing noise impacts.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

MM 4.11-1 The following shall be implemented by the project proponent during construction of any cannabis related facility:

- 1) Project construction hours shall comply with Kern County Noise Ordinance.
- 2) The construction contractor shall place all stationary construction equipment so that emitted noise is directed away from residential sensitive receptors.
- 3) The construction contractor shall locate machinery capable of causing strong vibrations or load noises, such as pile drivers or similar, such that the rear of the vibratory pile driver or machinery faces toward the noise sensitive receptor when the machine is being utilized.
- 4) The construction contractor shall locate equipment staging in areas that will create the greatest possible distance between construction –related noise sources and noise sensitive receptors nearest the project site during all project construction to the extent practical.
- 5) The construction contractor shall ensure proper maintenance and working order of equipment and vehicles, and that all construction equipment is equipped with manufacturer's approved mufflers and baffles.
- 6) The construction contractor shall install sound-control devices in all construction and impact equipment, no less effective than those provided ion the original equipment.
- 7) The construction contractor shall establish a noise disturbance coordinator for the project during construction. The disturbance coordinator shall be responsible for responding to any complaints about construction noise. The disturbance coordinator shall determine the cause of the complaint and shall be required to implement reasonable measures to resolve the complaint.

MM 4.11-2 The project applicant shall submit evidence of the following, if applicable: Construction contracts shall specify that notices shall be sent out to all residences located within 1,000 feet from the project site at least 15 days prior to commencements of construction. The notices shall include the construction schedule and a telephone number where complaints can be registered with the

noise disturbance coordinator. A sign, legible at a distance of 50 feet, shall also be posted at the construction sites throughout construction which includes the same details as the notices.

Any application for a conditional use permit shall include details on the site plan that demonstrate compliance.

MM 4.11-3 Prior to the submittal of any site development plan or modification to an approved site development plan, the project applicant shall demonstrate that a distance of not less than 0.5 mile will be established between schools (K -12) public park, large family day care, public youth center, city limit line for a cannabis cultivation, processing and packaging, or distribution and transport facility. project applicant shall demonstrate that a distance of not less than 0.5 mile will be established between school (K-12), public park, large family day care, public youth center, city limit line for a retail cannabis store. Any application for a conditional use permit shall include details on the site plan that demonstrate compliance.

Level of Significance after Mitigation

No impact would occur with respect to Option A. Impacts regarding Option B would be less than significant.

Impact 4.11-2: Exposure of Persons to, or Generate, Excessive Ground Borne Vibrations or Ground Borne Noise Levels

Proposed Project Option A

Option A would result in no commercial medical and recreational cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A does not provide opportunities for business development and thus would not result in new businesses that could produce noise above the County's thresholds. Therefore, Option A would not result in exposing people to, or generating, excessive groundbourne vibrations. Existing residences and other sensitive receptors would continue to have the same exposure to groundbourne vibrations as existing conditions. No impact would occur in this regard.

In addition, Per Proposition 64, plants shall be kept within the person's private residence, or upon the grounds of that private residence (e.g. in an outdoor garden area), are in a locked space, and are not visible by normal unaided vision from a public place. Therefore, the implementation of

Option A would result in activities that could produce groundbourne; however, groundbourne vibration levels would be similar to those generated by a personal garden, and individual cultivation of up to six plants would not result in an adverse change in groundbourne vibration levels beyond those that already exist. No impact would occur in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and recreational cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

The main concern associated with groundborne vibration is annoyance; however, vibration-sensitive land uses (research, manufacturing, or medical facilities using vibration sensitive devices) often have instruments and operations, such as those found in hospitals and laboratories, that can be disrupted. In extreme cases, vibration can cause damage to buildings, particularly those that are old or otherwise fragile. Some common sources of groundborne vibration are trains, and construction activities such as blasting, pile-driving, and heavy earth-moving equipment.

FTA has published standard vibration velocities for construction equipment operations. In general, the FTA architectural damage criterion for continuous vibrations (i.e., 0.2 inch/second) appears to be conservative even for sustained pile driving. Building damage can be cosmetic or structural. Ordinary buildings that are not particularly fragile would not experience any cosmetic damage (e.g., plaster cracks) at distances beyond 30 feet. This distance can vary substantially depending on the soil composition and underground geological layer between vibration source and receiver. In addition, not all buildings respond similarly to vibration generated by construction equipment. The typical vibration produced by construction equipment is shown in Table 4.11-3.

Table 4.11-3. Typical Vibration Levels for Construction Equipment		
Equipment	Reference peak particle velocity at 25 feet (inches/second) ¹	Approximate peak particle velocity at 100 feet (inches/second) ²
Large bulldozer	0.089	0.011
Loaded trucks	0.076	0.010
Small bulldozer	0.003	0.0004
Jackhammer	0.035	0.004
Vibratory compactor/roller	0.210	0.026

Table 4.11-3. Typical Vibration Levels for Construction Equipment

Equipment	Reference peak particle velocity at 25 feet (inches/second) ¹	Approximate peak particle velocity at 100 feet (inches/second) ²
Source: FTA, 2006.		
¹ – Federal Transit Administration, <i>Transit Noise and Vibration Impact Assessment Guidelines</i> , May 2006. Table 12-2.		
² – Calculated using the following formula:		
$\text{PPV}_{\text{equip}} = \text{PPV}_{\text{ref}} \times (25/D)^{1.5}$ <p style="margin-left: 40px;">where: PPV (equip) = the peak particle velocity in in/sec of the equipment adjusted for the distance PPV (ref) = the reference vibration level in in/sec from Table 12-2 of the FTA <i>Transit Noise and Vibration Impact Assessment Guidelines</i> D = the distance from the equipment to the receiver</p>		

If any construction is necessary for future cannabis-related facilities, compliance to federal, State, and local laws, regulations, and policies would reduce anticipated impacts related to future cannabis-related facilities located in close proximity to sensitive receptors. Compliance with the Kern County Code of Ordinances and implementation of Mitigation Measures MM 4.11-1 through MM 4.11-3 would further reduce impacts of Option B as related to exposing people to, or generating, excessive groundbourne vibration or noise levels.

Future outdoor cultivation of cannabis plants would include the use of farming equipment, including tractors, and a number of miscellaneous groundbourne vibration emitting equipment. Future indoor cannabis cultivation would occur in greenhouses or in other structures. These activities would include equipment typical of greenhouse activities for other agricultural crops. As mentioned above, these facilities would be allowed in agriculture and industrial zones only and are not anticipated to be in close proximity to sensitive receptors. However, compliance with the Kern County Code of Ordinances and implementation of Mitigation Measures MM 4.11-1 through MM 4.11-3 would help to ensure that groundbourne vibration and noise levels would not be excessive.

Future cannabis processing, packaging, and distribution activities would occur within enclosed buildings. As is the case with other industrial buildings, groundbourne vibration could be produced by HVAC equipment, delivery vehicles, as well as noise associated with employees arriving and departing the facility. As mentioned above, these facilities would be allowed in agriculture and industrial zones only and are not anticipated to be in close proximity to sensitive receptors. However, compliance with the Kern County Code of Ordinances and implementation of Mitigation Measures MM 4.11-1 through MM 4.11-3 would help to ensure that groundbourne vibration and noise levels would not be excessive.

Future retail cannabis stores with or without mobile delivery would generate groundbourne vibration levels similar to the existing dispensaries within the County. Groundbourne vibration and noise levels would include traffic operations for employees and customers, deliveries to and from the facility, HVAC equipment, and commercial truck deliveries. Future retail cannabis stores would be scattered throughout the County. Compliance with the Kern County Code of Ordinances and implementation of Mitigation Measures MM 4.11-1 through MM 4.11-5 would help to ensure that groundbourne vibration and noise levels would not be excessive.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing for the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial)

and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as exposing people to, or generating, groundbourne vibration and noise levels in excess of established standards would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Groundbourne Vibration or Noise Levels

Refer to Impact 4.11-1, above, for a summary of applicable existing regulations and policies related to groundbourne vibration or noise levels.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

Implement Mitigation Measures MM 4.11-1 through MM 4.11-3, as described above.

Level of Significance

No impact would occur with respect to Option A. Impacts regarding Option B would be less than significant.

Impact 4.11-3: Substantial Permanent Increase in Ambient Noise Levels in the Vicinity of Projects above Levels Existing without the Project

Proposed Project Option A

Option A would result in no commercial medical and recreational cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A does not provide opportunities for business development and thus would not result in new businesses that could result in a permanent increase in ambient noise levels produce noise above the County's thresholds. Therefore, Option A would not result in exposing people to, or generating, noise levels in excess of standard established by the KCGP, MBGP, Kern County

Noise Control Ordinance, or applicable County Specific Plans. Existing residences and other sensitive receptors would continue to have the same exposure to noise levels as existing conditions. No impact would occur in this regard.

In addition, Per Proposition 64, plants shall be kept within the person's private residence, or upon the grounds of that private residence (e.g. in an outdoor garden area), are in a locked space, and are not visible by normal unaided vision from a public place. Therefore, the implementation of Option A would result in activities that could produce noise levels such that the ambient noise levels would be permanently increased; however, noise levels would be similar to those generated by a personal garden, and individual cultivation of up to six plants would not result in an adverse change in ambient noise levels beyond those that already exist. No impact would occur in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and recreational cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

If any construction is necessary for future cannabis-related facilities, typical construction equipment noise levels at a distance of 50 feet from the source can range from 74 dB for a roller to as high as approximately 101 dB for a pile driver; the majority of equipment operating at noise levels of between 76 dB and 88 dB at a distance of 50 feet from the source. Compliance to federal, State, and local laws, regulations, and policies would reduce anticipated impacts related to future cannabis-related facilities located in close proximity to sensitive receptors. Implementation of Mitigation Measures MM 4.11-1 through MM 4.11-3 would further reduce impacts of Option B as related to exposing people to, or generating, noise levels above the County's thresholds. As a result, impacts would be less than significant.

Mechanical HVAC equipment located on the ground or on rooftops of buildings have the potential to generate noise levels which average 71 dBA CNEL at a distance of 50 feet when equipment is operating continuously for 24 hours. Depending on where it is located, HVAC equipment could have the potential to generate noise that may exceed 65 dBA at nearby land uses; however, the setbacks for cannabis-related facilities are a minimum of 0.5 mile for most sensitive noise receptor land uses. For a single point source such as a piece of mechanical equipment, the sound level normally decreases by approximately 6 dBA for each doubling of distance from the source under "hard-surface" conditions typical of a developed commercial site. Therefore, it is assumed that

HVAC equipment would generate noise levels that exceed 65 dBA within approximately 100 feet of the equipment. Consequently, any existing residences or noise-sensitive land uses within 100 feet of a future cannabis related facility could result in a potentially significant impact. Compliance with the Kern County Code of Ordinances, including development standards, and implementation of Mitigation Measures MM 4.11-1 through MM 4.11-3 would be required. Impacts would continue to be significant after the implementation of mitigation measures.

Future outdoor cultivation of cannabis plants would include the use of farming equipment, including tractors, and a number of miscellaneous noise emitting equipment. Future indoor cannabis cultivation would occur in greenhouses or in other structures. These activities would include equipment typical of greenhouse activities for other agricultural crops; however, the HVAC systems could generate additional noise as compared to other agricultural crops, due to the need for specific oxygen/nitrogen mixes as well as air filters to reduce odors. As mentioned above, these facilities would be allowed in agriculture and industrial zones only and are not anticipated to be in close proximity to sensitive receptors. However, compliance with the Kern County Code of Ordinances and implementation of Mitigation Measures MM 4.11-1 through MM 4.11-3 would help to ensure that ambient noise levels would not exceed the County's thresholds. Impacts would continue to be significant after the implementation of mitigation measures.

Future cannabis processing, packaging, and distribution activities would occur within enclosed buildings. As is the case with other industrial buildings, noise could be produced by HVAC equipment, delivery vehicles, as well as noise associated with employees arriving and departing the facility. As mentioned above, these facilities would be allowed in agriculture and industrial zones only and are not anticipated to be in close proximity to sensitive receptors. However, compliance with the Kern County Code of Ordinances and implementation of Mitigation Measures MM 4.11-1 through MM 4.11-3 would help to ensure that noise levels would not increase the ambient noise level. Impacts would continue to be significant after the implementation of mitigation measures.

Future retail cannabis stores with or without mobile delivery would generate noise levels similar to the existing dispensaries within the County. Ambient noise levels would include traffic operations for employees and customers, deliveries to and from the facility, HVAC equipment, and commercial truck deliveries. Future retail cannabis stores would be scattered throughout the County. Compliance with the Kern County Code of Ordinances and implementation of Mitigation Measures MM 4.11-1 through MM 4.11-3 would help to ensure that ambient noise levels would not exceed the County's thresholds. Impacts would continue to be significant after the implementation of mitigation measures.

Traffic noise resulting from the operation of future cannabis-related facilities could generate noise at adjacent sensitive receptors sites. Traffic volumes would be a small percentage of existing traffic on existing roadways, resulting in minimal changes to the ambient noise environment from the development of an individual traffic noise generator, as discussed in further detail in Section 4.15, *Transportation and Traffic*. Impacts in this regard are considered less than significant.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing for the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial)

and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific ambient noise levels would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Ambient Noise Levels

Refer to Impact 4.11-1, above, for a summary of applicable existing regulations and policies related to ambient noise levels.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

Implement Mitigation Measures MM 4.11-1 through MM 4.11-3, as described above.

Level of Significance after Mitigation

No impact would occur with respect to Option A. Impacts regarding Option B would be less than significant.

Impact 4.11-4: Substantial Temporary or Periodic Increase in Ambient Noise Levels in Project Vicinities above Levels Existing without the Project

Proposed Project Option A

Option A would result in no commercial medical and recreational cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A does not provide opportunities for business development and thus would not result in new businesses that could produce temporary or periodic ambient noise above the County's thresholds. Therefore, Option A would not result in temporary or periodic ambient noise levels in excess of standard established by the KCGP, MBGP, Kern County Noise Control Ordinance, or applicable County Specific Plans. Existing residences and other sensitive receptors

would continue to have the same exposure to noise levels as existing conditions. No impact would occur in this regard.

In addition, Per Proposition 64, plants shall be kept within the person's private residence, or upon the grounds of that private residence (e.g. in an outdoor garden area), are in a locked space, and are not visible by normal unaided vision from a public place. Therefore, the implementation of Option A would result in activities that could produce temporary or periodic noise; however, temporary or periodic ambient noise levels would be similar to those generated by a personal garden, and individual cultivation of up to six plants would not result in an adverse change in temporary or periodic noise levels beyond those that already exist. No impact would occur in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and recreational cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

If any construction is necessary for future cannabis-related facilities, construction of future facilities would result in temporary increases in ambient noise levels during the future facility's construction. Noise levels would fluctuate depending on the phase of construction, equipment type and duration of use, distance between the noise source and receptor, and presence or absence of noise-attenuation barriers. As mentioned above, typical construction equipment noise levels at a distance of 50 feet from the source can range from 74 dB for a roller to as high as approximately 101 dB for a pile driver; the majority of equipment operating at noise levels of between 76 dB and 88 dB at a distance of 50 feet from the source.

The Kern County Code of Ordinances, Chapter 8.36, *Noise Control*, restricts the hours of construction for activities within 1,000 feet of an occupied residential dwelling (no construction between 9 PM and 6 AM weekdays and 9 PM and 8 AM on weekends). Therefore, any construction within 1,000 feet of an occupied residence would be required to comply with the Kern County Noise Control Ordinance. While the Kern County Noise Control Ordinance restricts the hours of construction for construction sites within 1,000 feet of an occupied residential dwelling, Kern County does not have regulations restricting construction noise levels. All construction activities would be required to take place between 6 AM and 9 PM, Monday through Friday, and between 8 AM and 9 PM on Saturdays and Sundays. Compliance to federal, State, and local laws, regulations, and policies would reduce anticipated impacts related to future cannabis-related facilities located in close proximity to sensitive receptors. Implementation of Mitigation Measures

MM 4.11-1 through MM 4.11-3 would further reduce impacts of Option B as related to temporary or periodic ambient noise level increases. As a result, impacts would be less than significant.

Construction-related noise generated by future cannabis-related activities could include periodic bursts of noise. Mitigation Measures MM 4.11-1 through MM 4.11-3 would ensure that impacts remain below the noise level threshold; however, temporary noise would still be present during construction, especially as related to noise levels from grading/excavation and finishing phases of construction. These mitigation measures would provide for the best available measures for the reduction of construction noise impacts, should any site plan refinements occur during the project review and approval process that result in project noise sources moving closer to sensitive receptors to the extent that significant impacts would occur to sensitive receptors.

As discussed under Impact 4.11-1, mechanical HVAC equipment located on the ground or on rooftops of buildings have the potential to generate noise levels that exceed 65 dBA. This can be a periodic sound if the HVAC system cycles on and off, or can be a continuous sound if the equipment is operating continuously for 24 hours. Therefore, it is assumed that HVAC equipment would generate periodic noise levels. Compliance with the Kern County Code of Ordinances, including development standards, and implementation of Mitigation Measures MM 4.11-1 through MM 4.11-3 would reduce impacts..

Future outdoor cultivation of cannabis plants would include the use of farming equipment, including tractors, and a number of miscellaneous noise emitting equipment. Future indoor cannabis cultivation would occur in greenhouses or in other structures. These activities would include equipment typical of greenhouse activities for other agricultural crops; however, the HVAC systems could generate additional noise as compared to other agricultural crops, due to the need for specific oxygen/nitrogen mixes as well as air filters to reduce odors. Many of the noise-generating activities would be cyclical, as the largest equipment is often required for harvesting and planting activities. As mentioned above, these facilities would be allowed in agriculture and industrial zones only and are not anticipated to be in close proximity to sensitive receptors. However, compliance with the Kern County Code of Ordinances and implementation of Mitigation Measures MM 4.11-1 through MM 4.11-3 would help to reduce that temporary or periodic ambient noise levels would increase.

Future cannabis processing, packaging, and distribution activities would occur within enclosed buildings. As is the case with other industrial buildings, noise could be produced by HVAC equipment, delivery vehicles, as well as noise associated with employees arriving and departing the facility. Similar to future cannabis cultivation activities, future cannabis processing, packaging, and distribution activities would be at its largest volume during harvesting season. While harvesting could occur year-round, it is assumed that future cultivation crops within the County would be on similar harvesting cycles, and thus, certain times of year would have more processing, packaging, and distribution activities than others. As mentioned above, these facilities would be allowed in agriculture and industrial zones only and are not anticipated to be in close proximity to sensitive receptors. However, compliance with the Kern County Code of Ordinances and implementation of Mitigation Measures MM 4.11-1 through MM 4.11-3 would help to reduce that noise levels would not increase the temporary or periodic ambient noise level.

Future retail cannabis stores with or without mobile delivery would generate noise levels similar to the existing dispensaries within the County. Ambient noise levels would include traffic operations for employees and customers, deliveries to and from the facility, HVAC equipment, and

commercial truck deliveries. Future retail cannabis stores would be scattered throughout the County. Sales of cannabis would be year-round and are not considered to be tied to the growing cycle. Therefore, it is not anticipated that retail cannabis stores would general temporary or periodic ambient noise level increases. Impacts would continue to be less than significant in this regard.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing for the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific temporary or periodic ambient noise levels would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Ambient Noise Levels

Refer to Impact 4.11-1, above, for a summary of applicable existing regulations and policies related to ambient noise levels.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

Implement Mitigation Measures MM 4.11-1 through MM 4.11-3, as described above.

Level of Significance after Mitigation

No impact would occur with respect to Option A. Impacts regarding Option B would be less than significant.

Impact 4.11-5: For a Project Located within the Kern County Airport Land Use Compatibility Plan, Would the Project Expose People Residing or Working in the Project Area to Excessive Noise Levels

Proposed Project Option A

Option A would result in no commercial medical and recreational cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial

cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A does not provide opportunities for business development and thus would not result in new businesses that could produce noise above the County's thresholds. Therefore, Option A would not result in exposing people to excessive noise levels in within the Kern County ALUCP. Existing residences and other sensitive receptors would continue to have the same exposure to noise levels within the Kern County ALUCP as existing conditions. No impact would occur in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and recreational cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

Future cannabis-related activities could occur in the vicinity of the public use airports identified in the Kern County ALUCP, thus exposing workers to noise levels associated with an airport. Typically zone districts within the Kern County ALUCP are generally related to agriculture, industrial, and commercial zones.

Aircraft operations at airports within the project site, with the exception of Meadows Field Airport, Mojave Airport and China Lake NAWS and Edwards AFB, consist of relatively infrequent flights by small general aviation propeller aircraft. Occasional corporate jet aircraft operations occur at airports throughout the County. Meadows Field is an air carrier airport with scheduled turboprop and jet aircraft service and relatively frequent operations by general aviation propeller and jet aircraft.

If future cannabis-related facilities, specifically future cannabis cultivation, processing and packaging, and distribution facilities, were built or operated within the 65 dB CNEL contours of an airport identified within the Kern County ALUCP, then the combined noise levels of aircraft take-offs and landings and future cannabis cultivation, processing and packaging, and distribution activities have the potential to exceed County acceptable noise levels for workers and/or residents that are in proximity to both the public airport and potential cannabis-related activities, depending

on the location of the future cannabis-related facility and the residence or facility. Future cannabis-related facilities would comply with federal, State, and local laws, regulations, and policies, thus reducing potential impacts.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing for the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to combined noise levels of a future cannabis-related facility located in the 65 dB CNEL contours of an airport identified in the Kern County ALUCP and the aircraft noise level would be considered and mitigated, where reasonable and feasible, during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Noise Levels in an ALUCP

Refer to Impact 4.11-1, above, for a summary of applicable existing regulations and policies related to noise levels within an ALUCP. In addition, the following are also applicable.

1. The FAA, KCGP, Kern County Zoning Ordinance, Kern County ALUCP, and MBGP provide noise level thresholds for sensitive receptors and exposure time.
2. KCGP Noise Element Policy 6 and Implementation Measure E provide guidance on noise levels and land use compatibility within ALUCP areas.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

Compliance with the goals, policies, and implementation measures of the KCGP, MBGP, Kern County ALUCP, and appropriate specific plan, if applicable, as well as local ordinances is required. No additional mitigation measures are proposed.

Level of Significance after Mitigation

No impact would occur with respect to Option A. Impacts regarding Option B would be less than significant.

Impact 4.11-6: For a Project within the Vicinity of a Private Airstrip, Would the Project Expose People Residing or Working in the Project Area to Excessive Noise Levels.

Proposed Project Option A

Option A would result in no commercial medical and recreational cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A does not provide opportunities for business development and thus would not result in new businesses that could produce noise above the County's thresholds. Therefore, Option A would not result in exposing people to excessive noise levels in within the vicinity of a private airstrip. Existing residences and other sensitive receptors would continue to have the same exposure to noise levels as existing conditions. No impact would occur in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and recreational cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

Kern County contains more than 20 private airports and airstrips; the majority of these are in the Valley Region, with approximately 5 in the Mountain Region and approximately 4 in the Desert Region. In addition, as noted previously, the Desert Region contains two military airbases, China Lake NAWS and Edwards AFB, which utilize the R-2508 Complex areas for military aircraft operations.

The majority of the private airports and airstrips house mostly single-engine planes. The short duration of noise events generated by planes taking off and landing at private airstrips would

temporarily increase noise levels in the immediate vicinity of the airport. Future cannabis-related activities could occur in the vicinity of a private airstrip, thus exposing workers to noise levels associated with an airstrip. Typically zone districts near airstrips are generally related to agriculture, industrial, and commercial zones. If future cannabis-related facilities, specifically future cannabis cultivation, processing and packaging, and distribution facilities, were built or operated within close proximity to a private airport or airstrip, the combined noise levels of aircraft take-offs and landings and future cannabis cultivation, processing and packaging, and distribution activities have the potential to exceed County acceptable noise levels for workers and/or residents that are in proximity to both the private airport and potential cannabis-related activities, depending on the location of the future cannabis-related facility and the residence or facility. Future cannabis-related facilities would comply with federal, State, and local laws, regulations, and policies, thus reducing potential impacts.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing for the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to combined noise levels of a future cannabis-related facility located in close proximity to a private airport or airstrip and the aircraft noise level would be considered and mitigated, where reasonable and feasible, during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Noise Levels in the Vicinity of a Private Airstrip

Refer to Impacts 4.11-1 and 4.11-5, above, for a summary of applicable existing regulations and policies related to noise levels within the vicinity of a private airstrip.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

Compliance with the goals, policies, and implementation measures of the KCGP, MBGP, and appropriate specific plan, if applicable, as well as local ordinances is required. No additional mitigation measures are proposed.

Level of Significance after Mitigation

No impact would occur with respect to Option A. Impacts regarding Option B would be less than significant.

Cumulative Setting Impacts and Mitigation Measures

Cumulative Setting

The geographic scope for cumulative impacts on recreational resources includes both the KCGP and the regional growth plan and projections included in the Kern COG Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) approved in 2014, as defined in Section 3.7, *Cumulative Projects*. This is a large enough area to encompass any effects of the proposed project on recreational resources that may combine with similar effects caused by other projects, and provides a reasonable context wherein cumulative actions could affect these resources. The cumulative analyses consider whether the proposed project, Option A or Option B, in combination with the past, present, and reasonably foreseeable projects, could cumulatively affect geology and soils.

Cumulative Impacts and Mitigation Measures

Impact 4.11-7: Contribute to Cumulative Noise Impacts

Proposed Project Option A

Option A of the proposed project would ban all commercial medical and adult use cannabis-related activities other than what is allowed for personal use under Proposition 64. Option A would not result in an increase in residents or employees within the County. As discussed above, Option A would not result in exposing people to noise levels that exceed threshold standards (Impact 4.11-1), exposing people to increased groundbourne vibration and noise (Impact 4.11-2), substantially increase ambient noise levels permanently or temporarily (Impacts 4.11-3 and 4.11-4), and would not expose people residing or working within a Kern County ALUCP area or in close proximity to a private airport or airstrip (Impacts 4.11-5 and 4.11-6). Therefore, Option A would not contribute to cumulative impacts when combined with past, present, or reasonably foreseeable projects. No impacts would occur in this regard.

Proposed Project Option B

Option B of the proposed project would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis stores with or without mobile delivery. Since future cannabis-related activities could occur in the project site in the identified zoning classification with appropriate setbacks (refer to Appendices C, D, and E), the combined noise levels from the proposed project and existing or reasonably foreseeable projects depend on the proximity of cannabis-related activities to other noise sources at a specific location. Noise generated from potential construction activities could be in excess of 65 dBA CNEL. Therefore, significant noise impacts would occur if there are sensitive noise receptors near the future potential construction area. In addition, future cannabis-related activities could, depending on location relative to sensitive noise receptors, result in noise levels in excess of the County's thresholds due to noise generated from future cannabis cultivation, processing and packaging, distribution, and retail activities including, but not limited to, use of equipment, HVAC systems, and traffic to/from the facilities. Other projects with construction or operations occurring concurrently with construction or operations of a future cannabis-related facility would also contribute to noise levels experienced by nearby sensitive noise receptors.

Therefore, the proposed project, in combination with other reasonably foreseeable development project, would have the potential to result in increased noise and groundbourne vibration levels.

With respect to future cannabis-related activities in close proximity to the public or private airport, activities from the proposed project could occur in the vicinity of a public or private airport. These facilities could combine with noise levels of aircraft take-offs and landings. In addition, other agricultural, commercial, and industrial land uses located in close proximity to these airports could also contribute to and increase noise level. The proposed project requires mitigation measures for those future facilities and activities that would be in close proximity to a public or private airport. Other past, present, or reasonably foreseeable projects in close proximity to a public or private airport would also be required to comply with appropriate noise reducing mitigation measures, as well as the Kern County Noise Control Ordinance, the KCGP Noise Element, MBGP Noise Element, specific plans, and other applicable noise regulations. Therefore, the proposed project, in combination with other reasonably foreseeable development project, would have the potential to result in increased noise in close proximity to public and private airports and airstrips.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing for the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distributional facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to the exposure of people to, or generation of, cumulative noise levels in excess of established standards would be considered and mitigated during the CUP process.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

Implement Mitigation Measures MM 4.11-1 through MM 4.11-3, as described above.

Level of Significance after Mitigation

No impact would occur with respect to Option A. Cumulative impacts regarding Option B would be less than significant.

Section 4.12

Population and Housing

Section 4.12

Population and Housing

4.12.1 Introduction

This section of the Draft Environmental Impact Report (EIR) addresses potential impacts associated with the implementation of the Kern County Cannabis Land Use Ordinance Project (proposed project) on population, housing, and employment in Kern County (County) and discusses mitigation measures to reduce impacts, where applicable. It also provides an overview of current population estimates, projected population growth, current housing, employment trends, and the regulatory setting.

Sources of information and data provided in this section include, but are not limited to, the Kern County General Plan (KCGP) and Housing Element, Metropolitan Bakersfield General Plan (MBGP), demographic information from the California Department of Finance (DOF), the California Economic Development Department (CA EDD), and the U.S. Census Bureau. Census and California Department of Finance information is source information in the Kern Council of Governments (Kern COG) Regional Housing Data Report, October 2014.

4.12.2 Environmental Setting

Kern County is bounded by Kings, Tulare, and Inyo counties on the north, San Bernardino County on the east, Los Angeles and Ventura counties on the south, and Santa Barbara and San Luis Obispo counties on the west.

Regional and Population Trends

Kern County, located at the southern end of the Central Valley, is the third-largest county in California, encompassing 8,202 square miles. Most of Kern County's population lives in or near incorporated areas. As shown in Table 4.12-1, *Kern County Population Trends*, the County's population rose by 3.86 percent between 2010 and 2016, and the population rose by 5.58 percent in unincorporated portions of Kern County.

Table 4.12-1. Kern County Population Trends

Area	2010 ¹	2016 ²	2010-2016 Percent Change
Kern County (Unincorporated)	297,932	309,425	3.86%
Kern County (Total County)	839,631	886,507	5.58%

¹U.S. Census Bureau, 2010
²Department of Finance (DOF), 2016a; U.S. Census Bureau

As of January 1, 2015, the population in Kern County was 880,387 persons; as of January 1, 2016, the population in Kern County was 886,507 persons. Population growth is expected to continue in Kern County. According to DOF projections, the County's population is anticipated to grow to 989,815 persons by 2020 and 1,189,004 persons by 2030 (Department of Finance [DOF], 2015). According to the Kern COG's 2014 Regional Transportation Plan (RTP), "... Kern County was in the top ten fastest growing counties in California from 2012 to 2013. About one in every 44 people in California live in Kern County. The Kern region is California's eleventh most

populated of 58 counties, recently surpassing San Francisco and Ventura counties..." (Kern Council of Government [COG], 2014a).

Of the 886,507 persons living in Kern County in January 2016, approximately 309,425 persons (or 35 percent) resided within unincorporated Kern County. The 2016 population within unincorporated Kern County represented a 3.86 percent increase compared with the 2010 population. Population growth is expected to continue in unincorporated Kern County.

Regional and Local Housing Trends

Kern County has experienced significant housing growth since 2010. As shown in Table 4.12-2, *Kern County Housing Trends*, housing stock (the existing supply of residential units) in the County increased 3.53 percent between 2010 and 2016 and 1.73 percent in the County's unincorporated areas. These trends are reflected in Table 4.12-2, *Kern County Housing Trends*, below.

Table 4.12-2. Kern County Housing Trends (Housing Units)			
Area	2010 ¹	2016 ²	2010-2016 Percent Change
Kern County (Unincorporated)	112,117	114,052	1.73%
Kern County (Total County)	284,367	294,401	3.53%

¹U.S. Census Bureau, 2010
²DOF, 2016b

The census bureau defines a household as any group of people occupying a housing unit, which may include single persons living alone, families related through marriage or blood, or unrelated persons sharing living quarters. Persons living in retirement or convalescent homes, dormitories, or other group living situations are not considered households. Household characteristics are important indicators of the type and size of housing needed in a community. The number of persons per household in Kern County in 2016 was 3.13 (DOF, 2016b).

Regional and Local Employment Trends

Kern County's economy is based on agriculture, oil, aerospace, trade, transportation, and utilities, and warehousing services (California Economic Development Department [CA EDD], 2017). Despite this economic diversification, the overall performance of the County has been mixed in recent years when compared to the State and other counties. This is due in part to the cyclical and uncertain nature of oil and aerospace which is often affected by many external factors. Further, the agricultural sector consists largely of lower paying and often seasonal employment which limits the positive multipliers within the economy. One of the key industries in the County is value-added agriculture. New industries such as transportation, logistics and warehousing, are emerging and growing in the County. The County also has distinctive assets related to renewable energy and aerospace, two areas with significant potential to expand and develop. Wind and biomass geothermal are established forms of locally-generated renewable energy. Aerospace potential is driven by the emergence of private sector space-travel activities as well as other private sector aerospace activities and government contracts related to the County's two military bases.

In 2010, for the employable population 16 years and older, 371,500 (or 41.9 percent) were in the labor force, whereas 15.7 percent were unemployed. In October 2016, 404,000 persons (or 45.6 percent) were in the labor force, whereas 9.1 percent were unemployed. For comparison, in 2016 the unemployment rate was on average 5.5 percent in the State, while the nationwide

unemployment rate for November 2016 was 4.6 percent (CA EDD, 2016a). The U.S. Census Bureau's current American Community Survey for 2016, which is the most recent data available, indicates that 21.9 percent of individuals in Kern County lived below poverty level (U.S. Census, 2016).

Several industries provide employment opportunities in Kern County. Table 4.12-3, *Industries in Kern County*, summarizes the industries in Kern County as well as the percent of the County population that each industry employs based on the 2015 U.S. Census data estimates, which are the most recent available data.

Table 4.12-3. Industries in Kern County

Industry	Percent of Population
Educational, health, and social services	19.5
Agriculture, forestry, fishing, hunting, and mining	16.7
Retail trade	10.8
Professional, scientific, management, administrative, and waste management services	8.0
Arts, entertainment, recreation, accommodation, and food services	8.6
Public administration	7.0
Construction	6.2
Manufacturing	6.0
Transportation, warehousing, and utilities	5.2
Other services (except public administration)	4.4
Finance, insurance, real estate, and rental and leasing	3.7
Wholesale trade	3.0
Information	1.1

Source: U.S. Census Bureau, 2015a, 2011-2015 American Community Survey 5-Year Estimates

As noted in Table 4.12-3, educational, health, and social services; agriculture, forestry, fishing, hunting, and mining; and retail trade industries provided the greatest amount of County employment opportunities in 2015. Industry employment projections between 2012 and 2022 are shown for the for the Bakersfield Metropolitan Statistical Area (MSA) in Table 4.12-4, *2012 to 2022 Industry Employment Projections, Bakersfield Metropolitan Statistical Area (MSA), Kern County*. It should be noted that the Bakersfield MSA is the only available data for industry employment projections within the County and was published in February 2015, which is the most recent available data.

Table 4.12-4. 2012 to 2022 Industry Employment Projections, Bakersfield Metropolitan Statistical Area (MSA), Kern County

Industry Title	Annual Average Employment		Employment Change	
	2010	2020	Numerical	Percent
Total Employment	324,300	371,900	47,600	14.7
Self-Employment	23,000	22,200	-800	-3.5
Unpaid Family Workers	1,300	1,200	-100	-7.7
Private Household Workers	500	400	-100	-20.0
Total Farm	54,400	61,800	7,400	13.6
Total Nonfarm	245,100	286,300	41,200	16.8
Mining and Logging	13,300	13,500	200	1.5
<i>Oil and Gas Extraction (includes 211,213)</i>	12,300	12,500	200	1.6

Table 4.12-4. 2012 to 2022 Industry Employment Projections, Bakersfield Metropolitan Statistical Area (MSA), Kern County				
Industry Title	Annual Average Employment		Employment Change	
	2010	2020	Numerical	Percent
Construction	16,700	19,100	2,400	14.4
Manufacturing	13,400	16,400	3,000	22.4
Durable Goods Manufacturing (321, 327, 331-339)	5,100	6,000	900	17.6
Nondurable Goods Manufacturing (311-316,322-326)	8,300	10,400	2,100	25.3
<i>Food Manufacturing</i>	5,800	7,300	1,500	25.9
Trade, Transportation, and Utilities	45,400	53,200	7,800	17.2
Wholesale Trade	8,400	9,900	1,500	17.9
Retail Trade	27,900	31,300	3,400	12.2
<i>Food and Beverage Stores</i>	5,900	6,400	500	8.5
<i>Clothing and Clothing Accessories Stores</i>	2,000	2,100	100	5.0
<i>General Merchandise Stores</i>	6,000	6,200	200	3.3
<i>Department Stores</i>	3,000	3,500	500	16.7
Transportation, Warehousing, and Utilities	9,100	12,000	2,900	
Information	2,700	2,900	200	7.4
Financial Activities	8,700	10,100	1,400	16.1
Finance and Insurance	5,500	6,200	700	12.7
Real Estate and Rental and Leasing	3,200	3,900	700	21.9
Professional and Business Services	26,500	33,300	6,800	25.7
Professional, Scientific, and Technical Services	11,300	12,900	1,600	14.2
Management of Companies and Enterprises	2,900	3,600	700	21.1
Administrative and Support and Waste Management and Remediation Services	12,300	16,800	4,500	36.6
Educational Services, Health Care, and Social Assistance	30,800	39,700	8,900	28.9
Educational Services (Private)	1,600	2,100	500	31.3
Health Care and Social Assistance	29,100	37,600	8,500	29.2
<i>Ambulatory Health Care Services</i>	11,200	15,600	4,400	39.3
<i>Hospitals (Private)</i>	7,200	7,400	200	2.8
Leisure and Hospitality	21,600	26,500	4,900	22.7
Arts, Entertainment and Recreation	2,400	2,800	400	16.7
Accommodation and Food Services	19,300	23,700	4,400	22.8
<i>Food Services and Drinking Places</i>	17,500	21,700	4,200	24.0
<i>Limited-Service Eating Places</i>	9,700	12,600	2,900	29.9
Other Services (excludes 814-Private Household Workers)	7,200	8,300	1,100	15.3
Government	58,800	63,300	4,500	7.7
Federal Government	10,400	9,000	-1,400	-13.5
State and Local Government	48,400	54,300	5,900	12.2

Table 4.12-4. 2012 to 2022 Industry Employment Projections, Bakersfield Metropolitan Statistical Area (MSA), Kern County				
Industry Title	Annual Average Employment		Employment Change	
	2010	2020	Numerical	Percent
State Government	9,400	11,700	2,300	24.5
<i>State Government Education</i>	1,300	1,500	200	15.4
<i>Other State Government</i>	8,100	10,200	2,100	25.9
Local Government	39,000	42,600	3,600	9.2
<i>Local Government Education</i>	25,800	27,300	1,500	5.8
<i>Other Local Government</i>	13,200	15,300	2,100	15.9

Source: CA EDD, 2015.
Note: The California Employment Development Department (CE EDD) only provides industry projections within Kern County for the Bakersfield MSA. The most recent projects were published in February 2015.

As shown in Table 4.12-4, above, Kern County's industry employment (including self-employment, farm and nonfarm employment, and private household workers) is expected to reach 371,900 people by 2020, an increase of 14.7 percent over a 10-year projection period. All nonfarm employment is expected to grow by 41,200 jobs by 2020. Most of this growth will be in professional and business services, educational services, health care and social assistance, construction, retail trade, and leisure/hospitality.

As of December 2016, Kern County had a labor force of approximately 391,400 persons. An estimated 38,900 people (approximately 9.9 percent of the labor force) were unemployed. This compares with an unadjusted unemployment rate of 5.8 percent for California. The County's predominant industries for employment are government, trade, transportation, utilities, agriculture, oil and gas production, and professional and business services (CA EDD, 2016).

4.12.3 Regulatory Setting

State

California Housing Element Law

State law requires each city and county to adopt a general plan for future growth. This plan must include a housing element that identifies housing needs for all economic segments and provides opportunities for housing development to meet that need. At the State level, the California Department of Housing and Community Development estimates the relative share of California's projected population growth that could occur in each county in the State based on DOF population projections and historic growth trends. Where there is a regional council of governments, as in Kern County, the California Department of Housing and Community Development provides information regarding the regional housing need to the council. Locally, Kern COG then assigns a share of the regional housing need to each of its cities and the county. The process of assigning shares provides cities and counties the opportunity to comment on the proposed allocations. The California Department of Housing and Community Development oversees the process to ensure that the council of governments distribute their share of the State's projected housing need.

Each city and county must update its general plan housing element on a regular basis. Among other things, including incorporating policies, the housing element must identify potential sites that could accommodate the city's share of the regional housing needs. Before adopting an update to its housing element, the city or county must submit a draft to the California Department of Housing and Community Development for review. The department advises the local jurisdiction as to whether its housing element complies with the provisions of California housing element law (California Government Code Sections 65580–65589.8).

Regional Housing Need Allocation Process

Regional Housing Need Allocation (RHNA) is the State-mandated process to identify the total number of housing units (by affordability level) that each jurisdiction must accommodate in its housing element of the general plan. As part of this process, the California Department of Housing and Community Development identifies State-wide housing need and assigns the County a share in a manner that is consistent with the development pattern included in the Sustainable Communities Strategy (SCS) of the 2014 RTP that was adopted in June 2014. This process was recently revised with the approval of Senate Bill (SB) 375, in 2008, which amended the RHNA schedule and methodology requiring due dates for local governments to update their housing elements no later than 18 months from the date that Kern COG adopts the RTP, which occurred on June 19, 2014 (California Government Code Section 65584 et seq.). The RHNA for January 1, 2013 through December 31, 2023 was adopted June 19, 2014 as Appendix H of the 2014 Regional Transportation Plan.

Senate Bill (SB) 375 Sustainable Communities Strategy

SB 375 (Chapter 728, Statues of 2008) directs the California Air Resources Board to set regional targets for the reduction of greenhouse gas (GHG) emissions in coordination with Assembly Bill 32, California's Global Warming Solutions Act of 2006. SB 375 is implemented through the development of a Sustainable Communities Strategy (SCS). This SCS is a chapter of the 2014 RTP, which was approved on June 19, 2014, by the Kern COG Board functioning as the Transportation Planning Policy Committee.

SB 375 is designed to enhance existing regional planning efforts by coordinating regional transportation planning together with the RHNA in an effort to reduce GHG emissions from cars and light-duty trucks through the provision of incentivized land use strategies by willing local governments and development applicants. Under the SB 375 process, cities and counties maintain their existing authority over local planning and land use decisions.

Local

Kern County General Plan (KCGP)

Kern County General Plan (KCGP) was last updated in 2009 and lists the goals and policies for the County. The KCGP's purpose is to provide long-range guidance to County officials when making decisions affecting the growth and economic development of unincorporated Kern County. The KCGP includes a Land Use, Open Space, and Conservation Element, as well as a Housing Element (among other mandated and voluntary elements), which most closely deals with population growth and the provision of housing.

The policies, goals, and implementation measures in the KCGP for population and housing applicable to the proposed project are provided below. The KCGP contains additional policies, goals, and implementation measures that are more general in nature. Therefore, they are not listed below, but, as stated in Chapter 2, *Introduction*, all policies, goals, and implementation measures in the KCGP are incorporated by reference.

Chapter 1. Land Use, Open Space, and Conservation Element

Section 1.6 Residential

Goals

- **Goal 1.** Guide the development of new residential uses within the County so as to ensure that the supply of land designated for residential use is extensive enough to meet anticipated demand.
- **Goal 2.** Ensure the provision of safe and amenable living environments and the promotion of efficient and economical use of land.
- **Goal 3.** Discourage scattered urban density development within Kern County that is not supported by adequate infrastructure.
- **Goal 4.** Promote higher-density residential development within the County of Kern in areas with adequate public services and infrastructure.
- **Goal 7.** Minimize land use conflicts between residential and resource, commercial, or industrial land uses.

Policies

- **Policy 2.** The County will encourage the creation of residential developments as provided for in the Cluster Combining District of the Zoning Ordinance as a means of preserving open space.
- **Policy 3.** The owners of individually residentially zoned lots of record will, in any event, retain the right to develop a housing unit structure regardless of the General Plan designation, provided County development ordinance criteria are met.
- **Policy 5.** Discourage premature urban encroachment into areas of intense agriculture areas.
- **Policy 9.** Development in areas without adequate infrastructure or development that places a burden on public services (i.e., fire, sheriff, parks, and libraries) shall be discouraged.

Implementation Measures

- **Implementation Measure A.** All General Plan Amendments, zone changes, conditional use permits, discretionary residential developments of five or more dwelling units, and variations from height limits established by zoning for properties which are located in the Airport Influence Areas or near a military airport shall be reviewed by the Planning Department for compatibility with the Kern County Airport Land Use Compatibility Plan.

- **Implementation Measure G.** Discretionary project applicants shall provide documentation of adequate public infrastructure and services which include, but are not limited to:
 1. Fire protection.
 2. Police protection.
 3. Sewage disposal.
 4. Water service including quality and quantity.
 5. Documentation that water conservation measures have been considered.
- **Implementation Measure I.** Discretionary projects located within a Moderate, High, or Extreme Fire Hazard Zone shall abide by building materials and construction requirements set forth by the Kern County Fire Department and Office of Emergency Services.

Section 1.10 General Provisions

Goals

- **Goal 1.** Ensure that the County can accommodate anticipated future growth and development while maintaining a safe and healthful environment and a prosperous economy by preserving viable natural resources, guiding development away from hazardous areas, and assuring the provision of adequate public services.

Policies

- **Policy 6.** The County shall ensure the fair treatment of people of all races, cultures, incomes and age groups with respect to the development, adoption, implementation and enforcement of land use and environmental programs.
- **Policy 7.** In administering land use and environmental programs, the County shall not deny any individual or group the enjoyment of the use of land due to race, sex, color, religion, ethnicity, national origin, ancestry, lawful occupation or age.
- **Policy 8.** The County shall ensure that new industrial uses and activities are sited to avoid or minimize significant hazards to human health and safety in a manner that avoids over concentrating such uses in proximity to schools and residents.

Implementation Measures

- **Implementation Measure A.** The Kern Council of Governments (COG) will monitor population growth and its subsequent development effects to identify the distribution of population increases and the capabilities of governmental and public agencies to provide new development with adequate services and facilities in a fiscally acceptable manner.

Section 1.10.8 Smart Growth

Policies

- **Policy 49.** Discretionary development projects should be encouraged to incorporate innovative or “smart growth” land use planning techniques as design features, as follows:

- a. Higher Density development, where compatible, to maximize the efficient use of land.
- b. Mixed use developments that promote reduced vehicle trips by having residential, commercial, and public uses proximate to each other.
- c. Variety of housing types, including those using energy efficient design, and densities to address Kern County's housing needs.
- d. Master planned communities that feature interconnected roads, transit stops, sidewalks, landscaping, and trails to encourage efficient vehicle and pedestrian movement.
- e. Compact development that conserves open space, agricultural land, floodprone areas, creeks, hillsides, ridge tops, wetlands, and other natural features.
- f. Adequate infrastructure (i.e. roads, sewer, water, parks, etc.) is provided as a condition of development approval by the project proponent.
- g. Aesthetically pleasing and unifying design features that promote a visually pleasing environment.

Section 1.10.9 Economic Development

Policies

- **Policy 50.** Employ land use policies that protect the county's businesses from physical degradation and ensure orderly growth, thereby sustaining opportunities for current and future generations to enjoy economic vitality.
- **Policy 56.** Provides for mixed land uses that offer a variety of employment opportunities and enhance the county's economic assets to allow the capture of regional growth.

Implementation Measures

- **Implementation Measure HH.** Develop Specific Plans for communities throughout the County which provide for a mix of land uses to promote employment opportunities and housing, while maintaining a good quality of life.

Kern County General Plan and Metropolitan Bakersfield General Plan, Housing Element 2015–2023, Adopted April 2016

The Kern County Housing Element covers the unincorporated portions of Kern County. The housing element is one of seven mandated elements of the local general plan (California Government Code Sections 65580–65589.8). California law requires adequate planning so that local governments meet the existing and projected housing needs of all economic segments of the community. The law acknowledges that for the private market to address housing needs and demand adequately, local governments must adopt land use plans and regulatory systems that provide opportunities for housing development that do not unduly constrain development. As a result, housing policy in the State rests largely upon the effective implementation of local general plans and, in particular, local housing elements. The most recent Housing Element was adopted by the Kern County Board of Supervisors on April 26, 2016.

Kern Council of Governments (COG)

A council of governments (COG) acts as an area-wide planning agency. COGs assist local governments with multi-jurisdictional issues such as air quality, transportation, water quality, energy, and housing. The Kern COG serves this purpose for Kern County. Kern COG and its member agencies include the County of Kern and the 11 incorporated cities within Kern County. The primary function of the Kern COG is to address regional transportation issues, but it also functions as the State-designated Census Data Center Affiliate. The Kern COG facilitates comprehensive planning and intergovernmental coordination.

Under California law, every city and county must prepare and adopt a long-term comprehensive general plan with seven mandatory elements, one of which is the housing element. State law declares that the provision of adequate housing is an issue of statewide concern. The housing element is the only element of the general plan that is subject to approval or disapproval by the State. Prior to preparation of a housing element, each jurisdiction is allocated the number of additional housing units necessary to meet State and local housing goals through the RHNA process. This allocation also considers the number of housing units needed for specific income classes.

California Government Code Section 65584 establishes and outlines responsibilities of the California Department of Housing and Community Development to determine existing and projected need for housing in specific income classes. It is Kern COG's responsibility to allocate the projected needs for unincorporated Kern County and each of the 11 incorporated cities.

To do this, Kern COG developed a RHNA for the period between 2015 and 2023. The plan addresses comprehensive housing needs for all income levels in the Kern region. Need is based on available census data, market demand for housing, employment opportunities, the availability of suitable sites, public facilities, commuting patterns, and population projections. Future housing needs refer to the projected amount of housing a community is required to plan for during a specified planning period. The RHNA supports communities in anticipating growth so that they can grow in a way that enhances quality of life; improves access to jobs, transportation, and housing; and avoids adversely affecting the environment. Each of the local governments has an opportunity to comment on the allocations proposed by the Kern COG.

The Kern COG is required to assign regional housing shares to the cities within its region on a similar five-year schedule. The shares of the regional need are allocated before the end of the cycle so that the cities and counties can amend their housing elements by the deadline. The Kern COG has determined the additional housing construction needed by 2023 is 67,675 units for the entire County, and 21,583 units for unincorporated areas of the County.

Kern Regional Blueprint and San Joaquin Valley Blueprint Programs

Beginning in 2005, community members and governmental entities in the Kern region collaborated to develop the Kern Regional Blueprint program. The Kern COG-sponsored program was intended to create a shared vision and provide guiding principles for the Kern region's growth through 2050 (Kern COG, 2008). The mutual vision for the Kern region resulting from the Blueprint program includes:

- Economic development opportunities that are linked to the education system and current and future industries
- Unique natural resources and open spaces that provide for multiple use.

Blueprint participants developed the following general guiding principles for growth:

- Conserve energy and natural resources, and develop alternatives
- Provide adequate and equitable services
- Enhance economic vitality
- Use and improve existing community assets and infrastructure
- Use compact, efficient development and/or mixed land uses where appropriate
- Provide a variety of transportation choices
- Conserve undeveloped land and spaces
- Increase civic and public engagement.

A similar San Joaquin Valley-Wide Blueprint Program was developed in 2009 for the seven Valley Councils of Government (San Joaquin, Stanislaus, Merced, Fresno, Tulare, Kings, and Kern) and the Madera County Transportation Commission. The San Joaquin Valley-Wide Blueprint Program used the individual blueprint efforts to establish San Joaquin Valley-Wide Values, Smart Growth Principles, a preferred growth scenario, and performance measures. A “tool box” of implementation programs was also developed for use by the program’s stakeholders.

Metropolitan Bakersfield General Plan (MBGP)

The Metropolitan Bakersfield General Plan (MBGP), a joint effort between the Kern County Planning Department and the City of Bakersfield Planning Division, was last adopted on December 11, 2007. The MBGP includes both city and unincorporated County lands. The MBGP describes the community's physical development as well as its economic, social and environmental goals and is currently undergoing an update. The MBGP Land Use Element provides goals and policies related to population and housing.

Chapter II. Land Use Element

Goals

- **Goal 4.** Accommodate new development which channels land uses in a phased, orderly manner and is coordinated with the provision of infrastructure and public improvements.

Policies

- **Policy 2.** Allow for the development of a variety of residential types and densities.
- **Policy 3.** Ensure that residential uses are located in proximity to commercial services, employment centers, public services, transportation routes, and recreational and cultural resources.
- **Policy 4.** Encourage maintenance of the residential character of specially identified neighborhoods through such mechanisms as architectural design, landscape, and property setbacks.
- **Policy 6.** Retain existing residential neighborhoods as designated on the Land Use Plan, and allow for the infill of residential land uses which are compatible with the scale and character of the surrounding neighborhood.
- **Policy 8.** Provide the opportunity for the development of residential units in areas designated for commercial use provided that conflicts between the two can be adequately mitigated.
- **Policy 10.** Accommodate high and high-medium density residential adjacent to existing and planned commercial, multi-family, and principal transportation corridors.

Kern County Specific Plans

Kern County has adopted 39 Specific Plans, 10 Rural Community Plans, and 14 Interim Rural Community Plan Maps. The Specific Plans and Rural Community Plans are intended to be an amplification of the goals and policies of the KCGP and are, therefore, consistent therewith. Interim Rural Community Plan Maps are areas where a specific plan has not been formally adopted, thus the goals and policies of the KCGP govern these areas. Future commercial cannabis cultivation, processing/packaging, and sales activities that would be authorized under the proposed project that would be located within the boundary of an adopted Specific Plan would be regulated according to County zoning.

4.12.4 Impacts and Mitigation Measures

This section describes the methodology used in conducting the CEQA impact analysis for population and housing; the thresholds of significance used in assessing impacts to population and housing; and the assessment of impacts to population and housing, including relevant mitigation measures.

Methodology

Population, housing, and employment in the Project Area were evaluated by reviewing the most current data available from the U.S. Census Bureau, DOF, CA EDD, KCGP, MBGP, the Kern Economic Development Strategy, and the Kern COG.

Development Standards Related to Population and Housing

Option A

Option A of the proposed project would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Therefore, no development standards are identified in the proposed Zoning Ordinance; refer to Appendix B for specific wording of the proposed ordinance under Option A.

Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, testing, and retail cannabis stores with or without mobile delivery facilities. Development standards provided in the proposed Zoning Ordinance, that pertain to population and housing include, but are not limited to, the following (refer to Appendix C for specific working of the proposed ordinance under Option B):

- All cannabis facilities must be 0.5 mile from any school, park, day care center or youth center.
- The applicant must demonstrate compliance with all applicable mitigation measures prior to the issuance of a grading or building permit for any future cannabis related facility.
- A Fire Safety Plan must be approved by the Kern County Fire Department for future cannabis related facilities.
- All entrances to the future cannabis facility shall be clearly marked and legibly posted. No minors or adults below the age of 21 years old will be allowed on the premises.
- A Hazardous Materials Business Plan must be approved by the Kern County Environmental Health Services Division/Hazardous Materials Section.
- No organized and advertised tours shall be permitted.
- No cannabis related facility shall have a private patio or café seating.
- Trash dumpsters shall be enclosed and not accessible to the public.

Thresholds of Significance

The Kern County CEQA Implementation Document and Kern County Environmental Checklist state that a project would have a significant impact on population and housing if it would:

- Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).
- Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere.
- Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

The lead agency determined in the NOP/IS (see Appendix A of this EIR) that the following environmental issues areas resulted in no impact and were scoped out of requiring further review in

this Program EIR. Please refer to Appendix A of this Draft EIR for a copy of the NOP/IS and additional information regarding the following impacts:

- Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere.

The proposed project would amend Title 19 of the Kern County Code of Ordinances (Zoning Ordinance of Kern County or Zoning Ordinance) and any other related County ordinances to either: (A) ban all medical and adult use cannabis related activities other than what is allowed under Proposition 64, or (B) include updated standards and conditions for future commercial cannabis cultivation, commercial cannabis processing and packaging, distribution, and retail cannabis stores with or without mobile delivery. The proposed project would apply to the A (Exclusive Agriculture), A-1 (Limited Agriculture), M-1 (Light Industrial), M-2 (Medium Industrial), and M-3 (Heavy Industrial), C-1 (Neighborhood Commercial), C-2 (General Commercial) and CH (Highway Commercial) and guide future commercial medical and adult use cannabis-related activities within these zone classifications. The proposed project would not require the removal or displacement of housing units thereby necessitating the construction of replacement housing. No impact would occur.

- Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

As discussed above, the proposed project would amend Title 19 of the Kern County Code of Ordinances (Zoning Ordinance of Kern County or Zoning Ordinance) and any other related County ordinances to either: (A) ban all medical and adult use cannabis related activities other than what is allowed under Proposition 64, or (B) include updated standards and conditions for future commercial cannabis cultivation, commercial cannabis processing and packaging, distribution, and retail cannabis stores with or without mobile delivery. The proposed project would apply to specific agricultural, industrial, and commercial zone classifications and would guide future commercial medical and adult use cannabis-related activities within these zone classifications. The proposed project would not remove or displace people or necessitate the construction of replacement housing. No impact would occur.

Project Impacts

Impact 4.12-1: Induce Substantial Population Growth in an Area, Either Directly or Indirectly

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

Future buildout of the agriculture, commercial and industrial zones have been previously addressed in the KCGP and the KCGP EIR. Option A of the proposed project would ban all medical and adult use cannabis-related activities other than what is allowed under Proposition 64. Option A would result in closing dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County.

At this time, specific development is not proposed as part of Option A. Future development would be required to be consistent with the updated standards and conditions resulting from Option A, as well as consistent with other County land uses, development, and design programs, policies, standards, guidelines, and regulations contained in the KCGP and the Kern County Code of Ordinances. Option A would not directly result in the physical construction of residential units or other structures within unincorporated Kern County. Development of properties within unincorporated Kern County would occur as shown in the KCGP land use designations and Zoning Ordinance; however, land uses related to medical and adult use cannabis-activities would not be allowed. No roadway improvements or extension of roads or other infrastructure would occur as a result of Option A. Therefore, Option A would not induce substantial population growth in the County either directly, by proposing new homes or businesses, or indirectly, through extension of roads or other infrastructure.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 square feet (ft^2) of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft^2 of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

Cannabis-related activities are not individually identified within industry labor and employment data at this time. Table 4.12-5, *Industry Employment and Labor Force for Bakersfield MSA (Kern County)*, provides the most recent estimated employed labor force date in Kern County for industries that could include future cannabis-related activities in 2018 when business permits are available from the State, per Proposition 64.

Table 4.12-5. Industry Employment and Labor Force for Bakersfield MSA (Kern County) ¹		
Industry	Employed Labor Force (December 2016) ²	Percent of Total Civilian Employed Labor Force
Civilian Labor Force	352,500	100 %
Total Farm	50,700	14.4 %
Manufacturing	13,900	3.9 %
Nondurable Goods	9,200	2.6 %
Food manufacturing	6,500	1.8 %

Private service providing	162,600	46.1 %
Wholesale Trade	9,500	2.7 %
Retail Trade	35,300	10.0 %
Food and Beverage Stores	6,500	1.8 %
General Merchandise	8,800	2.5 %
Other Services	7,300	2.1 %

Source: CA EDD, 2017.
¹ Labor force and industry employment data for Kern County is only available for the Bakersfield Metropolitan Statistical Area (MSA) for Kern County.
² December 2016 numbers published by the California Employment Development Department are estimates published January 20, 2017.

Future cannabis-related activities authorized under Option B are not anticipated to result in a population increase beyond what has been identified in the KCGP and the regional growth plan and projections included in the Kern COG Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). At this time, specific development related to cannabis-related activities is not proposed as part of Option B. Future development would be required to be consistent with the updated standards and conditions resulting from Option B, as well as consistent with other County land uses, development, and design programs, policies, standards, guidelines, and regulations contained in the KCGP and the Kern County Code of Ordinances. As future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis stores with or without mobile delivery facilities are proposed, the County will review projects on a case-by-case basis to determine if a future project is compliant with Option B and any other relevant Kern County planning documents. In addition, future cannabis-related projects would require additional CEQA review if future indoor cultivation in warehouses or other structures are located in C-2 and CH, for any future retail cannabis stores with or without mobile delivery, or if a proposed cannabis-related facility and operation is not consistent with development standards.

Given the history of development within Kern County, including the oil and gas, wind, solar, and agricultural industries, as well as urban development including industrial, commercial, and residential, the general industries of farm, manufacturing (including food manufacturing), private service providing industries such as wholesale trade and retail trade (including food and beverage services as well as general merchandise), and other services, are expected to continue to sustain a substantial share of employment for Kern County residents. It is anticipated that the existing labor force residing in Kern County is sufficient to provide the industry workforce needed to accommodate the countywide maximums identified in Option B. Any increase in the workforce, including increases as a direct result of cannabis-related activities, would be consistent with the Kern COG's population and housing growth projects for the County as a whole. In addition, unemployment in Kern County, as of December 2016, was approximately 9.9 percent (CA EDD, 2017); therefore, there would be an available labor pool to fill the anticipated nominal growth in employment.

A project could induce population growth in an area either directly or indirectly. More specifically, the development of new homes or businesses could induce population growth directly, whereas the extension of roads or other infrastructure could induce population growth indirectly. Option B would not construct new residential units nor would it result in the need for roadway improvements or expansions, therefore, Option B would not directly induce population growth in this regard. As outlined above, Option B would result future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis stores

with or without mobile delivery facilities which would result in new employment opportunities; however, Kern County has an available workforce to accommodate any increase in employment as a result of the cannabis-related industry. As such, Option B would not lead to substantial population growth and this impact is less than significant.

Certain future cannabis-related activities and facilities would require processing a Conditional Use Permit (CUP) and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing for the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to the direct or indirect impacts to population growth would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Population and Housing

1. The California Housing Element Law requires a local agency to adopt a general plan to provide guidance for future growth and that identifies housing needs and provides opportunities for housing development to meet the housing needs.
2. The KCGP Land Use, Open Space and Conservation Element Section 1.6, Residential, Goals 1, 2, 3, 4, and 7; Policies 2, 3, 5, and 9; and Implementation Measures A, G, and I relate to providing adequate housing opportunities and infrastructure to support population growth within the County.
3. The KCGP Land Use, Open Space and Conservation Element Section 1.10, General Provisions, Goal 1; Policies 6, 7, and 8; and Implementation Measure A provide guidance to accommodate population growth and maintain a safe and healthful environment and ensure fair treatment of all citizens residing in unincorporated Kern County.
4. The KCGP Land Use, Open Space and Conservation Element Section 1.10.8, Smart Growth, Policy 49 provides guidelines to encourage efficient uses of land and a variety of land uses and housing facilities and infrastructure.
5. The KCGP Land Use, Open Space and Conservation Element Section 1.10.9, Economic Development, Policies 50 and 56 and Implementation Measure HH relate to ensuring orderly growth and providing employment and housing opportunities.
6. KCGP and MBGP Housing Element provides policies and guidelines for housing development that does not unduly constrain development and meets the County's housing needs.
7. Kern Regional Blueprint provides guiding principles for the County's growth through 2050.

8. The San Joaquin Valley-Wide Blueprint Program provides guiding principles for the Valley's anticipated population growth and introduces performance measures. The San Joaquin Valley-Wide Blueprint Program covers seven COGs in the San Joaquin Valley, including Kern COG.
9. MBGP Land Use Element Goal 4 and Policies 2, 3, 4, 6, 8, and 10 guide the community's housing development.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

No mitigation measures are required.

Level of Significance

No impact would occur with respect to Option A. Impacts regarding Option B would be less than significant.

Cumulative Setting, Impacts, and Mitigation Measures

Cumulative Setting

The geographic scope for cumulative impacts is defined in Section 3.7, *Cumulative Projects*, and includes both the KCGP and the regional growth plan and projections included in the Kern COG Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) approved in 2014. With respect to population and housing, the geographic scope of analysis is bounded by the County line and includes the KCGP and RTP/SCS implementation.

This is a large enough area to encompass any effects of the proposed project on population and housing that may combine with similar effects caused by other projects, and provides a reasonable context wherein cumulative actions could affect these resources. The cumulative analyses for population and housing considers whether the proposed project, Option A or Option B, in combination with the past, present, and reasonably foreseeable projects, could cumulatively increase or decrease population and housing numbers.

Cumulative Impacts and Mitigation Measures

Impact 4.12-2: Contribute to Cumulative Population and Housing Impacts

Cumulative impacts to population and housing are evaluated in relation to the existing KCGP and the RTP/SCS which collectively provide the framework for evaluating the significance of planned population and housing growth in the County. Kern County is expected to continue to grow, with or without the proposed project, consistent with the growth projections included in the Kern COG RTP/SCS and accompanying EIR. Overall proposed project consistency with these plans is discussed in Section 4.10, *Land Use and Planning*.

Proposed Project Option A

Option A of the proposed project would ban all medical and adult use cannabis-related activities other than what is allowed under Proposition 64. Option A would result in closing dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County. Option A would not directly result in the physical construction of residential units or other structures within unincorporated Kern County. Development of properties within unincorporated Kern County would occur as shown in the KCGP land use designations and Zoning Ordinance; however, land uses related to medical and adult use cannabis-activities would not be allowed. No roadway improvements or extensions of roads or other infrastructure would occur as a result of Option A. Option A would not result in an increase in new residential units or new employment opportunities (Impact 4.12-1), thus, Option A would not contribute to cumulative impacts when combined with past, present, or reasonably foreseeable projects. Impacts are less than significant in this regard.

Proposed Project Option B

As discussed above, Option B would not construct new residential units nor would it result in the need for roadway improvements or expansions, therefore, Option B would not directly induce population growth in this regard. As outlined above, Option B would result future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis stores with or without mobile delivery facilities which would result in new employment opportunities; however, Kern County has an available workforce to accommodate any increase in employment as a result of the cannabis-related industry (Impact 4.12-1). Option B would not lead to a substantial increase in population. Therefore, Option B would not contribute to cumulative impacts when combined with past, present, or reasonably foreseeable project. Cumulative impacts are considered less than significant in this regard.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

No mitigation measures are required.

Level of Significance

No cumulative impact would occur with respect to Option A. Cumulative impacts regarding Option B would be less than significant.

Section 4.13

Public Services

Section 4.13 Public Services

4.13.1 Introduction

This section of the Draft Environmental Impact Report (EIR) addresses potential impacts of the Kern County Cannabis Land Use Ordinance Project (proposed project) on public services, which include fire protection, law enforcement, schools and other public facilities (i.e., legal counsel, public health services, and tax collection) within Kern County (County). Impacts to parks and recreational facilities are analyzed in Section 4.15, *Recreation*. This section also describes relevant environmental and regulatory settings and discusses mitigation measures to reduce impacts, where applicable. The proposed project would potentially increase demand on public services. Therefore, it is the purpose of this section to ascertain if the potential increase in demand would exceed the capacity of existing public services, which may result in the need for additional personnel or require construction of new facilities.

The setting, context, and impact analysis in this section are based on public information and input from the California Department of Forestry and Fire Protection (CAL FIRE), Kern County Fire Department (KCFD), Kern County Sheriff's Office (KCSO), California Highway Patrol (CHP), and Kern County Library.

4.13.2 Environmental Setting

Fire Protection

Wildland fire protection in Kern County is a cooperative effort. The KCFD provides firefighting services to many cities throughout the County. In addition, operating agreements with the U.S. Forest Service (USFS), U.S. Department of the Interior, Bureau of Land Management (BLM), U.S. Fish and Wildlife Service (USFWS), and the CAL FIRE, also provide wildland fire protection.

California Department of Forestry and Fire Protection

As discussed further in Section 4.8, *Hazards and Hazardous Materials*, Fire Hazard Severity Zones (FHSZs) have been mapped by CAL FIRE under the direction of (Public Resources Code (PRC) 4201-4204 and Government Code 51175-89. FHSZs are categorized fire protection within a Federal Responsibility Area (FRA) under the jurisdiction of a federal agency, a State Responsibility Area (SRA) under the jurisdiction of CAL FIRE, or within a Local Responsibility Area (LRA) under the jurisdiction of a local agency. The County contains both SRAs and an LRAs. CAL FIRE is responsible for fire protection within SRAs, found in 56 counties in California, and provides a variety of emergency services in 36 counties in California (California Department of Forestry and Fire Protection [CAL FIRE], 2016). In Kern County, SRA fire protection is provided by the KCFD under contract with CAL FIRE.

Kern County Fire Department

The KCFD provides primary fire protection to unincorporated areas of the county and on regional transportation corridors, such as I-5. The KCFD protects an area that covers over 8,000 square miles and provides fire protection services for over 500,000 citizens living in the unincorporated

areas of Kern County and the cities of Arvin, Delano, Maricopa, McFarland, Ridgecrest, Shafter, Taft, Tehachapi, and Wasco.

The KCFD has 46 fire stations throughout Kern County and is divided into seven battalions for operational management. Each battalion covers a large geographical area and includes between seven and nine fire stations. The county has a total of over 546 uniformed firefighter personnel, which results in a ratio of 0.62 firefighter personnel per 1,000 people, based on the January 1, 2016, California Department of Finance population figure of 886,507 (Kern County Fire Department [KCFD], 2016).

Other services provided by KCFD are fire and life safety education, fire prevention, emergency care, rescue, community assistance (civil defense, tourist information, weather monitoring), and arson investigation. KCFD also manages and directs the Kern County Office of Emergency Services. This office oversees disaster preparedness and mitigation for Kern County. In a major emergency or disaster, the KCFD Office of Emergency Services oversees all emergency operations and recovery operations.

Law Enforcement Services

California Highway Patrol

The CHP provides traffic regulation enforcement; oversees response to emergency incidents on California's highways or assists other public agencies responding to emergency incidents; and promotes the safe and efficient movement of people and goods on California highways to minimize loss of life, injuries, and property damage. CHP officers patrol State highways and implement the CHP's other law enforcement activities (e.g., drug interception, vehicle theft investigation and prevention, vehicle inspections, accident investigations, and public awareness campaigns), with the support of the non-uniformed personnel assigned to area and division offices. In addition, the CHP is available to report to major accidents anywhere in the unincorporated areas and has mutual aid agreements with other agencies to assist in emergencies.

The CHP has eight divisions and more than 100 offices that provide services throughout California. Kern County is located in both the Central and Inland Division service areas (California Highway Patrol [CHP], 2016). There are five main offices out of which the CHP operates within the County; regional offices are provided where the service area is of sufficient size to require additional facilities. Offices and regional offices within the County are located as follows (CHP, 2017a and 2017b):

- Valley Region
 - Bakersfield (with a regional office in Kernville)
 - Wheeler Ridge
 - Buttonwillow
- Mountain Region
 - Lebec
- Desert Region
 - Mojave (with a regional office in Ridgecrest)

In addition to the normal patrol services noted, the CHP also operates the truck weigh station at Wheeler Ridge and Cache Creek (west of Mojave). In 1997, the Wheeler Ridge station assessed

the weight package in over 1,635,000 trucks on the two loaded and one unloaded scale at that facility. The CHP also manages and determines the need to close various highway routes due to a variety of causes, including climate, accidents, mud or rock slide, and other emergency situations.

Kern County Sheriff's Office

The Kern County Sheriff's Office (KCSO) provides law enforcement services through the enforcement of local, State, and federal laws. The Sheriff's Office is responsible for crime prevention, field patrol (ground and air), crime investigation, the apprehension of offenders, regulation of noncriminal activity, and a number of related and support services. Traffic and parking control functions are also provided, along with some investigation of property damage reports and traffic accidents.

KCSO administers law enforcement services throughout the County, including jail system management, bailiff and prisoner transportation services to the courts, search and rescue operations, coroner services, civil processing (serving lawsuit papers), and off-highway vehicle enforcement team. KCSO headquarters is located at 1350 Norris Road in the City of Bakersfield. In addition, there are 14 substations that allow KCSO to provide patrol services to all areas of unincorporated Kern County, as well as to other areas that need law enforcement services. The substations are located throughout the County and include the communities and areas of Buttonwillow, Delano, Frazier Park, Glenville, Kern Valley, Walker Basin, Lamont, Mojave, Boron, Ridgecrest, Rosamond, Taft, Tehachapi, and Wasco.

Within the Valley Region of the project area, KCSO operates the Buttonwillow, Delano, Lamont, and Wasco substations. In general, the Valley Region substations protect farming, ranching, and oil industries which primarily experience rural industrial thefts. The Lamont substation is and has historically been the busiest substation in the County (Kern County Sheriff's Office [KCSO], 2017a). The Lamont substation experiences ongoing illegal drug activity, gang-related criminal activity, graffiti, burglaries and thefts (KSCO, 2017a, and 2017d). In addition, the KCSO Valley Region substations generally work closely with the KCSO Rural Crime Investigation Unit in order to prevent and deter agricultural, livestock, and oil field related crimes.

Within the Mountain Region, KCSO operates the Frazier Park, Glenville, Kern Valley, Taft, Tehachapi, and Walker Basin substations. The Mountain Region substations generally protect the mountain communities located near oil and ranch industries. In addition, the Mountain Region includes national forests and other open spaces that provide year-round recreation which supports the travel industry. These areas primarily experience rural ranching thefts and lost persons as well as assisting with floods, forest and range fires, snowstorms, and other natural occurrences. The Taft substation, similar to the Lamont substation in the Valley Region, experiences ongoing illegal drug activity, gang-related criminal activity, graffiti, burglaries and thefts (KSCO, 2017a, and 2017d).

Within the Desert Region, KCSO operates the Mojave, Boron, Ridgecrest, and Rosamond substations. The Mojave Substation covers approximately 1,320 square miles and is the largest response area of the KCSO substations (KCSO, 2017b). The Off-Highway Enforcement Team was initiated out of the Rosamond Substation (KCSO, 2017c). The Desert Region substations typically have large geographic areas throughout the desert terrain and cover federal military, mining, farming and ranching, and renewable energy (i.e., solar and wind) industries. With respect to Edwards Air Force Base, military personnel are responsible for on-base law enforcement.

Response times by law enforcement services to an emergency within the County vary depending on the level of demand on other area law enforcement personnel at the time of the call. If demand is high, the response time may be longer than the average times given above.

Schools

Elementary and High Schools

There are 35 elementary school districts, 8 unified school districts (provide elementary and high school facilities), 4 high school districts and two community college districts in Kern County. In addition to regular school programs, a number of special education programs are provided through the Kern County Superintendent of Schools, Kern High School District and local school districts. The educational institutions are responsible for the operation, staffing and scheduling of more than 70 individual school facilities. Two of the key factors that affect existing and future school facilities are funding and student generation rates.

The educational system in Kern County for grades K (Kindergarten) through 12 are overseen by the Kern County Board of Education. This is a seven-person board that meets monthly to provide goals and policies to the Superintendent of Schools and the Districts of the County. Administrative assistance is also provided by the following:

- Kern County Committee on School District Organization
- Kern County School Boards Association
- California School Boards Association-Administrative Advisory Committee
- Kern County Superintendent of Schools Personnel Commission

The Superintendent of Schools Office is managed by an elected Superintendent of Schools who is assisted by various personnel under the following departments:

- Division of Schools Legal Services
- Division of Administration and Finance Services
- Division of Communications and KETV
- Division of Fiscal Crisis and Management Assistance
- Division of Insurance Services
- Educational Services
- Division of Student Services
- Division of Special Education Services
- Division of Mobility Opportunities
- Support Services

In addition to Kern County's Kindergarten through 12th grade school districts, the County includes a number of private schools and home or independent study programs.

Higher Education

Community Colleges

The Kern Community College District has three campuses. All campuses in both community college districts are accredited by the Western Association of Schools and Colleges and offer a variety of educational opportunities from vocational courses accepted at four-year colleges and universities.

- Bakersfield College - Bakersfield (Valley Region)
- Taft College – Taft (Mountain Region)
- Cerro Coso College - Ridgecrest (Desert Region)

Four-Year Public Universities

California State University, Bakersfield is part of the California State University system. One of the newer schools in this system, CSUB opened its 375-acre campus in southwest Bakersfield in 1970 and offers undergraduate and graduate degrees through the Schools of Arts-and Sciences, Business and Public Administration, and Education.

Private Higher Education Schools and Universities

Other private universities include: University of Laverne, University of Phoenix, San Joaquin Valley College, and other various Business and Vocational Schools.

Parks

Refer to Section 4.14, *Recreation*, for a detailed description and analysis related to the public recreational facilities briefly described below.

There are two national parks within 40 miles of Kern County, which include Death Valley National Park located approximately 30 miles east and north of the County line and Sequoia and Kings Canyon National Park located approximately 35 miles north and east of the project area. The United States Forest Service (USFS) oversees the Pacific Crest Trail (PCT), which traverses Kern County along the eastern, or desert, side of the Sierra Nevada and Tehachapi Mountains for a distance of approximately 100 miles. The Carrizo Plain National Monument (CPNM) is located in the western portion of the County and extends into adjacent land within San Luis Obispo County. Los Padres National Forest extends approximately 220 miles from Monterey County to the western edge of Los Angeles County and encompasses nearly 2 million acres. Sequoia National Forest is located approximately 13 miles northeast of downtown Bakersfield in the northeastern portion of the County. Sequoia National Forest encompasses approximately 1.2 million acres and is named for the giant sequoia trees that are located within 38 groves within the boundaries of the forest. The Kern National Wildlife Refuge (KNWR) is located approximately 18 miles west of Delano, in the northern portion of the County and preserves a portion of the San Joaquin Valley freshwater wetlands and acts as a refuge primarily for waterfowl (United States Fish and Wildlife Service [USFWS], 2017a). The Bitter Creek National Wildlife Refuge is located in the southwestern portion of the Project Area, approximately 6.5 miles south of Maricopa, in the San Emigdio and Coast Range foothills. The bitter Creek National Wildlife Refuge's primary goal is to preserve essential foraging and roosting habitat for the California condor.

Fort Tejon State Historic Park is located in Grapevine Canyon and is a 2,054-acre park which includes the site of a U.S. Army fort established in 1854 and abandoned in 1864. Red Rock Canyon State Park is a 27,000-acre park within the Mojave Sector of the Tehachapi District of the California State Park System. The park is located along State Route (SR) 14, 25 miles northeast of Mojave and 80 miles east of Bakersfield. Tomo-Kahni State Historic Park was created to protect and preserve the integrity of the site of Tomo-Kahni, or "Winter Village," a Kuwaitis (Nuwa) Native American community located atop a ridge in the Tehachapi Mountains, overlooking Sand Canyon to the east and the Tehachapi valley to the west. The 987-acre Tule Elk State Natural Reserve, located southeast of Buttonwillow, protects a small herd of tule elk, once in danger of extinction, and provides opportunities to observe native birds of the San Joaquin Valley (California Department of Parks and Recreation, 2016d). The Hungry Valley State Vehicular Recreation Area (Hungry Valley) is located in Gorman and is a 19,000-acre facility containing 130 miles of off-highway vehicle (OHV) terrain, including motorcycle, all-terrain vehicle, dune buggy, and 4-wheel drive vehicle trails.

Wind Wolves Preserve is a 95,000-acre non-profit preserve operated by The Wildlands Conservancy. The Wind Wolves Preserve ranges in elevation from 640 to 6,005 feet and includes unique land forms and ecologically important habitat. The preserve is open daily and offers outdoor education programs for schools as well as nature viewing, camping, hiking, mountain biking, and picnicking (The Wildlands Conservancy, 2017).

The 2010 Parks and Recreation Master Plan identifies seven regional parks that are operated and maintained by the Kern County Parks and Recreation Department. In addition, Camp Condor is a regional park operated and maintained by Westside Recreation and Park District under an agreement with the County and Kernville Fish Hatchery is in a management transition from USFS to Kern County Parks and Recreation Department. Kern County Parks and Recreation Department also operates and maintains more than 40 neighborhood parks and more than 20 public buildings. The Kern River County Park, the largest regional recreation facility in the County, provides a variety of structured and non-structured recreational facilities, including Hart Memorial Park, Camp Okihi, the Kern County Soccer Park, Lake Ming, the Kern River Golf Course, and picnic areas. Non-structured recreational uses occur along the length of Kern River County Park and include rafting, hiking, bicycle trails, off-road vehicle uses.

Multiple public, as well as private, golf courses are also available in Kern County. Kern County Parks and Recreation Department owns and oversees management of three golf courses:

- Buena Vista Golf Course, located near Dustin Acres, approximately 8.5 miles east of Taft immediately north of Buena Vista Aquatic Recreational Area;
- Kern River Golf Course, located approximately 13 miles northeast of downtown Bakersfield and adjacent to Lake Ming; and
- North Kern Golf Course, located approximately one mile north of Lerdo Highway and approximately 2.5 miles east of SR-99.

In addition to the Kern County Parks and Recreation Department's facilities, there are 11 incorporated cities and nine special recreation and park districts that also provide recreational facilities within Kern County.

Library Services

The Kern County Library system, with a main library and headquarters facility located at the Beale Memorial Library in Bakersfield, is a countywide system that provides all public library (non-school based) services in Kern County. It was organized as the Kern County Free Library on July 11, 1911, and currently operates a main library, 24 branches and three bookmobiles that provide an additional 26 points of service. Branch libraries are generally established as a result of population growth, distance from other branches, and community expansion. The Library is governed by the Kern County Board of Supervisors and is financed by appropriations from County general funds, fines and fees, and State Public Library Fund revenues as provided by State Law.

Other Public Facilities

Other public services include approximately 47 federal post offices throughout Kern County, within both incorporated and unincorporated areas (Post Office Finder, 2017). Services for water, wastewater, solid waste, stormwater drainage, electricity, natural gas, and video, voice and data are considered a utility and therefore impacts to these services are discussed under Section 4.16, *Utilities and Service Systems*.

Kern County Counsel

County Counsel is the general counsel and risk manager for the County of Kern. Pursuant to California law, County Counsel is responsible for providing legal services to the County, its officers, employees, boards, commissions, and other agencies. It is also responsible for the County's safety program, insurance coverage, general liability, and workers compensation claims.

Kern County Public Health Services

The Public Health Services Division, which is operated by the Kern County Public Health Services Department, is responsible for the protection and promotion of the public's health. The County Public Health Departments provides services to promote healthy living and behaviors through programs regarding health education, awareness, and prevention of disease, as prescribed in the State Health and Safety Code and the Kern County Code of Ordinances. There are three departmental divisions, Emergency Medical Services, Environmental Health Services and Public Health Services.

The Public Health Services Division programs include vital statistics, health education, communicable disease control, nutrition and family planning advisory services, and medical and nursing services to promote maternal and child health. Within the general program areas, Public Health Services administers the federal Early and Periodic Screening, Diagnosis and Treatment Program, AIDS Consortium Grants and AIDS Housing and Drug Procurement Programs, the State Child Health and Disability Prevention Program, and the Maternal, Child and Adolescent Health Care Program. Public Health Services also administers the California Children Services Program, which carries out the State mandated program intended to locate and provide necessary specialized medical care and allied services to children with disabling conditions.

Kern County Treasurer-Tax Collector

The Kern County Treasurer-Tax Collector collects taxes for the people and businesses of County, including property taxes, which are then managed and safeguarded as public funds to provide community services to the constituents of Kern County. The Kern County Treasurer-Tax Collector also provides assistance with financial services, taxpayer services, audit services, and deferred compensation.

4.13.3 Regulatory Setting

State

California Department of Forestry and Fire Protection

Under Title 14 of the California Code of Regulations, CAL FIRE has the primary responsibility for implementing wildfire planning and protection for the SRA. CAL FIRE develops fire safe regulations and issues fire safe clearances for land within a fire district of the SRA. More than 31 million acres of California's privately owned wildlands are under the jurisdiction of the CAL FIRE.

In addition to wildland fires, CAL FIRE's planning efforts involve responding to other types of emergencies that may occur on a daily basis, including residential or commercial structure fires, automobile accidents, heart attacks, drowning victims, lost hikers, hazardous material spills on highways, train wrecks, floods, and earthquakes. Through contracts with local government, the CAL FIRE provides emergency services in 36 of California's 58 counties (CAL FIRE, 2016).

Senate Bill (SB) 50

The Leroy F. Greene School Facilities Act of 1998, or Senate Bill 50 (SB 50), authorizes school districts to levy developer fees to finance the construction or reconstruction of school facilities. In January 2015, the State Allocation Board (SAB) approved maximum Level 1 developer fees at \$0.54 per square foot of enclosed and covered space in any commercial or industrial development, and \$3.36 per square foot for residential development. These fees are intended to address the increased educational demands on the school district resulting from new development. Public school districts can, however, impose higher fees than those established by the SAB, provided they meet the conditions outlined in the act. Private schools are not eligible for fees collected pursuant to SB 50.

The payment of school mitigation impact fees authorized by SB 50 is deemed to provide full and complete mitigation of project impacts on school facilities. SB 50 provides that a State or local agency may not deny or refuse to approve the planning, use, or development of real property on the basis of a developer's refusal to provide mitigation in amounts in excess of that established by SB 50.

Local

Kern County General Plan (KCGP)

The policies, goals, and implementation measures in the KCGP applicable to public services as related to the project are provided below. The KCGP contains additional policies, goals, and

implementation measures that are more general in nature and not specific. Therefore, they are not listed below, but, as stated in Chapter 2, *Introduction*, all policies, goals, and implementation measures in the KCGP are incorporated by reference.

Chapter 1. Land Use, Open Space, and Conservation Element

Section 1.4 Public Facilities and Services

Goals

- **Goal 1.** Kern County residents and businesses should receive adequate and cost-effective public services and facilities. The County will compare new urban development proposals and land use changes to the required public services and facilities needed for the proposed project.

Policies

- **Policy 1.** New discretionary development will be required to pay its proportional share of the local costs of infrastructure improvements required to service such development.
- **Policy 6.** The County will ensure adequate fire protection to all Kern County residents.
- **Policy 7.** The County will ensure adequate police protection to all Kern County residents.

Implementation Measures

- **Implementation Measure A.** Continue to administer the Capital Improvement Program (CIP) and coordinate with public utility providers, listing the necessary improvements to Kern County's public services and facilities in collaboration with key service-providing agencies and the County Administrative Office as a first step toward the preparation of a long-term Public Services Plan for Kern County. This plan addresses the projected demand for public services throughout the County in comparison with projected revenues and identifies long-term financial trends for the major public service providers. The CIP and general plan can ensure compliance with the provisions of Government Code Sections 65401 and 65402, which require review of all capital facility decisions for consistency with the General Plan.
- **Implementation Measure L.** Prior to the approval of development projects, the County shall determine the need for fire protection services. New development in the County shall not be approved unless adequate fire protection facilities and resources can be provided.

Section 1.10 General Provisions

Goals

- **Goal 1.** Ensure that the County can accommodate anticipated future growth and development while maintaining a safe and healthful environment and a prosperous economy by preserving viable natural resources, guiding development away from hazardous areas, and assuring the provision of adequate public services.

Section 1.10.1 Public Services and Facilities

Policies

- **Policy 9.** New development should pay its pro rata share of the local cost of expansions in services, facilities, and infrastructure that it generates and upon which it is dependent.
- **Policy 15.** Prior to approval of any discretionary permit, the County shall make the finding, based on information provided by the California Environmental Quality Act (CEQA) documents, staff analysis, and the applicant, that adequate public or private services and resources are available to serve the proposed development.
- **Policy 16.** The developer shall assume full responsibility for costs incurred in service extension or improvements that are required to ensure the project. Cost sharing or other forms of recovery shall be available when the service extensions or improvements have a specific quantifiable regional significance.

Chapter 4. Safety Element

Section 4.6 Wildland and Urban Fire

Policies

- **Policy 1.** Require discretionary projects to assess impacts on emergency services and facilities.
- **Policy 3.** The County will encourage the promotion of fire prevention methods to reduce service protection costs and costs to taxpayers.
- **Policy 4.** Ensure that new development of properties have sufficient access for emergency vehicles and for the evacuation of residents.
- **Policy 6.** All discretionary projects shall comply with the adopted Fire Code and the requirements of the Fire Department.

Implementation Measures

- **Implementation Measure A.** Require that all development comply with the requirements of the Kern County Fire Department or other appropriate agency regarding access, fire flows, and fire protection facilities.

Section 4.8 Critical Facilities and Hazardous Buildings

Policies

- **Policy 1.** That buildings and other structures indispensable to emergency services, including hospitals, law enforcement stations, fire stations, communication control stations, and other facilities of disaster control and refuge (e.g. schools) remain operational during any major disaster and be designed, located, and constructed accordingly.
- **Policy 3.** Require that the siting and development of critical facilities under discretionary approval be supported by documentation through hazard investigations relating to site selection, preconstruction site investigations, and application of the most current professional standards for seismic design.

Implementation Measures

- **Implementation Measure K.** Reflect the location of active faults in zoning and subdivision approvals, through low-density zoning designations, and through locations of lot lines and public ways to allow adequate flexibility in placement of buildings such that active fault traces can be avoided.
- **Implementation Measure L.** Require that plans and permits for installation of major lifeline components such as highways, utilities, and petroleum or chemical pipelines to incorporate design features to accommodate potential fault movement in areas of active faults without prolonged disruption of essential service or threat to health and safety.

Kern County Land Division Ordinance (Title 18 of the Ordinance Code of Kern County) – Section 18.50.080 Park Land Dedication

California Government Code Section 66477 of the California Subdivision Map Act (Quimby Act) identifies allowable methods under which local land use authorities may require recreational land dedications or in-lieu fee payments as a condition of subdivision approval. Kern County has implemented the Quimby Act for the Kern County Parks and Recreation portion of the project in Section 18.50.080 of the Kern County Land Division Ordinance, which requires that every land division include a dedication of parkland or payment of an equivalent in-lieu fee (Land Division Ordinance 18.50.080.D.1). The County code provides that a project may receive a credit at the recommendation of the appropriate parks and recreation district against a parkland fee based on the value of private open space within the development that is usable for active recreational purposes, including private recreation and private open space.

Kern County Wildland Fire Management Plan

The KCFD Wildland Fire Management Plan documents the wildland fire situation throughout the SRA of the County. It identifies strategic targets for pre-fire solutions, as defined by the people who live and work with the local fire problem. The goals of the plan are to reduce costs and losses from wildfire by protecting at-risk assets through focused pre-fire management prescriptions and increasing initial attack success. The plan systematically assesses the existing levels of wildland protection services and identifies high-risk and high-value areas, which are potential locations for costly and damaging wildfires. The plan also ranks the areas in terms of priority needs and prescribes what can be done to reduce future costs and losses.

Capital Improvement Plan (CIP)

A countywide Capital Improvement Plan (CIP) was presented to the board of supervisors on October 9, 2007, and adopted in 2008. This report presents the best current understanding regarding new public facilities that would be needed to serve projected development in the County through 2030. The scope of services includes parks; libraries; Sheriff's Office (public protection and investigation), fire department, animal control, public health, and landfill/transfer facilities; and, general government services. Road and sewer costs, as well as related impacts, are not part of this program. The program includes three phased components:

- **Phase One:** Develop a conceptual CIP for the included facility categories, assessing what additional capacity and conceptual projects are required to provide needed infrastructure for new development through 2030;

- **Phase Two:** Evaluate existing and potential funding sources, and outline options available as financing mechanisms, including a development fee proposal; and
- **Phase Three:** Perform a fiscal (operational) analysis for use in evaluating the ongoing operating and maintenance impacts of a new development on the County's general fund.

The adopted CIP includes a summary of proposed service levels for the included facilities and a conceptual list of the planned projects upon which the CIP was based.

Public Facilities Mitigation Program

The changing fiscal landscape in California during the past 30 years has steadily undercut the financial capacity of local governments to fund infrastructure. Three dominant trends stand out:

- The passage of a string of tax limitation measures, starting with Proposition 13 in 1978 and continuing through the passage of Proposition 218 in 1996;
- Declining popular support for bond measures to finance infrastructure for the next generation of residents and businesses; and
- Steep reductions in federal and State assistance.

Faced with these trends, the County has adopted a policy of "growth pays its own way" through use of a public facilities mitigation program. The primary policy objective of this program is to ensure that new development pays the capital costs associated with growth. The CIP further identified appropriate existing facility demand standards to be used as a basis for estimating future facility needs and levels of service. The basic purpose of the CIP is to identify the facilities and infrastructure needed to serve the population in 2030.

Continued growth in the County, as well as the impacts resulting from that growth, has increased demands on countywide public services and have made it difficult to implement and fund many of the facilities identified in the CIP while maintaining existing public service demand standards.

The purpose of the Public Facilities Mitigation Program is to identify impacts on public services and determine the California Environmental Quality Act (CEQA)-required mitigation (in dollars) that would be needed to address growth impacts adequately. The following categories would be considered to determine the specific public needs that could potentially be affected by the project:

- Countywide Public Protection Facilities;
- Sheriff Patrol and Investigation Facilities;
- Library Facilities;
- Animal Control Facilities;
- Park Facilities (also see Section 4.14, *Recreation*);
- Fire Facilities;
- Waste Management Facilities (also see Section 4.16, *Utilities and Service Systems*).
- Public Health Facilities; and
- General Government Facilities.

The County undertook preparation of the *Draft Kern County Public Facilities Impact Fee Study* in 2009 (Willdan Financial Services, 2009). The purpose of the study was to ensure that new development pays the capital costs associated with growth. The report calculates and presents fees that enable the County to expand its inventory of public facilities and maintain its facilities standards, as new development leads to service population increases. The study divides the County into three zones: Desert, Mountain, and Valley, and lists project monetary mitigation fees that various project types may be required to pay within each zone. The report provides the necessary findings required by the Mitigation Fee Act, contained in California Government Code Sections 66000 et seq., for adoption of the fees presented in the report. The report was not finalized by the Board of Supervisors and is currently under review and update.

Metropolitan Bakersfield General Plan (MBGP)

The Metropolitan Bakersfield General Plan (MBGP), a joint effort between the Kern County Planning Department and the City of Bakersfield Planning Division, was last adopted on December 11, 2007. The MBGP includes both city and unincorporated County lands. The MBGP describes the community's physical development as well as its economic, social and environmental goals and is currently undergoing an update. Project-related development on unincorporated lands within the MBGP Planning Area would be subject to the following applicable policies and implementation measures of the MBGP, with respect to public services.

Chapter VIII. Safety Element

C. Public Safety

Goals

- **Goal 1.** Ensure that the Bakersfield metropolitan area maintains a high level of public safety for its citizenry.
- **Goal 2.** Ensure that adequate police and fire services and facilities are available to meet the needs of current and future metropolitan residents through the coordination of planning and development of metropolitan police and fire facilities and services.
- **Goal 3.** Provide for the coordinated planning and development of service areas for police and fire protection to ensure an equitable burden of responsibility between County and City in metropolitan Bakersfield.
- **Goal 4.** Ensure that fire, hazardous substance regulation, and emergency medical service problems are continuously identified and addressed in a proactive way, to optimize safety and efficiency.

Policies

- **Policy 1.** Identify future site locations, projected facility expansions, projected site acquisition costs, construction costs and operational costs in a manner that would maximize the efficiency of new public safety services.
- **Policy 2.** Require discretionary projects to assess impacts on police and fire services and facilities.
- **Policy 11.** Expand emergency medical services by the City and County Fire Departments and encourage the integration of ground and air and public and private resources to achieve efficiency and effectiveness of emergency medical services.

Implementation Measures

- **Implementation Measure 2.** Funding for Police and Fire equipment and facilities will be facilitated through bond issues and/or development fees and/or land dedications and/or assessment districts.

Chapter X. Public Services and Facilities Element

A. General Utility Services

Goals

- **Goal 4.** Develop funding principles and programs which will assure that all new development will pay for the incremental costs of the public facilities and services—utilities bridges, parks, and public safety facilities—both onsite and offsite, to serve such development.

Policies

- **Policy 5.** Require all new development to pay its pro rata share of the cost of necessary expansion in municipal utilities, facilities and infrastructure for which it generates demand and upon which it is dependent.

Implementation Measures

- **Implementation Measure 4.** Create benefit assessment districts or establish service fees for the distribution of costs to users for capital improvement replacement costs and maintenance, utilizing such districts for the financing of improvements which are essential to planning area development.

Chapter XI. Parks Element

None of the goals, policies, or implementation measures related to parks are applicable to the proposed project.

Kern County Specific Plans

Kern County has adopted 39 Specific Plans, 10 Rural Community Plans, and 14 Interim Rural Community Plan Maps. The Specific Plans and Rural Community Plans are intended to be an amplification of the goals and policies of the KCGP and are, therefore, consistent therewith. Interim Rural Community Plan Maps are areas where a specific plan has not been formally adopted, thus the goals and policies of the KCGP govern these areas. Future commercial cannabis cultivation, processing/packaging, and sales activities that would be authorized under the proposed project that would be located within the boundary of an adopted Specific Plan would be regulated according to County zoning.

4.13.4 Impacts and Mitigation Measures

This section describes the methodology used in conducting the impact analysis for public services, the thresholds of significance used in assess impacts to public services, and the assessment of impacts to public services. Measures to mitigate (i.e., avoid, minimize, rectify, reduce, eliminate, or compensate for) significant impacts accompany each impact discussion, where applicable.

Methodology

Public service systems were evaluated by reviewing the most current data available from State and Kern County department websites, the KCGP, the Public Facilities Impact Fee Study, and the fiscal impact analysis (refer to Appendix K of this EIR) prepared for the project.

Development Standards Related to Public Services

Option A

Option A of the proposed project would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Therefore, no development standards are identified in the proposed Zoning Ordinance; refer to Appendix B for specific wording of the proposed ordinance under Option A.

Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, testing, and retail cannabis stores with or without mobile delivery facilities. Development standards provided in the proposed Zoning Ordinance, that pertain to public services include, but are not limited to, the following (refer to Appendix C for specific working of the proposed ordinance under Option B):

- All cannabis facilities must be 0.5 mile from any school, park, day care center or youth center.
- The applicant must demonstrate compliance with all applicable mitigation measures prior to the issuance of a grading or building permit for any future cannabis related facility.
- A Fire Safety Plan must be approved by the Kern County Fire Department for future cannabis related facilities.
- All entrances to the future cannabis facility shall be clearly marked and legibly posted. No minors or adults below the age of 21 years old will be allowed on the premises.
- A Hazardous Materials Business Plan must be approved by the Kern County Environmental Health Services Division/Hazardous Materials Section.
- For future cannabis related facilities, if construction is required, debris and waste generated would be recycled to the extent feasible.
- For cannabis cultivation (indoor and outdoor), processing and packaging, and distribution facilities, on-site energy shall be provided or offset with a solar photovoltaic system; small wind generators may be used only in appropriate areas of Eastern Kern County.
- Future cannabis related facilities shall be equipped with an effective odor control system which at all times must prevent unreasonable interference with neighbors' use and enjoyment of their property. The odor control system shall: consist of one or more fans; utilize an alternative method or technology to achieve equal to or greater odor mitigation than provided by the fan system; and the system must be maintained in working order and in use.
- Future cannabis related facilities shall provide the Kern County Planning and Natural Resources Department with a detailed security monitoring plan.

Thresholds of Significance

The Kern County CEQA Implementation Document and Kern County Environmental Checklist state that a project would have a significant impact on public services if it would:

- Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or to other performance objectives for any of the public services:
 - Fire Protection;
 - Law Enforcement Protection;
 - Schools;
 - Parks; or
 - Other Public Facilities.

Project Impacts

Impact 4.13-1: Result in Substantial Adverse Physical Impacts Associated with the Provision of New or Physically Altered Governmental Facilities, Need for New or Physically Altered Governmental Facilities, the Construction of Which Could Cause Significant Environmental Impacts in order to Maintain Acceptable Service Ratios, Response Times, or Other Performance Objectives for Fire Protection, Law Enforcement Protection, Schools, Parks or Other Public Facilities

Fire Protection

This section discusses the fire protection and emergency medical service facility impacts and response times. Impacts related to hazardous materials and fire risk, especially wildland fires, are discussed in Section 4.8, *Hazards and Hazardous Materials*.

A community's requirements for fire protection services and facilities are based on the number of residents and workers in the primary service area. Service demand is primarily tied to the size of the population being served, not land use activity, because emergency medical calls typically make up the majority of responses provided by a fire department. As the number of residents and workers increases, so does the number of emergency medical calls. In general, service demands per employee are less than service demands per resident; therefore, population growth in a given area increases the demand on fire protection services and facilities.

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any

cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on commercial cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A does not provide opportunities for business development and thus would not result in an increase in residents or employees within the County, as discussed in detail in Section 4.12, *Population and Housing*. Fire calls for illegally operated cultivation or preparation sites that use unregulated butane to make products that could cause hazardous conditions could increase fire calls. These calls would be included in the existing fire facilities and operations. Therefore, Option A would not result in an increase in fire protection needs and thus would not result in the need for new or physically altered fire protection facilities.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis stores with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 square feet (ft^2) of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft^2 of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

As discussed in Chapter 3, *Project Description*, Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. The County currently allows medical cannabis dispensaries. Future cannabis-related activities that would be authorized under Option B are not anticipated to result in a substantial population increase, as further explained in Section 4.12, *Population and Housing*.

As analyzed in Section 4.8, *Hazards and Hazardous Materials*, different aspects of the commercial cannabis industry include hazardous materials. AB 2679 amended Section 11362.775 of the California Health and Safety Code and established rules for the manufacturing of oils, waxes and other concentrates produced by a collective or cooperative producing medical cannabis products. AB 2679 provides guidelines on the manufacturing systems and solvents that are allowable for commercial cannabis. Like other businesses that use hazardous materials, and in accordance with the California Health and Safety Code and Kern County regulations, business owners would be required to prepare a Hazardous Materials Business Plan (HMBP) and submit it to the Kern County Public Health Services Department for review and approval. Implementation of HMBPs not only helps to reduce the frequency of emergency calls to the KCFD, it allows the KCFD to be prepared to respond to all types of emergencies that could occur at such facilities.

There are five classes of fire extinguishers, each designed to put out different types of fires (U.S. Fire Administration [USFA], 2017):

- Class A: Class A for use on fires in ordinary combustibles, such as wood, paper, cloth, trash, and plastics.
- Class B: Class B for use on fires in combustible and flammable liquids, such as gasoline, petroleum oil, grease, and paint. Class B fires also include flammable gases, such as propane and butane. Class B fires do not include fires involving cooking oils and grease.
- Class C: Class C for use on fires involving energized electrical equipment, such as motors, transformers, tools, and appliances. Remove the power, and the Class C fire becomes one of the other classes of fire.
- Class D: Class D for use on fires in combustible metals, such as potassium, sodium, aluminum, and magnesium.
- Class K: Class K for use on fires in cooking oils and greases, such as animals fats and vegetable fats. Class K fires are typically found in commercial kitchens (restaurants, cafeterias, catering businesses, etc.).

Any of these types of fires could occur at a future cannabis-related facility because of the structures, equipment, and other materials associated with future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis stores with or without mobile delivery facilities. Kern County has hazardous materials teams. Significant impacts could occur if the hazardous material response teams do not have sufficient firefighting materials or equipment to extinguish the type of fires that could be associated with the types of materials at a cannabis-related facility.

As discussed above, any new businesses would be required to federal, State, and local health and safety regulations, business plans, HMBPs, development standards, building codes, and other laws and regulations that govern fire protection. In addition, mitigation measures would be required to ensure that the implementation of Option B would not increase the need for fire protection services and facilities beyond what they currently anticipate for any given year. Therefore, with the implementation of mitigation measures, future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis stores with or without mobile delivery activities would not result in the need for new or physically altered government facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection. With implementation of mitigation measures, impacts to fire protection services and facilities are considered less than significant.

Certain future cannabis-related activities and facilities would require processing a Conditional Use Permit (CUP) and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing before the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General

Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to the direct or indirect impacts to fire protection services and facilities would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Fire Protection

1. Title 14 of the California Code of Regulations establishes that CAL FIRE has primary responsibility for implementing wildfire planning and protection in SRAs.
2. KCGP Land Use, Open Space, and Conservation Element Section 1.4, Public Facilities and Services Goal 1; Policies 1, 6, and 7; and Implementation Measures A and L relate to providing adequate public services and facilities, including fire protection, to residents and businesses and establish the payment of proportional shares of the local costs.
3. KCGP Land Use, Open Space, and Conservation Element Section 1.10.1, Public Services and Facilities Policies 9, 15, and 16 relate to new development paying its pro rata share of local cost of expansions in public services, facilities and infrastructure.
4. KCGP Safety Element Section 4.6, Wildland and Urban Fire Policies 1, 3, 4, and 6 and Implementation Measure A encourage fire prevention methods and establishes guidelines for fire safety, services, and infrastructure for fire protection services.
5. KCGP Safety Element Section 4.8, Critical Facilities and Hazardous Buildings Policies 1 and 3 and Implementation Measures K and L establish that fire protection services remain operational during emergencies.
6. Kern County Wildland Fire Management Plan identifies strategies for pre-fire solutions.
7. Public Facilities Mitigation Program establishes the County's policy of "growth pays its own way" to ensure that new development pays the capital costs associated with growth.
8. MBGP Safety Element Public Safety Goals 1, 2, 3 and 4; Policies 1, 2, and 11; and Implementation Measure 2 establish goals and policies guiding public services, infrastructure and providing adequate services to the residents and businesses.
9. MBGP Public Services and Facilities Element, General Utility Services Goal 4, Policy 5, and Implementation Measure 4 establish the funding mechanisms for new development to pay for improvements required to maintain fire protection services, facilities, and infrastructure.

Law Enforcement

Both KCSO and CHP law enforcement agencies oversee areas of the project site. The KCSO provides primary police protection for the project site and surrounding areas. Both residents and workers in unincorporated portions of the County benefit from the patrol and investigation services provided by the KCSO. KCSO serves a population base of more than 700,000 people in metropolitan and rural areas. KCSO provides basic law enforcement services in the unincorporated areas of the County; city police departments provide these services in the County's incorporated cities. KCSO provides primary police protection for the project areas. Both residents and workers in unincorporated portions of the County benefit from the patrol and investigation services provided by KCSO. KCSO operates 14 substations throughout the County and include the communities and

areas of Buttonwillow, Delano, Frazier Park, Glenville, Kern Valley, Walker Basin, Lamont, Mojave, Boron, Ridgecrest, Rosamond, Taft, Tehachapi, and Wasco.

Within the Valley Region of the project area, KCSO operates the Buttonwillow, Delano, Lamont, Wasco substations. In general, the Valley Region substations protect farming, ranching, and oil industries which primarily experience rural industrial thefts. The Lamont substation is and has historically been the busiest substation in the County (Kern County Sheriff's Office [KCSO], 2017a). Both the Lamont and Taft substations experience ongoing illegal drug activity, gang-related criminal activity, graffiti, burglaries and thefts (KSCO, 2017a, and 2017d). In addition, the KCSO Valley Region substations generally work closely with the KCSO Rural Crime Investigation Unit in order to prevent and deter agricultural, livestock, and oil field related crimes.

Within the Mountain Region, KCSO operates the Frazier Park, Glenville, Kern Valley, Taft, Tehachapi, and Walker Basin substations. The Mountain Region substations generally protect the mountain communities located near oil and ranch industries. In addition, the Mountain Region includes national forests and other open spaces that provide year-round recreation which supports the travel industry. These areas primarily experience rural ranching thefts and lost persons as well as assisting with floods, forest and range fires, snowstorms, and other natural occurrences.

Within the Desert Region, KCSO operates the Mojave, Boron, Ridgecrest, and Rosamond substations. The Mojave Substation covers approximately 1,320 square miles and is the largest response area of the KCSO substations (KCSO, 2017b). The Off-Highway Enforcement Team was initiated out of the Rosamond Substation (KCSO, 2017c). The Desert Region substations typically have large geographic areas throughout the desert terrain and cover federal military, mining, farming and ranching, and renewable energy (i.e., solar and wind) industries. With respect to Edwards Air Force Base, military personnel are responsible for on-base law enforcement.

The CHP provides traffic regulation enforcement; oversees response to emergency incidents on California's highways or assists other public agencies responding to emergency incidents; and promotes the safe and efficient movement of people and goods on California highways to minimize loss of life, injuries, and property damage. Kern County is located in both the CHP Central and Inland Division service areas. Within the Valley Region, the CHP Central Division operates offices in Bakersfield, Wheeler Ridge, and Buttonwillow. Within the Mountain Region, the CHP Central Division operates one office in Lebec, on the I-5 corridor. In the Desert Region, the CHP Inland Division has an office in Mojave with a regional office in Ridgecrest.

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on commercial cannabis-related

activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A does not provide opportunities for business development and thus would not result in an increase in residents or employees within the County, as discussed in detail in Section 4.12, *Population and Housing*. A total ban on commercial cannabis-related activities that are legal under Proposition 64 State wide while allowing personal adult use, would result in the need for an enforcement task force to coordinate across County agencies and seek State and federal funding. This task force would also coordinate with the State on cannabis operations that are not allowed in the County and, therefore, cannot legally obtain State permitting. If such commercial operations continue to sell, cultivate, or manufacture products they would be illegal under both local and State law. Therefore, Option A would result in the need to increase law enforcement and would result in the need for new equipment and altered protection facilities for the KCSO. Mitigation Measure MM 4.13-1 provides for the formation of Cannabis Activity Enforcement Task Force comprised of the following new positions:

- Kern County Sheriff – 1 Supervisor, 5 Deputies, 1 Clerical
- District Attorney – 1 Supervisor, 2 Attorneys, 1 Paralegal
- Kern County Counsel – 1 Supervisor, 2 Attorneys, 1 Paralegal
- Support Staff – 1 Office Service Specialist, 1 Code Compliance, 1 Planner
- Coordination with Kern County Public Health Services Department, Kern County Agricultural Commissioner, Kern County Environmental Health, and Kern County Fire Department

The first year would require partial staffing as the State resolves licensing issues with full staffing the second and third year for focused, enhanced activity. Depending on the level of remaining activities the fourth year and beyond could be reduced. The total cost of the full staffing and equipment is estimated to be from \$1.2 to 2.7 million dollars a year.

This impact could be reduced to less than significant with the implementation of Mitigation Measure MM 4.13-1; however, the funding source outside the General Fund is not known with certainty. Therefore, the impact on public services for law enforcement and other government facilities and services is significant and unavoidable.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

As discussed in Chapter 3, *Project Description*, Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Thus, future cannabis-related activities that would be authorized under Option B are not anticipated to result in a substantial population increase, as further explained in Section 4.12, *Population and Housing*. Implementation of the proposed project would not lead to a substantial increase in the population within the County; therefore, the per capita staffing ratio would not be affected. Impacts resulting from increased law enforcement services related to increased population would be less than significant.

Although service demands would not increase from the implementation of the proposed project, future commercial use cannabis cultivation, processing and packaging, distribution, and retail cannabis stores with or without mobile delivery activities and facilities could increase the level of demand for law enforcement services from KCSO, specifically in rural areas, because future cannabis-related activity could attract vandals or create security risks requiring police response. Option B provides development and performance standards, refer to the proposed Cannabis Land Use Ordinance (refer to Appendix C of this EIR). Any permit or licensing applicant for a cannabis-related business would be required to comply with the proposed ordinance, including the development standards, specifically on-site security requirements. Complying with the County's development and performance standards for cannabis-related activities and facilities would reduce the potential for an increase in crime at these facilities. However, the potential for increased crime to occur as a result of future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis stores with or without mobile delivery activities and facilities could increase demands on the KCSO. The potential increase in crime would result in a significant impact to staffing and would require implementation of mitigation. This impact is less than significant with the implementation of Mitigation Measure MM 4.13-2 which would produce \$200,000 for necessary equipment and facilities.

Option B has the potential to increase crime; however, this would be incremental within unincorporated Kern County. While it may require additional staff, the staffing needs are not expected to result in the need for new or physically altered law enforcement facilities. Therefore, impacts are considered less than significant in this regard.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing for the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to the direct or indirect impacts to law enforcement services and facilities would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Law Enforcement Protection

1. KCGP Land Use, Open Space, and Conservation Element Section 1.4, Public Facilities and Services Goal 1; Policies 1, 6, and 7; and Implementation Measures A and L relate to providing adequate public services and facilities, including police and sheriff protection, to residents and businesses and establish the payment of proportional shares of the local costs.
2. KCGP Land Use, Open Space, and Conservation Element Section 1.10.1, Public Services and Facilities Policies 9, 15, and 16 relate to new development paying its pro rata share of local cost of expansions in public services, facilities and infrastructure.
3. KCGP Safety Element Section 4.8, Critical Facilities and Hazardous Buildings Policies 1 and 3 and Implementation Measures K and L establish that police and sheriff protection services remain operational during emergencies.
4. Public Facilities Mitigation Program establishes the County's policy of "growth pays its own way" to ensure that new development pays the capital costs associated with growth.
5. MBGP Safety Element Public Safety Goals 1, 2, 3 and 4; Policies 1, 2, and 11; and Implementation Measure 2 establish goals and policies guiding public services, infrastructure and providing adequate services to the residents and businesses.
6. MBGP Public Services and Facilities Element, General Utility Services Goal 4, Policy 5, and Implementation Measure 4 establish the funding mechanisms for new development to pay for improvements required to maintain police and sheriff protection services, facilities, and infrastructure.

School Services

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on commercial cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A does not provide opportunities for business development and thus would not result in an increase in residents or employees within the County, as discussed in detail in Section 4.12, *Population and Housing*. Therefore, Option A would not result in an increase in school service needs and thus would not result in the need for new or physically altered school facilities. No impact would occur in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

Future cannabis-related activities that would be authorized under Option B are not anticipated to result in a substantial population increase, as further explained in Section 4.12, *Population and Housing*. As a result, the proposed project would not substantially affect enrollment in local schools, and school impacts are considered less than significant.

As outlined in the proposed amendment to Title 19 Chapter 19.120 of the Kern County Code of Ordinances provided in Appendix C of this EIR, future commercial cannabis cultivation, processing and packaging, and distribution facilities would be required to be 0.5 mile or more away from a school, daycare, or youth center facility. In addition, future retail cannabis stores with or without mobile delivery would be required to be located no less than 0.5 mile from a school, daycare, or youth center facility per the proposed amendment to Title 19 Chapter 19.120 of the Kern County Code of Ordinances, as well as per California Proposition 64. Thus, consumers frequenting cannabis-related facilities would not be adjacent to school, day care, or youth center facilities and, therefore, Option B would not increase the use of school facilities. Impacts are considered less than significant in this regard.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing for the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to the direct or indirect impacts to school facilities would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to School Services

1. SB 50 authorizes school districts to levy developer fees to finance the construction or reconstruction of school facilities.

2. KCGP Land Use, Open Space, and Conservation Element Section 1.4, Public Facilities and Services Goal 1; Policy 1; and Implementation Measures A and L relate to providing adequate public services and facilities, including school services, to residents and businesses and establish the payment of proportional shares of the local costs.
3. KCGP Land Use, Open Space, and Conservation Element Section 1.10.1, Public Services and Facilities Policies 9, 15, and 16 relate to new development paying its pro rata share of local cost of expansions in public services, facilities and infrastructure.
4. KCGP Safety Element Section 4.8, Critical Facilities and Hazardous Buildings Policies 1 and 3 and Implementation Measures K and L establish that facilities of disaster control and refuge (e.g. schools) remain operational during emergencies.
5. Public Facilities Mitigation Program establishes the County's policy of "growth pays its own way" to ensure that new development pays the capital costs associated with growth.
6. MBGP Safety Element Public Safety Goals 1, 2, 3 and 4; Policies 1, 2, and 11; and Implementation Measure 2 establish goals and policies guiding public services, infrastructure and providing adequate services to the residents and businesses.
7. MBGP Public Services and Facilities Element, General Utility Services Goal 4, Policy 5, and Implementation Measure 4 establish the funding mechanisms for new development to pay for improvements required to maintain school services, facilities, and infrastructure.

Park Services

This section discusses the park service and facility impacts. Impacts associated with parks and recreational opportunities are discussed in greater detail in Section 4.14, *Recreation*, specifically, impacts related to increased use of existing park and recreational facilities (Impact 4.14-1) and the expansion or construction of recreational facilities (Impact 4.14-2).

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

Option A would not result in a substantial increase in residents or employees within the County, as detailed and analyzed within Section 4.12, *Population and Housing*. Thus, Option A would not result in an increase in park service needs and thus would not result in the need for new or physically altered park service facilities. No impact would occur in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or

without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

Future cannabis-related activities that would be authorized under Option B are not anticipated to result in a substantial population increase, as further explained in Section 4.12, *Population and Housing*. As a result, the proposed project would not substantially affect the demand for park services. Thus, Option B would not result in a substantial increase in park service needs and thus would not result in the need for new or physically altered park service facilities. Impacts would be less than significant in this regard.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing before the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to the direct or indirect impacts to park service facilities would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Park Services

1. KCGP Land Use, Open Space, and Conservation Element Section 1.4, Public Facilities and Services Goal 1; Policy 1; and Implementation Measures A and L relate to providing adequate public services and facilities, including park services, to residents and businesses and establish the payment of proportional shares of the local costs.
2. KCGP Land Use, Open Space, and Conservation Element Section 1.10.1, Public Services and Facilities Policies 9, 15, and 16 relate to new development paying its pro rata share of local cost of expansions in public services, facilities and infrastructure.
3. Kern County Land Division Ordinance (Kern County Code of Ordinances Title 18 Section 18.50.080) details the methods in which park and recreation land shall dedicated, fees shall be paid, or a combination thereof.
4. Public Facilities Mitigation Program establishes the County's policy of "growth pays its own way" to ensure that new development pays the capital costs associated with growth.

5. MBGP Safety Element Public Safety Goals 1, 2, 3 and 4; Policies 1, 2, and 11; and Implementation Measure 2 establish goals and policies guiding public services, infrastructure and providing adequate services to the residents and businesses.
6. MBGP Public Services and Facilities Element, General Utility Services Goal 4, Policy 5, and Implementation Measure 4 establish the funding mechanisms for new development to pay for improvements required to maintain park services, facilities, and infrastructure.

Library Services

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

Option A would not result in a substantial increase in residents or employees within the County, as detailed and analyzed within Section 4.12, *Population and Housing*. Thus, Option A would not result in an increase in library service needs and thus would not result in the need for new or physically altered library facilities. No impact would occur in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

Future cannabis-related activities that would be authorized under Option B are not anticipated to result in a substantial population increase, as further explained in Section 4.12, *Population and Housing*. As a result, the proposed project would not substantially affect the demand for library services. Thus, Option B would not result in a substantial increase in library service needs and thus would not result in the need for new or physically altered library facilities. Impacts would be less than significant in this regard.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing for the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to the direct or indirect impacts to library facilities would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Library Services

1. KCGP Land Use, Open Space, and Conservation Element Section 1.4, Public Facilities and Services Goal 1; Policy 1; and Implementation Measures A and L relate to providing adequate public services and facilities, including library services, to residents and businesses and establish the payment of proportional shares of the local costs.
2. KCGP Land Use, Open Space, and Conservation Element Section 1.10.1, Public Services and Facilities Policies 9, 15, and 16 relate to new development paying its pro rata share of local cost of expansions in public services, facilities and infrastructure.
3. Public Facilities Mitigation Program establishes the County's policy of "growth pays its own way" to ensure that new development pays the capital costs associated with growth.
4. MBGP Safety Element Public Safety Goals 1, 2, 3 and 4; Policies 1, 2, and 11; and Implementation Measure 2 establish goals and policies guiding public services, infrastructure and providing adequate services to the residents and businesses.

Other Public Services – County Counsel, Public Health, and Treasurer-Tax Collector

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

A total ban on commercial cannabis-related activities that are legal under Proposition 64 State wide while allowing personal adult use will result in the need for an enforcement task force to coordinate across County agencies and seek State and federal funding. This task force will also coordinate with the State on cannabis operations that are not allowed in the County and, therefore, cannot legally obtain State permitting. If such commercial operations continue to sell, cultivate, or manufacture products they would be illegal under both local and State law. Therefore, Option A

would result in the need for County Counsel and Public Health to investigate and enforce the ban ordinance, and would result in the need for new equipment and altered facilities for the Kern County Counsel. Mitigation Measure MM 4.13-1 provides for the formation of Cannabis Activity Enforcement Task Force comprised of the following new positions:

- Kern County Sheriff – 1 Supervisor, 5 Deputies, 1 Clerical
- Kern County District Attorney – 1 Supervisor, 2 Attorneys, 1 Paralegal
- Kern County Counsel – 1 Supervisor, 2 Attorneys, 1 Paralegal
- Support Staff – 1 Office Service Specialist, 1 Code Compliance, 1 Planner
- Coordination with Kern County Public Health Department, Kern County Agricultural Commissioner, Kern County Environmental Health, and Kern County Fire Department

The first year would require partial staffing as the State resolves licensing issues with full staffing the second and third year for focused, enhanced activity. Depending on the level of remaining activities the fourth year and beyond could be reduced. The total cost of the full staffing and equipment is estimated to be from \$1.2 to 2.7 million dollars a year.

This impact would be reduced to less than significant with the implementation of Mitigation Measure MM 4.13-1; however, the funding source outside the General Fund is not known with certainty. Therefore, the impact on public services for law enforcement and other government facilities and services is significant and unavoidable.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

The increase in regulatory oversight of cannabis activities including commercial cultivation, processing and packaging facilities, distribution facilities, the retail sales of edibles, and the amortization provisions for existing medical marijuana dispensaries would increase the need for County Counsel services, including County advisory services, employment law, and risk management. The increase in regulatory oversight of cannabis activities would also result in an increased need for Kern County Public Health Services. This would include services related to drug prevention and education, children's drug prevention services, and health education. This increased need for County Counsel and County Public Health Services could result in the need for additional staff and facilities. Mitigation Measure MM 4.13-3 would provide funding for equipment and facilities for the public services impacts. County Counsel and Public Health, each,

would receive approximately \$200,000 a year at full buildout from the fee. With Mitigation Measure MM 4.13-3 the impacts on County Counsel and County Public Health services would be less than significant.

The Kern County Treasurer-Tax Collector would be required by State law to collect the property taxes and any tax approved by the voters on cannabis activities. As the applicants are dealing in cash due to banking issues, an addition to the Kern County Treasurer-Tax Collector offices would need to be constructed to handle the cash and counting activities. Mitigation Measure MM 4.13-3 allocates up to \$300,000 as a one-time payment from the first annual revenues for the remodeling project. With Mitigation Measure MM 4.13-3 the impacts on Kern County Treasurer-Tax Collector services would be less than significant.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing for the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to the direct or indirect impacts to medical services and facilities would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Other Public Services

1. KCGP Land Use, Open Space, and Conservation Element Section 1.4, Public Facilities and Services Goal 1; Policies 1, 6, and 7; and Implementation Measures A and L relate to providing adequate public services and facilities, including medical services, to residents and businesses and establish the payment of proportional shares of the local costs.
2. KCGP Land Use, Open Space, and Conservation Element Section 1.10, General Provisions, Goal 1 related to accommodating development while maintaining a safe and healthful environment and a prosperous economy.
3. KCGP Land Use, Open Space, and Conservation Element Section 1.10.1, Public Services and Facilities Policies 9, 15, and 16 relate to new development paying its pro rata share of local cost of expansions in public services, facilities and infrastructure.
4. KCGP Safety Element Section 4.8, Critical Facilities and Hazardous Buildings Policies 1 and 3 and Implementation Measures K and L establish that emergency services remain operational during any major disaster.
5. Public Facilities Mitigation Program establishes the County's policy of "growth pays its own way" to ensure that new development pays the capital costs associated with growth.
6. MBGP Safety Element Public Safety Goals 1, 2, 3 and 4; Policies 1, 2, and 11; and Implementation Measure 2 establish goals and policies guiding public services, infrastructure and providing adequate services to the residents and businesses.

7. MBGP Public Services and Facilities Element, General Utility Services Goal 4, Policy 5, and Implementation Measure 4 establish the funding mechanisms for new development to pay for improvements required to maintain medical services, facilities, and infrastructure.

Mitigation Measures

Option A

MM 4.13-1 A Cannabis Activity Enforcement Task Force shall be established comprised of Kern County Sheriff, Kern County District Attorney, Kern County Counsel Code Compliance, and Kern County Planning and Natural Resources staff with necessary equipment and clerical and paralegal support. The size and composition of the task force shall be based on available funding sources, illegal cannabis activity and coordination with State and federal agencies. The Task Force shall coordinate with Kern County Public Health Services Department, Kern County Agricultural Commissioner, and Kern County Fire Department, as needed.

Option B

MM 4.13-2 The applicant will develop and implement a fire safety plan for use during construction and operation. The applicant will submit the plan at the time of submitting the site development plan or the conditional use permit application to the Kern County Fire Department for review and approval prior to the approval of the site development plan or a conditional use permit. The fire safety plan will contain notification procedures and emergency fire precautions including, but not limited to, the following:

- a. All internal combustion engines, stationary and mobile, will be equipped with spark arresters. Spark arresters will be in good working order.
- b. Light trucks and cars with factory-installed (type) mufflers will be used only on roads where the roadway is cleared of vegetation. These vehicle types will maintain their factory-installed (type) muffler in good condition.
- c. Fire rules will be posted on the project bulletin board at the contractor's field office and areas visible to employees.
- d. Equipment parking areas and small stationary engine sites will be cleared of all extraneous flammable materials.
- e. Personnel will be trained in the practices of the fire safety plan relevant to their duties. Construction and maintenance personnel will be trained and equipped to extinguish small fires in order to prevent them from growing into more serious threats.
- f. The applicant will make an effort to restrict use of chainsaws, vegetation masticators, grinders, tractors, torches, and explosives to outside of the official fire season. When the above tools are used, water tanks equipped with hoses, fire rakes, and axes will be easily accessible to personnel.

MM 4.13-3 Permits issued for cannabis sale, cultivation, processing and preparation, testing, transport or testing shall pay an annual payment for public services impacts. The payment shall be based on the square footage of the building used for cannabis activities or for outdoor cultivation the are covered by plants

including any rows in between. The annual payment shall be 45 cents a square foot allocated as follows by the County Administrative Office:

- Kern County Treasurer–Tax Collector: One-time allocation up to \$300,000.
- Kern County Public Health Services: \$200,000
- County Counsel: \$200,000
- Kern County Sheriff: \$200,000
- County Administrative Office: up to \$50,000
- Community Benefit Fund: up to \$508,000 a year shall be provided through a grant program to community groups that provide alcohol and drug education support to children, teens and adults up to age 20. The program may be extended to adults (21 years of age or older) by direction of the Board of Supervisors. The program shall be administered by the CAO or other designated County department.

The County Administrative Office may shift allocations between the Kern County Sheriff, County Counsel, and Kern County Public Health service areas based on demonstrated need or lack of use for the funding.

Level of Significance after Mitigation

Option A would have no impact on library services and less than significant impacts on fire services and schools. Option A would result in significant and unavoidable impacts to law enforcement protection and other public services. Impacts associated with Option B would be less than significant.

Cumulative Setting Impacts and Mitigation Measures

Cumulative Setting

The geographic scope for cumulative impacts on recreational resources includes both the KCGP and the regional growth plan and projections included in the Kern COG Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) approved in 2014, as defined in Section 3.7, Cumulative Projects. This is a large enough area to encompass any effects of the proposed project on recreational resources that may combine with similar effects caused by other projects, and provides a reasonable context wherein cumulative actions could affect these resources. The cumulative analyses consider whether the proposed project, Option A or Option B, in combination with the past, present, and reasonably foreseeable projects, could cumulatively affect recreational resources.

Impact 4.13-2: Contribute to Cumulative Public Service Impacts

Proposed Project Option A

Option A of the proposed project would ban all commercial medical and adult use cannabis-related activities other than what is allowed for personal use under Proposition 64. Option A would not result in an increase in residents or employees within the County. As discussed above, Option A would create an enforcement impact for law enforcement protection, County Counsel, and the District Attorney, as well as coordinating County Departments. Mitigation Measure MM 4.13-1 would provide mitigation for the enforcement requirements however the funding is uncertain. Therefore, Option A would contribute to cumulative impacts when combined with past, present,

or reasonably foreseeable projects. Cumulative impacts on public services are significant and unavoidable.

Proposed Project Option B

Future commercial medical and adult use cannabis-related activities under Option B would have a workforce comprised of local Kern County residents and is not anticipated to result in a substantial population increase. Option B would require cannabis-related businesses to comply with federal, State, and local health and safety regulations, business plans, HMBPs, development standards, building codes, and other laws and regulations that govern fire protection and security risks. Impacts to fire protection and law enforcement services would occur as a result of the future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis stores with or without mobile delivery activities and facilities that would be authorized under Option B of the proposed project. Mitigation measures would be required with respect to Option B. Overall, the Option B of the proposed project would cumulatively contribute to an increased demand for fire protection and law enforcement needs and, therefore, could cumulatively contribute to the need for new or physically altered facilities. The property taxes would increase the Fire Fund providing revenue for this impact; however, facilities and equipment would be needed for the KCSO, County Counsel, Kern County Public Health Services, and the Kern County Treasurer-Tax Collector. Further, community groups that provide alcohol and drug education and support would have an increased need for materials and equipment as adult use cannabis and cannabis products are available legally for the first time in California. Mitigation Measure MM 4.13-3 would provide funding for these areas and mitigate the impact of this new regulatory industry. Therefore, with the implementation of mitigation measures, Option B would not contribute to cumulative impacts when combined with past, present, or reasonably foreseeable project. Cumulative impacts are considered less than significant in this regard.

While the proposed project's contribution to growth in the region would be nominal, cumulative projects that would occur under the regional plans would add to the cumulative demand for such fire and police/sheriff services through the introduction of new residents and users of the proposed facilities. However, this growth has been considered and accounted for in the KCGP, the MBGP, and the Kern COG RTP/SCS. Additionally, in accordance with the KCGP, Public Services and Facilities, Policies 9 and 16 (see Section 4.13.3, *Regulatory Setting*), new developments would be required to pay a pro rata share of the local cost for the expansion of services under the Public Facilities Mitigation Program. Developers would be required to assume full responsibility for costs incurred in service extensions or improvements that are required to serve their project(s). Therefore, new projects would have to pay for the extension or improvement of fire protection or law enforcement services to serve a specific development, if those services are not available and to ensure service objectives are met. Option B's incremental impacts can be sufficiently mitigated. Therefore, Option B's incremental effect on fire protection and law enforcement services is not cumulatively considerable with incorporation of mitigation measures and would be considered less than significant.

Overall, the Option B of the proposed project would not cumulatively contribute to an increased demand for school service, library service, and park service; therefore, the impacts are less than significant in this regard. While Option B's contribution to growth in the region would be nominal, cumulative projects that would occur under the regional plans would add to the cumulative demand for such services through the introduction of new residents and users of the

proposed facilities. However, this growth has been considered and accounted for in the KCGP, the MBGP, and the Kern COG RTP/SCS. Additionally, in accordance with the KCGP, Public Services and Facilities, Policies 9 and 16 (see Section 4.13.3, *Regulatory Setting*), new developments would be required to pay a pro rata share of the local cost for the expansion of services under the Public Facilities Mitigation Program. Developers would be required to assume full responsibility for costs incurred in service extensions or improvements that are required to serve their project(s). Therefore, new projects would have to pay for the extension or improvement of school, library, and park services to serve a specific development, if those services are not available and to ensure service objectives are met. Option B's incremental impacts are less than significant, thus, Option B's incremental effect on school, library, and park services is not cumulatively considerable, as Option B would have a nominal increase in population. Therefore, Option B would not contribute to cumulative impacts when combined with past, present, or reasonably foreseeable project. Cumulative impacts are considered less than significant in this regard.

Mitigation Measures

Option A

Implement Mitigation Measure MM 4.13-1, as described above.

Option B

Implement Mitigation Measures MM 4.13-2 and MM 4.13-3, as described above.

Level of Significance after Mitigation

Option A would have no cumulative impact on Library services and less than significant cumulative impacts on fire services and schools. Option A would result in significant and unavoidable cumulative impacts to law enforcement protection and other public services. Cumulative impacts associated with Option B would be less than significant.

Section 4.14

Recreation

Section 4.14 Recreation

4.14.1 Introduction

This section of the Draft Environmental Impact Report (EIR) addresses potential impacts associated with the implementation of the Kern County Cannabis Land Use Ordinance Project (proposed project) on parks and recreation within Kern County (County). This section also describes the environmental and regulatory settings and discusses mitigation measures to reduce impacts, where applicable.

4.14.2 Environmental Setting

Kern County is California's third largest county, encompassing 8,202 square miles. Located at the southern end of the Central Valley, Kern County serves as the gateway to southern California, the San Joaquin Valley, and California's high desert. The geography of Kern County is diverse, containing mountainous areas, agricultural lands, and desert areas. The County offers a variety of recreational opportunities, including camping, hiking, horseback riding, boating and water skiing, bird watching, picnicking, scenic viewing, golf, baseball and softball, and soccer. The following sections provide a summary of federal, State, regional, and local recreational facilities located in unincorporated areas of Kern County.

National Parks, Trails and Monuments

National Parks

There are no national parks within Kern County; however, several national parks are accessible from Kern County. These include: Death Valley National Park located approximately 30 miles east and north of the County line; Sequoia and Kings Canyon National Park located approximately 35 miles north and east of the project area; Pinnacles National Park located approximately 73 miles northwest of the County line; Joshua Tree National Park located approximately 90 miles southeast of the County line; Yosemite National Park located approximately 120 miles north of the County line; and Mojave National Preserve located approximately 120 miles east of the County line.

Pacific Crest Trail

The United States Forest Service (USFS) oversees the Pacific Crest Trail (PCT). The PCT is an approximately 2,650-mile hiking trail that extends from Canada to Mexico through California, Oregon, and Washington. The PCT traverses Kern County along the eastern, or desert, side of the Sierra Nevada and Tehachapi Mountains for a distance of approximately 100 miles. Within Kern County, the PCT is popular for hikers and equestrians, providing views of the Desert Region.

Carrizo Plain National Monument

The Carrizo Plain National Monument (CPNM) is located in the western portion of the Project Area and extends into adjacent land within San Luis Obispo County. The CPNM is managed by the Bureau of Land Management (BLM), the Nature Conservancy, and the California Department of Fish and Wildlife (CDFW). The 250,000-acre facility was established by presidential proclamation in 2001 to preserve unique San Joaquin Valley saline and fault zone habitats and related biological and geological resources. Monument attractions include Soda Lake, a 3,000-

acre alkali, ephemeral lake; the Painted Rock, an outcrop of 20-million-year-old, cross-bedded marine sandstone that contains prehistoric rock art; San Andreas fault traces and other surface features; and wildflower and wildlife viewing. Public facilities include the Guy L. Goodwin Education Center, which houses a library, special displays, and public restrooms, and two BLM campgrounds. Car camping is allowed within the monument. The facility is generally remote from major population centers and is subject to high temperatures in the summer (BLM, 1996; BLM, 2010).

National Wildlife Refuges

Kern National Wildlife Refuge

The Kern National Wildlife Refuge (KNWR) is located approximately 18 miles west of Delano, in the northern portion of the Project Area. KNWR was established in November of 1960 and consists of approximately 11,250 acres. It preserves a portion of the San Joaquin Valley freshwater wetlands and acts as a refuge primarily for waterfowl. The KNWR has 17 hunting blinds spaced across 730 acres, with three of the blinds being wheelchair accessible or compliant with the American Disabilities Act (ADA compliant). It also provides up to 1,867 acres of free roam hunting area. The refuge includes a six-mile auto tour route and provides opportunities for hiking, bird watching, and photography (United States Fish and Wildlife Service [USFWS], 2017a).

Bitter Creek National Wildlife Refuge

The Bitter Creek National Wildlife Refuge is located in the southwestern portion of the Project Area, approximately 6.5 miles south of Maricopa, in the San Emigdio and Coast Range foothills. The bitter Creek National Wildlife Refuge's primary goal is to preserve essential foraging and roosting habitat for the California condor. Also protected within the refuge are Native American cultural resources and remnants of 19th century homesteads (USFWS, 2017b). The Bitter Creek National Wildlife Refuge is part of the larger Hopper Mountain National Wildlife Refuge Complex which oversees four national wildlife refuges located in Kern, Ventura, Tulare, and San Luis Obispo counties, totaling approximately 20,015 acres (USFWS, 2017c).

National Forests

Los Padres National Forest

Los Padres National Forest was established in 1898 for the purpose of protecting vital watersheds and ensuring a continuous flow of water for developing communities. The forest extends approximately 220 miles from Monterey County to the western edge of Los Angeles County and encompasses nearly 2 million acres. The forest is divided into the Monterey, Santa Lucia, Santa Barbara, Ojai, and Mount Pinos Ranger Districts. Approximately 924,000 visitors use Los Padres National Forest annually. In general, of the total estimated annual site visits at Los Padres National Forest, the majority are day-use site visits, estimates at 313,000 visits annually (United States Forest Service [USFS], 2016b). Public recreation resources in the forest include the following:

- Wildlife and nature viewing;
- Approximately 1,680 miles of hiking, equestrian, and off-road vehicle trails, with associated camping areas;

- Approximately 109 developed family and group campgrounds, picnic and day use areas, beaches and swimming sites, and scenic overlooks;
- Cross-country skiing, snowplay, and snow-related activities, including the Chula Vista Winter Sports Area located at the end of the Mount Pinos paved access road, which supports a network of cross-country ski trails;
- Primitive camping and hiking in 10 designated wilderness areas comprising 875,000 acres;
- Pleasure-driving, scenic viewing, nature photography, rock climbing, and hang-gliding;
- Fishing activities in approximately 400 miles of year-round and seasonal streams and 37 lakes and reservoirs within or near the forest;
- Seasonal hunting except in restricted and designated wilderness areas, such as the Sisquoc and Sespe California condor sanctuaries and as permitted by the CDFW, County ordinance, California State law, or federal regulations; and
- Stargazing, astrophotography, and other astronomy-related activities.

Sequoia National Forest

Sequoia National Forest is located approximately 13 miles northeast of downtown Bakersfield in the northeastern portion of the Project Area. Sequoia National Forest encompasses approximately 1.2 million acres and is named for the giant sequoia trees that are located within 38 groves within the boundaries of the forest. The Giant Sequoia National Monument, 328,000 acres in size, is located within the forest, north of the Project Area, and was established by presidential proclamation on April 15, 2000. Sequoia National Forest has approximately 626,000 visitors annually. In general, of the total estimated annual site visits at Sequoia National Forest, the majority are visits to overnight use developed sites, estimates at 274,000 visits annually (USFS, 2016a). The Sequoia National Forest provides for a variety of recreational pursuits, including:

- Wildlife and nature viewing;
- Hiking, equestrian, and off-road vehicle trails;
- Individual and group camping sites;
- Swimming, fishing, day use, picnic use;
- Whitewater rafting;
- Kayaking;
- Cave tours; and
- Cross-country skiing.

State Parks

Antelope Valley California Poppy Reserve

The Antelope Valley California Poppy Reserve is located at Antelope Buttes, approximately 4.5 miles south of Kern County's southern border. The 1,745-acre reserve is operated and maintained by the California Department of Parks and Recreation, and is one of California's most consistent poppy-bearing lands. Other wildflowers that occur at the site include owl's clover, lupine, goldfield, cream cups, and coreopsis. The reserve is open year-round from sunrise to sunset and maintains eight miles of nature and hiking trails and picnic areas. The Jane S. Pinheiro Interpretive Center is generally open March 1st through Mother's Day (early-May) and the Interpretive Center is only open during the spring wildflower bloom and for special events (California Department of Parks

and Recreation, 2017a). Annual use of the poppy reserve varies with the extent of rainfall and the resulting wildflower crop.

Eastern Kern County Onyx Ranch State Vehicular Recreation Area (SVRA)

Eastern Kern County Onyx Ranch State Vehicular Recreation Area (SVRA) is located adjacent to State Route (SR) 14 in the eastern portion of Kern County on the western edge of the Desert Region. The 26,000-acre Eastern Kern County Onyx Ranch SVRA is the second largest SVRA in the Off-Highway Motor Vehicle Recreation Division and is the newest of the nine SVRAs in California. The Eastern Kern County Onyx Ranch SVRA is operated as a division of the California State Department of Parks and Recreation. provides off-highway vehicle (OHV) terrain for all-terrain vehicles (ATVs), motorcycles, recreation off-highway vehicles (ROVs) and four-wheel drive vehicles. The SVRA is surrounded by mostly BLM lands (California Department of Parks and Recreation, 2017b).

Fort Tejon State Historic Park

Fort Tejon State Historic Park is located in Grapevine Canyon. The 2,054-acre park is operated and maintained by the California Department of Parks and Recreation and includes the site of a U.S. Army fort established in 1854 and abandoned in 1864. Restored adobes, several 400-year-old valley oak trees, and interactive exhibits, including period recreations with live actors, occur within the park. Facilities include a visitor's center and museum, picnic areas, and group campsites (California Department of Parks and Recreation, 2016a). The park is generally not a destination location and not heavily used except for one day each month from May through September when Civil War-period reenactments occur. The park's only campground, a group facility, is also available.

Hungry Valley State Vehicular Recreation Area

The Hungry Valley State Vehicular Recreation Area (Hungry Valley) is located in Gorman, and extends into the southern edge of the Project Area and along Interstate (I) 5 at Tejon Pass. Hungry Valley is the third largest SVRA in the Off-Highway Motor Vehicle Recreation Division and is operated as a division of the California State Department of Parks and Recreation. The 19,000-acre facility contains 130 miles of OHV terrain, including motorcycle, ATVs, dune buggy, and four-wheel drive vehicle trails. The Quail Canyon Off-Road Event Area and Motocross Track are located in the eastern portion of the site. The closed-course track is used for competitive special events. Hungry Valley includes 150 campsites with shade ramadas, picnic tables, and fire rings (California Department of Parks and Recreation, 2017c). The facility is open year-round.

Red Rock Canyon State Park

Red Rock Canyon State Park is a 27,000-acre park within the Mojave Sector of the Tehachapi District of the California State Park System. The park is located along State Route 14 in Kern County, 25 miles northeast of Mojave and 80 miles east of Bakersfield. The park includes two natural preserves and opportunities for camping, sightseeing, equestrian activities, hiking, and off-highway vehicle use (California Department of Parks and Recreation, 2016b).

Tomo-Kahni State Historic Park

Tomo-Kahni State Historic Park was created as a unit of California State Parks in 1993 to protect and preserve the integrity of the site of Tomo-Kahni, or "Winter Village," a Kuwaitis (Nuwa) Native American community located atop a ridge in the Tehachapi Mountains, overlooking Sand Canyon to the east and the Tehachapi valley to the west. Tomo-Kahni is available to the public only by guided tours on weekends during the spring and fall months (California Department of Parks and Recreation, 2016c). Recreational opportunities include hiking trails, historical/cultural sites, guided tours, vista points, and nature and wildlife viewing.

Tule Elk State Natural Reserve

The 987-acre Tule Elk State Natural Reserve protects a small herd of tule elk, once in danger of extinction, and provides opportunities to observe native birds of the San Joaquin Valley (California Department of Parks and Recreation, 2016d). Located southeast of Buttonwillow, recreational facilities within the reserve include a picnic area and interpretive exhibits.

Regional and Local Parks

The 2010 Parks and Recreation Master Plan identifies seven regional parks that are operated and maintained by the Kern County Parks and Recreation Department. In addition, Camp Condor is a regional park operated and maintained by Westside Recreation and Park District under an agreement with the County and Kernville Fish Hatchery is in a management transition from USFS to Kern County Parks and Recreation Department. Kern County Parks and Recreation Department also operates and maintains more than 40 neighborhood parks and more than 20 public buildings. The Kern River County Park, the largest regional recreation facility in the County, provides a variety of structured and non-structured recreational facilities, including Hart Memorial Park, Camp Okihi, the Kern County Soccer Park, Lake Ming, the Kern River Golf Course, and picnic areas. Non-structured recreational uses occur along the length of Kern River County Park and include rafting, hiking, bicycle trails, off-road vehicle uses.

Multiple public, as well as private, golf courses are also available in Kern County. Kern County Parks and Recreation Department owns and oversees management of three golf courses:

- Buena Vista Golf Course, located near Dustin Acres, approximately 8.5 miles east of Taft immediately north of Buena Vista Aquatic Recreational Area;
- Kern River Golf Course, located approximately 13 miles northeast of downtown Bakersfield and adjacent to Lake Ming; and
- North Kern Golf Course, located approximately one mile north of Lerdo Highway and approximately 2.5 miles east of SR-99.

In addition to the Kern County Parks and Recreation Department's facilities, there are 11 incorporated cities and nine special recreation and park districts that also provide recreational facilities within Kern County. Table 4.14-1, *Existing Parks within Kern County*, provides a list of regional and community parks within Kern County. Table 4.14-2, *Special Recreation and Parks Districts*, provides a list of the nine special recreation districts and a list of their facilities. In addition to the facilities listed in Tables 4.14-1 and 4.14-2, there are several residential communities within Kern County that are served by a community services districts, some of which include oversite on neighborhood parks.

Table 4.14-1. Existing Parks within Kern County	
Recreational Facility Name	Size (Acres)
Regional Parks	
Buena Vista Aquatic Rec. Area	1,585
Greenhorn Mountain	110
LeRoy Jackson	100
Kern River County Park Total	1,445
Lake Woollomes	445
Metropolitan Recreation Center/Stramler	107
Tehachapi Mountain	490
Camp Condor ^(c)	-
Lake Isabella Rec. Area ^(c)	-
Community Parks	
A.W. Noon	12
Belle Terrace	19.30
Boron	10
Casa Loma	9
Ed Oakley Park ^(a)	1.70
Frazier Mountain	27
Greenfield	5
Victoria Araujo Park	3
Heritage	18
Inyokern	3
Kern Delta Park ^(b)	11.75
Kernville Circle	1
Lake Isabella	40
Lost Hills	7
Mojave East	8
Mojave West	10
Mountain Mesa	5.20
North Edwards	5
Pioneer	14
Potomac	5
Randsburg	0.20
Rexland Acres	4
Riverside	5

Table 4.14-1. Existing Parks within Kern County

Recreational Facility Name	Size (Acres)
Rosamond	10
Scodi (e)	4
Virginia Avenue	9.50
Wilkins	2.60
Wofford Heights	7
Community Parks Within City or Special District	
Blanco Little League (d)	6
Circle Park (Bakersfield) (e)	0.10
College	17
Cormack Park (Wasco) (f)	6
Delano Memorial	32
Derby Acres (g)	3.80
DiGiorgio	16
Fellows (h)	8
Ford City	4.10
Lamont	8
Panorama	24
Valley Acres	2
Westpark (i)	5

Source: Kern County Parks and Recreation, 2010

Notes:

- (*) Not an official part of the Kern County park system. Kern County Parks and Recreation Dept. provides recreation services inside the park area.
- (a) Ed Oakley Memorial Building located within a small park that includes recreational facilities.
- (b) A new park.
- (c) Owned by Kern County but operated as a Westside Recreation and Park District facility (not Kern County Parks) under a long-term lease.
- (d) Leased, not owned, by the Parks Department.
- (e) Currently listed as a Kern County park site.
- (f) Park site has been transferred to the Wasco Park District.
- (g) Leased, not owned, by the Parks Department.
- (h) Leased, not owned, by the Parks Department.
- (i) Ownership transferred to Rosamond Community Service District.

Table 4.14-2: Special Recreation and Park Districts

District	Recreational Facilities	
Tehachapi Valley Recreation and Park District	– Brite Lake Aquatic Rec. Center – Dye Natatorium Pool – Philip Marx Central Park – Meadowbrook Dog Park – Central Park	– Meadowbrook Park – West Park Activity Center – Skate Park – West Park – Morris Park
Buttonwillow Recreation and Park District	– Buttonwillow Park	– Buttonwillow Recreation Building
Shafter Recreation and Park District	– Mannel Park – Kirschenmann Park – Stringham Park	– Rodriguez Park – Town Square – Veterans Park
Bear Mountain Recreation and Park District	– Bear Mountain Park – Weedpatch Park	– Arvin and Lamont Pools
Wasco Recreation and Park District	– Barker Park – Westside Park	– Cormack Park
McFarland Recreation and Park District	– Browning Road Park	– McFarland Park
North of the River Recreation Department	– Almondale Park – Beardsley Park, North – Emerald Cove Park – Fruitvale-Norris Park – Greenacres Park – Highland Park – Liberty Park – Madison Grove Park – McCray Park – Mondavi Park, North – North Meadows Park – North Rosedale Park	– Olive Park East and Olive Park West – Polo Community Park – The Rasmussen Center – River Lakes Ranch Park – Riverview Park – San Lauren Park – Sears Park – Silver Oak Park – Standard Park – Westdale Park
West Side Recreation and Park District	– "A" Street Park – Community Center Park (Skate Park) – Fitness Center – Franklin Field Complex – Mil Potrero Park	– Taft Community Center – Skate Escape – Walter Glenn Natatorium Swimming Pool – Westside Mountain Park
Rosamond Community Service District	– Jim Williford Community Park	– Rosamond Community Pool

Other Recreational Facilities

Wind Wolves Preserve

Wind Wolves Preserve is a 95,000-acre non-profit preserve operated by The Wildlands Conservancy. The Wind Wolves Preserve ranges in elevation from 640 to 6,005 feet and includes unique land forms and ecologically important habitat. The preserve is open daily and offers outdoor education programs for schools as well as nature viewing, camping, hiking, mountain biking, and picnicking (The Wildlands Conservancy, 2017).

Tejon Ranch Land

On June 17, 2008, Tejon Ranch Company entered into a Conservation and Land Use Agreement (Ranchwide Agreement) with Audubon California, the Endangered Habitats League, Natural Resources Defense Council, Planning and Conservation League, and Sierra Club (Resource Groups) and the newly formed nonprofit Tejon Ranch Conservancy (Conservancy). The Ranchwide Agreement provides for the permanent protection through the dedication or sale of conservation easements over approximately 90 percent of the 270,000-acre Ranch, while allowing Tejon Ranch Company and its development partners to pursue approvals for development on designated portions of Tejon Ranch, including the project, without opposition from the Resource Groups. Consistent with the Ranchwide Agreement, the Conservancy was established on June 11, 2008.

The Conservancy holds easements to approximately 110,000 acres of Tejon Ranch-conserved lands. In addition to implementing a Ranch-wide Management Plan designed to preserve, enhance, and restore resource lands, the Conservancy will oversee managed public access to conserved lands and will provide interpretive and environmental education programs. In addition, the public will be able to use and enjoy conserved lands through a public access plan implemented by the Conservancy. The Public Access Plan will identify opportunities for managed access to conserved lands, plan for the provision of support facilities for public use, and identify environmental education programs. The parties to the Ranchwide Agreement have also agreed to work cooperatively with State officials to create a new State park on a portion of the conserved land intended to encompass approximately 50,000 acres. The potential location of the park has yet to be determined. Under the Ranchwide Agreement, commercial hunting and other recreational activities are allowed in the preserved open space areas.

The Ranchwide Agreement also formalized commitment for Tejon Ranch Company to dedicate an easement to relocate a portion of the PCT, a federally maintained non-mechanized trail, from the desert floor in the Antelope Valley to the Tehachapi Mountain highlands. Tejon Ranch Company conveyed a conservation easement to the Conservancy in May 2014 covering 10,000 acres. The Tejon Ranch Company will be working with the Conservancy, the U.S. Department of Agriculture (USDA), USFS, and the Pacific Crest Trail Association to realign a 37-mile segment of the PCT through this easement on Tejon Ranch. The USFS will be working to obtain relevant permits from resource agencies to construct the re-aligned trail segment and upon completion of the permitting, Tejon Ranch Company is anticipating dedicating the 37-mile trail easement. Construction would then follow, with completion in approximately 10 years.

4.14.3 Regulatory Setting

Federal

As explained in Section 3.2, *Regulatory History and Background*, even though cannabis is “decriminalized” under State law, and even with the U.S. Department of Justice (USDOJ) issuance of memoranda guiding federal law enforcement related to cannabis activities within jurisdictions that have legalized cannabis, cannabis activities continue to be illegal at the federal level and subject to the prosecutorial discretion of the federal government.

National Trails System Act of 1968

The National Trails System Act of 1968 (Public Law 90-543), was passed by Congress in 1968 to create a series of trails “to promote the preservation of, public access to, travel within, and enjoyment and appreciation of the open-air, outdoor areas and historic resources of the Nation.” The Act authorized National Scenic Trails as well as National Recreation Trails and the connecting-and-side trails. National Scenic Trails are established to provide access to “spectacular natural beauty and to allow the pursuit of healthy outdoor recreation” and “extended trails so located as to provide for maximum outdoor recreation potential and for the conservation and enjoyment of the nationally significant scenic, historic, natural, or cultural qualities of the areas through which such trails may pass.” In addition, the 1968 Act also authorized creation of the PCT as a National Scenic Trail. As Congressionally established long-distance trails, each trail is administered by a federal agency, such as by the USDA Forest Service for the PCT.

Pacific Crest Trail Planning Criteria

The Pacific Crest National Scenic Trail Comprehensive Plan and the Pacific Crest Trail Guide for Location, Design, and Management (USFS, 1982) provide guidelines and criteria for design and location of the PCT. Specifically, these guidelines state that the most desirable location will avoid unattractive roads, mining areas, power and telephone lines, commercial and industrial developments, fences, and other features incompatible with the natural condition of the trail, and with its use for outdoor recreation. Where the trail encounters such developments, it should be located so as not to adversely affect, or conflict with, the purpose of the development. Natural vegetation, topography, or natural plantings shall be used, where possible, to screen objectionable features from the view of the trail user.

State

California Subdivision Map Act

The California Subdivision Map Act (Map Act; California Government Code Section 66410 et seq.) sets forth procedures regarding the subdivision of land within the State. The Map Act includes provisions that identify allowable methods under which local land use authorities may require recreational land dedications or an in-lieu fee payment as a condition of subdivision approval. These provisions are commonly called the Quimby Act. Kern County’s Quimby Act is found in Section 18.50.080, Park Land Dedication, of the Kern County Land Division Ordinance (Title 18, Division 1, Chapter 1 of the Kern County Ordinance Code). This provision provides for parkland dedication requirements of 2.5 acres per 1,000 residents within a proposed subdivision, or the equivalent land cost if in-lieu fees are paid. The Quimby Act also includes provisions relating to improved property dedication, common interest development recreational facility offsets, and other recreational land dedication requirements.

Local

Kern County General Plan (KCGP)

The policies, goals, and implementation measures in the KCGP applicable to recreation as related to the project are provided below. The KCGP contains additional policies, goals, and implementation measures that are more general in nature and not specific. Therefore, they are not

listed below, but, as stated in Chapter 2, *Introduction*, all policies, goals, and implementation measures in the KCGP are incorporated by reference.

Chapter 1. Land Use, Open Space and Conservation Element

Section 1.4 Public Facilities and Services

Goals

- **Goal 8.** Provide recreational opportunities for all citizens of Kern County while avoiding duplication between jurisdictions.
- **Goal 12.** Provide a balanced system of parks and recreational facilities to meet Kern County's diverse needs, and clearly define responsibility for the provision of these facilities.
- **Goal 13.** Provide a variety of park and recreation programs that offer safe, equitable and balanced recreation opportunities for all residents and visitors.

Policies

- **Policy 4.** The provision of parks and recreational facilities of varying size, function and location to serve County residents will be encouraged. Special attention will be directed to providing linear parks along creeks, rivers, and streambeds in urban areas.
- **Policy 5.** Seek to provide recreational facilities where deficiencies have been identified.

Implementation Measures

- **Implementation Measure E.** Continue to establish coordinated efforts between government entities and private enterprise to identify and preserve unique scenic qualities of existing natural resources and to enhance the image of the County as a whole.
- **Implementation Measure F.** Continue to use the accepted California and National Design Standards for both passive and active parks development to accommodate programmed and spontaneous activities. Some usable area should be held as open turf for free play and community festivals.
- **Implementation Measure G.** Continue to encourage coordination between appropriate jurisdictions in the acquisition (including cooperative agreements), development and the use of parks to avoid duplication of facilities and provide economic use of public funds.
- **Implementation Measure H.** Continue to pursue federal, State and private grant funding for the rehabilitation and acquisition of parks and recreation facilities.
- **Implementation Measure I.** Developers of new residential subdivisions will be required to dedicate land and/or pay fees in lieu of dedication for the acquisition and development of recreational facilities that directly serve the needs of the subdivision.
- **Implementation Measure GG.** Implement a level of service standard of 2.5 acres of park area per 1,000 residents.
- **Implementation Measure HH.** The County shall periodically investigate the level of service standards for park and recreation services to ensure that adequate recreation facilities are provided for County residents.
- **Implementation II.** The Kern County Parks and Recreation Department will evaluate the possibility of alternative funding sources for the development rehabilitation and operation of park and recreation facilities. These funding sources shall include the possible implementation of development fees and/or special assessment districts used for lighting and landscaping, under a county service area (CSA).

*Section 1.6 Residential*Policies

- **Policy 9.** Development in areas without adequate infrastructure or development that places a burden on Public services (i.e. Fire, Sheriff, Parks and Libraries) shall be discouraged.

Implementation Measures

- **Implementation Measure E.** Projects that propose creative and innovative housing types and mixed use densities shall be encouraged by the County based on the following criteria:
 4. Location of the residential development in close proximity to one or one of the following: b) Parks and/or open space.

*Section 1.10.8 Smart Growth*Policies

- **Policy 49.** Discretionary development projects should be encouraged to incorporate innovative or “smart growth” land use planning techniques as design features as follows:
 - a. Higher density development, where compatible, to maximize the efficient use of land.
 - b. Mixed use developments that promote reduced vehicle trips by having residential, commercial, and public uses proximate to each other.
 - c. Variety of housing types, including those using energy efficient design, and densities to address Kern County’s housing needs.
 - d. Master planned communities that feature interconnected roads, transit stops, sidewalks, landscaping, and trails to encourage efficient vehicle and pedestrian movement.
 - e. Compact development that conserves open space, agricultural land, flood-prone areas, creeks, hillsides, ridge tops, wetlands, and other natural features.
 - f. Adequate infrastructure (i.e., roads, sewer, water, parks, etc.) is provided as a condition of development approval by the project proponent.
 - g. Aesthetically pleasing and unifying design features that promote a visually pleasing environment.

Implementation Measures

- **Implementation Measure CC.** Promote the creation of innovative development through the use of smart growth principals and various implementing tools including, but not limited to: Combining Zone districts CL (Cluster), SP (Special Planning), OS (Open Space), Density Bonuses, Transit facilities, etc.

Kern County Parks and Recreation Master Plan*Section 5.1 Policy I – Goals and Actions*Policies

- **Policy 1.** Provide a quality park and open space system that supports opportunities for active and passive recreation to meet the wide-ranging recreational and social needs of the diverse, varied communities of Kern County.
- **Policy 2.** Maximize resources and expand opportunities for the County-wide parks and recreation system by reforming the financial support structure for the park system,

enhancing organizational capabilities, and pro-actively engaging other organizations and the community at large through partnerships and other cooperative arrangements.

Goals

- **Goal 2.** Provide a minimum standard 5 acres of park land per 1,000 residents. This standard would apply to regional parks serving the entire County, as well as local parks in unincorporated areas of the County not served by a local park district.
- **Goal 4.** Expand trail connections and pathways throughout Kern County.
- **Goal 6.** Incorporate natural areas and unique ecological and archaeological features into the park and open space system to protect threatened species, conserve significant natural and cultural resources and retain critical habitat areas that are unique to Kern County.
- **Goal 7.** Achieve sustainable long-term financial viability for the Kern County park system to satisfy operational needs, capital requirements and desired recreational services.

Kern County Bicycle Master Plan and Complete Streets Recommendations

In October 2012, Kern Council of Governments (Kern COG) adopted the Kern County Bicycle Master Plan and Complete Streets Recommendations. The Bicycle Master Plan supersedes the 2001 Kern County Bicycle Facilities Plan, which was also prepared by Kern COG. The Bicycle Master Plan provides a broad vision, design guidance, and actions for encouraging bicycle travel throughout the unincorporated areas of Kern County. The Bicycle Master Plan classifies bikeways into three types based on Caltrans standard designations:

- Class I Bikeway – Typically called a bike path, these provide for bicycle travel on a paved right-of-way completely separated from any street or highway, with minimum cross-flow.
- Class II Bikeway – These are often referred to as bike lanes. They provide a striped and stenciled lane for one-way travel on a street or highway.
- Class III Bikeway – Generally referred to as bike routes, these provide shared use with pedestrian or motor vehicle traffic and are identified only by signing. These are recommended where there is enough right-of-way for bicyclists and motorists to safely pass.

The Bicycle Master Plan incorporates the following elements:

- Recommended improvements to specified bikeway segments
- Bike lane design features
- Bicycle end-of-trip facilities
- Bicycle parking facilities
- Multimodal connections
- Bikeway facility maintenance
- Signage
- School connectivity programs
- Education programs
- Bicycle encouragement programs
- Enforcement programs
- Funding.

Kern County Land Division Ordinance (Title 18 of the Kern County Code of Ordinances) – Section 18.50.080 Park Land Dedication

California Government Code Section 66477 of the California Subdivision Map Act (Quimby Act) identifies allowable methods under which local land use authorities may require recreational land dedications or in-lieu fee payments as a condition of subdivision approval. The project is located within the Kern County Parks and Recreation Department's jurisdiction. Kern County has implemented the Quimby Act for the Kern County Parks and Recreation portion of the project in Section 18.50.080 of the Kern County Land Division Ordinance, which requires that every land division include a dedication of parkland or payment of an equivalent in-lieu fee (Land Division Ordinance 18.50.080.D.1). The County code provides that a project may receive a credit at the recommendation of the appropriate parks and recreation district against a parkland fee based on the value of private open space within the development that is usable for active recreational purposes, including private recreation and private open space.

Metropolitan Bakersfield General Plan (MBGP)

The MBGP, a joint effort between the Kern County Planning Department and the City of Bakersfield Planning Division, was last adopted on December 11, 2007. The MBGP includes both city and unincorporated County lands. The MBGP describes the community's physical development as well as its economic, social and environmental goals and is currently undergoing an update. Project-related development on unincorporated lands within the MBGP Planning Area would be subject to the following applicable policies and implementation measures of the MBGP, with respect to recreation.

Chapter VI. Open Space Element

Goals

- **Goal 1.** Conserve and enhance the unique aspects of open space within the planning area.
- **Goal 2.** Create an integrated system of open space amenities in the planning area.
- **Goal 3.** Locate and site development to minimize the disruption of open space areas.
- **Goal 6.** Create a greenbelt corridor along the Kern River with increased recreational opportunities.

Policies

- **Policy 1.** Promote the establishment, maintenance and protection of the planning area's open space resources, including the following:
 - a) Conservation of natural resources (refer to Chapter II-Land Use, Chapter V-Conservation, and Chapter XII-Kern River Plan Element)
 - Kern River corridor
 - Management of hillsides
 - b) Managed production of resources
 - Agriculture (refer to Chapter V-Conservation/Soils and Agriculture)
 - Oil Production (refer to Chapter V-Conservation/Mineral Resources)
 - c) Outdoor recreation
 - Parks (refer to Chapter XI-Parks)

- Kern River corridor (refer to Chapter II-Land Use, Chapter V Conservation, and Chapter XII-Kern River Plan Element).
- d) Public health and safety
 - Hazard avoidance (refer to Chapter VIII-Safety)
- **Policy 15.** Encourage the establishment of public neighborhood parks in or adjacent to the Northeast Bakersfield Open Space Area (NBOSA).
- **Policy 16.** Establish linkages between NBOSA and adopted trail systems.
- **Policy 17.** Support establishment of an area for off road vehicle use. Potential areas include, but are not limited to, property adjacent to Bena land fill, and area adjacent to Round Mountain Road, and areas adjacent to Breckenridge Road, east of Comanche Road.
- **Policy 18.** Establish open space/trail linkages from the NBOSA to public and quasi-public facilities such as CALM, Hart Park, soccer park, Lake Ming and the Kern River Corridor.
- **Policy 19.** In the review of the site-specific development plans, encourage access from proposed development adjacent to the NBOSA to provide public access to open space and trails.

Kern County Specific Plans

Kern County has adopted 39 Specific Plans, 10 Rural Community Plans, and 14 Interim Rural Community Plan Maps. The Specific Plans and Rural Community Plans are intended to be an amplification of the goals and policies of the KCGP and are, therefore, consistent therewith. Interim Rural Community Plan Maps are areas where a specific plan has not been formally adopted, thus the goals and policies of the KCGP govern these areas. Future commercial cannabis cultivation, processing/packaging, and sales activities that would be authorized under the proposed project that would be located within the boundary of an adopted Specific Plan would be regulated according to County zoning.

4.14.4 Impacts and Mitigation Measures

This section describes the methodology used in conducting the CEQA impact analysis for recreation; the thresholds of significance used in assessing impacts to recreation; and the assessment of impacts to recreation, including relevant mitigation measures.

Methodology

Recreational facilities and opportunities in the project area were evaluated to determine whether they would be adversely affected by the proposed project. This evaluation included consideration of the overall number and area of parklands or other recreational facilities and the proposed project's influence on the number of residents and employees.

Development Standards Related to Recreational Facilities

Option A

Option A of the proposed project would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Therefore, no development standards are identified in the proposed Zoning Ordinance; refer to Appendix B for specific wording of the proposed ordinance under Option A.

Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, testing, and retail cannabis stores with or without mobile delivery facilities. Development standards provided in the proposed Zoning Ordinance, that pertain to recreation include, but are not limited to, the following (refer to Appendix C for specific working of the proposed ordinance under Option B):

- All cannabis facilities must be 0.5 mile from any school, park, day care center or youth center.
- The applicant must demonstrate compliance with all applicable mitigation measures prior to the issuance of a grading or building permit for any future cannabis related facility.
- A Fire Safety Plan must be approved by the Kern County Fire Department for future cannabis related facilities.
- A Hazardous Materials Business Plan must be approved by the Kern County Environmental Health Services Division/Hazardous Materials Section.
- No organized and advertised tours shall be permitted.
- No cannabis related facility shall have a private patio or café seating.
- Future cannabis-related facilities shall prepare a detailed security monitoring plan which includes security fencing.

Thresholds of Significance

The Kern County CEQA Implementation Document and Kern County Environmental Checklist state that a project would have a significant impact on recreation if it would:

- Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; or,
- Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment.

Project Impacts

Impact 4.14-1: Result in Increased Use of Existing Neighborhood and Regional Parks or Other Recreational Facilities Such That Substantial Physical Deterioration Would Occur or Be Accelerated

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for

commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

Option A of the proposed project would ban all medical and adult use cannabis-related activities other than what is allowed under Proposition 64. Option A would not result in an increase in residents or employees within the County. Therefore, Option A would not result in an increase in use of existing neighborhood and regional parks or other recreational facilities. No impact would occur in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 square feet (ft^2) of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft^2 of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

As discussed in Chapter 3, *Project Description*, Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Population growth in a given area increases the use of recreational facilities, which can cause accelerated deterioration of neighborhood and regional parks or other recreational facilities. Future cannabis-related activities that would be authorized under Option B are not anticipated to result in a substantial population increase, as further explained in Section 4.12, *Population and Housing*.

Given the history of development within Kern County, including the oil and gas, wind, solar, and agricultural industries, as well as urban development including industrial, commercial, and residential, any nominal increase in the cannabis-related workforce in the future would likely be comprised of local Kern County residents. As such, Option B would not lead to an increase in use of any recreational facilities that would cause or accelerate substantial deterioration of such facilities. Therefore, no impacts from increased use of recreational facilities would occur from implementation of the future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis stores with or without mobile delivery activities. A less than significant impact is identified for this issue.

As outlined in the proposed amendment to Title 19 Chapter 19.120 of the Kern County Code of Ordinances provided in Appendix C of this EIR, future commercial cannabis cultivation, processing and packaging, and distribution facilities would be required to be 0.5 mile or more away from a park or recreational facility. In addition, future retail cannabis stores with or without

mobile delivery would be required to be located no less than 0.5 mile from a park or recreation facility per the proposed amendment to Title 19 Chapter 19.120 of the Kern County Code of Ordinances, as well as per California Proposition 64. Thus, consumers frequenting cannabis-related facilities would not be adjacent to recreational facilities and, therefore, Option B would not increase the use of recreational facilities. Impacts are considered less than significant in this regard.

Certain future cannabis-related activities and facilities would require processing a Conditional Use Permit (CUP) and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing for the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to the direct or indirect impacts to park and recreational facilities would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Recreational Facilities

1. Quimby Act allows local jurisdictions, through an ordinance, to require developers to dedicate land, pay fees, or a combination of both for park and recreational purposes as a condition of approval of Tentative and Parcel Maps.
2. Kern County Land Division Ordinance (Kern County Code of Ordinances Title 18 Section 18.50.080) implements the Quimby Act and details the methods in which land shall dedicated, fees shall be paid, or a combination thereof pursuant to the Quimby Act.
3. Kern County Parks and Recreation Master Plan provides goals and policies related to parks and recreation that create a management framework for the parks and recreation system.
4. Kern County Bicycle Master Plan provides guidance for design guidelines and creates a management framework for bicycle and pedestrian connectivity.
5. The KCGP Land Use, Open Space and Conservation Element Section 1.4, Public Facilities and Services, Goals 8, 12, and 13; Policies 4 and 5; and Implementation Measures E, F, G, H, I, GG, HH, and II relate to providing adequate parks and recreation facilities and services for the citizens of Kern County.
6. The KCGP Land Use, Open Space and Conservation Element Section 1.6, Residential, Policy 9 and Implementation Measure E relate to providing adequate infrastructure for public services and population and development progress within the County.
7. The KCGP Land Use, Open Space and Conservation Element Section 1.10.9, Smart Growth, Policy 49 and Implementation Measure CC provide guidelines to encourage

efficient uses of land and a variety of land uses and park and recreational facilities and infrastructure.

8. The MBGP Open Space Element Goals 1, 2, 3, and 6; Policies 1, 15, 16, 17, 18, and 19 relate to the conservation of open space and natural resources.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

No mitigation measures are required.

Level of Significance

No impact would occur with respect to Option A. Impacts regarding Option B would be less than significant.

Impact 4.14-2: Include Recreational Facilities or Require Construction or Expansion of Recreational Facilities That Might Have an Adverse Physical Effect on the Environment

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

Option A of the proposed project would ban all medical and adult use cannabis-related activities other than what is allowed under Proposition 64. Option A would not result in an increase in residents or employees within the County. Thus, Option A does not include new recreational facilities nor would it require the construction or expansion of recreational facilities. No impact would occur in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 square feet (ft^2) of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft^2 of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before any illegally opened after

the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis stores with or without mobile delivery. As explained above, future commercial medical and adult use cannabis-related activities are not anticipated to result in a substantial population requiring the construction or expansion of recreational facilities. No adverse physical effects related to recreational facilities would occur to the environment as a result of Option B. Impacts are anticipated to be less than significant.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing for the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to the direct or indirect impacts to park and recreational facilities would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Recreational Facilities

Refer to Impact 4.14-1, above, for a summary of applicable existing regulations and policies related to parks and recreational facilities.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

No mitigation measures are required.

Level of Significance

No impact would occur with respect to Option A. Impacts regarding Option B would be less than significant.

Cumulative Setting, Impacts, and Mitigation Measures

Cumulative Setting

The geographic scope for cumulative impacts on recreational resources includes both the KCGP and the regional growth plan and projections included in the Kern COG Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) approved in 2014, as defined in Section 3.7, *Cumulative Projects*. This is a large enough area to encompass any effects of the proposed project on recreational resources that may combine with similar effects caused by other projects, and provides a reasonable context wherein cumulative actions could affect these resources. The cumulative analyses consider whether the proposed project, Option A or Option B, in combination with the past, present, and reasonably foreseeable projects, could cumulatively affect recreational resources.

Cumulative Impacts and Mitigation Measures

Impact 4.14-3: Contribute to Cumulative Recreation Impacts

Proposed Project Option A

Option A of the proposed project would ban all medical and adult use cannabis-related activities other than what is allowed under Proposition 64. Option A would not result in an increase in residents or employees within the County, therefore, Option A would not result in an increase in use of existing recreational facilities (Impact 4.14-1). Option A does not include new recreational facilities nor would it require the construction or expansion of recreational facilities (Impact 4.14-2). Therefore, Option A would not contribute to cumulative impacts when combined with past, present, or reasonably foreseeable projects.

Proposed Project Option B

With regard to projects resulting in increased use of parks (Impact 4.14-1), Option B would not generate significant impacts to existing local, State, federal, and private recreational resources. Future commercial medical and adult use cannabis-related activities under Option B would have a workforce comprised of local Kern County residents and is not anticipated to result in a substantial population increase. Therefore, Option B would result in minimal increases when combined with other projects resulting in increased use of recreational facilities. Impacts in this regard are less than significant.

Option B would not result in recreational facilities within unincorporated Kern County that presently do not exist. In addition, Option B would not require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment (Impact 4.14-2). Therefore, Option B would not contribute to cumulative impacts when combined with past, present, or reasonably foreseeable project. Cumulative impacts are considered less than significant in this regard.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

No mitigation measures are required.

Level of Significance

No cumulative impacts would occur with respect to Option A. Cumulative impacts regarding Option B would be less than significant.

Section 4.15

Transportation and Traffic

Section 4.15

Transportation and Traffic

4.15.1 Introduction

This section of the Draft Environmental Impact Report (EIR) addresses potential impacts of the Kern County Cannabis Land Use Ordinance (proposed project) on transportation and traffic, and describes the environmental and regulatory settings. Mitigation measures that would reduce impacts, where applicable, are also discussed. The regulatory setting is presented in Section 4.15.3, *Regulatory Setting*, while the project impacts and associated Mitigation Measures are analyzed in Section 4.15.4, *Impacts and Mitigation Measures*.

4.15.2 Environmental Setting

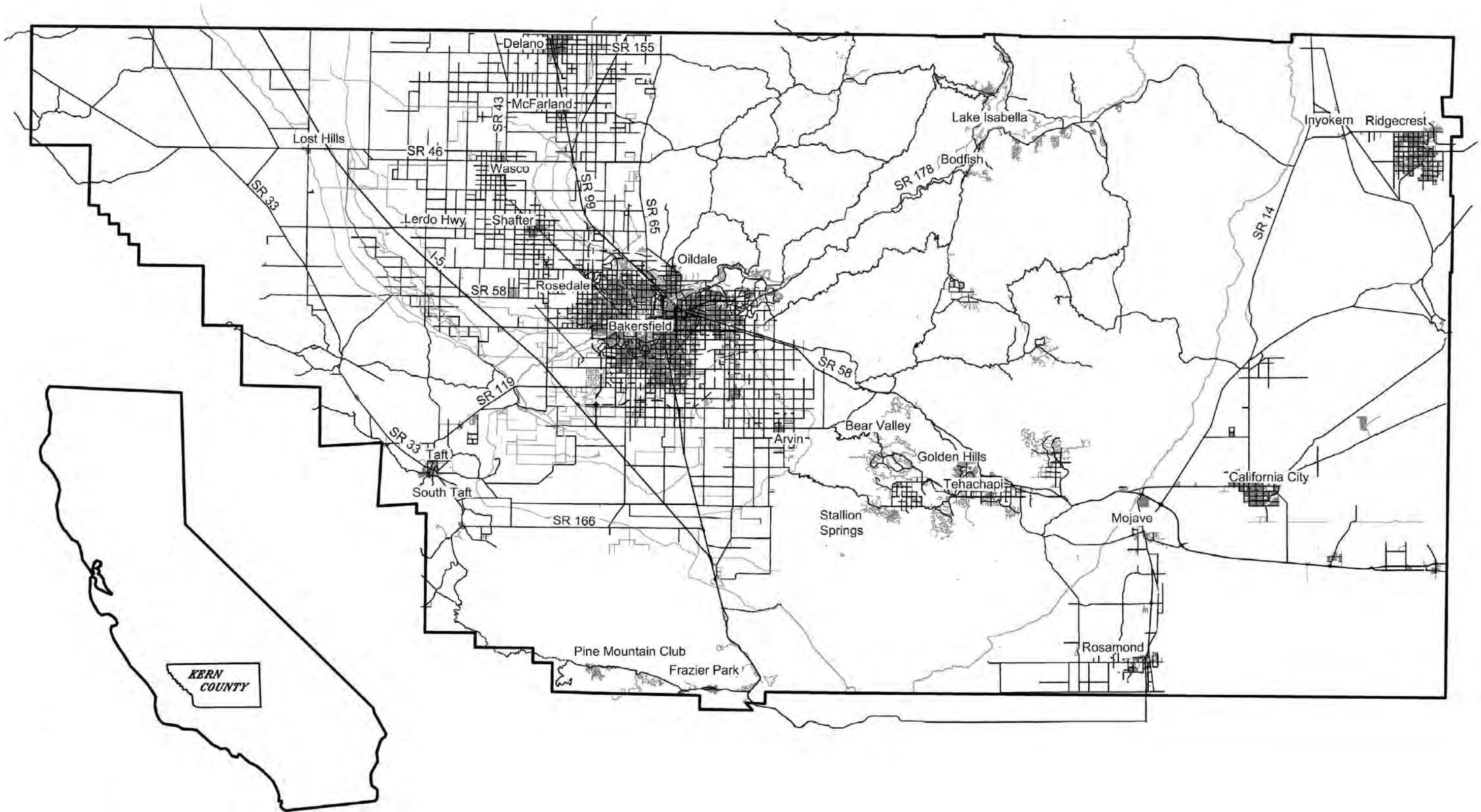
Kern County is California's third largest county, encompassing 8,202 square miles at the southern end of the Central Valley. Transportation in the County is dominated by automobile traffic. This section discusses the existing conditions related to transportation and traffic in the County. The circulation system in the County is made up of a combination of State, county and city jurisdiction facilities. Major components of the system are discussed below.

Regional Roadway Facilities

An extensive system of County, City and private roadways provides circulation throughout the County. The regional circulation system serving the County includes numerous highways, arterials, and other major roads. These facilities are described below and are presented in Figure 4.15-1, *Regional Roadways*.

Overlaid on the basic network of arterials and collectors is the freeway system. State Route (SR) 99, consisting of four to six travel lanes, provides freeway service for and through Metropolitan Bakersfield. Interstate (I) 5 enters the County in the southwest and carries traffic on a north-south alignment from Southern California through the Central Valley to Sacramento. In the Desert Region, SR-14 provides linkage to Southern California dividing at Mojave into SR-58 to Bakersfield through Tehachapi and continuing on as SR-58 past Boron and through San Bernardino County to U.S. Route (US) 395.

As the major Central Valley connector in California, SR-99 carries large numbers of through vehicles, in addition to local Bakersfield traffic. SR-58 is an east-west freeway linking SR-99 with cities east of Bakersfield and I-5 to the west. It carries much less traffic than SR-99. The other freeways in the area include the portion of SR-204 between SR-99 and SR-58 and the portion of SR-178 between M Street and Fairfax Road. Because of its location in a highly-traveled corridor, SR-178 carries large traffic volumes despite a lack of continuity. The major freeways are discussed in more detail below.



SOURCE: Ruettgers & Schuler, 2017

KERN COUNTY CANNABIS LAND USE ORDINANCE PROJECT EIR
AMENDMENT TO TITLE 19 – KERN COUNTY ZONING
ORDINANCE FOCUSED ON CHAPTER 19.120 (CANNABIS LAND USE REGULATION)

Interstate 5

Interstate 5 (I-5) is a major, four-lane, divided freeway that extends north from the Mexican border to the Canadian border and provides access for goods movement, shipping, and travel. This highway crosses the western portion of Kern County and is designated as an arterial/major highway by the Circulation Element of the Kern County General Plan (KCGP). North of Kern County, I-5 travels northwest along the west side of the San Joaquin Valley as it heads towards Northern California. South of the County, I-5 begins immediately climbing into the Tehachapi Mountains towards the Tejon Pass as it heads towards Southern California. In the County, the I-5 is an eight-lane freeway with multiple interchanges.

State Route 33

State Route (SR) 33 connects U.S. Route (US) 101 at Ventura with I-5 near Vernalis and Tracy. SR-33 begins in Ventura as a freeway and changes to a rural character as it ascends the San Rafael Mountains near Ojai. SR-33 descends into the great Central Valley, and it quickly becomes a parallel route to I-5, serving the communities of Maricopa, Taft, Avenal, Coalinga, Mendota, Los Banos, and Patterson. SR-33 ends its journey at its junction with I-5, located south and east of Tracy. SR-33 is a two-lane highway, entering the County in the southwest corner near Maricopa and exiting at the County near Devils Den.

State Route 43

SR-43 is a north-south route in the west-central portion of the County between north County line west of Delano and SR-119 near Tupman. SR-43 is a two-lane road except for some Expressway standards between Wasco and Shafter, and extends north from SR-119 in Kern County to SR-99 in Kings County. SR-43 operates as a four-lane highway between the cities of Shafter and Wasco and as a two-lane highway elsewhere in the County.

State Route 46

SR-46 is an east-west route between western County line and SR-99. SR-46 is a two-lane route except through portions of Wasco and continues west into San Luis Obispo County. This route ends at US-1 on the Pacific Coast.

State Route 58 (Rosedale Highway/Mojave Freeway)

SR-58 is an east-west route between east County line at Boron and west County line near McKittrick. This meandering route consists of Freeway standards between Boron and Mojave and is currently a 4-lane surface street through Mojave, turning into freeway and expressway standards between Mojave and Bakersfield at SR-99. There is a three-mile jog in the route between the intersection with SR-99 and SR-178 (Rosedale Highway), which then goes westerly from SR-99 through Rosedale as a 4-lane surface highway. From Allen Road in Rosedale to the west County line, this route exists as a two-lane road.

State Route 65

SR-65 is a two-lane highway that starts at SR-99 in unincorporated Oildale, north of Bakersfield, and continues into Tulare County.

State Route 99

SR-99 is a major north-south route through the central valley of California. SR-99 begins south of Bakersfield branching off I-5 and continuing north to Sacramento. SR-99 provides a vital regional north-south link to the cities and communities in the San Joaquin Valley. Most of SR-99 is a six-lane freeway in Kern County. Sections through Bakersfield have eight lanes. Sections north of McFarland and south of White Lane, in Bakersfield, have four lanes. This is the heaviest traveled route in the County with some interchange traffic equaling peak volumes along the entire length of SR-99 in the State.

State Route 166

SR-166 begins at I-5 in Mettler Station and continues west through Maricopa into Santa Barbara County where it eventually reaches US 101. This route overlies portions of SR-33 and is a two-lane road over its entire length in the County.

State Route 184

SR-184 extends north from SR-223 to Kern Canyon Road along the northerly extension of the Wheeler Ridge Road alignment. SR-184 then turns onto the Kern Canyon Road alignment and continues northeasterly to SR-178 in Bakersfield. SR-184 operates as a two-lane road except through Lamont where it is a four-lane highway.

State Route 14

SR-14 is a north-south route between intersection with US-395 near Inyokern and south County line at Rosamond. Freeway from south County line to near Mojave, two-lane Highway except through Mojave (four lanes) and Expressway through Red Rock Canyon and other location northerly.

State Route 41

SR-41 is an east-west two-lane highway in the extreme northwest corner of the County

State Route 119

SR-119 is an east-west route between Taft and SR-99 at Pumpkin Center. This is a two-lane highway except for expressway standard through Taft.

State Route 155

This is an east-west route between Delano and Wofford Heights, and a north-south route between Wofford Heights and Lake Isabella at SR-178. SR-155 is a two-lane route throughout the County.

State Route 178

SR-178 is an east-west route between Bakersfield and eastern County line at Ridgecrest; the route passes through the Isabella area; the route exists as a freeway through Bakersfield and part of Kern River Canyon and is a two-lane road for the remainder except through Ridgecrest where the route consists of 4-lanes; there is a jog in the route between its intersection with SR-14 and Inyokern, a distance of approximately four miles, and a two-mile jog within the City of Ridgecrest.

State Route 202

SR-202 is an east-west route between Tehachapi/SR-58 and the California Correctional Institute; this is a two-lane highway.

State Route 204

SR-204 is an intracity four-lane route in Bakersfield between SR-58 and SR-99.

State Route 223

SR-223 is an east-west route connecting I-5 with SR-58 through Arvin; this is a two-lane SR-except through Arvin where it is a four-lane highway.

U.S. Route 395

US-395 is a north-south highway between Johannesburg and the north County line near Inyokern. Portions of US-395 near Inyokern meet expressway standards; the remainder of US-295 is a two-lane highway.

Performance Criteria

Roadway level of service (LOS) performance criteria adopted by the California Department of Transportation (Caltrans) and Kern County are utilized to determine if the project could cause a significant impact to State and local transportation facilities. In general, LOS criteria range from LOS A (free-flow conditions) to LOS F (severely congested conditions). The Circulation Element of the KCGP states that the minimum LOS for conformance with the KCGP is LOS D. The Circulation Element of the Metropolitan Bakersfield General Plan (MBGP) states that the LOS standard for the City of Bakersfield and the County is LOS C. The Kern Council of Governments (Kern COG) Congestion Management Program (CMP) Action Element of the 2014 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) has established LOS E as the minimum system-wide LOS traffic standard. Caltrans has an operational goal for intersection operation and roadway capacity of LOS C or better.

Table 4.15-1, *Level of Service Characteristics for Intersections*, summarizes the relationship between the control delay and LOS for signalized and unsignalized intersections (Caltrans, 2017).

Table 4.15-1. Level of Service Characteristics for Intersections

Level of Service	Description	Average Control Delay (seconds/vehicles)	
		Signalized	Unsignalized
A	Uncongested conditions with very low control delay. Signalized intersections operate with exceptionally favorable traffic signal progression and/or very short cycle lengths.	≤10.0	≤10.0
B	Low control delay and light congestion. Signalized intersections operate with highly favorable progression and/or short cycle lengths.	10.0 – 20.0	10.1- 15.0
C	Light congestion with moderate delays. Signalized intersections operate with favorable progression and moderate cycle lengths; individual cycle failure begin to appear.	20.1 – 35.0	15.1 – 25.0

Table 4.15-1. Level of Service Characteristics for Intersections			
Level of Service	Description	Average Control Delay (seconds/vehicles)	
		Signalized	Unsignalized
D	Increased delays due to higher demand volumes, ineffective signal progression, and/or longer cycle length. At signalized intersections, many vehicles stop and individual cycle failures are noticeable.	35.1 – 55.0	25.1-35.0
E	Significant delay due to a combination of high traffic demand volume, adverse signal progression, and/or long cycle lengths. At signalized intersections, individual cycle failures are frequent.	55.1 – 80.0	35.1 – 50.0
F	Congested conditions with very high traffic demand volumes and extensive queuing. Signalized intersections operate with poor signal progression, long cycle lengths, and most cycles fail to clear the queue.	> 80	> 50

Source: Caltrans, 2017

Table 4.15-2, *Level of Service Characteristics for Freeways*, summarizes the technical descriptions for the LOS thresholds for freeway segments (Caltrans, 2017).

Table 4.15-2. Level of Service Characteristics for Freeways			
Level of Service	Operating Speed (mph)	Technical Description	Delay
A	70	Highest quality of service. Traffic flows freely with little or no restrictions on speed or maneuverability.	No Delays
B	70	Traffic is stable and flows freely. The ability to maneuver in traffic is only slightly restricted.	No Delays
C	67	Few restrictions on speed. Freedom to maneuver is restricted. Drivers must be more careful making lane changes.	Minimal Delays
D	62	Speeds decline slightly and density increases. Freedom to maneuver is noticeably limited.	Minimal Delays
E	53	Vehicles are closely spaced, with little room to maneuver. Driver comfort is poor.	Significant Delays
F	Less than 53	Very congested traffic with traffic jams, especially in areas where vehicles have to merge.	Considerable Delays

Source: Caltrans, 2017
mph = miles per hour

Pedestrian and Bicycle Facilities

Bicycle Facilities

Bicycle facilities are grouped into the following four classifications:

Multi-use paths (Class I) provide a completely separated right-of-way designated for the exclusive use of bicycles and pedestrians with crossflows by motorists minimized.

On-street lanes (Class II) provide a restricted right-of-way designated for the exclusive or semi-exclusive use of bicycles. Class II bicycle facilities are designated for use by bicycles through striping, pavement legends, and signs.

On-street bike routes (Class III) are designated by signage for shared bicycle use with vehicles but do not necessarily include any additional pavement width.

Protected bikeways (Class IV) are bicycle facilities which provided a right-of-way designated exclusively for bicycle travel within a roadway and are protected from other

vehicle traffic with devices including, but not limited to, grade separation, flexible posts, inflexible physical barriers, or parked cars. These are also known as “cycle tracks” or “protected bike lanes.”

Bikeways exist in most cities and in the unincorporated portions of the County. Most bikeways exist as marked lanes on surface streets within the communities. The most prominent trail separated from motor vehicle traffic is the Kern River Bikeway that is located between Enos Lane (west of California State University) and China Grade Loop near Gordon’s Ferry. Bikeway jurisdiction is shared between the City of Bakersfield and the County. An additional link to the River Trail is located between Hart Park and California Living Museum (CALM). This path has been constructed with Transportation Development Act (TDA), private financing and several public and private grants. The TDA sets aside two percent of all funds given to the County each year for bikeway development.

The Kern County Bikeways Plan prepared by the Kern Council of Governments suggests a number of bikeway routes throughout the County. While many of the incorporated communities have implemented their own programs, the plan suggests several routes tying into the various city systems and also suggests routes in areas without city jurisdiction. Priority plans exist for Hot Springs Valley, Bakersfield, Isabella Lake, Rosamond, Taft, Mojave and Lamont-Weedpatch. As funds become available, trails and paths are developed along County roads and highways.

Recreation routes with greatest appeal are those within Hart Park; between Tehachapi and Stallion Springs; between Bakersfield and Buena Vista Lake; between Caliente and Twin Oaks; and between Bakersfield and Woody/Glennville.

Pedestrian Facilities

Many of the Accepted County Areas (Specific Plans) Map Code 4.1 and rural communities require Type A Subdivision standards as defined by the Kern County Development Standards and the County Land Division Ordinance. The Type A standard requires sidewalks for pedestrian travel in the more urbanized area of the county. The remainder of the County may use excess right of way along roadways for pedestrian travel. However, due to long distances between many communities, other means of transportation such as bicycle or transit us used by many residents to travel.

Transit Services and Facilities

Transit systems in Kern County include bus, railroad (including Amtrak) and airplane. The Transportation and Development Act provides for development of public transportation and allocation of funds for such systems and is being implemented by the County. Rail transportation includes the Southern Pacific and the Burlington Northern and Santa Fe lines that carry freight through and beyond the County; the Amtrak system carries passengers by rail from Bakersfield north through the San Joaquin Valley and by bus to southern California.

The County operates several airports. Meadows Field, northwest of Oildale is the primary airport under this system which also includes landing fields in Lost Hills, Wasco, Poso, Buttonwillow, Taft, and Kern River Valley. Freight movement occurs at Meadows Field,

Minter (Shafter) Field, Inyokern, Mojave and Delano; all sites except Meadows Field are operated as municipal or community systems. Passenger activity is primarily from Meadows Field and Inyokern, where scheduled flights take place.

Bus Services

The County of Kern operates Kern Regional Transit (Kern Transit) currently operates 17 fixed transit routes that connect the communities and cities within Kern County. In addition, KRT operates Dial-A-Ride (DAR) services in most communities. The transit systems offer intercity service between Arvin, Bakersfield, Bodfish, Boron, Buttonwillow, California City, Delano, Edwards, Frazier Park, Inyokern, Keene, Kernville, Lake Isabella, Lamont, Lebec, Lost Hills, McFarland, Mojave, Onyx, Ridgecrest, Rosemond, Shafter, Taft, Tehachapi, Wasco, Weldon, and Wofford Heights. Connections to Metrolink in Lancaster, in Los Angeles County, are also available through Kern Transit services (Kern Transit, 2016).

Golden Empire Transit (GET) operates daily bus routes within the City of Bakersfield and surrounding areas, including Greenfield, Stockdale, and Oildale. GET bus services include an express route that services the Kern Delta Park and Ride lot and the Tejon Ranch Commerce Center on Laval Road/Wheeler Ridge Road (GET, 2016). In addition, GET also provides paratransit service through GET-A-Lift (GAL) for eligible riders who have a disability that prevents them from making trips on the fixed bus routes. GAL offers ride-share and curb-to-curb services (GET, 2017).

In the Desert Region, Eastern Sierra Transit Authority (ESTA) provides bus services including fixed routes and DAR throughout the US-395 and US-6 corridors extending from Reno, Nevada to Lancaster, California (Eastern Sierra Transit Authority [ESTA], 2017a). Within Kern County, the ESTA services Mojave and Inyokern (ESTA, 2017b).

Greyhound provides statewide and nationwide bus service. Within Kern County, bus stations are located in Bakersfield at 1820 18th Street and Delano at 1112 High Street (Greyhound, 2017a). From Bakersfield and Delano, bus services are provided north to Fresno and south to Los Angeles (Greyhound, 2017b).

Railroad Facilities

The County is served by two railroad systems: Southern Pacific (SP); and Burlington Northern-Santa Fe (BNSF). The SP system passes through the County between the Los Angeles County line at Rosamond to Tulare County Line at Delano. The SP line shares the right-of-way with the BNSF from Mojave to Bakersfield where the systems divide. The SP goes northwesterly paralleling SR-99 through Delano and northerly into Tulare County. The SP system provides a vital link across the Tehachapi Mountains with over 30 trains a day passing through the City of Tehachapi. The BNSF enters the County near Boron at the San Bernardino County line and following separation from the SP in Bakersfield goes through Rosedale, then heads northwesterly paralleling the Central Valley Highway through Shafter and Wasco and into Tulare County, west of Delano.

Amtrak, a Federally financed/Caltrans operated passenger service, runs on the BNSF tracks northerly between Bakersfield and Oakland/Emeryville four times each day. The San

Joaquin travel time to Oakland is approximately 6 hours. Travel to Los Angeles is provided via bus. The Wasco station is about 20-25 minutes from Bakersfield.

Aviation

There are more than 300 public, private, and military airports, balloonports, gliderports, heliports, and ultraflight flightparks within a 100-mile radius of the City of Bakersfield (AirNav, 2017a). Of these, more than 20 are private airports and airstrips; the majority of these are in the Valley Region, with approximately 5 in the Mountain Region and approximately 4 in the Desert Region. The Kern County Airport Land Use Compatibility Plan (ALUCP) identifies 18 airports as follows:

- **Valley Region** – Bakersfield Municipal Airport, Meadows Field Airport, Shafter-Minter Field, Wasco-Kern County Airport, Delano Municipal Public Airport, Elk Hills-Buttonwillow Airport, Poso-Kern County Airport, and Lost Hills-Kern County Airport;
- **Mountain Region** – Taft-Kern County Airport, Tehachapi Municipal Airport, Mountain Valley Airport, and Kern Valley Airport; and
- **Desert Region** – Mojave Air and Space Port Airport, Rosamond Skypark Airport, California City Municipal Airport, and InyoKern Airport.

The Desert Region also contains two military aviation facilities: China Lake Naval Air Weapons Station (NAWS) and Edwards Air Force Base (AFB). Both military facilities are principal bases for research and development, and testing and evaluation for air warfare and missile weapons systems. In support of these activities, many varied aircraft utilize the airfield facilities. In addition, a restricted area known as Join Service Restricted R-2508 Complex is a large area of restricted airspace which is greatly limited to civilian aircraft and only after obtaining prior permission. It encompasses 20,000 square miles of electronically surveilled ranges permitting unrestricted flight test from near ground level to near space at various locations. The R-2508 Complex covers portions of Kern, Inyo, Mono, Los Angeles, San Bernardino, and Tulare counts and a small portion of the State of Nevada.

4.15.3 Regulatory Setting

Federal

As explained in Section 3.2, *Regulatory History and Background*, even though cannabis is “decriminalized” under State law, and even with the U.S. Department of Justice (USDOJ) issuance of memoranda guiding federal law enforcement related to cannabis activities within jurisdictions that have legalized cannabis, cannabis activities continue to be illegal at the federal level and subject to the prosecutorial discretion of the federal government.

Federal Aviation Administration (FAA)

The Federal Aviation Administration (FAA) regulates aviation at regional, public, private, and military airports. The FAA regulates objects affecting navigable airspace. According to 49 Code of Federal Regulations Part 77.13, any person/organization who intends to sponsor

any of the following construction or alterations must complete FAA form 7460 for FAA approval of:

- Any construction or alteration exceeding 200 feet above ground level.
- Any construction or alteration:
 - Within 20,000 feet of a public use or military airport, which exceeds a 100:1 surface from any point on the runway;
 - Within 10,000 feet of a public use or military airport, which exceeds a 50:1 surface from any point on the runway; and
 - Within 5,000 feet of a public use heliport, which exceeds a 25:1 surface.
- Any highway, railroad, or other traverse way whose prescribed adjusted height would exceed the above noted standards.
- When requested by the FAA.
- Any construction or alteration located on a public use airport or heliport regardless of height or location.

State

California Department of Transportation

Caltrans is responsible for operating and maintaining the State highway system. In the County, I-5, SR-99, SR-138, SR-166, and SR-184, SR-223, along with all the freeway ramps and ramp terminal intersections fall under Caltrans jurisdiction. Caltrans provides administrative support for transportation programming decisions made by the California Transportation Commission (CTC) for State funding programs. The State Transportation Improvement Program (STIP) is a multi-year capital improvement program that sets priorities and funds transportation projects envisioned in long-range transportation plans. The Caltrans *Guide for the Preparation of Traffic Impact Studies* provides general guidance regarding the preparation of traffic impact studies for projects that may have an impact on the State Highway System. The Caltrans *Highway Design Manual* (HDM) establishes uniform policies and procedures for State highway designs. Caltrans also sets maximum load limits for trucks and safety requirements and administers the following regulations for oversized vehicles that operate on State highways:

California Vehicle Code (CVC), Division 15, Chapters 1 through 5 (Size, Weight, and Load)

Includes regulations pertaining to licensing, size, weight, and load of vehicles operated on highways.

California Street and Highway Code Sections 660-711, 670-695

Requires permits from Caltrans for any roadway encroachment during truck transportation and delivery, includes regulations for the care and protection of State and county highways and provisions for the issuance of written permits, and requires permits for any load that exceeds Caltrans weight, length, or width standards for public roadways.

Local

Kern County General Plan (KCGP)

The policies, goals, and implementation measures in the KCGP applicable to traffic and transportation as related to the project are provided below. The KCGP contains additional policies, goals, and implementation measures that are more general in nature and not specific. Therefore, they are not listed below, but, as stated in Chapter 2, *Introduction*, all policies, goals, and implementation measures in the KCGP are incorporated by reference.

Chapter 1: Land Use, Open Space, and Conservation Element

Section 1.10.8 Smart Growth

Policy

- **Policy 49.** Discretionary development projects should be encouraged to incorporate innovative or “smart growth” land use planning techniques as design features, as follows:
 - a. Higher Density development, where compatible, to maximize the efficient use of land.
 - b. Mixed use developments that promote reduced vehicle trips by having residential, commercial, and public uses proximate to each other.
 - c. Variety of housing types, including those using energy efficient design, and densities to address Kern County’s housing needs.
 - d. Master planned communities that feature interconnected roads, transit stops, sidewalks, landscaping, and trails to encourage multi-modal movement.
 - e. Compact development that conserves open space, agricultural land, flood prone areas, creeks, hillsides, ridge tops, wetlands, and other natural features.
 - f. Adequate infrastructure (i.e. roads, sewer, water, parks, etc.) is provided as a condition of development approval by the project proponent.
 - g. Aesthetically pleasing and unifying design features that promote a visually pleasing environment.

Implementation Measure

- **Implementation Measure CC.** Promote the creation of innovative development through the use of smart growth principles and various implementing tools including, but not limited to: Community Plans, Specific Plans, Combing Zone districts CL (Cluster), SP (Special Planning), OS (Open Space), Density Bonuses, Transit facilities, etc. Allow the flexibility to assess traffic and safety impacts through means other than Level of Service (LOS) when development utilizes smart growth policies that encourage multi-modal movements, and is proposed as part of a community plan or specific plan.

Chapter 2. Circulation Element

Section 2.1 Introduction

Goal

- **Goal 5.** Maintain a minimum Level of Service (LOS) D for all roads throughout the County unless the roads are part of an adopted community plan or specific plan which utilizes smart growth policies that encourage multi-modal movement (see Section 1.10.8).

Section 2.3.3 Highway Plan

Goals

- **Goal 1.** To carry out this plan in a manner consistent with needs and standards of the County.
- **Goal 2.** This plan proposes to improve access to Kern County using all available methods of transportation.
- **Goal 3.** This plan sets up a simple way for protecting road right-of-way. Protecting corridors for future transportation facilities is the most important transportation planning activity in any high growth area.
- **Goal 5.** Maintain a minimum LOS D.

Policies

- **Policy 1.** Development of roads within the County shall be in accordance with the Circulation Diagram Map. The charted roads are usually on section and midsection lines. This is because the road centerline can be determined by an existing survey.
- **Policy 2.** This plan requires, as a minimum, construction of local road widths in areas where the traffic model estimates little growth through and beyond year 2010. Where Planning and Natural Resources Department's growth estimates indicate more than a local road is required, expanded facilities shall be provided. The timing and scope of required facilities should be set up and implemented through the Kern County Land Division Ordinance. However, the County shall routinely protect all surveyed section lines in the Valley and Desert Regions for arterial right-of-way. The County shall routinely protect all mid-section lines for collector highways in the same regions. The only possible exceptions shall be where the County adopts special studies and where Map Code 4.1 (Accepted County Plan) areas occur. In the Mountain Region where terrain does not allow construction on surveyed section and mid-section lines, right-of-way width shall be the size shown on the diagram map. No surveyed section and mid-section "grid" will comprehensively apply to the Mountain Region.
- **Policy 3.** This plan's road width standards are listed below. These standards do not include State highway widths that would require additional right-of-way for rail transit, bike lanes and other modes of transportation. Kern County shall consider these modifications on a case-by-case basis.
 - Expressway [Four Travel Lanes] Minimum 110-foot right-of-way

- Arterial [Major Highway] Minimum 110-foot right-of-way (County Standard 110-feet);
- Collector [Secondary Highway] Minimum 90-foot right-of-way (County Standard 90-feet);
- Commercial-Industrial Street Minimum 60-foot right-of-way (County Standard 60-feet);
- Local Street [Select Local Road] Minimum 60-foot right-of-way; (County Standard 60-feet).

Implementation Measures

- **Implementation Measure A.** The Planning and Natural Resources Department shall carry out the road network Policies by using the Kern County Land Division Ordinance and Zoning Ordinance, which implements the Kern County Development Standards that includes road standards related to urban and rural planning requirements. These ordinances also regulate access points. Planning Department can help developers and property owners in identifying where planned circulation is to occur.
- **Implementation Measure B.** Continuity and integrity of the arterial and collector system at the mountain/valley region and the mountain/desert region boundary must be reviewed and approved in conjunction with project adoption on an individual basis.
- **Implementation Measure C.** Conformance to alignment minimum design standards, where roadways that deviate from section and mid-section lines intersect those lines, must be reviewed and approved in conjunction with project adoption on an individual basis.

Section 2.3.4 Future Growth

Goals

- **Goal 1.** To provide ample flexibility in this plan to allow for growth beyond the 20-year planning horizon.
- **Goal 3.** To provide a total framework for guiding the development of access roads to City, County and State road systems to diminish jobs-housing imbalance influences.

Policies

- **Policy 1.** Monitor traffic volumes and patterns on County arterials. Undertake special studies when monitoring shows traffic is such that additional traffic would exceed LOS D unless the roads are part of an adopted Community Plan or specific plan which utilities smart growth policies that encourage multi-modal movement (see Section 1.10.8). The purpose of the special studies is eventually to upgrade key major highways to expressway standards. Expressway standards would limit access to one-half (1/2) mile spacing.
- **Policy 2.** The County should monitor development applications as they relate to traffic estimates developed for this plan. Mitigation is required if development

causes affected roadways to fall below LOS D. However, development proposed as part of a community plan or specific plan which utilizes smart growth policies that encourage multi-modal movement (see Section 1.10.8) is allowed the flexibility to assess traffic and safety impacts through other means than Level of Service (LOS). Utilization of the California Environmental Quality Act (CEQA) process would help identify alternatives to or mitigation for such developments. Mitigation could involve amending the Land Use, Open Space, and Conservation Element to establish jobs/housing balance if projected trips in any traffic zone exceed trips identified for this Circulation Element. Mitigation could involve exactions to build off-site transportation facilities. These enhancements would reduce traffic congestion to an acceptable level.

- **Policy 4.** As a condition of private development approval, developers shall build roads needed to access the existing road network. Developers shall build these roads to County standards unless improvements along State routes are necessary then roads shall be built to Caltrans standards. Developers shall locate these roads (width to be determined by the Circulation Plan) along centerlines shown on the circulation diagram map unless otherwise authorized by an approved Specific Plan Line. Developers may build local roads along lines other than those on the circulation diagram map. Developers would negotiate necessary easements to allow this.
- **Policy 5.** When there is a legal lot of record, improvement of access to county, city or State roads will require funding by sources other than the County. Funding could be by starting a local benefit assessment district or, depending on the size of a project, direct development impact fees.
- **Policy 6.** The County may accept a developer's road into the County's maintained road system. This is at Kern County's discretion. Acceptance would occur after the developer follows the above requirements.

Implementation Measures

- **Implementation Measure A.** The County should relate traffic levels to road capacity and development levels. To accomplish this the Public Works Department and Planning and Natural Resources Department should set up a monitoring program. The program would identify traffic volume to capacity ratios and resulting level of service. The geographic base of the program would be traffic zones set up by Kern Council of Governments.
- **Implementation Measure C.** Project development shall comply with the requirements of the Kern County Zoning Ordinance, Land Division Ordinance, and Development Standards.

Section 2.3.5 Expressway, Arterial and Collector Specific Plan Lines

Goals

- **Goal 1.** To set up specific plan lines that protects right-of-way for both County and State highways and expressways. Specific plan lines are needed where the rights-

of-way for arterial and collector alignments do not follow surveyed section and mid-section lines.

Policies

- **Policy 1.** Kern County will require adoption of specific plan lines for public roads meeting any of the following criteria.
 - State or County-adopted expressways (includes State freeways), arterials, and collectors that deviate from surveyed section or mid-section lines or any routes depicted on the circulation maps.
 - Where public road continuity is desirable, but the County has to consider offset surveyed section and mid-section lines.
- **Policy 2.** Any new, adopted specific plan line and non-standard design cross-section(s) shall be protected from land use development the same as right-of-way along surveyed section and mid-section lines.

Implementation Measures

- **Implementation Measure A.** Any private or public entity may apply for adoption of new, or revision of existing, specific plan line. With private applications, the County may require a fee to defray the cost of processing a specific plan line application.
- **Implementation Measure B.** In large development plans that, Kern County customarily considers specific plans, all arterial and collector roads may be adopted as specific plan lines if centerline and cross-section surveys are complete at time of Specific Plan public hearing.

Section 2.3.10 Congestion Management Programs

Issues

State law requires that urbanized counties prepare an annual Congestion Management Program (CMP). City and county eligibility for new gas tax subventions is contingent upon their participation in the CMP. To qualify for funding provided through the State Transportation Improvement Program (STIP) or the FTIP, the regional transportation agency must keep current an RTP that contains the CMP. Also, the CMP offers local jurisdictions the opportunity to find cooperative solutions to the multi-jurisdictional problems of air pollution and traffic congestion.

The CMP has links with air quality requirements. The California Clean Air Act requires that cities and counties implement transportation control measures (TCMs) to attain, and maintain, the State air quality standard.

Goals

- **Goal 1.** To satisfy the trip reduction and travel demand requirements of the Kern Council of Government's Congestion Management Program.
- **Goal 2.** To coordinate congestion management and air quality requirements and avoid multiple and conflicting requirements.

Policies

- **Policy 1.** Pursuant to California Government Code § 65089(a), Kern County has designated Kern Council of Governments as the County's Congestion Management Agency (CMA).
- **Policy 2.** The Congestion Management Agency is responsible for developing, adopting, and annually updating a Congestion Management Plan. The Plan is to be developed in consultation with, and with the cooperation of, the regional transportation agency (also Kern Council of Governments), regional transportation providers, local governments, Caltrans, and the air pollution control district.

Implementation Measures

- **Implementation Measure.** Kern County Council of Governments should request the proper consultation from County of Kern to develop and update the proper congestion management program.
- **Implementation Measure.** The elements within the Kern Congestion Management Program are to be implemented by each incorporated city and the County of Kern. Specifically, the land use analysis program, including the preparation and adoption of deficiency plans is required. Additionally, the adoption of trip reduction and travel demand strategies are required in the Congestion Management Program.

Section 2.5.2 Airport Land Use Compatibility Plan (ALUCP) (Also see discussion of ALUCP below)

Goal

- **Goal 1.** Plan for land uses that are compatible with public airport and military bases and mitigate encroachment issues.

Policies

- **Policy 1.** Review land use designations and zoning near public and private airports, Edwards Air Force Base and Naval Air Weapons (NAWS) China Lake for compatibility.
- **Policy 2.** To the extent legally allowable, prevent encroachment on public airport and military base operations from incompatible, unmitigated land uses.

Implementation Measures

- **Implementation Measure A.** Review discretionary land use development applications within the airports influence area and the military base operating area as shown in the ALUCP for consistency.
- **Implementation Measure E.** Utilize Avigation Easements as a condition of approval in appropriate compatibility zones to increase buyer awareness of impacts from proximity to airports and military bases.

Chapter 4. Safety Element
Section 4.6 Wildland and Urban Fire Policies

- **Policy 4.** Ensure that new development of properties have sufficient access for emergency vehicles and for the evacuation of residents.

Section 4.7 Kern County Emergency Plan

Implementation Measures

- **Implementation Measure C.** Require emergency plans to include procedures for traffic control and security of damaged areas.

Kern County Specific Plans

Kern County has adopted 39 Specific Plans, 10 Rural Community Plans, and 14 Interim Rural Community Plan Maps. The Specific Plans and Rural Community Plans are intended to be an amplification of the goals and policies of the KCGP and are, therefore, consistent therewith. Interim Rural Community Plan Maps are areas where a specific plan has not been formally adopted, thus the goals and policies of the KCGP govern these areas. Future commercial cannabis cultivation, processing/packaging, and sales activities that would be authorized under the proposed project that would be located within the boundary of an adopted Specific Plan would be regulated according to County zoning.

Vehicles and Traffic Code (Title 10 of the Kern County Code of Ordinances)

The purpose of this ordinance is to identify and define vehicle and traffic related issues within Kern County. These issues include: speed limits (Chapter 10.04); weight limits (Chapter 10.08); interstate trucks (Chapter 10.12); parking and safety zones (Chapters 10.16 and 10.20); handicapped parking (Chapter 10.24); abandoned, wrecked, dismantled or inoperative vehicles (Chapter 10.28); golf carts (Chapter 10.32); transportation of hay (Chapter 10.36); off-road driving (Chapter 10.40); no cruising zones (chapter 10.44); and parking penalties (Chapter 10.50). The ordinance mainly provides guidance for existing roads; however, it also provides guidance on criteria for roadways based on existing land uses, when and how speed limits, weight limits and parking should be signed and noticed, and a description of the types of roadways (i.e., arterials, highways, combined use roadways) where different rules and regulations should apply.

Roads, Highways and Bridges Code (Title 12 of the Kern County Code of Ordinances)

Chapter 12.16 Highway Encroachment

Section 12.16.100 Encroachment Permits in New Subdivisions

No permit is required in roads in new subdivisions for the purpose of making the improvements designated by the board of supervisors under the subdivision of land ordinance of the county, Title 18 of Ordinance Code of Kern County, and which improvements are a part of the improvement contract between the county and the subdivider; but for any improvement of or encroachment on any road for purposes not designated in such

improvement contract, a permit must first be secured from the director of roads under this chapter. Failure to secure an encroachment permit prior to beginning the work for which one is required, or construction in violation of the terms of such permit, constitutes a violation of this chapter.

Section 12.24.020 Boulevards

Pursuant to the provisions of Section 21354 of the Vehicle Code, all of the streets or highways of the County which are designated as primary or secondary roads or highways on the Master Highway Plan of the County are designated and declared to be the boulevards of the County. The Kern County Board of Supervisors may declare and designate other streets or highways of the County as boulevards. This ordinance thus sets forth the appropriate signing for boulevards as well as appropriate locations for stop signs and signals at intersections.

Chapter 12.63 Street Addresses and Street Names

In order to promote the convenience, safety and general welfare of the public, this ordinance establishes an official plan for unincorporated area coordinated area-wide street addressing and street naming systems within Kern County. All official street addresses shall be issued through the Kern County Planning and Natural Resources Department. The installation of various area-wide and metropolitan area street addresses and street naming systems established by this ordinance shall be accomplished progressively and in consultation with the Kern County Planning and Natural Resources Department.

Kern County Council of Governments

Congestion Management Program

All urbanized areas with populations of more than 200,000 are required to have a congestion management system, program, or process. The Kern COG refers to its congestion management activities as the CMP. Kern COG has been designated as a congestion management agency.

The CMP provides a systematic process for managing congestion and information regarding (1) transportation system performance and (2) alternative strategies for alleviating congestion and enhancing the mobility of persons and goods to levels that meet State and local needs. The purpose of the CMP is to ensure that a balanced transportation system is developed that relates population growth, traffic growth, and land use decisions to transportation system level of service (LOS) performance standards and air quality improvement. The program attempts to link land use, air quality, transportation, and advanced transportation technologies as integral and complementary parts of the region's plans and programs.

The purpose of defining the CMP network is to establish a system of roadways that will be monitored in relation to established LOS standards. At a minimum, all State highways and principal arterials must be designated as part of the Congestion Management System of Highways and Roadways. Kern County has 18 designated State highways.

Regional Transportation Plan and Sustainable Communities Strategy

The Regional Transportation Plan (RTP) is a long-term general plan for the region's transportation network and encompasses project for all types of travel, including aviation and freight movement. The RTP is prepared by the Kern COG through a continuing,

comprehensive, and cooperative planning process and provides for effective coordination between local, regional, State and federal agencies and assesses environmental impacts of projects and establishes air quality conformity as required by federal regulations. The California Sustainable Communities and Climate Protection Act (Senate Bill [SB] 375) requires that the Kern RTP include a Sustainable Communities Strategy (SCS) that reduces greenhouse gas emissions from passenger vehicles and light-duty trucks by five percent per capita by 2020 and ten percent per capita by 2035 compared to 2005. In addition, SB 375 provides for closer integration of the RTP/SCS with the State Regional Housing Needs Allocation (RHNA) to ensure consistency between low income housing needs and transportation planning. The most recent 2014 RTP/SCS exceeds SB 375 reduction targets for the region, is consistent with the RHNA and provides a 26-year blueprint that establishes a set of regional transportation goals, objectives, policies, and actions to guide development of planned multimodal transportation systems in Kern County. The RTP/SCS supports a land use pattern and corresponding transportation network that encourages the location of housing near jobs and transportation facilities designed to reduce regional passenger vehicle travel and the resulting reduction in air emissions.

Kern County Bicycle Master Plan and Complete Streets Recommendations

The Kern County Bicycle Master Plan and Complete Streets Recommendations (2012) is prepared by the Kern COG. It guides the development of bicycle transportation facilities in an orderly and timely fashion throughout Kern County. It provides a broad vision and direction for expanding the bikeway network and connecting gaps within unincorporated Kern County

Kern County Airport Land Use Compatibility Plan

The Kern County ALUCP establishes procedures and criteria to assist Kern County and affected incorporated cities in addressing compatibility issues between airports and surrounding land uses. Land Use Compatibility Maps for all airports in Kern County depict each airport's area of influence. Future cannabis related activities that would be located within an airport influence area would be subject to ALUCP policies.

Chapter 3 Supporting Compatibility Criteria

3.2. Safety

3.2.1. Objective

The intent of land use safety compatibility criteria is to minimize the risks associated with an off-airport aircraft accident or emergency landing.

- a. Risks both to people and property in the vicinity of an airport and to people on board the aircraft shall be considered.
- b. More stringent land use controls shall be applied to the areas with greater potential risk.

3.2.4. Other Risks

Storage of fuel or other hazardous materials shall be prohibited in Compatibility Zone A and subject to restrictions in the B zones as identified in Table 3A of the ALUCP.

3.3. Airspace Protection

3.3.1. Height Limits

The criteria for limiting the height of structures, trees, and other objects in the vicinity of an airport shall be set in accordance with Part 77, Subpart C, of the Federal Aviation Regulations and with the United States Standard for Terminal Instrument Procedures.

3.3.4. FAA Notifications

Proponents of a project which may exceed a Part 77 surface must notify the Federal Aviation Administration as required by FAR Part 77, Subpart B, and by the California State Public Utilities Code Sections 21658 and 21659.

3.3.5. Other Flight Hazards

Land use characteristics which may produce hazards to aircraft in flight shall not be permitted within any airport's influence area. Specific characteristics to be avoided include:

- a. Glare, distracting lights, or light patterns which could be mistaken for airport lights;
- b. Sources of dust, steam, or smoke which may impair pilot visibility;
- c. Sources of electrical interference with aircraft communications or navigation;
- d. Any use, especially landfills and certain agricultural uses, which may attract large flocks of birds; and
- e. Any light or series of lights which may cause visual discomfort or loss of orientation during critical phases of flight.

Chapter 4 Public Use Airport and Military Aviation

4.17 Military Aviation

4.17.2 Encroachment

Commercial Development – Creation of a development that attracts large concentrations of people in a sensitive low flight corridor. Height of structures and signs that penetrate into airspace in low flight corridor.

4.17.36 Notification

China Lake NAWS and Edwards AFB both shall be notified of development that falls within any of the following categories:

- Any structure within 75 miles of the R-2508 complex that is greater than 50 feet tall.
- Any project within 50 miles of R-2508 that emit radio and communication frequencies.
- Any environmental document or discretionary project within 25 miles of the military installation boundaries.
- Any project that would create environmental impacts (e.e. visibility, elevated obstructions) within 25 miles of the R-2508 complex)
- Any project within 25 miles of the centerline of any route/corridor.

- Any project with the potential to impact the utilities of the military installation (water, gas, electricity, phone, roads, railway, etc.) required for normal bases operations.
- Any environmental document within the R-2515 complex requires a copy sent to Edwards AFB and primary notification to China Lake NAWS.
- Any environmental document within the R-2505 and R-2506 complexes requires a copy sent to China Lake NAWS and primary notification to Edwards AFB.

Metropolitan Bakersfield General Plan

The Metropolitan Bakersfield General Plan (MBGP), a joint effort between the Kern County Planning Department and the City of Bakersfield Planning Division, was last adopted on December 11, 2007. The MBGP includes both city and unincorporated County lands. The MBGP describes the community's physical development as well as its economic, social and environmental goals and is currently undergoing an update. Project-related development on unincorporated lands within the MBGP Planning Area would be subject to the following applicable policies and implementation measures of the MBGP, with respect to transportation and traffic.

Chapter II. Land Use Element

Policies

- **Policy 34.** Provide for the clustering of new industrial development adjacent to existing industrial uses and along major transportation corridors.
- **Policy 38.** Minimize impacts of industrial traffic on adjacent residential parcels through the use of site plan review and improvement standards (I-1, I-6).

Chapter III. Circulation Element

A. Streets

Goals

- **Goal 3.** Minimize the impact of truck traffic on circulation, and on noise sensitive land uses.
- **Goal 5.** Provide a system of freeways which maintains adequate travel times in and around the metropolitan area.
- **Goal 7.** Develop and maintain a circulation system that supports the land use plan shown in the general plan.

Policies

- **Policy 6.** Design and locate site access driveways to minimize traffic disruption where possible considering items such as topography, past parcelization and other factors.
- **Policy 7.** Minimize direct and uncontrolled property access from arterials.
- **Policy 14.** Maintain the integrity of the circulation system.

- **Policy 14.** Provide continuous truck routes within incorporated areas that provide access to designated industrial areas.
- **Policy 15.** Prohibit trucks from non-truck routes within incorporated areas except as necessary for direct property access for pick-up and delivery.
- **Policy 16.** Require that truck access to commercial and industrial properties be designed to minimize impacts on adjacent residential parcels.
- **Policy 36.** Prevent streets and intersections from degrading below Level of Service "C" where possible due to physical constraints (as defined in a Level of Service Standard) or when the existing Level of Service is below "C" prevent where possible further degradation due to new development or expansion of existing development with a three-part mitigation program: adjacent right-of-way dedication, access improvements and/or an area-wide impact fee. The area-wide impact fee would be used where the physical changes for mitigation are not possible due to existing development and/or the mitigation measure is part of a larger project, such as freeways, which will be built at a later date.
- **Policy 37.** Require new development and expansion of existing development to pay for necessary access improvements, such as street extensions, widenings, turn lanes, signals, etc., as identified in the transportation impact report as may be required for a project.
- **Policy 39.** Require new development and expansion of existing development to pay or participate in its pro rata share of the costs of expansions in area-wide transportation facilities and services which it necessitates.

Implementation Measures

- **Implementation Measure 7.** Review all site plans for compliance with adopted drive approach design standards.
- **Implementation Measure 8.** Review site plans, rezonings, and subdivision requests, with respect to access from arterials. Consider conditions of approval to minimize uncontrolled property access.
- **Implementation Measure 14.** Amend the city and county Zoning Ordinances as needed to regulate truck access on properties adjacent to residential areas.
- **Implementation Measure 25.** Maintain records of existing traffic volume and cumulative projections of traffic from new development to schedule projects for the Capital Improvement Program.
- **Implementation Measure 26.** Establish guidelines for project design review based on traffic engineering standards (e.g., driveway design, onsite circulation) and the Level of Service Ordinance.
- **Implementation Measure 28.** Periodic review and if needed, revision of adopted ordinances that includes a Level of Service standard for the city and county to include a definition of Level of Service "C", procedures for how it is measured, and mitigation measures to keep from exceeding the standard.

- **Implementation Measure 29.** Periodic review and, if needed, revision of adopted guidelines for preparation of transportation impact reports, definition of undesirable impacts, and identification of mitigation procedures.
- **Implementation Measure 33.** Periodic review and, if needed, revision of adopted Transportation Impact Fee Ordinance for the city and county, which specifies the area wide impact fee schedule and how the fees will be used.

E. Airports

Policies

- **Policy 4.** Encourage and provide for the orderly development of public use airports within the planning area and prevent the creation of new noise and safety impacts.
- **Policy 5.** Provide for periodic update (every five years) of the Airport Land Use Compatibility Plan, subject to the availability of funding, to ensure that airport vicinity planned land uses are in conformance with airport land use compatibility criteria.

Implementation Measure

- **Implementation Measure 4.** Consider the use of aviation easements for discretionary projects to provide for orderly development and as a means of preventing new noise and safety impacts.

Chapter X. Public Services and Facilities Element

A. General Utilities

Policies

- **Policy 5.** Require all new development to pay its pro rata share of the cost of necessary expansion in municipal utilities, facilities and infrastructure for which it generates demand and upon which it is dependent.

4.15.4 Impacts and Mitigation Measures

This section describes the methodology used in conducting the impact analysis for transportation and traffic, the thresholds of significance used in assess impacts to transportation and traffic, and the assessment of impacts to transportation and traffic. Measures to mitigate (i.e., avoid, minimize, rectify, reduce, eliminate, or compensate for) significant impacts accompany each impact discussion, where applicable.

Methodology

Potential impacts associated with the proposed project and mitigation measures were developed based on consultation with Kern County and review of the proposed amendments to the Kern County Code of Ordinances under Options A and B. The discussion below lists specific impacts and measures that would be incorporated to mitigate and reduce potential impacts to the extent feasible.

Traffic

A *Traffic Impact Study* was prepared by Ruettgers & Schuler in April 2017 and is provided in Appendix J of this EIR. There is very little historic data related to the traffic volumes and travel patterns associated with the cannabis industry; therefore, the *Traffic Impact Study* reviewed related information available from states that have legalized medical and adult use cannabis, such as Colorado. The *Traffic Impact Study* also considered the land uses within Kern County and how these land uses interact with each other as well as how they interact with the incorporated cities within Kern County.

Traffic Generators

Option A

Distribution for Option A only pertains to retail cannabis stores within incorporated areas, and the vehicle trips that would be generated from populations in the unincorporated areas accessing them.

Option B

The following criteria were evaluated when considering the distribution of the various land use types under Option B:

- Climates within Kern County
- Accessibility of water
- Accessibility of power
- Transportation
- Oil field activities and locations
- Industrial areas
- Agricultural activities in the county
- Locations of incorporated cities

Based on the above criteria, the cannabis related land uses were broadly distributed over the County's geographic regions, Valley Region, Desert Region, and Mountain Region, using the following assumptions:

Outdoor Cultivation

Vehicle distribution throughout the various geographic regions for this land use is based on the percentages listed below, and the proximity to areas that support existing agricultural land uses.

- Valley Regions = 60 percent
 - 15 percent North of Bakersfield
 - 35 percent South of Bakersfield
 - 10 percent West of Interstate 5
- Desert Region = 10 percent
- Mountain Region = 30 percent

Indoor Cultivation

Vehicle distribution throughout the various geographic regions for this land use is based on the percentages listed below, and in proximity to areas where industrial land uses already exist.

- Valley Region = 80 percent
 - 25 percent North
 - 15 percent South
 - 30 percent East
 - 10 percent West
- Desert Region = 10 percent
- Mountain Region = 10 percent

Processing, Packaging, and Distribution

Vehicle distribution for this land use is based on the proximity to areas where industrial land uses already exist, with an emphasized around Metropolitan Bakersfield due to the number of existing industrial facilities located in the outlying areas.

Retail Cannabis Stores

The distribution of retail cannabis stores is based on proximity to populated areas, with an emphasis around Metropolitan Bakersfield, due to population density in relation to all other regions of Kern County.

Trip Generators

The Institute of Transportation Engineers (ITE) Trip Generation, 9th Edition manual, does not include trip generation rates for cannabis related land uses, therefore the most closely related ITE codes were used for each operation, with the exception of retail cannabis stores (Ruetters & Schueler, 2017). Trip generation for the cannabis related land uses was determined as follows; refer to Appendix J of this EIR for further detail:

Outdoor Cultivation

- ITE Code 150 – General Heavy Industrial - While Outdoor Cultivation activities are different from General Heavy Industrial activities, both are similar in regard to the ratio of acreage to personnel and equipment.

Indoor Cultivation

- ITE Code 152 – High-Cube Warehouse - Indoor Cultivation activities are anticipated to be similar to High-Cube Warehouse activities, as both will most likely be proportional in size, utilize some forms of automation (i.e. watering, environmental controls, etc. for growing cannabis plants), store materials prior to shipping to distributors or processing facilities, and both have a relatively low work force requirement.

Processing, Packaging, and Distribution

- ITE Code 110 – General Light Industrial Processing & Packaging activities are anticipated to be very similar to General Light Industrial activities where material is assembled/processed into final products, and both will typically consist of a free-standing facility devoted to a single use, with minimal office space.

Retail Cannabis Stores

- Trip generation is based research by Ruettgers & Schuler pertaining retail cannabis store operations in states that allow commercial cannabis sales (refer to Appendix J).
- Average daily trip (ADT) generation and weekday peak hour rates are based on two-day counts conducted at four different dispensaries in Colorado (Ruettgers & Schuler, 2017; refer to Appendix J).

Development Standards Related to Traffic and Transportation

Option A

Option A of the proposed project would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Therefore, no development standards are identified in the proposed Zoning Ordinance; refer to Appendix B for specific wording of the proposed ordinance under Option A.

Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, testing, and retail cannabis stores with or without mobile delivery facilities. Development standards provided in the proposed Zoning Ordinance, that pertain to transportation and traffic include, but are not limited to, the following (refer to Appendix C for specific working of the proposed ordinance under Option B):

- All cannabis facilities must be 0.5 mile from any school, park, day care center or youth center.
- The applicant must demonstrate compliance with all applicable mitigation measures prior to the issuance of a grading or building permit for any future cannabis related facility.
- A Fire Safety Plan must be approved by the Kern County Fire Department for future cannabis related facilities.
- Off-street parking shall be provided at all future cannabis facilities as specific in Chapter 19.82 of the Kern County Zoning Code.
- All entrances to the future cannabis facility shall be clearly marked and legibly posted. No minors or adults below the age of 21 years old will be allowed on the premises.
- No organized and advertised tours shall be permitted.
- No cannabis related facility shall have a private patio or café seating.

- Trash dumpsters shall be enclosed and not accessible to the public.

Thresholds of Significance

The Kern County CEQA Implementation Document and Kern County Environmental Checklist state that a project would have a significant impact on Traffic and Transportation if it would:

- Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit;
- Conflict with an applicable congestion management program, including, but not limited to, level of service (LOS) standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways:
 - i. Metropolitan Bakersfield General Plan LOS “C”
 - ii. Kern County General Plan LOS “D”
- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.
- Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
- Result in inadequate emergency access.
- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

Cannabis Traffic Thresholds

For operational analysis, there is an initial screening of proposed project traffic for locations that meet a 50-trip peak-hour volume, which is the threshold for requiring analysis of potential impacts. Locations with less than 50 peak hour trips are considered to be below the threshold for potential significance and do not require further study. Locations with greater than 50 peak hour trips are evaluated based on a Level of Service analysis. Outcomes of the analysis resulting in a LOS D or below are generally considered potential significant impacts.

For safety considerations, and vehicle miles traveled (VMT) estimates, there are no established CEQA thresholds. The safety evaluation is generally a qualitative review and summary. The VMT estimates are utilized in the air quality analysis provided in Section 4.3, *Air Quality*.

Project Impacts

Impact 4.15-1: Conflict with an Applicable Plan, Ordinance, or Policy Establishing Measures of Effectiveness for the Performance of the Circulation System

ADT generation rates for the ITE codes were used directly rather than the rate equations, because each land use type represents numerous facilities or cultivation locations, not

single sites (Ruetters & Schuler, 2017); refer to Appendix J for the *Traffic Impact Study*. Table 4.15-3, *Cannabis Related Trip Generation for Kern County by Land Use Type*, represents trip generation for all future cannabis related facilities throughout unincorporated Kern County. Table 4.15-4, *Cannabis Related Trip Generation for Individual Sites by Land Use Type*, represents the trip generation estimates for future cannabis facilities at individual sites. The ADT resulting from Option A and Option B of the proposed project are based on these generation rates.

An evaluation of the total VMT was made based on the anticipated locations of the cannabis related land uses depicted in Figures 4.15-2 through 4.15-6. The VMT for Option A and Option B are shown in Table 4.15-5, below. As mentioned above under the Subsection *Thresholds*, there are currently no established VMT thresholds under CEQA; however, VMT is used to show comparisons between Option A and Option B of the proposed project.

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one-to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

Table 4.15-3. Cannabis Related Trip Generation for Kern County by Land Use Type ^{a, b}										
General Information			Daily Trips		AM Peak Hour Trips			PM Peak Hour Trips		
ITE Code	Development Type	Variable	ADT Rate	ADT	Rate	In % Split / Trips	Out % Split / Trips	Rate	In % Split / Trips	Out % Split / Trips
152	High-Cube Warehouse (Indoor Cultivation)	2,000 1,000 ft ² GFA	1.68	1,013	1.98	83% 247	17% 50	2.16	22% 71	78% 253
120	General Heavy Industrial (Outdoor Cultivation)	150 acres	6.75	3,360	0.11	69% 152	31% 68	0.12	31% 74	69% 166
110	General Light Industrial (Processing, Packaging, Distribution)	500 1,000 ft ² GFA	6.97	3,485	0.92	88% 405	12% 55	0.97	12% 58	88% 427
-- ^c	Retail Cannabis Stores	40 2 per unincorporated community	544	21,760	16.86	51% 344	49% 330	54.64	49% 1,071	51% 1,115
Total				29,618		1,148	503		1,274	1,961

Source: Ruettgers & Schuler, 2017.

ft² = square feet; GFA = general floor area; ADT = average daily trips

^a Option A would ban future commercial cannabis related activities. Personal cannabis related activities allowed under Proposition 64 would continue to be allowed under Option A.

^b Option B would allow future commercial cannabis related activities up to the following County maximums: 2,000,000 ft² of indoor cultivation; 150 acres of outdoor cultivation; 500,000 ft² of processing, packaging, and distribution; and 40 retail cannabis stores.

^c Based on research by Ruettgers & Schuler provided in the Traffic Impact Study in Appendix J of this EIR.

Table 4.15-4. Cannabis Related Trip Generation for Individual Sites by Land Use Type ^{a, b}										
General Information			Daily Trips		AM Peak Hour Trips			PM Peak Hour Trips		
ITE Code	Development Type	Variable	ADT Rate	ADT	Rate	In % Split / Trips	Out % Split / Trips	Rate	In % Split / Trips	Out % Split / Trips
152	High-Cube Warehouse (Indoor Cultivation)	10 1,000 ft ² GFA	1.68	7	1.98	83% 2	17% 0	2.16	22% 0	78% 2
152	High-Cube Warehouse (Indoor Cultivation)	22 1,000 ft ² GFA	1.68	17	0.11	69% 1	31% 0	0.12	31% 0	69% 1
152	High-Cube Warehouse (Indoor Cultivation)	50 1,000 ft ² GFA	1.68	37	0.11	69% 2	31% 1	0.12	31% 1	69% 2
152	High-Cube Warehouse (Indoor Cultivation)	100 1,000 ft ² GFA	1.68	84	0.11	69% 4	31% 2	0.12	31% 2	69% 4

Table 4.15-4. Cannabis Related Trip Generation for Individual Sites by Land Use Type ^{a, b}										
General Information			Daily Trips		AM Peak Hour Trips			PM Peak Hour Trips		
ITE Code	Development Type	Variable	ADT Rate	ADT	Rate	In % Split / Trips	Out % Split / Trips	Rate	In % Split / Trips	Out % Split / Trips
152	High-Cube Warehouse (Indoor Cultivation)	200 1,000 ft ² GFA	1.68	168	0.11	69% 8	31% 3	0.12	31% 4	69% 8
120	General Heavy Industrial (Outdoor Cultivation)	1 acre	6.75	336	0.11	69% 15	31% 7	0.12	31% 7	69% 17
110	General Light Industrial (Processing, Packaging, and Distribution)	10 1,000 ft ² GFA	6.97	70	0.92	88% 8	12% 1	0.97	12% 1	88% 9
-- ^c	Retail Cannabis Stores	1	544	554	16.86	51% 9	49% 8	54.64	49% 27	51% 28
			Total	1,262		49	22		42	71

Source: Ruettgers & Schuler, 2017.

ft² = square feet; GFA = general floor area; ADT = average daily trips

^a Option A would ban future commercial cannabis related activities. Personal cannabis related activities allowed under Proposition 64 would continue to be allowed under Option A.

^b Option B would allow future commercial cannabis related activities up to the following County maximums: 2,000,000 ft² of indoor cultivation; 150 acres of outdoor cultivation; 500,000 ft² of processing, packaging, and distribution; and 40 retail cannabis stores.

^c Based on research by Ruettgers & Schuler provided in the Traffic Impact Study in Appendix J of this EIR.

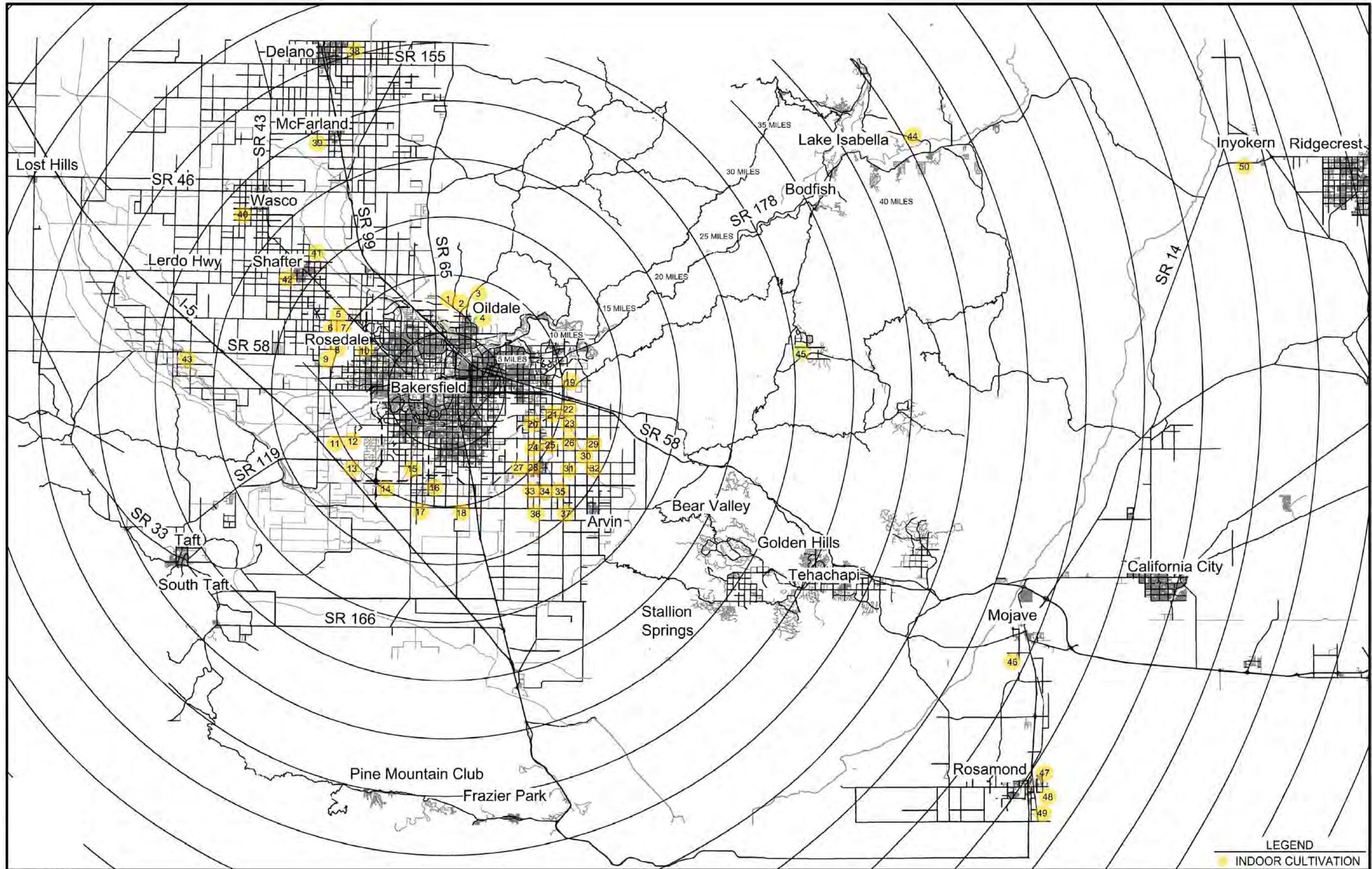
Table 4.15-5. Vehicle Miles Traveled by Land Use Type		
Land Use Type	Vehicle Miles Traveled	
	Option A ¹	Option B ²
Indoor Cultivation	--	472
Outdoor Cultivation	--	11,290
Processing, Packaging and Distribution	--	1,064
Retail Cannabis Stores	343,264	83,776
Total	343,264	96,552

Source: Ruettgers & Schuler, 2017.

-- Not applicable.

¹ Option A would ban future commercial cannabis related activities. Personal cannabis related activities allowed under Proposition 64 would continue to be allowed under Option A.

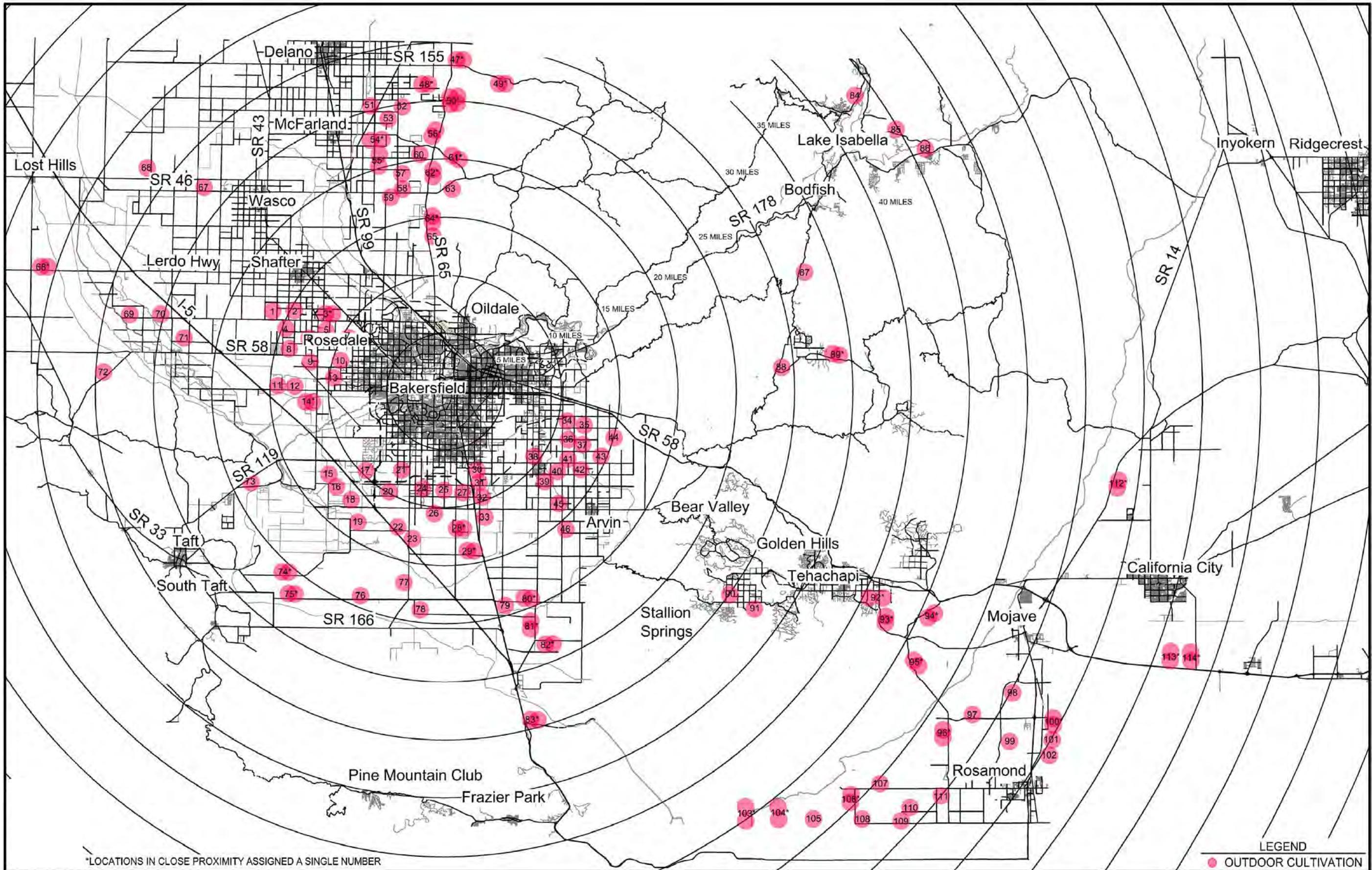
² Option B would allow future commercial cannabis related activities up to the following County maximums: 2,000,000 ft² of indoor cultivation; 150 acres of outdoor cultivation; 500,000 ft² of processing, packaging, and distribution; and 40 retail cannabis stores.



SOURCE: Ruetgers & Schuler, 2017

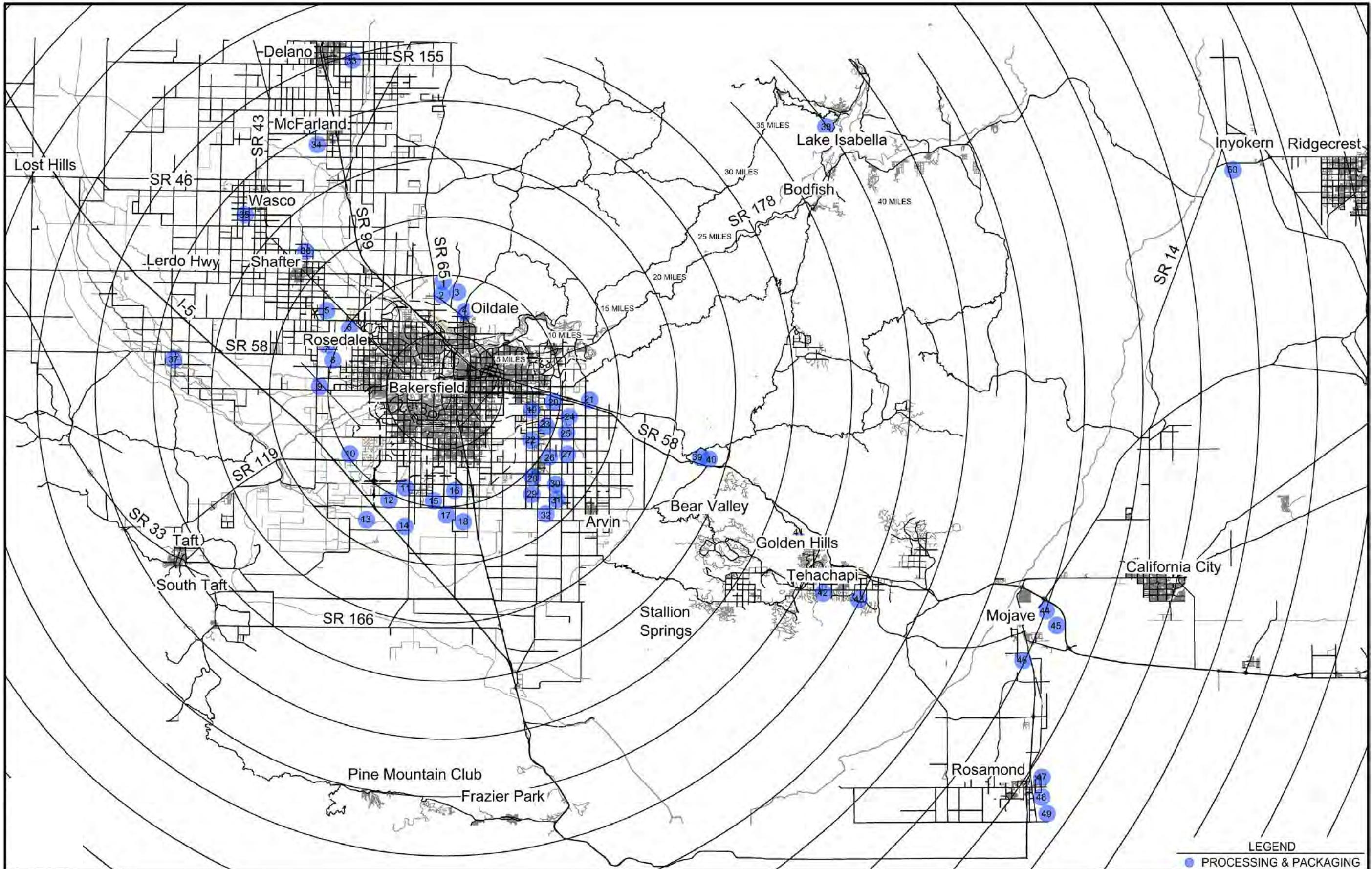
KERN COUNTY CANNABIS LAND USE ORDINANCE PROJECT EIR
AMENDMENT TO TITLE 19 – KERN COUNTY ZONING
ORDINANCE FOCUSED ON CHAPTER 19.120 (CANNABIS LAND USE REGULATION)

Potential Cannabis Indoor Cultivation Locations for Traffic Analysis Only



SOURCE: Ruettgers & Schuler, 2017

KERN COUNTY CANNABIS LAND USE ORDINANCE PROJECT EIR
AMENDMENT TO TITLE 19 – KERN COUNTY ZONING
ORDINANCE FOCUSED ON CHAPTER 19.120 (CANNABIS LAND USE REGULATION)



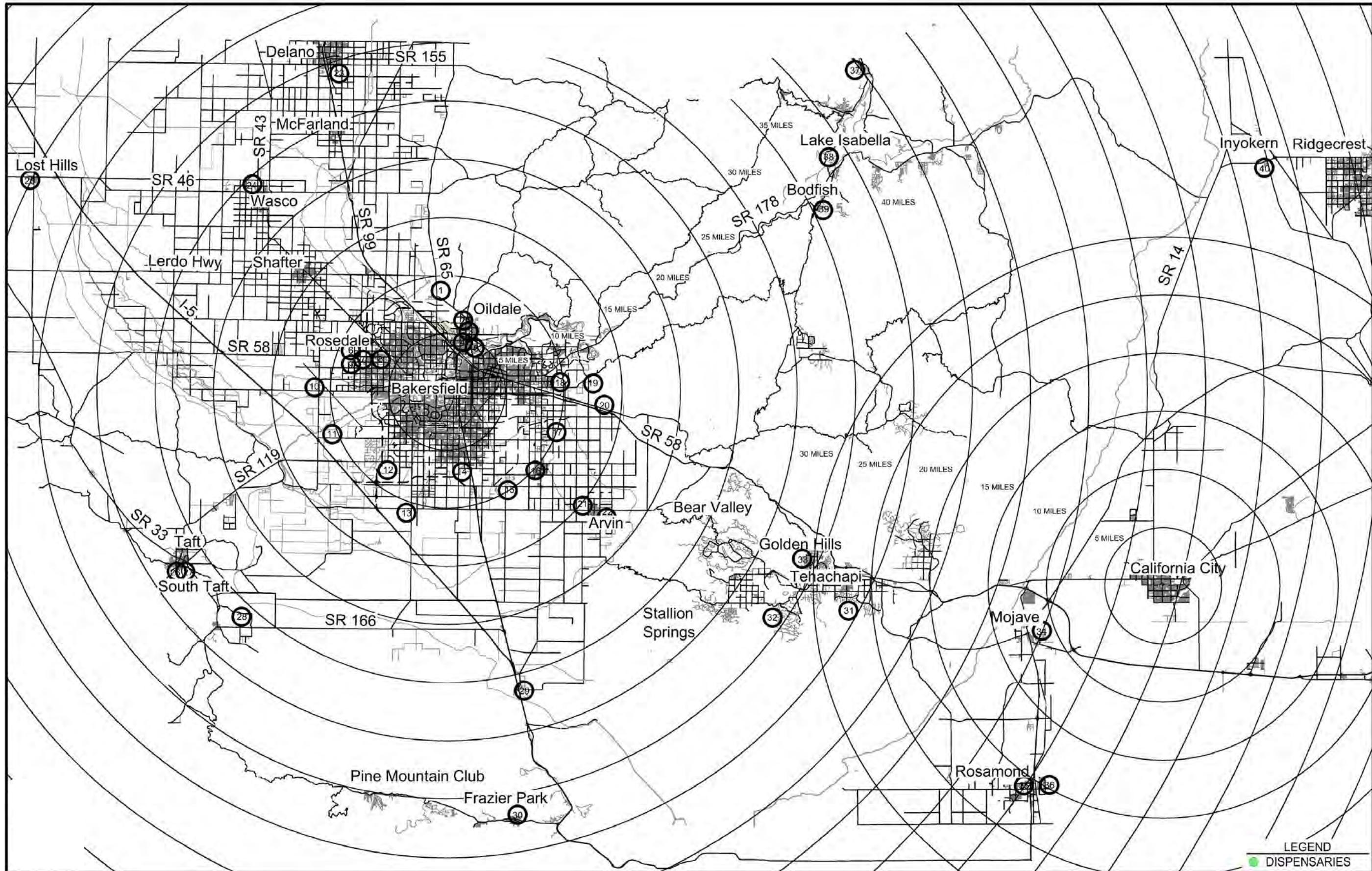
SOURCE: Ruettgers & Schuler, 2017

KERN COUNTY CANNABIS LAND USE ORDINANCE PROJECT EIR

AMENDMENT TO TITLE 19 – KERN COUNTY ZONING

ORDINANCE FOCUSED ON CHAPTER 19.120 (CANNABIS LAND USE REGULATION)

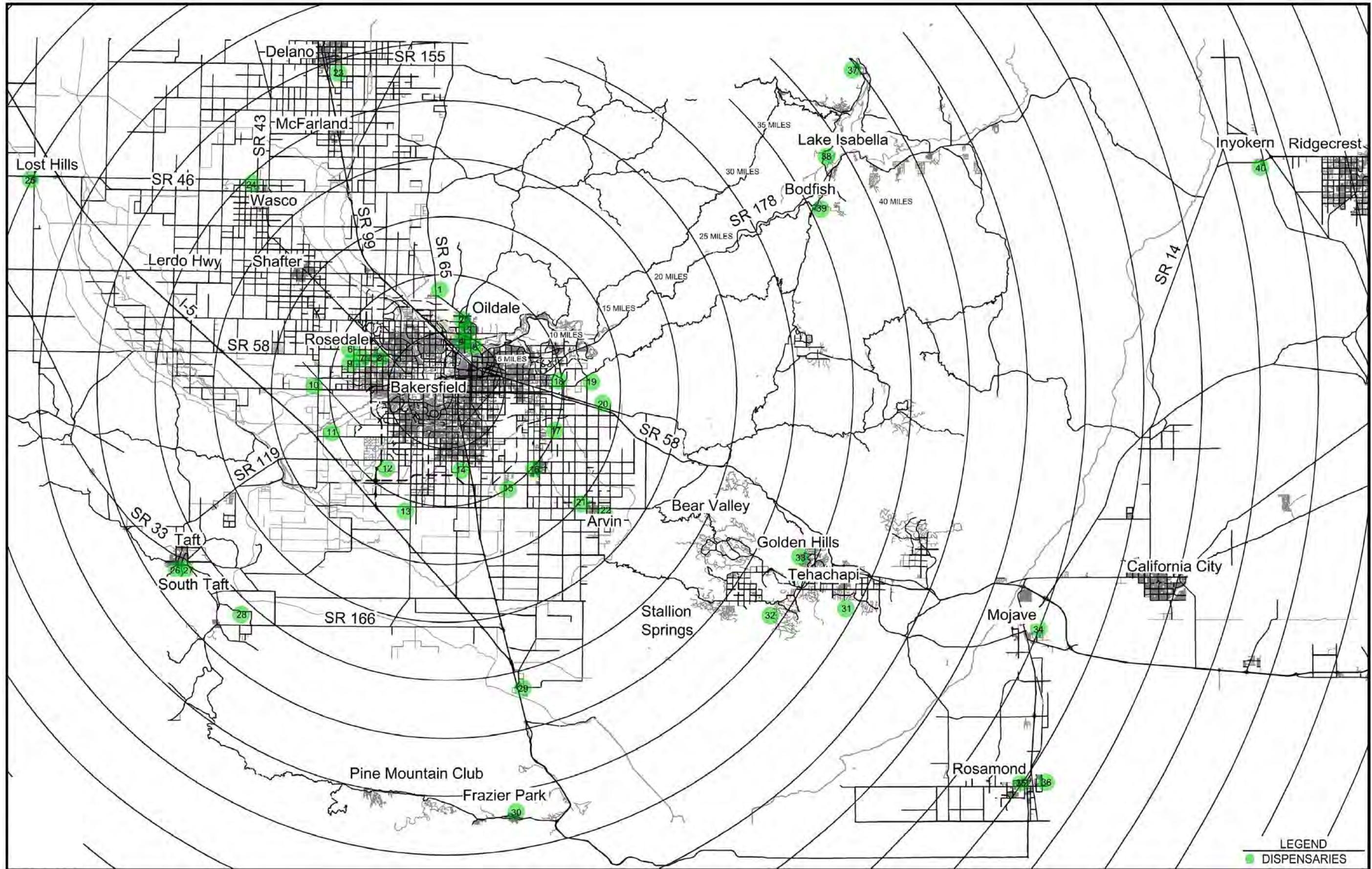
Potential Processing and Packaging Facility Locations for Traffic Analysis Only



SOURCE: Ruettgers & Schuler, 2017

KERN COUNTY CANNABIS LAND USE ORDINANCE PROJECT EIR
AMENDMENT TO TITLE 19 – KERN COUNTY ZONING
ORDINANCE FOCUSED ON CHAPTER 19.120 (CANNABIS LAND USE REGULATION)

Potential Dispensary Locations Option A, Outside Unincorporated Areas, for Traffic Analysis Only



SOURCE: Ruettgers & Schuler, 2017

KERN COUNTY CANNABIS LAND USE ORDINANCE PROJECT EIR
AMENDMENT TO TITLE 19 – KERN COUNTY ZONING
ORDINANCE FOCUSED ON CHAPTER 19.120 (CANNABIS LAND USE REGULATION)

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A does not provide opportunities for business development. Option A would continue to allow individuals to cultivate up to six plants on private property. Option A would result in the closure of existing cannabis dispensaries over a one-to two-year timeframe, to allow for amortization of the business investment, which would result in existing and potential cannabis customers driving further distances to retail cannabis stores.

Potential retail cannabis stores, for the purposes of this traffic analysis, were assumed to be within the incorporated areas of the City of Bakersfield or City of California City, which currently have ordinances allowing sales, or outside the Kern County boundaries. As shown above in Table 4.15-4, one retail cannabis store would generate 544 ADT. Given that there are 22 existing dispensaries that were opened before and any illegally opened after the moratorium, these 22 dispensaries would generate 11,968 ADT. The PM peak hours for a retail cannabis store have 27 inbound trips and 28 outbound trips. Because Option A would result in the closure of the existing dispensaries, the 11,968 ADT would be redistributed throughout the County, as well as outside the County.

An evaluation of the total VMT was made based on Option A. Option A VMT values shown in Table 4.15-5, *Vehicle Miles Traveled by Land Use Type*, were based on the location of population centers within the unincorporated areas of Kern County and the estimated distance necessary to reach either the City of Bakersfield or the City of California City as these are the only cities in Kern County that currently have ordinances allowing the operation of dispensaries within their jurisdiction. Option A would result in 343,264 VMT. This is based on the assumption that the demand for cannabis would not disappear and customers would travel to locations outside the unincorporated areas of Kern County, either to Bakersfield or California City, or to outside of Kern County.

Table 4.15-6, *Distances within Kern County*, and Table 4.15-7, *Distances outside Kern County*, below, show the approximate number of miles, using the major freeways (interstates and state routes), a consumer would have to drive within or outside the County, respectively. For trips within Kern County, the SR-99/SR-58 interchange within Bakersfield and California City Boulevard/Hacienda Boulevard intersection in California City were chosen for determining distance. For trips outside Kern County, the Google Maps default community or city center was used to determine distance. The mileage shown in the below tables vary depending on point of origin and destination. Within Kern County, travel distance could range from approximately 15 miles to approximately 116 miles. Outside of Kern County, travel distances could range from approximately 22 miles to approximately 267 miles.

Table 4.15-6. Distances Within Kern County

Point of Origin ¹	Distance to Destination (miles) ²	
	Bakersfield (SR-99/SR-58)	California City (California City Boulevard / Hacienda Boulevard)
Boron	93	26
Rosamond	78	29
Mojave	63	15.5
Tehachapi	43	29
Inyokern	94	43
Ridgecrest	114	51
Lake Isabella	43	80.5
Weldon	56	66
Onyx	61	62
Kernville	54	82
Wofford Heights	49.5	86
Frazier Park	46	82
Lebec	41.5	80
Mettler	24	76
Maricopa	42	99
Taft	36	98
Buttonwillow	27	97.5
Shafter	17	88
Lost Hills	45	116
Wasco	27	97.5
McFarland	24.5	95
Delano	31	102
Arvin	23.5	58
Lamont	15	67
McKittrick	39	113

Source: Google, 2017

¹ Not all population areas within Kern County are listed above; however, the list is generally representative of the population areas within Kern County and the maximum distances within Kern County between communities and Bakersfield and California City.

² The distance, in miles, between the point of origin and Bakersfield and California City was based on travel using major freeways (interstates and state routes). While there may be other routes that can be taken that are shorter, or longer routes that are faster, to stay consistent in distances, only routes via major freeways were analyzed. The shortest distance was then chosen when more than one route using major freeways was available.

Table 4.15-7. Distances Outside Kern County

Point of Origin ¹	Distance to Destination (miles) ^{2,3}														
	Palmdale	Victorville	Barstow	Santa Clarita	Burbank	Ojai	Santa Barbara	Paso Robles	San Luis Obispo	Santa Maria	Visalia	Fresno	Lone Pine	Bishop	Baker
Boron	65.5	44	40.5	100	116	154	180	197	224	199	170	200	127	184	103
Rosamond	22	78	84	57	73	110	137	181	197	172	153	184	128	185	147
Mojave	35	75	71.5	69	85	123	135	167	197	169	140	170	114	172	134
Tehachapi	55	94	91	90	104	140	168	147	177	149	119	150	129	187	153
Inyokern	84	89.5	86	119	135	173	199	199	238	212	169	200	71	128	149
Ridgecrest	92.5	86.5	83	127	143	181	227	209	239	224	180	210	79	137	145
Lake Isabella	121	141	138	125	145	163	189	148	178	170	119	150	117	174	200
Weldon	107	127	123	137	158	176	202	161	191	182	132	163	102	160	186
Kernville	123	142	139	135	155	173	200	157	189	177	130	160	118	175	201
Frazier Park	62	118	137	43.5	64	82	108	140	133	108	123	153	181	238	199
Mettler	77.5	133	140	59	79	97	124	118	129	104	100	131	176	133	200
Maricopa	101	156	164	82	102	73	101	99	104	79	125	134	198	256	227
Taft	108	163	171	89	108	80	108	92	95	86	106	126	194	255	222
Buttonwillow	115	170	159	96	116	107	136	81	93	114	102	106	185	255	221
Shafter	114	153	150	96	116	127	156	89.5	112	133	73	97	174	245	212
Lost Hills	134	181	177	115	135	118	159	60	90	121	74	89	217	204	241
Wasco	123	162	159	108	128	135	156	81	111	142	67	89.5	184	255	221
McFarland	121	160	157	105	126	130	169	170	122	139	53	84	195	252	219
Delano	128	167	163	112	133	139	186	100	130	144	47	78	202	259	226
Arvin	83.5	123	119	80	100	118	145	121	151	126	100	131	157	215	182
McKittrick	127	175	171	108	129	95	124	76	80	101	109	112	210	267	234

Source: Google, 2017

¹ Not all population areas within Kern County are listed above; however, the list is generally representative of the population areas throughout the various geographic regions in Kern County (Valley Region, Desert Region, and Mountain Region).

² Not all areas outside of Kern County are identified as a potential destination for potential cannabis consumers. This list represents the general geographic population areas in surrounding counties that could potentially sell cannabis products. This list is not a guarantee that these areas will allow sales of cannabis products. Pursuant to Proposition 64, each jurisdiction (local agency) will provide individual regulations regarding whether to allow or ban commercial cannabis activities. In addition, the State will begin issuing licenses for commercial activities on January 2, 2018. It is unknown at this time how many and in which geographic areas licenses will be issued.

³ The distance, in miles, between the point of origin and Bakersfield and California City was based on travel using major freeways (interstates and state routes). While there may be other routes that can be taken that are shorter, or longer routes that are faster, to stay consistent in distances, only routes via major freeways were analyzed. The shortest distance was then chosen when more than one route using major freeways was available.

As mentioned in Tables 4.15-6 and 4.15-7, pursuant to Proposition 64, each local agency provides individual regulations regarding whether to allow or ban commercial cannabis activities, including sales. In addition, the State will begin issuing licenses for commercial activities on January 1, 2018; however, it is unknown at this time how many and in which geographic areas State licenses will be issued. Therefore, the distance a potential cannabis consumer would travel, under Option A, could be greater than the maximum distances shown in Tables 4.15-6 and 4.15-7, above. Thus, VMT could be increased above what is shown in Table 4.15-5.

As mentioned above, the VMT for Option A is approximately four times higher than the VMT for retail cannabis stores under Option B and could be higher given the uncertain nature of the locations of future retail cannabis stores. Therefore, given the potential distances to future retail cannabis stores outside of Kern County's jurisdiction (either to an incorporated city or outside the Kern County boundaries) and given the increase in VMT for Option A, it is anticipated that the circulation system would experience an increase in use. Thus, Option A of the proposed project would increase traffic thereby potentially conflicting with applicable plans and ordinances related to the performance of the circulation system. Impacts are considered significant in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 square feet (ft^2) of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft^2 of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community. Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance amendment).

Option B could result in some construction related activities for future cannabis related facilities. Construction of future cannabis related activities could occur anywhere within the appropriate zone districts (agricultural, commercial, and industrial) within unincorporated Kern County. This could result in a temporary increase in vehicles in order to deliver construction equipment to and from the future cannabis related facility as well as construction workers to and from the future cannabis related facility. In certain locations, these activities could result in a temporary decrease in LOS; however, Mitigation Measure MM 4.15-1 requires the project applicant to consult with Kern County Public Works to determine if a Construction Traffic Control Plan is required based on the timing and volume of larger vehicle rigs and the volume of traffic to address public safety and congestion management. With the implementation of mitigation measures, the proposed

project would not conflict with applicable plans and ordinance relations to the performance of the circulation system. Impacts are less than significant in this regard.

Option B could result in the closure or relocation of existing cannabis dispensaries over a one- to two-year timeframe, to allow for amortization of the business investment, could result in a change in traffic trips, ADT and LOS. As shown above in Table 4.15-3, the land use types would generate different ADT: 2,000,000 ft² of future cannabis indoor cultivation would generate 3,360 ADT, 150 acres of future cannabis outdoor cultivation would generate 1,013 ADT, 40 retail cannabis stores countywide would generate 21,760 ADT, and 500,000 ft² of future cannabis processing, packaging, and distribution facilities would generate 3,485 ADT. Retail cannabis stores have the highest peak-hour volume of trips, with the PM peak-hour for one retail cannabis store having 27 inbound trips and 28 outbound trips. Distributing these ADT onto the Kern County roadway network would result in less than 50 trips at any given intersection. The peak-hour trips for future cannabis cultivation (indoor and outdoor), processing and packaging, and distribution facilities would be significantly less. The broad distribution of these sites throughout unincorporated Kern County would not reach the established threshold for further LOS study for Option B. Option B of the proposed project would not conflict with applicable plans and ordinance relations to the performance of the circulation system. Impacts are less than significant in this regard.

The future cannabis indoor cultivation facility trip generation was based on facility sizes ranging from 10,000 ft² to 200,000 ft². However, it is conceivable that a larger facility might be constructed, as long as the countywide maximum of 2,000,000 ft² is not exceeded. The future cannabis processing, packaging, and distribution facility trip generation was based on facility sizes of 10,000 ft²; however, it is conceivable that a larger facility might be constructed, as long as the countywide maximum of 500,000 ft² is not exceeded. The trip generation shown in Tables 4.15-3 and 4.15-4, above, suggest that future cannabis indoor cultivation, processing and packaging, and distribution activities would require further study. Mitigation Measure MM 4.15-2 states that a traffic study/analysis would be required to identify heavy truck annual ADT generated by the proposed development on County-maintained roads for the purposes of determining the adequacy of the existing structural capacity and turning movements of the facility's related roadways and may require the applicant to provide structural improvements or road expansions. In addition, Mitigation Measure MM 4.15-2 states that future cannabis related development would be subject to the applicable adopted Transportation Impact Fee Programs, where applicable. With the implementation of mitigation measures, the proposed project would not conflict with applicable plans and ordinance relations to the performance of the circulation system. Impacts are less than significant in this regard.

However, an evaluation of the total VMT was made based on Option B. Option B VMT values shown in Table 4.15-5, *Vehicle Miles Traveled by Land Use Type*, were based on estimating the distance of each future cannabis related site within each of the land use types, to the other land use types and population centers within the project site. Option B would result in a total of 96,552 VMT.

Under Option B, it is anticipated that there would be 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores. This would distribute the retail cannabis store locations throughout the

County, thus, the potential distance traveled by potential cannabis consumers 21 years of age and older, would not be as large as the distances shown in Table 4.15-6, because each unincorporated community could have a maximum of two retail stores. Therefore, given the total population of potential eligible cannabis consumers, the potential distances to future retail cannabis stores within each unincorporated community, given the VMT for Option B would be four time less than option A, and given the proposed mitigation measures, it is anticipated that the circulation system would not experience an increase in use. Thus, Option B of the proposed project would not conflict with applicable plans and ordinance relations to the performance of the circulation system. Impacts are less than significant in this regard.

Certain future cannabis-related activities and facilities would require processing a Conditional Use Permit (CUP) and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing before the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to conflict with applicable plans and ordinance relations to the performance of the circulation system would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to the Performance of the Circulation System

1. Caltrans regulates the operations and maintenance of the State Highway System.
2. KCGP Circulation Element, Section 2.1, Introduction, Goal 5 promotes LOS D for all County roads.
3. KCGP Circulation Element, Section 2.3.3 Highway Plan, Goals 1, 2, and 5; Policy 1; and Implementation Measures A and B promote acceptable LOS and continuity of roadway alignments and services between regions.
4. KCGP Circulation Element, Section 2.3.4, Future Growth, Goals 1 and 3; Policies 1, 2, 4, 5, and 6; Implementation Measures A and C relate to providing adequate infrastructure and flexibility to allow for future growth within the County.
5. MBGP Circulation Element, Streets, Policy 36 and Implementation Measure 28 relate to maintaining LOS C on area roadways.

Mitigation Measures

Option A

There are no feasible mitigation measures at this time that would reduce the anticipated VMT and increased use of the circulation system.

Option B

- MM 4.15-1** If the project applicant's facility requires construction, and construction traffic is using an arterial or collector, or Caltrans route, for access to a construction site, then the project applicant shall consult with the Kern County Public Works Department – Roads Division to determine if a Construction Traffic Control Plan is required based on the timing and volume of larger vehicle rigs and the volume of traffic to address public safety and congestion management. If a Plan is required, the Applicant shall prepare and submit a Construction Traffic Control Plan to the Kern County Roads Department and to the appropriate California Department of Transportation (District 6 office) for approval. The Construction Traffic Control Plan must be prepared in accordance with both the California Department of Transportation Manual on Uniform Traffic Control Devices and Work Area Traffic Control Handbook and shall include, but not be limited to, the following issues:
- a. Timing of deliveries of heavy equipment and building materials.
 - a. Placing temporary signing, lighting, and traffic control devices as necessary to indicate the presence of heavy vehicles and construction traffic.
 - b. Determining the need for construction work hours and arrival/departure times outside peak traffic periods.
 - c. Ensuring access for emergency vehicles to the Project site.
 - d. Any temporary closure of travel lanes or disruptions to street segments and intersections during well development.
 - e. Maintaining access to adjacent property.
- MM 4.15-2** Cultivation, processing and packaging, and distribution facilities shall submit a traffic study/analysis to the Kern County Public Works –Road Division for review and approval. The study/analysis while identifying all trips shall focus on the heavy truck annual average daily trips (ADT) generated by the proposed development on County-maintained roads for the purposes of determining the adequacy of the existing structural capacity and turning movements of the facility's related roadways and may require the applicant to provide structural improvements or road expansions. All development is subject to the applicable adopted Transportation Impact Fee Programs. Improvements to State Highways shall be as required by the California Department of Transportation in consultation with the Kern County Public Works.

Level of Significance after Mitigation

Impacts related to Option A would be significant and unavoidable. Impacts regarding Option B would be less than significant.

Impact 4.15-2: Conflict with an Applicable Congestion Management Program, Including, but Not Limited to Level of Service Standards and Travel Demand Measures, or Other Standards Established by the County Congestion Management Agency or Adopted County Threshold for Designated Roads or Highways

The Circulation Element of the KCGP states that the minimum LOS for conformance with the KCGP is LOS D. The Circulation Element of the MBGP states that the LOS standard for the City of Bakersfield and the County is LOS C. The Kern COG Congestion Management Program (CMP) Action Element of the 2014 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) has established LOS E as the minimum system-wide LOS traffic standard for CMP corridors (Table 4.15-8).

Table 4.16-8. Kern COG Congestion Management Corridors	
Highways	
Interstate 5	SR-155
SR-14	SR-166
SR-33	SR-178
SR-43	SR-184
SR-46	SR-202
SR-58*	SR-204
SR-65	SR-223
SR-99	U.S. 395
SR-119	
Principal Arterials	
China Lake Boulevard – SR-178 to US-395	
Rosamond Boulevard – Tehachapi-Willow Springs Road to SR-14	
Seventh Standard Road – SR-99 to I-5	
Tehachapi-Willow Springs Road – SR-58 to Rosamond Boulevard	
Wheeler Ridge Road – Interstate 5 to SR-223	
Source: Kern COG, 2014 *The new Westside Parkway and Stockdale Highway will be added to the CMP system when the designation of SR-58 switches over to those routes, possibly by 2015.	

The 2014 RTP/SCS CMP Action Element identifies the following five locations with LOS F. These locations have been accepted at traffic level of LOS F instead of the LOS E standard established in the CMP (Kern COG, 2014).

- Seventh Standard Road – SR-99 to Coffee Road
- Portions of SR-119 at SR-99
- Portions of SR-178/24th Street – Oak Street to N Street
- Portions of SR-58 – SR-99 to Cottonwood Road
- Portions of SR-58/Rosedale Highway – SR-99 to Fruitvale Avenue

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one-to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A does not provide opportunities for business development. Option A would continue to allow individuals to cultivate up to six plants on private property. Option A would result in the closure of existing cannabis dispensaries over a one-to two-year timeframe, to allow for amortization of the business investment, which would result in existing and potential cannabis customers driving farther distances to retail cannabis stores.

Potential retail cannabis stores, for the purposes of this traffic analysis, were assumed to be located either within the incorporated areas of the City of Bakersfield or City of California City, which currently have ordinances allowing sales, or outside the Kern County boundaries. As shown above in Table 4.15-4, one retail cannabis store would generate 544 ADT. Given that there are 22 existing dispensaries that were opened before and any illegally opened after the moratorium, these 22 dispensaries would generate 11,968 ADT. The PM peak hours for a retail cannabis store has 27 inbound trips and 28 outbound trips. Because option A would result in the closure of the existing dispensaries, the 11,968 ADT would be redistributed throughout the County, as well as outside the County.

As discussed above, Table 4.15-5 shows that Option A would result in 343,264 VMT. This is based on the assumption that the demand for cannabis would not disappear and customers would travel to locations outside the unincorporated areas of Kern County, either to Bakersfield or California City, or to areas outside of Kern County. Distances traveled by potential cannabis customers could range from 15 miles to more than 267 miles as shown in Tables 4.15-6 and 4.15-7.

As mentioned above, pursuant to Proposition 64, each jurisdiction (local agency) provides individual regulations regarding whether to allow or ban commercial cannabis activities, including sales. In addition, the State will begin issuing licenses for commercial activities on January 1, 2018; however, it is unknown at this time how many and in which geographic areas these State licenses will be issued. Therefore, the distance a potential cannabis consumer would travel, under Option A, could be greater than the maximum distances shown in Tables 4.15-6 and 4.15-7. Thus, VMT could be greater than what is shown.

The ADT does not reach the established threshold for further LOS study and would not exceed Kern County, Kern COG, or Caltrans LOS thresholds. However, given the uncertain nature of the locations of future retail cannabis stores and given the high VMT, Option A would have the potential to conflict with established congestion management plans because the circulation system would experience an increase in use. Impacts are considered significant in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community. Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance amendment).

As shown above in Table 4.15-3, the land use types would generate different ADT: 2,000,000 ft² of future cannabis indoor cultivation would generate 3,360 ADT, 150 acres of future cannabis outdoor cultivation would generate 1,013 ADT, 40 retail cannabis stores countywide would generate 21,760 ADT, and 500,000 ft² of future cannabis processing, packaging, and distribution facilities would generate 3,485 ADT. Retail cannabis stores have the highest peak-hour volume of trips with the PM peak-hour for one retail cannabis stores have 27 inbound trips and 28 outbound trips. Distributing these ADT onto the Kern County roadway network would result in less than 50 trips at any given intersection. The peak-hour trips for future cannabis cultivation (indoor and outdoor), processing and packaging, and distribution facilities would be significantly less. The broad distribution of these sites throughout unincorporated Kern County would not reach the established threshold for further LOS study for Option B. In addition, Option B would distribute the retail cannabis store locations throughout the County, thus, the potential distance traveled by potential cannabis consumers 21 years of age and older, would not be as large as the distances shown in Table 4.15-6, because each unincorporated community could have a maximum of two retail stores. Therefore, given the total population of potential eligible cannabis consumers, the potential distances to future retail cannabis stores within each unincorporated community, given the VMT for Option B would be four time less than option A, and given the proposed mitigation measures, it is anticipated that the circulation system would not experience an increase in use. Thus, Option B traffic would not exceed Kern County, Kern COG, or Caltrans LOS thresholds and would be in compliance with the established congestion management plans. Impacts are less than significant in this regard.

Option B could result in some construction related activities for future cannabis related facilities. Construction of future cannabis related activities could occur anywhere within the appropriate zone districts (agricultural, commercial, and industrial) within unincorporated Kern County. This could result in a temporary increase in vehicles in order to deliver construction equipment to and from the future cannabis related facility as well as construction workers to and from the future cannabis related facility. In certain locations, these activities could increase a temporary decrease in LOS; however, Mitigation Measure MM 4.15-1 requires the project applicant to consult with Kern County Public Works to determine if a Construction Traffic Control Plan is required based on the timing and volume of larger vehicle rigs and the volume of traffic to address public safety and congestion management. With the implementation of mitigation measures, Option B traffic would not exceed Kern County, Kern COG, or Caltrans LOS thresholds and would be in compliance with the established congestion management plans. Impacts are less than significant in this regard.

The future cannabis indoor cultivation facility trip generation was based on facility sizes ranging from 10,000 ft² to 200,000 ft². However, it is conceivable that a larger facility might be constructed, as long as the countywide maximum of 2,000,000 ft² is not exceeded. The future cannabis processing, packaging, and distribution facility trip generation was based on facility sizes of 10,000 ft²; however, it is conceivable that a larger facility might be constructed, as long as the countywide maximum of 500,000 ft² is not exceeded. The trip generation shown in Tables 4.15-3 and 4.15-4, above, suggest that future cannabis indoor cultivation, processing and packaging, and distribution facilities would require further study. Mitigation Measure MM 4.15-2 states that a study/analysis would be required to identify heavy truck annual ADT generated by the proposed development on County-maintained roads for the purposes of determining the adequacy of the existing structural capacity and turning movements of the facility's related roadways and may require the applicant to provide structural improvements or road expansions. In addition, Mitigation Measure MM 4.15-2 states that future cannabis related development would be subject to the applicable adopted Transportation Impact Fee Programs, where applicable. With the implementation of mitigation measures, the proposed project would not exceed Kern County, Kern COG, or Caltrans LOS thresholds and would be in compliance with the established congestion management plans. Impacts are less than significant in this regard.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing before the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to exceeding Kern County, Kern COG, or Caltrans LOS thresholds and conflicting with the established congestion management plans would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to a Congestion Management Plan and LOS Standards

Refer to Impact 4.15-1, above, for a summary of applicable existing regulations and policies related to a CMP and LOS standards. In addition, the following are also applicable.

1. KCGP Circulation Element, Section 2.3.5, Expressway, Arterial, and Collector Plan Lines, Goal 1; Policies 1 and 2; and Implementation Measures A and B relate to maintaining adequate right-of-way expressway, arterial and collector roadways as development occurs within the County in order to maintain acceptable LOS.
2. KCGP Circulation Element, Section 2.3.10, Congestion Management Plan, Goals 1 and 2; Policies 1 and 2, and Implementation Measures A and B related to the preparing and implementing the CMP.
3. MBGP Circulation Element, Streets, Goals 3 and 5; Policies 12, 14, 15, 37, and 39; Implementation Measures 8, 25, 26, 29, and 33 related to minimizing roadway congestion and improving LOS.
4. MBGP Public Services and Facilities Element, General Utilities, Policy 5 related to minimizing traffic impacts.

Mitigation Measures

Option A

There are no feasible mitigation measures at this time that would reduce the anticipated VMT and increased used of the circulation systems.

Option B

Implement Mitigation Measures MM 4.15-1 and MM 4.15-2, as described above.

Level of Significance after Mitigation

Impacts related to Option A would be significant and unavoidable. Impacts regarding Option B would be less than significant.

Impact 4.15-3: Change in Air Traffic Patterns That Result in Substantial Safety Risks

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one-to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6

plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on commercial cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed, thus Option A would not result in an increase in people residing or working in an area within the Kern County ALUCP or within close proximity to a private airstrip or military zone. Option A would continue to allow individuals to cultivate up to six plants on private property similar to existing conditions. Therefore, Option A would not result in a safety hazard that would require changing air traffic patterns. Impacts would be less than significant in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community. Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance amendment).

As discussed in Section 4.8, *Hazards and Hazardous Materials*, there are more than 300 public, private, and military airports, balloonports, gliderports, heliports, and ultraflight flightparks within a 100-mile radius of the City of Bakersfield (AirNav, 2017a). The Kern County ALUCP identifies 18 airports within the project site: eight within the Valley Region; four within the Mountain Region; and four within the Desert Region.

The Kern County ALUCP specifies restrictions within designated zones surrounding airports to ensure that activities within those zones are compatible with the safe operation of the airport. If cannabis related activities are proposed in the vicinity of one of the airports identified in the Kern County ALUCP, some activities may not be compatible with the ALUCP and, therefore, would have a significant impact. The proposed project would create a hazard if the height of structures at the future cannabis related facility creates obstructions to air navigation by being poorly lit or marked or by obstructing the navigation system used by aircraft. It is not anticipated that future cannabis related facilities would exceed height limits of 200 feet, in airport influence zones. Lighting could exceed restrictions on lighting type, design, and placement in certain airport influence zones. Future cannabis related facilities would be required to comply with federal, State, and local regulations, the Kern County ALUCP, any specific plans applicable to the future facility, as well as the development standards provided above and further detailed within Appendix C of this EIR.

Additionally, Mitigation Measures MM 4.8-8 through MM 4.8-10 would further reduce the chance of Option B changing air traffic patterns for a public or private airport or airstrip; therefore, impacts would be less than significant levels.

Portions of the project site fall inside the boundaries of the Special Use Airspace of the Joint Service Restricted R-2508 Complex (Military Review Requirements). This complex is considered an extension of the airspace of the military installations within the complex, including Edwards AFB, China Lake NAWS, and Fort Irwin/National Training Center, and covers 20,000 square miles. As such, the project site falls within a special use military airspace where structure height shall not exceed the maximum allowable heights specified in Figure 19.08.160 of the Kern County Zoning Ordinance. Generally, areas within the eastern portion of the Mountain Region and the Desert Region would require structures to be no more than 100 feet in height. Areas within the western portion of the Mountain Region and with the Valley Region would require structures to be no more than 200 feet in height in some areas, while other areas would require no review. Mitigation Measures MM 4.8-10 would reduce the chance of Option B changing air traffic patterns; therefore, impacts would be less than significant levels.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing before the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to a change in air traffic patterns that result in a substantial safety risk would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Air Traffic Patterns and Safety

1. FAA regulates objects affecting navigable airspace for regional, public, private, and military airports.
2. Kern County ALUCP establishes procedures and criteria to promote safety and compatibility between airports and surrounding land uses.
3. KCGP Circulation Element, Section 2.5.2, Airport Land Use Compatibility, Goal 1; Policies 1 and 2; and Implementation Measures A and E related to ensuring land use compatibility between airports and development.
4. MBGP Circulation Element, Airports, Policies 4 and 5; Implementation Measure 4 related to development near airports.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

Implement Mitigation Measure MM 4.8-8 through MM 4.8-10, as described in Section 4.8, *Hazards and Hazardous Materials*.

Level of Significance after Mitigation

Impacts related to Option A would be less than significant. Impacts regarding Option B would be less than significant.

Impact 4.15-4: Substantially Increase Hazards Due to a Design Feature or Incompatible Uses

This EIR discusses the physical impact on the environment as it relates to the proposed project. It does not analyze the safety impacts of cannabis use as a result of the passing of Proposition 64. The use of cannabis products and its effects on people, the changes in the number of people who drive under the influence, and its effects on changes in the number of traffic related accidents or deaths is outside of the scope of this EIR, as these topics are not related to the physical impact on the environment from the implementation of the proposed project.

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one-to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A does not provide opportunities for business development. Option A does not provide opportunities for commercial cannabis activities and thus would not result in an increase in the need of land for the cultivation, distribution and sale of cannabis. Therefore, Option A would not increase hazards due to design features or a conflict with existing zoning that results in incompatible land uses. No impact would occur in this regard.

As shown above in Table 4.15-4, one retail cannabis store would generate 544 ADT. Because Option A would result in the closure of these dispensaries, the 11,968 ADT would be redistributed throughout the County. Distributing the trips with the ADT onto the Kern County roadway network would result in less than 50 trips at any given intersection. As discussed in the *Traffic Impact Study* provided in Appendix J of this EIR, this low number of ADT generated for retail cannabis stores would not create an identifiable traffic safety hazard. Therefore, Option A would not increase hazards due to design features or incompatible uses. Impacts would be less than significant in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community. Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance amendment).

Option B would not result in the design of roadways or intersections. Many of the future cannabis related facilities would be placed within existing structures. Future cannabis indoor cultivation facilities would be located within greenhouses or warehouses within the appropriate zone district. Future retail cannabis stores with or without mobile delivery would likely be located within existing structures within the appropriate zone district; however, as discussed in Chapter 3, *Project Description*, all retail cannabis stores would require the completion of a CUP processing and additional CEQA review.

Option B could result in some construction related activities for future cannabis related facilities. Construction of future cannabis related activities could occur anywhere within the appropriate zone districts (agricultural, commercial, and industrial) within unincorporated Kern County. Future cannabis related facility construction could require the delivery of heavy construction equipment to the future facility location. Delivery of heavy equipment would use area roadways. The use of oversized vehicles during construction can create a hazard to the public by limiting motorist views on roadways and by the obstruction of space. In certain locations within the County, these activities could increase traffic hazards; however, Mitigation Measure MM 4.15-1 requires the project applicant to consult with Kern County Public Works to determine if a Construction Traffic Control Plan is required based on the timing and volume of larger vehicle rigs and the volume of traffic to address public safety and congestion management. With the implementation of mitigation measures, the proposed project would not increase hazards due to design features or incompatible uses. Impacts are less than significant in this regard.

Similar to future construction activities, future cannabis cultivation activities would require the use of general farm equipment and delivery of equipment and supplies. Because future cannabis outdoor cultivation is allowed only in land zoned for agricultural uses, and because future indoor cultivation would be allowed in agricultural and industrial zones. These zone districts currently experience large vehicles, delivery trucks, farm equipment, and other traffic trips and vehicle types related to agriculture and industrial, which would be similar to the needs of the proposed project. Therefore, Option B would not result in hazards associated with incompatible land uses.

Option B could result in the closure or relocation of existing cannabis dispensaries over a one- to two-year timeframe, to allow for amortization of the business investment, could result in a change in traffic trips, ADT and LOS. As shown above in Tables 4.15-3 and 4.15-4, distributing the ADT for retail cannabis stores under Option B onto the Kern County roadway network would result in less than 50 trips at any given intersection. The peak-hour trips for future cannabis cultivation (indoor and outdoor), processing and packaging, and distribution facilities would be significantly less. The broad distribution of these sites throughout unincorporated Kern County would not reach the established threshold for further LOS study for Option B. However, as required in Mitigation Measure MM 4.15-2, for any future cannabis indoor cultivation, processing and packaging, and distribution a traffic study/analysis would be required to identify heavy truck annual ADT generated by the proposed development on County-maintained roads for the purposes of determining the adequacy of the existing structural capacity and turning movements of the facility's related roadways and may require the applicant to provide structural improvements or road expansions. In addition, Mitigation Measure MM 4.15-2 states that future cannabis related development would be subject to the applicable adopted Transportation Impact Fee Programs, where applicable. With the implementation of mitigation measures, Option B of the proposed project would not increase hazards due to design features or incompatible land uses. Impacts are less than significant in this regard.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing before the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to increased hazards due to design features or incompatible uses would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Design Features and Incompatible Uses

Refer to Impacts 4.15-1 through 4.15-3, above, for a summary of applicable existing regulations and policies related to a design features and incompatible uses. In addition, the following are also applicable.

1. KCGP Land Use Open Space, and Conservation element, Section 1.10.8, Smart Growth, Policy 49 and Implementation Measure CC promote the efficient use of land and encourage multi-modal movements and adequate infrastructure.
2. KCGP Circulation Element, Section 2.3.3 Highway Plan, Goal 3; Policies 2, and 3; and Implementation Measure C promote standard roadway design features.
3. MBGP Land Use Element Policies 34 and 38 related to traffic impacts on surrounding land uses.
4. MBGP Circulation Element, Streets, Goal 7; Policies 6, 7, and 16; and Implementation Measures 7 and 14 related to roadway design features and compatible land uses.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

Implement Mitigation Measures MM 4.15-1 and MM 4.15-2, as described above.

Level of Significance after Mitigation

Impacts related to Option A would be less than significant. Impacts regarding Option B would be less than significant.

Impact 4.15-5: Result in Inadequate Emergency Access

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one-to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on commercial cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A does not provide opportunities for business development. Option A would continue to allow individuals to cultivate up to six plants on private property similar to existing conditions. Therefore, Option A would not impair emergency access to properties within unincorporated Kern County. No impact would occur in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 square feet (ft^2) of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft^2 of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community. Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance amendment).

The future cannabis related activities and facilities are unlikely to result in a significant impact to emergency access within the project area. While future cannabis related activities may include facilities along or equipment, all facilities would be required to comply with federal, State, and County building codes and access requirements, the Kern County Code of Ordinances, the KCGP, MBGP, applicable specific plans, and the proposed project's development standards. Compliance with applicable laws and regulation would ensure that activities would not interfere with emergency access. In addition, Mitigation Measure MM 4.15-1 includes assurance that access for emergency vehicles is available during any future cannabis related facility construction. The potential impact would be less than significant.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing before the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to emergency access would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Emergency Access

Refer to Impacts 4.15-1 through 4.15-4, above, for a summary of applicable existing regulations and policies related to an emergency access. In addition, the following are also applicable.

1. KCGP Safety Element Section 4.6, Wildland and Urban Fire, Policy 4 and Section 4.7, Kern County Emergency Plan, Implementation Measure C promote sufficient emergency vehicle access for new development.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

Implement Mitigation Measure MM 4.15-1, as described above.

Level of Significance after Mitigation

No impacts related to Option A would occur. Impacts regarding Option B would be less than significant.

Impact 4.15-6: Conflict with Adopted Policies, Plans, or Programs Supporting Alternative Transportation

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one-to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A does not provide opportunities for business development. Option A would continue to allow individuals to cultivate up to six plants on private property. Option A would not result in development activities that would conflict with an adopted plan or policy supporting alternative modes of transportation. Therefore, Option A would not conflict with adopted policies, plans, or programs supporting alternative transportation. No impacts would occur in this regard.

Option A would result in the closure of existing cannabis dispensaries over a one- to two-year timeframe, to allow for amortization of the business investment, which would result in existing and potential cannabis customers driving far distances to retail cannabis stores located either within the incorporated areas of the City of Bakersfield or City of California City, which currently have ordinances allowing sales, or to retail cannabis stores outside the Kern County boundaries. As shown above in Table 4.15-4, one retail cannabis store

would generate 544 ADT. Given that there are 22 existing dispensaries that were opened before and any illegally opened after the moratorium, these 22 dispensaries would generate 11,968 ADT. The PM peak hours for a retail cannabis stores have 27 inbound trips and 28 outbound trips. Distributing the trips with the ADT onto the Kern County roadway network would result in less than 50 trips at any given intersection, thus, the trip increase does not reach the established threshold for further LOS study, thus Option A would not impact roadways used by alternative transportation. Therefore, Option A would be in compliance with policies, plans, and programs supporting alternative transportation. Impacts are less than significant in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 square feet (ft^2) of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft^2 of processing, packaging, or distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community. Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance amendment).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on cannabis-related activities. Option B would provide clarification for the appropriate zone classifications where: (1) commercial cannabis cultivation, processing/packaging, and distribution facilities would be an allowable use when full compliance with development standards are achieved; and (2) where retail cannabis stores for either medical and/or adult use cannabis sales would be allowed under an approved CUP. Future cannabis related facilities would be required to be developed per the developments standards within specific zoning districts. Therefore, the proposed project would not result in development activities that would conflict with an adopted plan or policy supporting alternative modes of transportation. Therefore, Option B would not conflict with adopted policies, plans, or programs supporting alternative transportation. Impacts would be less than significant in this regard.

As shown above in Table 4.15-3, the land use types would generate different ADT: 2,000,000 ft^2 of future cannabis indoor cultivation would generate 3,360 ADT, 150 acres of future cannabis outdoor cultivation would generate 1,013 ADT, 40 retail cannabis stores countywide would generate 21,760 ADT, and 500,000 ft^2 of future cannabis processing, packaging, and distribution facilities would generate 3,485 ADT. Retail cannabis stores have the highest peak-hour volume of trips with the PM peak-hour for one retail cannabis stores have 27 inbound trips and 28 outbound trips. Distributing these ADT onto the Kern County

roadway network would result in less than 50 trips at any given intersection. The peak-hour trips for future cannabis cultivation (indoor and outdoor), processing and packaging, and distribution facilities would be significantly less. The broad distribution of these sites throughout unincorporated Kern County would not reach the established threshold for further LOS study, thus Option B would not impact roadways used by alternative transportation. Therefore, Option B would be in compliance with policies, plans, and programs supporting alternative transportation. Impacts are less than significant in this regard.

Option B could result in some construction related activities for future cannabis related facilities. Construction of future cannabis related activities could occur anywhere within the appropriate zone districts (agricultural, commercial, and industrial) within unincorporated Kern County. This could result in a temporary increase in vehicles in order to deliver construction equipment to and from the future cannabis related facility as well as construction workers to and from the future cannabis related facility. In certain locations, these activities could increase a temporary decrease in LOS; however, Mitigation Measure MM 4.15-1 requires the project applicant to consult with Kern County Public Works to determine if a Construction Traffic Control Plan is required based on the timing and volume of larger vehicle rigs and the volume of traffic to address public safety and congestion management. With the implementation of mitigation measures, Option B traffic would not impact roadways used by alternative transportation and would be in compliance with policies, plans, and programs supporting alternative transportation. Impacts are less than significant in this regard.

Mitigation Measure MM 4.15-2 states that for any future cannabis indoor cultivation, processing and packaging, or distribution facility, a traffic study/analysis would be required to identify heavy truck annual ADT generated by the proposed development on County-maintained roads for the purposes of determining the adequacy of the existing structural capacity and turning movements of the facility's related roadways and may require the applicant to provide structural improvements or road expansions. In addition, Mitigation Measure MM 4.15-2 states that future cannabis related development would be subject to the applicable adopted Transportation Impact Fee Programs, where applicable. With the implementation of mitigation measures, the proposed project would not impact roadways used by alternative transportation and would be in compliance with policies, plans, and programs supporting alternative transportation. Impacts are less than significant in this regard.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing before the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to conflicting with policies, plans, and programs supporting alternative transportation would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Alternative Transportation

Refer to Impacts 4.15-1 through 4.15-5, above, for a summary of applicable existing regulations and policies related to alternative transportation.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

Implement Mitigation Measures MM 4.15-1 and MM 4.15-2, as described above.

Level of Significance after Mitigation

Impacts related to Option A would be less than significant. Impacts regarding Option B would be less than significant.

Cumulative Setting Impacts and Mitigation Measures

Cumulative Setting

The geographic scope for cumulative impacts on transportation and traffic includes both the KCGP and the regional growth plan and projections included in the Kern COG Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) approved in 2014, as defined in Section 3.7, *Cumulative Projects*. This is a large enough area to encompass any effects of the proposed project on transportation and traffic that may combine with similar effects caused by other projects, and provides a reasonable context wherein cumulative actions could affect these resources. The cumulative analyses consider whether the proposed project, Option A or Option B, in combination with the past, present, and reasonably foreseeable projects, could cumulatively affect transportation and traffic.

Cumulative Impacts and Mitigation Measures

Impact 4.15-7: Contribute to Cumulative Transportation and Traffic Impacts

Proposed Project Option A

Option A of the proposed project would ban all commercial medical and adult use cannabis-related activities other than what is allowed for personal use under Proposition 64. Option A would not result in an increase in residents or employees within the County.

As discussed above, trip increases under Option A would not reach the established threshold for further LOS study. Option A would result in 343,264 VMT and would result in travel distances ranging from approximately 15 miles to more than 267 miles. Option A would potentially conflict with applicable plans and ordinance relations to the performance of the circulation system (Impact 4.15-1) and would potentially conflict with an applicable congestion management plan (Impact 4.15-2). The total population of unincorporated Kern County that is 21 years or older is estimated to be 216,145 people in 2018 and is anticipated

to increase to 247,957 people by the year 2027 (refer to Appendix K of this EIR). In addition, the incorporated areas of Kern County are estimated to have a population of people 21 years or older of 391,416 people in 2018 and is anticipated to increase to 449,473 people by the year 2027 (refer to Appendix K of this EIR). It is unknown at this time what percentage of the population estimates would be potential cannabis consumers; however, the number of potential cannabis consumers would increase from existing numbers because the uses would now include both medical and adult-use. Based on the closing of existing medical cannabis dispensaries, it is anticipated that the cumulative VMT would increase above what is shown in Tables 4.15-3, 4.15-4, and 4.15-5, because of the population increase of potential consumers, as well as the uncertainty of which jurisdictions would allow sales of cannabis and cannabis products. Therefore, Option A would contribute to cumulative impacts when combined with past, present, or reasonably foreseeable projects. Impacts are considered significant in this regard.

Option A would not change air traffic patterns (Impact 4.15-3), would not increase hazards due to design features or incompatible uses (Impact 4.15-4), would not impact emergency access (Impact 4.15-5), would not conflict with policies, plans, and programs supporting alternative transportation (Impact 4.15-6). Therefore, Option A would not contribute to cumulative impacts when combined with past, present, or reasonably foreseeable projects. Cumulative impacts would be less than significant in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B). The County currently allows medical cannabis dispensaries.

As discussed above, trip increases under Option B would not reach the established threshold for further LOS study. Option B would result in a total of 96,552 VMT. In certain locations, future cannabis facility construction activities could result in a temporary decrease in LOS; however, Mitigation Measure MM 4.15-1 requires the project applicant to consult with Kern County Public Works to determine if a Construction Traffic Control Plan is required based on the timing and volume of larger vehicle rigs and the volume of traffic to address public safety and congestion management. The trip generation shown in Tables 4.15-3 and 4.15-4, above, suggest that future cannabis indoor cultivation, processing and packaging, and distribution activities would require further study. Mitigation Measure MM 4.15-2 states that any future cannabis indoor cultivation, processing and packaging, or distribution facility would require a traffic study/analysis to identify heavy truck annual ADT trips generated by the proposed development on County-maintained roads for the purposes of determining the adequacy of the existing structural capacity and turning movements of the facility's related roadways and may require the applicant to provide structural improvements or road expansions.

With respect to conflicting with applicable plans and ordinance relations to the performance of the circulation system (Impact 4.15-1) and conflicting with an applicable congestion management plan (Impact 4.15-2) at the cumulative level, the total population of unincorporated Kern County that is 21 years or older is estimated to be 216,145 people in 2018 and is anticipated to increase to 247,957 people by the year 2027 (refer to Appendix K of this EIR). In addition, the incorporated areas of Kern County are estimated to have a population of people 21 years or older of 391,416 people in 2018 and is anticipated to increase to 449,473 people by the year 2027 (refer to Appendix K of this EIR). It is unknown at this time what percentage of the population estimates would be potential cannabis consumers; however, the number of potential cannabis consumers would increase from existing numbers because the uses would now include both medical and adult-use. Based on the closing of existing medical cannabis dispensaries, it is anticipated that the cumulative VMT would increase above what is shown in Tables 4.15-3, 4.15-4, and 4.15-5, because of the population increase of potential consumers, as well as the uncertainty of which jurisdictions would allow sales of cannabis and cannabis products. Therefore, Option B would contribute to cumulative impacts when combined with past, present, or reasonably foreseeable projects. Cumulative impacts are considered significant in this regard.

With the implementation of mitigation measures, Option B would not change air traffic patterns (Impact 4.15-3), would not increase hazards due to design features or incompatible uses (Impact 4.15-4), would not impact emergency access (Impact 4.15-5), and would not conflict with policies, plans, and programs supporting alternative transportation (Impact 4.15-6). Therefore, Option B would not contribute to cumulative impacts when combined with past, present, or reasonably foreseeable projects. Cumulative impacts would be less than significant in this regard.

Mitigation Measures

Option A

There are no feasible mitigation measures at this time that would reduce the anticipated VMT and increased roadway use pursuant to Option A.

Option B

Implement Mitigation Measures MM 4.15-1 and MM 4.15-2, as described above, and Mitigation Measure MM 4.8-8 through MM 4.8-10, as described in Section 4.8, *Hazards and Hazardous Materials*.

Level of Significance after Mitigation

Option A cumulative impacts associated with a change in air traffic patterns, increase in hazards due to design features and incompatible land uses, inadequate emergency access, and conflict adopted policies, plans, and programs supporting alternative transportation would be less than significant. Option A cumulative impacts associated with conflicting with applicable plans and ordinances related to the performance of the circulation system and applicable congestion management plans would be significant and unavoidable.

Option B cumulative impacts associated with a change in air traffic patterns, increase in hazards due to design features and incompatible land uses, inadequate emergency access, and

conflict adopted policies, plans, and programs supporting alternative transportation would be less than significant. Option B cumulative impacts associated with conflicting with applicable plans and ordinances related to the performance of the circulation system and applicable congestion management plans would be significant and unavoidable.

Section 4.16

Utilities and Service Systems

Section 4.16

Utilities and Service Systems

4.16.1 Introduction

This section of the Draft Environmental Impact Report (EIR) addresses the potential impacts of the Kern County Cannabis Land Use Ordinance Project (proposed project) on certain utilities and services: water, electricity, natural gas, solid waste and wastewater, and stormwater. It describes the existing utilities and service systems within Kern County (County), the regulatory setting, the potential impacts resulting from implementing the project, and feasible mitigation measures to reduce impacts. A description of the environmental setting (affected environment) is presented below in Section 4.16.2, *Environmental Setting*, and the regulatory setting is presented in Section 4.16.3, *Regulatory Setting*, while the project impacts and associated mitigation measures are analyzed in Section 4.16.4, *Impacts and Mitigation Measures*.

4.16.2 Environmental Setting

Kern County is California's third largest county, encompassing 8,202 square miles at the southern end of the Central Valley. The County contains 11 incorporated cities. Bakersfield is the largest city by population and serves as the County seat. The unincorporated area is 6,156 square miles. Kern County has a Valley Region (San Joaquin Valley), a Mountain Region (Tehachapi Mountains, Sierra Nevada Mountains, San Emigdio Mountains, Coast Ranges) and a Desert Region (Mojave Desert, Indian Wells Valley, Antelope Valley).

Government agencies, by definition, provide various services to the public. The range of services is based on the purpose of the individual agency or department. Agencies providing services include each city within the County, State agencies, federal government, and numerous special purpose districts/agencies. The County is in the jurisdiction of the two Regional Water Quality Control Boards (RWQCB): Central Valley Region and Lahontan Region. A brief description of the major public service utilities is provided below.

Water Supply – County Wide

State Water Project (SWP)

The SWP is the largest State-built, multi-purpose water project in the United States and includes 34 storage facilities, reservoirs, and lakes, 24 pumping and generating plants, 5 hydroelectric power plants, and approximately 701 miles of aqueducts and pipelines (Department of Water Resources [DWR], 2017a). The main transport structure of the SWP is the California Aqueduct, which conveys water from Northern California to Southern California. SWP facilities and deliveries are maintained and operated by the California Department of Water Resources (DWR). SWP water supplies are allocated to 29 system contractors under the terms of water supply contracts with the DWR. The maximum amount of water per year that an SWP contractor may request is listed in Table A of each contract with the DWR and is referred to as the contractor's "Table A amount." The amount of water delivered to SWP system participants each year may vary from the Table A allocations depending on annual precipitation, overall statewide demand, potential regulatory issues, potential climate change effects and other factors.

SWP contractors are periodically able to access other water supplies, including “Article 21” water (water that is excess to the current needs of SWP contractors and that is available under Article 21 of the DWR contracts), turnback pool water (unused Table A water that is “turned back” to the DWR and available to other contractors), and DWR dry year purchases. The availability of these potential deliveries is uncertain and dependent on hydrological conditions and regulatory constraints. Article 21 water may be supplied when Delta outflow requirements for environmental purposes have been met, SWP storage south of the Delta is full, and there is available aqueduct conveyance capacity. However, recent regulatory and judicial decisions affecting Delta flow requirements to protect certain fish species are anticipated to reduce the availability of Article 21 water under future conditions.

The turnback pool program allows contractors to sell (“turn back”) excess Table A supplies to other contractors. In general, as urban contractor demands have increased, the amount of water turned back and available for purchase under this program has diminished over time.

The DWR has the authority to implement dry year water purchase programs in critically dry years. Water is purchased by DWR, where available, and resold to contractors that may desire additional supplies. The amount, availability, and cost of water delivered under a dry year water purchase program is subject to multiple uncertainties and cannot be reliably predicted in any given year.

The Kern County Water Agency (KCWA) and the Antelope Valley-East Kern Water Agency (AVEK) are the SWP contractors for the project area. KCWA allocates SWP water under contracts with 13 local water districts, called member units, and Improvement District No. 4 and has a Table A amount of 982,730 AFY (DWR, 2014). AVEK covers approximately 2,400 square miles and includes northern Los Angeles, eastern Kern, and a portion of Ventura counties and has a Table A amount of 144,844 AFY through December 31, 2015 (DWR, 2013).

Water Supply – Valley Region

Central Valley Project (CVP) Supplies

The Central Valley Project (CVP) is a multi-purpose set of federal facilities operated by the U.S. Bureau of Reclamation (USBR) that extend from the Cascade Mountains north of Redding to the Tehachapi Mountains south of Bakersfield and serves the Central Valley as well as major urban centers in the San Francisco Bay Area (U.S. Bureau of Reclamation [USBR], 2017a). The CVP includes 20 dams and reservoirs, 11 power plants, and 500 miles of major canals, as well as conduits, tunnels, and related facilities (USBR, 2017). The CVP has long-term contracts with more than 250 contractors in 29 counties (DWR, 2017b).

The CVP annually delivers approximately 7,000,000 AFY for agricultural, urban, and wildlife uses, which is broken out as follows (USBR, 2017a):

- Approximately 5,000,000 AFY is provided to agricultural uses;
- Approximately 600,000 AFY is provided for municipal and industrial uses;
- Approximately 800,000 AFY is dedicated to fish and wildlife and their habitat; and
- Approximately 410,000 AFY is provided to State and federal wildlife refuges and wetlands, pursuant to the Central Valley Project Improvement Act (CVPIA).

The CVP long-term contractors in the project area include Arvin-Edison Water Storage District (WSD), Delano-Earlimart Irrigation District (ID), Kern-Tulare WD, Shafter-Wasco ID, and Southern

San Joaquin WSD. Water districts that are not contractors with the USBR in the project Area occasionally exchange other supplies for CVP water, including KCWA, Kern Delta WD, North Kern WSD, Rosedale-Rio Bravo WSD, and Semitropic WSD.

The reliability of future CVP deliveries to the Valley Region of the project area is affected by hydrological variability and a 2006 settlement of an 18-year lawsuit involving the U.S. Department of the Interior and Commerce Department, the Natural Resources Defense Council, and the Friant Water Users Authority (now Friant Water Authority) regarding fish habitat in the San Joaquin River below Friant Dam. The settlement and related federal legislation in 2009 require that significant amounts of water previously available to CVP Friant contractors, including Kern County, must, instead, be discharged to the river channel in an effort to create salmon and other fish habitats. A series of interim flows to the river were initiated in 2009, and more permanent “restoration” flows began in 2014. Restoration flow releases will have a priority over existing contracts. In certain emergency drought conditions, restoration flows may be reduced for other purposes.

State Water Project (SWP) – Cross Valley Canal

The Cross Valley Canal (CVC) was constructed in 1975 to move SWP water from the California Aqueduct to urban Bakersfield. The CVC connects to the California Aqueduct, local banking projects and districts, the Agency’s Henry C. Garnett Water Purification Plant and the Friant-Kern Canal. Seventeen (17) miles of the CVC’s 21.5-mile length are concrete-lined to minimize water loss, while the remaining 4.5 miles are unlined to facilitate ongoing percolation (recharge). The CVC Expansion Project began in 2005 to expand the ability to accept imported water. The expansion increases the CVC’s capacity and water supply reliability by approximately 54 percent, allowing 1,422 cubic feet per second (cfs) of flow. The delivered water is used for agricultural, municipal, and water recharge purposes (KCWA, 2017).

Water Districts

Water districts within the County provide a vehicle for procuring and distributing water to both agricultural and domestic needs. State laws permits the creation of California Water Districts, with boards and policies established by vote of land owners in the district, and County Water Districts where residents of the district vote to determine board members and policies. Water districts serving the general Valley Region include:

- Berrenda Mesa Water District (Western Kern County)
- Cawelo Water District (North Central)
- Devils Den Water District (Northwest)
- Kern County Water Agency Improvement District # 4
- Kern Delta Water District (South Central)
- Kern-Tulare Water District (North Central)
- Lost Hills Water District (Lost Hills; Northwest)
- North of the River Water District
- Rag Gulch Water District (Delano; North Central)
- Buttonwillow County Water District
- Greenfield County Water District
- Mettler County Water District
- Arvin-Edison Water Storage District
- Buena Vista Water Storage District
- North Kern Water Storage District

- Rosedale – Rio Bravo Water Storage District
- Semitropic Water Storage District-Banking Project (Wasco)
- Wheeler Ridge-Maricopa Water Storage District

Kern River

The Kern River flows for approximately 155 miles from the Sierra Nevada Mountains near Mount Whitney to the Tulare Lake basin in the San Joaquin Valley west of Bakersfield. The Kern River flows are regulated by the Lake Isabella dam operated by the U.S. Army Corps of Engineers (USACE) and the Kern River Watermaster. Smaller streams, most of which are ephemeral, flow during periods of rain or for brief periods in the spring if they are fed by snowmelt and generally percolate into valley floor aquifers or, in limited instances, are used for agricultural irrigation.

During periods of above-normal precipitation, flows within the Kern River and other streams can exceed the needs of existing users. Under such conditions, certain water districts and other entities, including the Kern Water Bank and Pioneer groundwater storage projects, have captured and used Kern River high-flow water.

Improvement District No. 4

In 1971, the KCWA Board of Directors formed Improvement District No. 4 (ID4) to provide a supplemental water supply for the urban Bakersfield area through the importation of water from the SWP. As a participant in the CVC, ID4 utilizes the 21.5-mile facility to move water into ID4 and to adjacent groundwater banking areas. Water delivered to ID4 is either directly recharged to replenish the underlying groundwater aquifer or delivered to the Henry C. Garnett Water Purification Plant where it is treated and then delivered to retail water purveyors. These retail purveyors include the California Water Service Company, the City of Bakersfield, East Niles Community Services District, and North of the River Municipal Water District which wholesales water to Oildale Mutual Water Company. In response to declining groundwater quality and to meet additional demands in the growing Bakersfield area, KCWA began developing the Treated Water Capacity Expansion Project (TWCEP) expanded the existing facilities and constructed new pump stations and pipelines to deliver treated water to the north, northwest and east portions of metropolitan Bakersfield. The TWCEP also included construction of a large-scale power project and electrical substation (KCWA, 2017).

Water Banking Rights

The County has extensive groundwater banking operations. Between 1977 and 2005, Kern County invested more than \$300 million to build its groundwater banking infrastructure throughout the County (Kern County Water Agency [KCWA], 2017). A groundwater bank allows participating water districts to percolate or inject water obtained during relatively wet hydrological periods into an aquifer for subsequent retrieval, typically during drier periods. Water bank supplies generally complement other sources, such as SWP deliveries, that may be affected by seasonal, regulatory or other operational variability. Groundwater banking is so important to Kern County that nearly all groundwater districts have banking projects within their district's boundaries, and those districts that do not overlie the groundwater basin participate in banking projects. Kern County groundwater banking includes:

- Arvin-Edison Water Storage District Water Management Program
- Berrenda Mesa Property Joint Water Banking Project

- Buena Vista Water Storage District Water Management Program
- Buena Vista Water Storage District/West Kern Water District Water Supply Project
- Cawelo Water District/Dudley Ridge Water District Conjunctive Use Program
- Cawelo Water District's Modified Famoso Water Banking Project
- City of Bakersfield 2800 Acre Groundwater Recharge Facility
- Kern Delta Water District's Groundwater Banking Program
- Kern Water Bank
- North Kern Water District Groundwater Storage Project
- Pioneer Groundwater Recharge and Recovery Project
- Rosedale-Rio Bravo Water Storage District and Improvement District No. 4 Joint Use Groundwater Recovery Project
- Rosedale-Rio Bravo Water Storage District's Groundwater Banking Program
- Semitropic Groundwater Banking Project
- West Kern Water District's Groundwater Banking Program

Recharge and Recycled Water Supplies

Groundwater recharge occurs from stream recharge, deep percolation of precipitation, treated sewage effluent, septic systems, and applied agricultural and municipal water. Deep percolation from stream runoff is the primary source of recharge. Due to arid conditions, groundwater recharge by precipitation is sporadic. Most recharge from precipitation occurs near the mountain fronts and from long duration storms.

California Code of Regulation, Title 22, governs the discharge of water effluents for reuse and groundwater recharge. Secondary effluents are generally land-applied to forage crops on non-consumptive grasses. Land application permits must demonstrate that there is no percolation to groundwater.

Groundwater Basins

As discussed in Section 4.9, *Hydrology and Water Quality*, the Valley Region of the project area is within the Tulare Lake Hydrologic Basin, within the San Joaquin Valley Groundwater Basin, specifically the Kern County Subbasin (DWR Groundwater Subbasin 5-22.14). In January 2016, the Kern County Subbasin, was identified by DWR as subject to critical conditions of overdraft. The Kern County Subbasin was also subject to major boundary modifications to address jurisdictional, geologic, hydrologic, and other considerations (DWR, 2016). This resulted in reducing the size of the Kern County Subbasin (5-022.14) and adding the White Wolf Subbasin (DWR Groundwater Subbasin 5-022.18).

Historically, California law has not required that water well operators in the State, including those in Kern County, to report the amount of groundwater extracted for agricultural, municipal and industrial, or other uses, except when aquifers are subject to a court-imposed adjudication.

With an average of less than six inches of rainfall per year, Kern County is a semi-arid region. Surface water supplies are not enough to meet the needs of citizens, businesses and farms in the area, so groundwater plays a large role in how water is managed in Kern County. The KCWA monitors groundwater levels and quality throughout Kern County, especially in the areas surrounding

groundwater banking projects. The KCWA collects, interprets and distributes groundwater data for the Southern San Joaquin Valley and Indian Wells Valley groundwater basins. This information is used for the operation of groundwater banking and recharge programs in the preparation of a variety of reports, which include the KCWA's Improvement District No. 4 Report on Water Conditions, and the Kern Fan Area Operations and Monitoring Program report. Approximately 800 production wells and 200 monitoring wells are measured for groundwater levels on a semiannual basis within the Kern sub-basin of the San Joaquin Valley groundwater basin, and approximately 350 production and monitoring wells are measured monthly within the Kern River Alluvial Fan area.

Water Supply – Mountain Region

Water Districts

As discussed above, water districts within the County provide a vehicle for procuring and distributing water to both agricultural and domestic needs. State laws permits the creation of California Water Districts, with boards and policies established by vote of land owners in the district, and County Water Districts where residents of the district vote to determine board members and policies. Water districts serving the general Mountain Region include:

- Henry Miller Water District (Southwest)
- Keene Water District (Keene; Tehachapi Foothills)
- Olcese Water District (East of Bakersfield)
- Quail Valley Water District (East of Tehachapi)
- Tejon-Castaic Water District (Lebec; South Central)
- Lebec County Water District
- Belridge Water Storage District
- Tehachapi-Cummings County Water District
- West Kern County Water District
- West Kern County-Buena Vista Spreading Area

Groundwater Basins

Groundwater is the primary source of water supply in the Mountain Region. The Mountain Region spans three hydrologic units: Central Coast, Tulare Lake, and South Lahontan. The Central Coast Hydrologic Region has two groundwater basins that extend into Kern County: Carrizo Plain (DWR Groundwater Basin 3-019) and Cuyama Valley Basin (DWR Groundwater Basin 3-013). Within the Tulare Lake Hydrologic Region there are 10 basins that are within the project area: Kern River Valley (DWR Groundwater Basin 5-025), Walker Basin Creek Valley (DWR Groundwater Basin 5-026), Cummings Valley (DWR Groundwater Basin 5-027), Tehachapi Valley West (DWR Groundwater Basin 5-028), Castaic Lake Valley (DWR Groundwater Basin 5-029), Brite Valley (DWR Groundwater Basin 5-080), Cuddy Canyon Valley (DWR Groundwater Basin 5-082), Cuddy Ranch Area (DWR Groundwater Basin 5-083), Cuddy Valley (DWR Groundwater Basin 5-084), and Mil Potrero Area (DWR Groundwater Basin 5-085). The South Lahontan Hydrologic Region has two groundwater basins within the Mountain Region: Tehachapi Valley East (DWR Groundwater Basin 6-045) and Kelso Lander Valley (DWR Groundwater Basin 6-069). Of these groundwater basins, the Cuyama Valley Basin, which is monitored by the Santa Barbara County Water Agency, is identified as a groundwater basin subject to critical conditions of overdraft (DWR, 2016). Kern County has five adjudicated basins, four of which are within the Mountain

Region and one in the Desert Region. The four adjudicated basins in the Mountain Region include: Cummings Valley Basin (DWR Groundwater Basin 5-027), Tehachapi Basin (Tehachapi Valley West [DWR Groundwater Basin 5-028] and Tehachapi Valley East Basin [DWR Groundwater Basin 6-045]), Brite Basin (DWR Groundwater Basin 5-080).

Water Supply – Desert Region

Water Districts

As discussed above, water districts within the County provide a vehicle for procuring and distributing water to both agricultural and domestic needs. State laws permits the creation of California Water Districts, with boards and policies established by vote of land owners in the district, and County Water Districts where residents of the district vote to determine board members and policies. Water districts serving the general Desert Region include the following:

- Antelope Valley East Kern Water District
- Indian Wells Valley Water District
- Rand Communities County Water District
- North Edwards Water District

Groundwater Basins

The Desert Region is within the South Lahontan Hydrologic Region. South Lahontan Hydrologic Region, there are six basins that are entirely within, or partially within, the project area: 6-044, 6-046, 6-047, 6-050, 6-052, and Indian Wells Valley Basin (DWR Groundwater Basin 6-054). Of these groundwater basins, the Indian Wells Valley Basin, which is monitored by the Indian Wells Valley Water District, is identified as a groundwater basin subject to critical conditions of overdraft (DWR, 2016). Of the five adjudicated basins in Kern County, the Desert Region contains one: Antelope Valley Basin (DWR Groundwater Basin 6-044).

Wastewater – County Wide

Wastewater disposal is handled by both public and private agencies, and by private individual systems. Disposal of waste by public agencies is through County Service Areas, Community Services Districts and Public Utility Districts. Individual private disposal generally occurs through a septic tank and leach line or cesspool system.

County Service Area

County Service Areas (CSA) are established, on request by residents of a designated area, by the Board of Supervisors to serve that area. Assessments for CSAs are established by the Board of Supervisors and approved by property owners of the area being served. Sewage disposal services may include actual disposal of sewage or monitoring of septic tanks to ensure proper operation of system. CSAs provide service for more than just sewage disposal, and may include street lighting, fire hydrants, drainage, and crossing guards. County Engineering and Survey Services manages the CSA programs for the County.

Community Sewage Disposal Systems

Several incorporated and unincorporated communities are served by wastewater treatment plants managed through Community Services Districts (CSD). State law allows the establishment of a CSD to provide a variety of services to communities similar to those provided by cities; these services

include water, sewage disposal, road maintenance, and law enforcement. A similar entity is the Public Utilities District (PUD) in which services are limited to utilities and public services such as water and sewage disposal. Several PUDs have been established in the County for various purposes. Management of CSDs and PUDs differ from CSAs; the former two entities are overseen by a board of directors or similar board elected by the people within the district, while the County Board of Supervisors manages the CSAs.

Liquid waste disposal and monitoring is also performed by County Sanitation District. While a city may manage its own sanitation district, most Kern County entities are operated through the County Waste Management Department as a public works project.

Waste Water Treatment Facilities

As noted, sewage is disposed of by either community treatment plants or through individual systems (septic tank). There are 47 authorized treatment plants within Kern County; these facilities range in size from large plants that treat wastes from communities such as Arvin or Bakersfield, and smaller plants that handle wastes from specific uses.

Stormwater Drainage – County Wide

The County typically requires developing sites to provide for their own on-site retention or show that existing facilities have sufficient capacity to carry the additional runoff. This policy also extends to individual, newly created single-family residential lots. If it can be clearly demonstrated that adequate downstream facilities exist, the County will on occasion lessen their full retention requirement to detention facilities so that the peak off-site runoff is increased.

The Federal Water Pollution Control Act (also known as the Clean Water Act, or CWA) establishes the basic structure for regulating discharges of pollutants into the water of the United States. The CWA gives the Federal EPA the authority to implement pollution control programs such as establishing wastewater standards for industry. The CWA also contains requirements to set water quality standards for all contaminants in surface waters and to prohibit discharge of any pollutant into water of the United States unless a discharge is authorized by a National Pollutant Discharge Elimination System (NPDES) Permit. Originally, the NPDES program focused on reducing pollutants from discharges from industrial process wastewater and municipal sewage treatment plants. In 1987, the CWA was amended to require U.S. EPA to establish requirements for regulating stormwater discharges through use of NPDES stormwater permits. The Regional Water Quality Control Boards carry out the regulation, protection and administration of water quality.

Solid Waste – County Wide

The Kern County Waste Management District (WMD) provides environmentally safe management of solid waste and is responsible for operating seven landfills, five transfer stations, and three bin sites throughout the County. WMD landfills are located in Bakersfield (Bena Landfill), Boron, Mojave-Rosamond, Ridgecrest, Shafter-Wasco, Taft, and Tehachapi.

The WMD also operates two special waste facilities and provides information to the residents of Kern County regarding recycling and ways to reduce waste. In addition, the WMD oversees the operation of several wastewater treatment facilities.

Solid waste is a mixture of items discarded as useless or unwanted arising from residential, commercial, industrial, institutional, agricultural, and mining activities. These wastes include

construction- and demolition-generated waste as well as inert wastes. In most cases, solid waste is hauled directly to Class III landfills, with the remainder being taken to transfer stations, resource recovery centers, or refuse-to-energy facilities. Class III landfills typically handle the disposal of non-hazardous waste. The general waste classifications utilized by the Kern County WMD are:

- Non-hazardous solid waste, which consists mostly of household garbage, commercial wastes, agricultural waste, and litter.
- Special waste, which is any waste that requires special handling, including infectious waste, pesticide containers, sewage sludge, oilfield waste, household hazardous waste, and asbestos waste.
- Designated waste, which is a waste that consists of or contains pollutants that could be released at concentrations in excess of applicable water quality objectives and standards or hazardous waste that has been granted a variance from hazardous waste management requirements.
- Hazardous waste, which is a waste that, because of its quantity, concentration, physical, chemical, or infectious characteristics, may either: (a) cause or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitating reversible illness; or (b) pose a substantial present or potential hazard to human health or the environment when improperly managed.
- Industrial wastes, which are hazardous and non-hazardous by-products produced by oil and gas extraction, pesticide, paper, petrochemical, rubber, plastics, electronics, and other industries.

Not all of the above-defined wastes may be disposed of at a landfill. State law regulates the disposal of wastes at landfills.

Kern County is responsible for compliance with the California Integrated Wastewater Management Act of 1989, Assembly Bill (AB) 939. AB 939 requires that cities and counties reduce the amount of solid waste being sent to landfills by 50 percent by January 1, 2000, and requires cities and counties to prepare AB 939 solid waste planning documents. These documents include the Source Reduction and Recycling Element (SRRE), the Household Hazardous Waste Element (HHWE), and the Non-Disposal Facility Element (NDFE). All three of these documents have been approved for Kern County, as well as an Integrated Waste Management Plan approved February 1998 by the California Integrated Waste Management Board (California Integrated Waste Management). The Kern County Integrated Waste Management Plan is the long-range planning document for landfill facilities.

Construction and demolition (C&D) waste is heavy, inert material. This material creates significant problems when disposed of in landfills. Since C&D waste is heavier than paper and plastic, it is more difficult for counties and cities to reduce the tonnage of disposed waste. For this reason, C&D waste has been specifically targeted by the State of California for diversion from the waste stream. Projects that will generate C&D waste should emphasize deconstruction and diversion planning, rather than demolition. Deconstruction is the planned and organized dismantling of a prior construction project, which allows maximum use of the deconstructed materials for recycling in other construction projects and sends a minimum of the deconstruction material to landfills.

The Kern County Waste Management Department administers or sponsors the following recycling programs that contribute to meeting the State-mandated solid waste diversion goals:

- Recycling programs at landfills to recycle or divert a wide variety of products, such as wood waste, cathode ray tubes, tires, inert materials, appliances, etc.
- Kern County and the City of Bakersfield operate drop-off recycling centers for household recyclables located within the unincorporated metropolitan area and within the city. County and City drop-off recycling centers may be used by both County and City residents.
- Financial assistance for the operation of the City of Bakersfield Green Waste Facility.
- Kern County Special Waste Facility provides disposal of household hazardous waste services to all County residents.
- Cosponsors semi-annual Bulky Waste Collection Events, which are held in the Bakersfield area and are available to both County and city residents.
- Participates jointly with the City of Bakersfield on a Christmas tree recycling campaign.
- Cosponsors jointly with the Community Clean Sweep, a telephone book recycling program.
- Sponsors the Community Clean Sweep to conduct summer workshops called “Trash to Treasure,” which educates children on recycling and other Kern County Waste Management Department programs.
- Operates, in collaboration with the Community Clean Sweep, an innovative elementary school education program called “Clean Kids Hit the Road Puppet Show.”
- Provides recycling trailers to churches, schools, and non-profit organization.

Table 4.16-1 identifies the landfill class, maximum cubic yards, maximum tons per day, cubic yards per year, closure date, and remaining capacity date of the landfills in Kern County.

Table 4.16-1. Landfills in Kern County

Landfill Name and Location	Landfill Class	Permitted Capacity		Remaining Cubic Yards	Closure Date Under Current Permits	Remaining Capacity Date
		Max Cubic Yards	Max Tons Per Day			
Public Landfills						
Bakersfield Metropolitan (Bena) Sanitary Landfill 2951 Neumarkel Road, Caliente, CA 93220	Class III	53,000,000	4,500	32,808,260	April 1, 2046	July 01, 2013
Boron Sanitary Landfill 11400 Boron Avenue, Boron, CA 93516	Class III	1,057,000	200	94,851	January 1, 2048	January 19, 2011
Clean Harbors Buttonwillow LLC 2500 West Lokern Road Buttonwillow, CA 93206	Class I	14,293,760	4,000	183,960,000	January 1, 2040	May 29, 2014
McKittrick Waste Treatment Site 56533 Highway 58, McKittrick, CA 93251	Class II	2,091,800	1,180	662,221	December 31, 2029	May 1, 2014
Mojave-Rosamond Sanitary Landfill 400 Silver Queen Road, Mojave, CA 93501	Class III	Not Available	3,000	76,310,297	December 31, 2023	March 1, 2013
Ridgecrest Recycling & Sanitary Landfill 3301 Bowman Road Ridgecrest, CA 93555	Class III	10,500,000	701	5,037,428	December 31, 2045	September 16, 2010
Shafter-Wasco Recycling & Sanitary Landfill 17621 Scofield Ave., Shafter, CA 93263	Class III	21,895,179	1,500	14,534,860	December 31, 2027	May 23, 2014
Taft Recycling & Sanitary Landfill 13351 Elk Hills Road, Taft, CA 93268	Class III	11,000,000	800	7,380,708	December 31, 2078	February 01, 2011

Table 4.16-1. Landfills in Kern County

Landfill Name and Location	Landfill Class	Permitted Capacity		Remaining Cubic Yards	Closure Date Under Current Permits	Remaining Capacity Date
		Max Cubic Yards	Max Tons Per Day			
Tehachapi Sanitary Landfill 12001 Tehachapi Blvd., Tehachapi, CA 93561	Class III	4,000,000	1,000	522,298	June 1, 2020	September 01, 2015
Private Use Landfills						
Edwards Air Force Base (AFB) Main Base Sanitary Landfill ¹ 220 Landfill Road, Edwards Air Force Base, CA 93524	Class III	2,250,000	120	1,078,875	December 31, 2028	Not Available
H.M. Holloway Landfill 13850 Holloway Road, Lost Hills, CA 93249	Class II, Class III	12,600,000	2,000	7,522,934	January 31, 2030	February 01, 2014
U.S. Borax Inc.-Gangue/Refuse Waste Pile ² 14486 Borax Road, Boron, CA 93516	Class III	8,500,000	443	908,496	January 1, 2023	May 29, 2014

Sources: CalRecycle, 2016.

¹ Not a public landfill; only accepts waste generated at Edwards AFB.

² Not a public landfill; only accepts waste derived solely from US Borax Boron Operations.

Electricity and Natural Gas – County Wide

Gas and Electricity is served to Kern County customers by three primary sources:

- Pacific Gas and Electric Company (PG&E)
- Southern California Edison Company (SCE)
- Southern California Gas Company (The Gas Company)

Pacific Gas and Electric (PG&E) generally services the westerly portion of the County. SCE also provides gas to customers in the western County. PG&E's service territory, referred to as its "Kern Division," covers a large area of the County and includes Arvin, Bakersfield, Maricopa, McFarland, Ridgecrest, Shafter, Taft, Wasco, and unincorporated portions of the County. Within this area, PG&E serves gas and/or electricity to more than 154,000 residential customers and about 23,000 commercial and industrial customers. SCE serves electricity only to most of the remaining parts of the County, including the mountain, foothill, and southern desert communities of the County. This includes Delano, Lake Isabella, and Tehachapi, Mojave, Rosamond, and other unincorporated areas. SoCalGas provides gas-only service to various regions of Kern County. Large capacity natural gas transmission mains are regulated by stringent State of California, California Public Utilities Commission (CPUC) and operating company safety standards.

4.16.3 Regulatory Setting

Federal

As explained in Section 3.2, *Regulatory History and Background*, even though cannabis is "decriminalized" under State law, and even with the U.S. Department of Justice (USDOJ) issuance of memoranda guiding federal law enforcement related to cannabis activities within jurisdictions that have legalized cannabis, cannabis activities continue to be illegal at the federal level and subject to the prosecutorial discretion of the federal government.

Clean Water Act (CWA)

At the federal level, the United States Environmental Protection Agency (U.S. EPA) promulgates regulations that protect surface waters under the Water Pollution Control Act Amendments of 1972, commonly referred to as the Clean Water Act. These federal regulations, published in the Federal Register and codified in Code of Federal Regulations Title 40, establish wastewater treatment policies, effluent requirements for surface water disposal, and requirements for biosolids management and disposal. Regulations also set forth pretreatment requirements for preventing pollutants from entering publicly owned treatment works at levels that could interfere with treatment operation or solids management.

Total Maximum Daily Load (TMDL)

Under Section 303(d) of the CWA, states, territories, and authorized tribes are required to develop lists of impaired waters. These are waters that exceed applicable water quality standards. The law requires that these jurisdictions establish priority rankings for waters on the lists and develop total maximum daily loads (TMDLs) for these waters. A TMDL is a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards.

Within Kern County, Isabella Lake is the only water body listed as a 303(d)-impaired water (State Water Resources Control Board [SWRCB], 2012).

Safe Drinking Water Act

The Safe Drinking Water Act of 1974 (SDWA) gave the U.S. EPA the authority to set standards for contaminants in drinking water supplies. The U.S. EPA was required to establish primary regulations for the control of contaminants that affected public health and secondary regulations for compounds that affect the taste, odor, and aesthetics of drinking water. Under the provisions of SDWA, the California Department of Health Services (DHS) has primary enforcement responsibility. Title 22 of the California Administrative Code establishes DHS authority and stipulates State drinking water quality and monitoring standards.

Federal Energy Regulatory Commission

The Federal Energy Regulatory Commission (FERC) regulates and oversees the energy industries in the interest of the American public. The Energy Policy Act of 2005 gave FERC additional responsibilities, including interstate commerce, licenses and inspections, energy markets, and penalizing energy organizers and individuals who violate FERC rules in the energy markets.

Central Valley Project Improvement Act

The Reclamation Projects Authorization and Adjustment Act of 1992 (Public Law 102-575) includes Title 34, the Central Valley Project Improvement Act (CVPIA). The CVPIA amended the previous authorizations of the California CVP to include fish and wildlife protection, restoration, and mitigation as project purposes having equal priority with irrigation and domestic uses and fish and wildlife enhancement as a project purpose equal to power generation. The CVPIA identifies specific measures to meet the CVPIA's multiple purposes (USBR, 2017a).

State

California Energy Commission

The California Energy Commission (CEC) regulates the provision of natural gas and electricity within the State. The CEC is the State's primary energy policy and planning agency. Created in 1974, the CEC has five major responsibilities: forecasting future energy needs and keeping historical energy data, licensing thermal power plants 50 megawatts (MW) or larger, promoting energy efficiency through appliance and building standards, developing energy technologies and supporting renewable energy, and planning for and directing the State of California's response to energy emergencies.

California Department of Resources Recycling and Recovery (CalRecycle) Formerly California Integrated Waste Management Board (CIWMB)

CalRecycle is the State agency designated to oversee, manage, and track California's 76 million tons of waste generated each year. It is one of the six agencies under the umbrella of the California Environmental Protection Agency. CalRecycle develops regulations to control and manage waste, for which enforcement authority is typically delegated to the local government. The board works jointly with local government to implement regulations and fund programs.

Assembly Bill (AB) 939 and Senate Bill (SB) 1016

The California Integrated Waste Management Act of 1989, or Assembly Bill (AB) 939, established the Integrated Waste Management Board, required the implementation of integrated waste management plans, and mandated that local jurisdictions divert at least 50 percent of all solid waste generated (from 1990 levels), beginning January 1, 2000, and divert at least 75 percent by 2010. Projects that would have an adverse effect on waste diversion goals are required to include waste diversion mitigation measures to assist in reducing these impacts to less-than-significant levels. With the passage of Senate Bill (SB) 1016 (the Per Capita Disposal Measurement System) in 2006, only per capita disposal rates are measured to determine if a jurisdiction's efforts are meeting the intent of AB 939.

Assembly Bill (AB) 341

In response to reducing commercial solid waste that is landfilled, the State Legislature passed AB 341 declaring that it is the policy goal of the State that not less than 75 percent of solid waste generated be source separated, reduced, recycled, or composted by the year 2020. AB 341 sets forth the requirements of the statewide mandatory commercial recycling program which defines that a business, including any commercial or public entity, generating four cubic yards or more of commercial solid waste per week are required to recycle. Businesses are required to take one or any combination of the following actions in order to reuse, recycle, or otherwise divert solid waste from disposal:

- Subscribe to a source separated recycling service with a regional franchise hauler authorized to provide service for the area in which the business is located;
- Subscribe to a mixed solid waste recycling service with a regional franchise hauler authorized to provide service for the area in which the business is located;
- Self-recycle and certify compliance with Kern County Ordinance No. G-8337.

Assembly Bill (AB) 1826

AB 1826, created to drive the recycling of yard trimmings and food scraps, will become effective April 2016. The bill requires businesses generating a specified amount of organic solid waste per week to arrange for recycling for that material. This bill will also require the contract or work agreement between a business and a gardening or landscaping service to require the organic waste generated by those services to comply with the requirements of the law. Business within the County would be required to comply with any codes/regulations promulgated from AB 1826.

California Green Building Standards Code

Construction- and demolition-generated (C&D) waste is heavy, inert material. This material creates significant problems when disposed of in landfills. Since C&D debris is heavier than paper and plastic, it is more difficult for counties and cities to reduce the tonnage of disposed waste. For this reason, C&D waste debris has been specifically targeted by the State of California for diversion from the waste stream.

The California Green Building Standards Code (Standards Code) will apply to the construction related activities of this project. The purpose of the Standards Code is to improve public health, safety, and general welfare by enhancing the design and construction of buildings using building concepts

that have a positive environmental impact and encouraging sustainable construction practices. Provisions of the Standards Code shall apply to the design and construction of building structures subject to State regulation.

Per Code Section 708.3 – Construction Waste Reduction, Disposal, and Recycling of the Standards Code, a commercial entity is to recycle and/or salvage for reuse a minimum of 50 percent of the nonhazardous construction and demolition debris, or meet a local construction and demolition waste management ordinance, whichever is more stringent.

State Water Resources Control Board

The National Pollution Discharge Elimination System (NPDES) was established per the 1972 amendments to the Federal Water Pollution Control Act, or CWA, to control discharges of pollutants from point sources (Section 402). Amendments to the CWA created a new section to the Act, which is devoted to stormwater permitting (Section 402[p]), with individual states designated for administration and enforcement of the provisions of the CWA and the NPDES permit program. The SWRCB issues both general construction permits and individual permits under this program.

Biosolids generated during wastewater treatment are regulated by the State under SWRCB Water Quality Order No. 2004-0012-DWQ, titled the "Final General Waste Discharge Requirements for Land Application of Biosolids for Use as a Soil Amendment in Agricultural, Silvicultural, Horticultural, and Land Reclamation Activities." This order, implemented under the federal biosolids rules set forth in 40 CFR Part 503, applies to all land application of Class A and Class B biosolids as well as "exceptional quality" biosolids-derived mixtures consisting of 50% or more biosolids. The order establishes permitting, monitoring, and reporting requirements. Local ordinances, described below, would also regulate the disposal of biosolids in Kern County.

Central Valley and Lahontan Regional Water Quality Control Boards

The primary responsibility for the protection of water quality in California rests with the SWRCB and nine regional water quality control boards (RWQCBs). The SWRCB sets Statewide policy for the implementation of State and federal laws and regulations. The RWQCBs adopt and implement Water Quality Control Plans (Basin Plans) that recognize regional differences in natural water quality, actual and potential beneficial uses, and water quality problems associated with human activities. The jurisdiction of the Central Valley RWQCB extends from the Oregon border, over the valley and foothills from Redding to Fresno, through the Central Valley, to the border with Los Angeles County. The jurisdiction of the Lahontan RWQCB extends from the Oregon border to the northern Mojave Desert and includes all of California east of the Sierra Nevada crest.

California Department of Water Resources (DWR)

The DWR is a department within the California Resources Agency. The DWR is responsible for the State's management and regulation of water usage.

California Water Code Section 13260

California Water Code Section 13260 requires any person who discharges waste, other than into a community sewer system, or proposes to discharge waste that could affect the quality of waters of the State, to submit a report of waste discharge to the applicable RWQCB. Any actions of the project that would be applicable under California Water Code Section 13260 would be reported to the two

applicable Regional Water Quality Control Boards (RWQCB): Central Valley Region and Lahontan Region.

Porter-Cologne Water Quality Control Act

The Porter Cologne Act, passed in 1969, acts in concert with the Federal CWA. The act established the SWRCB and divided the State into nine regions, each overseen by an RWQCB. The SWRCB is the primary State agency responsible for protecting the quality of the State's surface and groundwater supplies; however, much of its daily implementation authority is delegated to the nine RWQCBs. The Project Area is under the jurisdiction of two RWQCBs: Central Valley Region and Lahontan Region.

The Porter Cologne Act provides for the development and periodic review of water quality control plans (basin plans) that designate beneficial uses of California's major rivers and groundwater basins and establish narrative and numerical water quality objectives for those waters. Basin plans are primarily implemented by using the NPDES permitting system to regulate waste discharges so that water quality objectives are met. Basin plans, updated every three years, provide the technical basis for determining waste discharge requirements, taking enforcement actions, and evaluating clean water grant proposals. The act also assigns responsibility for implementing CWA Sections 401, 402, and 303(d) to the SWRCB and RWQCBs. There are two basin plans in the Central Valley RWQCB region, the Water Quality Control Plan for the Sacramento and San Joaquin Rivers and the Water Quality Control Plan for the Tulare Lake Basin. There is one basin plan in the Lahontan RWQCB region, the Water Quality Control Plan for the Lahontan Region.

Assembly Bill (AB) 1881

AB 1881 expanded previous legislation related to landscape water use efficiency. AB 1881, the Water Conservation in Landscaping Act of 2006, enacted landscape efficiency recommendations of the California Urban Water Conservation Council (CUWCC) for improving the efficiency of water use in new and existing urban irrigated landscapes in California. AB 1881 required the DWR to update the existing Model Local Water Efficient Landscape Ordinance and local agencies to adopt the updated model ordinance or an equivalent. The law also requires the California Energy Commission to adopt performance standards and labeling requirements for landscape irrigation equipment, including irrigation controllers, moisture sensors, emission devices, and valves to reduce the wasteful, uneconomic, inefficient, or unnecessary consumption of energy or water.

Assembly Bill (AB) 2882

AB was passed in 2008 and encourages public water agencies throughout California to adopt conservation rate structures that reward consumers who conserve water. AB 2882 clarifies the allocation-based rate structures and establishes standards that protect consumers by ensuring a lower base rate for those who conserve water.

Sustainable Groundwater Management Act of 2014

In 2014, California enacted the Sustainable Groundwater Management Act (SGMA; Water Code Section 10720 et seq.). SGMA, and related amendments to California law, require that all groundwater basins designated as high or medium priority in the DWR California Statewide Groundwater Elevation Monitoring (CASGEM) Program, and that are subject to critical overdraft conditions, must be managed under a new Groundwater Sustainability Plan (GSP) or a coordinated

set of GSPs, by January 31, 2020. High or medium priority basins that are not subject to a critical overdraft must be regulated under one or more GSPs by 2022. Where GSPs are required, one or more local Groundwater Sustainability Agencies (GSAs) must be formed to implement applicable GSPs. A GSA has the authority to require registration of groundwater wells, measure and manage extractions, require reports and assess fees, and to request revisions of basin boundaries, including establishing new subbasins. GSAs must be formed for high and medium priority basins by June 2017.

The 2.8 million acres of valley portion of Kern County has been designated a high priority and the 250,000 acres of the Indian Wells Valley sub-basin which includes the City of Ridgecrest and China Lake Naval Weapons Station has been classified a medium priority basin. Both are under mandatory requirements to form a GSA and create a GSP that achieves sustainability in 20 years.

Each GSP must include a physical description of the covered basin, such as groundwater levels, groundwater quality, subsidence, information on groundwater-surface water interaction, data on historical and projected water demands and supplies, monitoring and management provisions, and a description of how the plan will affect other plans, including city and county general plans. Under the Act, the GSA is authorized to restrict pumping, levy assessments and fees and undertake water quality and quantity projects to rebalance the basin. The DWR must adopt regulations for the preparation of a GSP by January 2016. As defined by the Act, “sustainable groundwater management” means that groundwater use within basins managed by a GSP will not cause any of the following “undesirable results.” (a) chronic lowering of groundwater levels (not including overdraft during a drought, if a basin is otherwise managed); (b) significant and unreasonable reductions in groundwater storage; (c) significant and unreasonable seawater intrusion; (d) significant and unreasonable degradation of water quality; (e) significant and unreasonable land subsidence; and (f) surface water depletions that have significant and unreasonable adverse impacts on beneficial uses (Water Code Section 10721(w)).

Kern County is a member of the following GSA’s: Cuyama Basin Groundwater Sustainability Agency, Indian Wells Valley Groundwater Authority and Kern Groundwater Authority which manages a portion of the valley sub-basin. The Valley portion of Kern County also is managed by the Kern River Groundwater Sustainability Agency which is comprised of the City of Bakersfield, Kern Delta Water District and Improvement District No. 4 of the Kern County Water Agency.

Recycled Water Policy

On February 3, 2009, by Resolution No. 2009-0011, the SWRCB adopted a Recycled Water Policy in an effort to move towards a sustainable water future. In the Recycled Water Policy states “we declare our independence from relying on the vagaries of annual precipitation and move towards sustainable management of surface waters and groundwater, together with enhanced water conservation, water reuse and the use of stormwater.”

The following goals were included in the Recycled Water Policy:

- Increase use of recycled water over 2002 levels by at least one million acre-feet per year by 2020 and at least two million acre-feet per year by 2030.
- Increase the use of stormwater over use in 2007 by at least 500,000 acre-feet per year by 2020 and at least one million acre-feet per year by 2030.
- Increase the amount of water conserved in urban and industrial areas by comparison to 2007 by at least 20 percent by 2020.

- Included in these goals is the substitution of as much recycled water for potable water as possible by 2030.

The Recycled Water Policy provides direction to the RWQCBs regarding issuing permits for recycled water projects, addresses the benefits of recycled water, addresses a mandate for use of recycled water and indicates the SWRCB will exercise its authority to the fullest extent possible to encourage the use of recycled water.

The Recycled Water Policy also indicates that some groundwater basins contain salts and nutrients that exceed or threaten to exceed water quality objectives established in basin plans and states that it is the intent of this Recycled Water Policy that all salts and nutrients be managed on a basin-wide or watershed-wide basis through development of regional or sub-regional management plans. Finally, the Recycled Water Policy addresses the control of incidental runoff from landscape irrigation projects, recycled water groundwater recharge projects, anti-degradation, control of emerging constituents and chemicals of emerging concern and incentives for use of recycled water.

In accordance with the provisions of the Recycled Water Policy, a Constituents of Emerging Concerns (CEC) Advisory Panel was established to address questions about regulating CECs with respect to the use of recycled water. The CEC Advisory Panel's primary charge was to provide guidance for developing monitoring programs that assess potential CEC threats from various water recycling practices, including groundwater recharge/reuse and urban landscape irrigation. On June 25, 2010, the CEC Advisory Panel provided recommendations to the SWRCB and California Department of Public Health in their Final Report "Monitoring Strategies for Chemicals of Emerging Concern in Recycled Water – Recommendations of a Scientific Advisory Panel". The SWRCB used those recommendations to amend the Recycled Water Policy in 2013 (SWRCB Resolution No. 2013-003).

The April 2013 amendment provides direction to the RWQCBs on monitoring requirements for CECs in recycled water. The monitoring requirements pertain to the production and use of recycled water for groundwater recharge reuse by surface and subsurface application methods, and for landscape irrigation. The amendment identifies three classes of constituents to monitor:

- Human health-based CECs: CECs of toxicological relevance to human health.
- Performance indicator CECs: An individual CEC used for evaluating removal through treatment of a family of CECs with similar physicochemical or biodegradable characteristics.
- Surrogates: A measurable physical or chemical property, such as chlorine residual or electrical conductivity, that provides a direct correlation with the concentration of an indicator compound. Surrogates are used to monitor the efficiency of CEC treatment.

Only groundwater recharge reuse facilities will be required to monitor for CECs and surrogates. Surface application and subsurface application facilities will have different mandatory CECs and a different monitoring schedule. Monitoring is not required for recycled water used for landscape irrigation projects that qualify for streamlined permitting unless monitoring is required under the adopted salt and nutrient management plan. Streamlined permitting projects must meet the criteria specified in the Policy including: compliance with Title 22, application at agronomic rates, compliance with any applicable salt and nutrient management plan, and appropriate use of fertilizers.

Senate Bills 610 (Chapter 643, Statutes of 2001) and 221 (Chapter 642, Statutes of 2001)

SB 610 and SB 221 are companion measures that seek to promote more collaborative planning among local water suppliers and cities and counties. They require that water supply assessments occur early in the land use planning process for all large-scale development projects. If groundwater is the supply source, the required assessments must include detailed analyses of historic, current, and projected groundwater pumping and an evaluation of the sufficiency of the groundwater basin to sustain a new project's demands. They also require an identification of existing water entitlements, rights, and contracts and a quantification of the prior year's water deliveries. In addition, the supply and demand analysis must address water supplies during single and multiple dry years presented in 5-year increments for a 20-year projection. Under SB 221, approval by a county of a subdivision of more than 500 homes requires an affirmative written verification of a sufficient water supply.

California Drought Regulations

Beginning in January 2014, Governor Jerry Brown issued three Executive Orders (EOs), B-26-14, B-28-14, B-29-15, B-37-16, and B-40-17 regarding water supply, water demand, and water use within the State during severe drought conditions. EO B-29-15, issued April 1, 2015, sets limitations not only for existing land uses and water supply systems, but also for new construction. Some of these restrictions include:

- The Water Board shall prohibit irrigation with potable water of ornamental turf on public street medians. (EO B-29-15, Save Water, Action #6)
- The Water Board shall prohibit irrigation with potable water outside of newly constructed homes and buildings that is not delivered by drip or microspray systems. (EO B-29-15, Save Water, Action #7)
- The California Energy Commission shall adopt emergency regulations establishing standards that improve the efficiency of water appliances, including toilets, urinals, and faucets available for sale and installation in new and existing buildings. (EO B-29-15, Increase Enforcement Against Water Waste, Action #16)

In addition, EO B-29-15 requires that DWR update the State Model Water Efficient Landscape Ordinance through expedited regulation by the end of 2015. This ordinance will increase water efficiency standards for new and existing landscapes through more efficient irrigation systems, greywater usage, onsite storm water capture, and by limiting the portion of landscapes that can be covered in turf (EO B-29-15, Increase Enforcement Against Water Waste, Action #11).

On November 13, 2015, Governor Brown issued EO B-36-15, which upheld the previous EOs, and directs the SWRCB to extend urban water use restrictions through October 31, 2016 based on drought conditions known through January 2016. The SWRCB issued Emergency Regulations on February 2, 2016, in compliance with EO B-36-15. These emergency regulations maintain the current tiers of required water reductions; however, additional adjustments in response to stakeholders; equity concerns were included in the Emergency Regulations.

In addition, DWR and the U.S. Bureau of Reclamation have finalized the 2016 Drought Contingency Plan that outlines State Water Project and Central Valley Project operations from February through November 2016. The 2016 Drought Contingency Plan was developed in coordination with staff from

State and federal agencies. The 2016 Drought Contingency Plan communicates overarching goals for 2016 water management and the potential operations needed to achieve those goals.

In May 2016, Governor Brown issued EO B-37-16, which upheld the previous EO's, and directs local agencies to provide new permanent water use targets for each urban water supplier and concrete improvements to drought preparedness. The order bolstered the State's drought resilience and preparedness by establishing longer-term water conservation measures that include permanent monthly water use reporting, new urban water use targets, reducing system leaks and eliminating clearly wasteful practices, strengthening urban drought contingency plans and improving agricultural water management and drought plans. Local agencies are required to publicly disclose the projections and calculations used to determine their conservation standards, and to continue monthly water conservation reporting. EO B-37-16 calls for wise water use and less water waste to become permanent changes to prepare for more frequent and persistent periods of limited water supply. On April 7, 2017, EO B-40-17 lifted the drought emergency in all California counties except Fresno, Kings, Tulare, and Tuolumne counties. EO B-40-17 builds on EO B-37-16, which continues to remain in effect, to continue to make water conservation a way of life in California.

Porter-Cologne Water Quality Control Act

The Porter–Cologne Water Quality Control Act (Porter-Cologne Act) authorizes regulation of California water rights and water quality by the SWRCB. The Porter–Cologne Act also established nine RWQCBs to ensure that water quality on local/regional levels is maintained. The Project Area is under the jurisdiction of two RWQCBs: Central Valley Region and Lahontan Region.

Local

Kern County General Plan (KCGP)

The policies, goals, and implementation measures in the KCGP applicable to utilities as related to the project are provided below. The KCGP also contains additional policies, goals, and implementation measures that are more general in nature. Therefore, they are not listed below, but, as stated in Chapter 2, *Introduction*, all policies, goals, and implementation measures in the KCGP are incorporated by reference.

Chapter 1. Land Use, Open Space, and Conservation Element

Section 1.4 Public Facilities and Services

Goals

- **Goal 1.** Kern County residents and businesses should receive adequate and cost-effective public services and facilities. The County will compare new urban development proposals and land use changes to the required public services and facilities needed for the proposed project.
- **Goal 2.** Promote an urban growth pattern in areas where adequate public service infrastructure exists or can be provided.
- **Goal 3.** Distribute the cost of new services or facilities equitably among the beneficiaries.
- **Goal 4.** Provide coordination between public entities to ensure infrastructure standards and equitable fiscal support.

- **Goal 5.** Ensure that adequate supplies of quality (appropriate for intended use) water are available to residential, industrial, and agricultural users within Kern County.
- **Goal 7.** Facilitate the provision of reliable and cost-effective utility services to residents of Kern County.
- **Goal 9.** Serve the needs of industry and Kern County residents in a way that does not degrade the water supply and the environment and protect public health and safety by avoiding surface and subsurface nuisances resulting from the disposal of hazardous wastes, irrespective of the geographic origin of the waste.
- **Goal 10.** Ensure landfill capacity for Kern County residents and industries.

Policies

- **Policy 1.** New discretionary development will be required to pay its proportional share of the local costs of infrastructure improvements required to service such development.
- **Policy 2.** The efficient and cost-effective delivery of public services and facilities will be promoted by designating areas for urban development that occur within or adjacent to areas with adequate public service and facility capacity.
 - a) Ensure that water quality standards are met for existing users and future development.
 - b) Ensure that adequate storage, treatment, and transmission facilities are constructed concurrently with planned growth.
 - c) Ensure the maintenance and repair of existing water systems.
 - d) Encourage the utilization of wastewater treatment facilities which provide for the reuse of wastewater.
 - e) Encourage the consolidation or elimination of small water systems.
 - f) Encourage the conversion of private sewer systems (septic tanks) to public systems.
 - g) Ensure that adequate collection, treatment, and disposal facilities are constructed concurrently with planned growth.
 - h) Ensure that appropriate funding mechanisms are in place to fund the needed improvements which result from development and subsequent growth.
- **Policy 3.** Individual projects will provide availability of public utility service as per approved guideline of the serving utility.
- **Policy 13.** The County shall ensure landfill capacity for the residents and industry of Kern County.

Implementation Measures

- **Implementation Measure C.** Project developers shall coordinate with the local utility service providers to supply adequate public utility services.
- **Implementation Measure D.** Involve utility providers in the land use and zoning review process.

*Section 1.9 Resources*Policies

- **Policy 19.** Work with other agencies to define regulatory responsibility concerning energy-related issues.

*Section 1.10.1 General Provisions, Public Services and Facilities*Policies

- **Policy 9.** New development should pay its pro rata share of the local cost of expansions in services, facilities, and infrastructure which it generates and upon which it is dependent.
- **Policy 12.** All methods of sewage disposal and water supply shall meet the requirements of the Kern County Public Health Services Department and the California Regional Water Quality Control Board. The County's Public Health Services Department shall periodically review and modify, as necessary, its requirements for sewage disposal and water supply, and shall comply with any new standards adopted by the State for implementation of Government Code Division 7 of the Water Code, Chapter 4.5 (Section 13290-13291.70 (Assembly Bill 885) (2000).
- **Policy 15.** Prior to approval of any discretionary permit, the County shall make the finding, based on information provided by the California Environmental Quality Act (CEQA) documents, staff analysis, and the applicant, that adequate public or private services and resources are available to serve the proposed development.
- **Policy 16.** The developer shall assume full responsibility for costs incurred in service extension or improvements that are required to ensure the project. Cost sharing or other forms of recovery shall be available when the service extensions or improvements have a specific quantifiable regional significance.
- **Policy 40.** Encourage utilization of community water systems rather than the reliance on individual wells.
- **Policy 41.** Review development proposals to ensure adequate water is available to accommodate projected growth.

Implementation Measures

- **Implementation Measure E.** All new discretionary development projects shall be subject to the Standards for Sewage, Water Supply and Preservation of Environmental Health Rules and Regulations administered by the County's Public Health Department. Those projects having percolation rates of less than five minutes per inch shall provide a preliminary soils study and site specific documentation that characterize the quality of upper groundwater in the project vicinity and evaluation of the extent to which, if any, the proposed use of alternative septic systems would adversely impact groundwater quality. If the evaluation indicates that the uppermost groundwater at the proposed site already exceeds groundwater quality objectives of the Regional Water Quality Control Board or would if the alternative septic system is installed, the applicant would be required to supply sewage collection, treatment, and disposal facilities.

Chapter 4. Safety Element

Section 4.2 General Policies and Implementation Measure, which Apply to More than One Safety Constraint

Policies

- **Policy 4.** The County shall encourage extra precautions be taken for the design of significant lifeline installations, such as highways, utilities, and petrochemical pipelines.

Section 4.3 Seismically Induced Surface Rupture, Ground Shaking, and Ground Failure

Implementation Measures

- **Implementation Measure G.** Route major lifeline components such as highways, utilities, petroleum or chemical pipelines around areas of high groundwater whenever possible. Where they must cross an area of high groundwater, plans and permits shall require design features to accommodate extensive ground rupture without prolonged disruption of an essential service or threat to health and safety.
- **Implementation Measure H.** Require that plans and permits for installation of major lifeline components such as highways, utilities, petroleum or chemical pipelines incorporate design features to accommodate potential fault movement in areas of active faults without prolonged disruption of essential service or threat to health and safety.
- **Implementation Measure I.** Design significant lifeline installations, such as highways, utilities, and petrochemical pipelines which cross an active fault, to accommodate potential fault movement without prolonged disruption of essential service or creating threat to health and safety.

Section 4.8 Critical Facilities and Hazardous Buildings

Implementation Measures

- **Implementation Measure L.** Require that plans and permits for installation of major lifeline components such as highways, utilities, and petroleum or chemical pipelines to incorporate design features to accommodate potential fault movement in areas of active faults without prolonged disruption of essential service or threat to health and safety.

Kern County Specific Plans

Kern County has adopted 39 Specific Plans, 10 Rural Community Plans, and 14 Interim Rural Community Plan Maps. The Specific Plans and Rural Community Plans are intended to be an amplification of the goals and policies of the KCGP and are, therefore, consistent therewith. Interim Rural Community Plan Maps are areas where a specific plan has not been formally adopted, thus the goals and policies of the KCGP govern these areas. Future commercial cannabis cultivation, processing/packaging, and sales activities that would be authorized under the proposed project that would be located within the boundary of an adopted Specific Plan would be regulated according to County zoning.

Kern County and Incorporated Cities Hazardous Waste Management Plan

In 1991, Kern County and the incorporated cities adopted the Kern County and Incorporated Cities Hazardous Waste Management Plan, which was developed to comply with State Law (California Health and Safety Code Section 25135 et seq.). The Hazardous Waste Management Plan includes

goals, policies, and implementation measures directed at the safe and responsible management of hazardous waste including waste stream management, source reduction, siting of new facilities, and other provisions. The safe management of hazardous waste is to be accomplished in accordance with federal, State and local laws.

The Kern County Integrated Waste Management Plan

The Kern County Integrated Waste Management Plan (KCIWMP) was established in response to the California Integrated Waste Management Act of 1989 (AB 939). As discussed above, AB 939 required cities and counties to reduce solid waste disposal 25 percent by January 1, 1995 and 50 percent by January 1, 2000. The law also established a hierarchy that the local jurisdictions must comply with to address waste management issues. The California Integrated Waste Management Act requires each local jurisdiction to prepare and carry out the following solid waste elements:

- Source Reduction and Recycling Element
- Household Hazardous Waste Element
- Non-disposal Facility Element
- Countywide Siting Element
- Countywide Integrated Waste Management Summary Plan

Together these elements make up the KCIWMP. Any facility requiring inclusions into the KCIWMP will require the appropriate Map Code designation.

Health and Safety Code (Title 8 of the Kern County Code of Ordinances)

Chapter 8.28 of the County's Ordinance Code is used to regulate proper storage, transportation, and disposal of solid waste. Specific requirements for controlling unsanitary conditions will be required during all phases of development related to the proposed project. Activities that could create unsanitary conditions or permit or encourage the accumulation or breeding of vectors are prohibited and punishable by law. The project will be subject to standard compliance with the health and safety code to ensure sanitary conditions are existing at all times.

Utilities Code (Title 14 of the Kern County Code of Ordinances)

Chapter 14.08 – Water Supply Systems

It is the purpose of this ordinance to provide for the design, construction, reconstruction, abandonment, and destruction of: (1) wells defined herein as air conditioning, domestic, agricultural, cathodic protection, industrial, hazardous material monitoring, monitoring and observation, and grounding; (2) geophysical test holes; and (3) test wells; in such a manner that the groundwater of this county will not be degraded, contaminated or polluted, and that water obtained for beneficial uses will not jeopardize the health, safety, or welfare of the people of this county. In addition, it is the purpose of this ordinance to provide for the design, construction, and modifications of public and nonpublic water systems, and the permitting of the same, to assure an adequate supply of pure, wholesome and potable water for the users. Nothing in this ordinance shall be interpreted as abrogating any more restrictive requirements of other governmental agencies or State law. Any domestic water supply system must be contained on plans and specifications that are filed with the appropriate County department and a permit must be issued for the water supply system.

Chapter 14.12 – Sewer Systems

One of the purposes of this ordinance is the accomplishment of water quality control in accordance with the water quality control plans and waste discharge plans and other regulations, conditions and requirements of the California Regional Water Quality Control Board having jurisdiction as may be now in effect or from time to time adopted. This ordinance also provides the prevention and abatement of causes of pollution or contamination of groundwater or surface water and related nuisances. In addition, the ordinance sets forth the requirements of imposing and collecting rates and charges for all or part of the services and facilities mentioned in this chapter upon the owners of lands within the areas to which this chapter applies. All sewerage systems shall be constructed, operated and maintained at all times in a sanitary manner, in conformity with the requirements of the regional board, the county, and the health officer, now in effect or as may be adopted, amended or revised from time to time, and in such manner as to safeguard against and prevent pollution, contamination and nuisance.

Metropolitan Bakersfield General Plan (MBGP)

The Metropolitan Bakersfield General Plan (MBGP), a joint effort between the Kern County Planning Department and the City of Bakersfield Planning Division, was last adopted on December 11, 2007. The MBGP includes both city and unincorporated County lands. The MBGP describes the community's physical development as well as its economic, social and environmental goals and is currently undergoing an update. Project-related development on unincorporated lands within the MBGP Planning Area would be subject to the following applicable policies and implementation measures of the MBGP, with respect to utilities and service systems.

Chapter X. Public Services and Facilities Element

A. General Utilities

Goals

- **Goal 4.** Develop funding principles and programs which will assure that all new development will pay for the incremental costs of the public facilities and services--utilities bridges, parks, and public safety facilities--both onsite and offsite, to serve such development.

Policies

- **Policy 5.** Require all new development to pay its pro rata share of the cost of necessary expansion in municipal utilities, facilities and infrastructure for which it generates demand and upon which it is dependent (I-3).

Implementation Measures

- **Implementation Measure 4.** Create benefit assessment districts or establish service fees for the distribution of costs to users for capital improvement replacement costs and maintenance, utilizing such districts for the financing of improvements which are essential to planning area development.

B. Water Distribution

Goals

- **Goal 1.** Ensure the provision of adequate water service to all developed and developing portions of the planning area.

Policies

- **Policy 3.** Require that all new development proposals have an adequate water supply available (I-3, I-4).

Implementation Measures

- **Implementation Measure 3.** Review, and modify as required, existing fee structures and ordinances to assure desired system financing and policy implementation.

C. Sewer Service

Goals

- **Goal 1.** Ensure the provision of adequate sewer service to serve the needs of existing and planned development in the planning area.

Implementation Measures

- **Implementation Measure 6.** Exclusive of County Service Area No. 71, developers shall be required to install dry sewer lines in streets and connections thereto for parcels less than 1 acre (net) in size in areas where a centralized sewer system is planned and imminent and where onsite systems can be proven to be temporarily satisfactory.

Within County Service Area No. 71, a proposed development at a density greater than one dwelling unit per three gross acres, as well as all commercial and industrial developments, shall be required to be served by a regional sewage collection and treatment system subject to the following provisions:

1. All new development (commercial, industrial and residential at densities greater than one dwelling unit per three gross acres), including both discretionary and ministerial projects, shall be required to connect to public sewer when said development is located 1,000 feet or closer to available public sewer.
2. If public sewer is more than 1,000 feet from development, a dry sewer system in conjunction with approved individual septic systems may be utilized for lots having an area of 10,000 square feet or larger. Dry sewer systems are not required for lots of three gross acres or larger. Single residential lots that require a ministerial permit shall connect to public sewer when located 200 feet or closer to available public sewer. Single residential lots less than three gross acres that are greater than 200 feet from available public sewer are required to install dry sewer in accordance with the requirements of the Engineering and survey.
3. All new development (commercial, industrial and residential at densities greater than one dwelling unit per three gross acres), including both discretionary and ministerial projects, shall pay a sewer development fee where the Board of Supervisors has adopted a planned sewer area and install dry sewer within the project development when located in excess of 1,000 feet from public sewer or where sewer service is not available as determined by the Engineering and Survey Services Department. The fee amount shall be based on the property's pro rata share of all conveyance, facility and capacity costs. Single residential lots that are greater than 200 feet from available public sewer are required to install dry sewer in accordance with the requirements of the Engineering and Survey Services Department.
4. In those cases where sewer service will not be available as determined by the Sewer Master Plan, an exemption may be granted by the Engineering and Survey Services Department.

5. All new development (commercial, industrial, and residential at densities greater than one dwelling unit per three gross acres) shall be required to annex to an existing County Service Area (CSA) or form a new CSA if none is already in place. In conjunction with formation of, or annexation to, a CSA, applicants shall be required to form a Zone of Benefit for the purpose of constructing and maintaining a sewer trunk line.

D. Storm Drainage

Goals

- **Goal 1.** Ensure the provision of adequate storm drainage facilities to protect planning area residents from flooding resulting from storm water excess.

4.16.4 Impacts and Mitigation Measures

This section describes the methodology used in conducting the impact analysis for utilities and service systems, the thresholds of significance used in assess impacts to utilities and service systems, and the assessment of impacts to utilities and service systems. Measures to mitigate (i.e., avoid, minimize, rectify, reduce, eliminate, or compensate for) significant impacts accompany each impact discussion, where applicable.

Methodology

Potential impacts associated with the proposed project and mitigation measures were developed based on consultation with Kern County and review of the proposed amendments to the Kern County Code of Ordinances under Options A and B. The discussion below lists specific impacts and measures that would be incorporated to mitigate and reduce potential impacts to the extent feasible.

Development Standards Related to Utilities and Service Systems

Option A

Option A of the proposed project would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Therefore, no development standards are identified in the proposed Zoning Ordinance; refer to Appendix B for specific wording of the proposed ordinance under Option A.

Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, testing, and retail cannabis stores with or without mobile delivery facilities. Development standards provided in the proposed Zoning Ordinance, that pertain to utilities and service systems include, but are not limited to, the following (refer to Appendix C for specific working of the proposed ordinance under Option B):

- All cannabis facilities must be 0.5 mile from any school, park, day care center or youth center.
- The applicant must demonstrate compliance with all applicable mitigation measures prior to the issuance of a grading or building permit for any future cannabis related facility.
- A Fire Safety Plan must be approved by the Kern County Fire Department for future cannabis related facilities.

- All entrances to the future cannabis facility shall be clearly marked and legibly posted. No minors or adults below the age of 21 years old will be allowed on the premises.
- A Hazardous Materials Business Plan must be approved by the Kern County Environmental Health Services Division/Hazardous Materials Section.
- No organized and advertised tours shall be permitted.
- For future cannabis related facilities, if construction is required, debris and waste generated would be recycled to the extent feasible.
- For cannabis cultivation (indoor and outdoor), processing and packaging, and distribution facilities, on-site energy shall be provided or offset with a solar photovoltaic system; small wind generators may be used only in appropriate areas of Eastern Kern County.
- Future cannabis related facilities shall be equipped with an effective odor control system which at all times must prevent unreasonable interference with neighbors' use and enjoyment of their property. The odor control system shall: consist of one or more fans; utilize an alternative method or technology to achieve equal to or greater odor mitigation than provided by the fan system; and the system must be maintained in working order and in use.
- Future cannabis related facilities shall provide the Kern County Planning and Natural Resources Department with a detailed security monitoring plan.

Thresholds of Significance

The Kern County CEQA Implementation Document and Kern County Environmental Checklist state that a project would have a significant impact on utilities and service systems if it would:

- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board;
- Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed;
- Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments;
- Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs; or
- Comply with federal, State, and local statutes and regulations related to solid waste.

Project Impacts

Impact 4.16-1: Exceed Wastewater Treatment Requirements of the Applicable Regional Water Quality Control Board

Wastewater disposal is handled by both public and private agencies and by private individual systems (often septic systems). Disposal of waste by public agencies is through CSAs, CSDs, and PUDs. Individual private disposal generally occurs through a septic tank and leach line or cesspool system. If the facility is located in the western portion of Kern County, typically west of the Tehachapi and Sierra Nevada Mountains, it is regulated by the Central Valley RWQCB. If the facility is located in the Desert Region of the County, typically east of the Tehachapi and Sierra Nevada Mountains, it is regulated by the Lahontan RWQCB.

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A does not provide opportunities for business development and thus would not result in an increase in residents or employees within the County, as discussed in detail in Section 4.12, *Population and Housing*. Option A would continue to allow individuals to cultivate up to six plants on private property. Any wastewater generated would be similar to wastewater generated from residential gardens and the residential gardening standards would continue to apply. Therefore, Option A would not exceed wastewater treatment requirements for either the Central Valley RWQCB or the Lahontan RWQCB. Impacts would be less than significant in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 square feet (ft^2) of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft^2 of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in

each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

The majority of wastewater generated under Option B would result from cultivation activities (indoor and outdoor) and processing and packaging operations. Distribution operations would have similar wastewater generation as other commercial distributors, coming mainly from the employees. Currently, the Central Valley RWQCB has a waste discharge program that includes permits addressing controllable water quality factors associated with cultivation. As of February 2016, cultivators must enroll in the Cannabis Cultivation Waste Discharge Regulatory Program, General Order No. R5-2015-0113 from the Central Valley RWQCB. General Order No. R5-2015-0113 includes requirements for outdoor and outdoor/indoor mix cultivation activities that occupy and/or disturb more than 1,000 ft². Indoor and outdoor commercial medical and adult use cannabis cultivation facilities within the Central Valley RWQCB jurisdiction would be required to comply with General Order No. R5-2015-0113 if the operation is 1,000 ft² or larger (Central Valley RWQCB, 2015a and 2015b). The Lahontan RWQCB does not currently have a waste discharge regulatory program. The State Water Resources Board (SWRB) will begin development of a Statewide General Order for cannabis cultivation in the Fiscal Year 2016-2017, with a completion goal of August 2017 (Central Valley RWQCB, 2016). With compliance with federal, State, and local rules, regulations, and policies, future commercial medical and adult use cannabis cultivation under Option B would not exceed wastewater treatment requirements for either the Central Valley RWQCB or the Lahontan RWQCB and impacts would be less than significant.

Future medical and adult use cannabis processing and packaging could also result in wastewater generation and would be required to comply with waste discharge requirements. While the Central Valley RWQCB and Lahontan RWQCB do not currently have water discharge requirements for commercial cannabis processing, packaging, and distribution activities, these activities would be allowed only in zone classifications A (Exclusive Agriculture), M-2 (Medium Industrial), and M-3 (Heavy Industrial) only, therefore, with a lack of cannabis-specific wastewater requirements, the requirements associated with agricultural and industrial land uses would be enforced until cannabis-specific requirements are adopted. With compliance with federal, State, and local rules, regulations, and policies, future commercial medical and adult use cannabis processing, packaging, and distribution activities under Option B would not exceed wastewater treatment requirements for either the Central Valley RWQCB or the Lahontan RWQCB and impacts would be less than significant.

Future medical and adult use retail cannabis stores with or without mobile delivery would be allowed in areas where commercial and industrial land uses are allowed. Future retail cannabis stores with or without mobile delivery would have similar wastewater generation as the existing dispensaries. These facilities generate low amounts of wastewater as they typically service only the employees. Consumers at these facilities typically do not stay longer than is necessary to acquire the products being sold. Therefore, retail cannabis stores with or without mobile delivery are not anticipated to generate wastewater beyond what is currently generated. In addition, there is an existing overconcentration of medical cannabis dispensaries in unincorporated communities within the County. Option B would result in up to two retail cannabis stores per unincorporated community. Thus, an overconcentration would not occur and any wastewater generation would be distributed evenly throughout the County and throughout the CSAs, CSDs, and PUDs within the County. Future retail cannabis stores would not result in wastewater treatment facilities exceeding treatment

requirements for either the Central Valley RWQCB or the Lahontan RWQCB. Impact are less than significant in this regard.

Certain future cannabis-related activities and facilities would require processing a Conditional Use Permit (CUP) and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing before the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to exceedance of wastewater treatment requirements from the Central Valley RWQCB or Lahontan RWQCB would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Wastewater Treatment Requirements

1. California Water Code Section 13260 requires a person who discharges waste that could affect the quality of water to submit a report of waste discharge to the applicable RWQCB.
2. KCGP Land Use, Open Space, and Conservation Element Section 1.4, Public Facilities and Services Goal 1; Policies 1, 2, and 3; and Implementation Measure C relate to providing adequate public utilities and facilities including wastewater treatment, to residents and businesses and establish the proportional share of the local costs of infrastructure improvements required to service new developments.
3. KCGP Land Use, Open Space, and Conservation Element Section 1.10.1, General Provisions, Public Services and Facilities Policies 9, 12, 15, 16, and 40 and Implementation Measure E relate to new development paying its pro rata share of local cost of expansions in utility services, facilities and infrastructure. In addition, these also relate to meeting all standards for wastewater treatment per public health codes.
4. KCGP Safety Element Section 4.2, General Policies and Implementation Measure, which apply to more than one safety constraint Policy 4 and KCGP Safety Element Section 4.3, Seismically Induced Surface Rupture, Ground Shaking and Ground Failure Implementation Measures G, H, and I guide development of utilities and other lifeline infrastructure to maintain services.
5. MBGP Public Services and Facilities Element, General Utilities Goal 4, Policy 5, and Implementation Measure 4 establish the funding mechanisms for new development to pay for improvements required to maintain utility services, facilities, and infrastructure.
6. MBGP Public Services and Facilities Element, Sewer Service Goal 1 and Implementation Measure 6 ensure adequate sewer services and require specific development infrastructure within County Service Area No. 71.
7. Title 14 of the Kern County Code of Ordinances establishes waste discharge plans and water quality control requirements to meet RWQCB regulations.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

No mitigation measures are required.

Level of Significance After Mitigation

Impacts related to Option A would be less than significant. Impacts regarding Option B would be less than significant.

Impact 4.16-2: Require or Result in the Construction of New Water or Wastewater Treatment Facilities or Expansion of Existing Facilities, the Construction of Which Could Cause Significant Environmental Effects

This impact analysis discusses physical impacts of constructing new or expanded water and wastewater treatment facilities. Specific impacts related to water supply are analyzed under Impact 4.16-4, below, *Have Sufficient Water Supplies Available to Serve the Project from Existing Entitlements and Resources, or Are New or Expanded Entitlements Needed*.

Wastewater disposal is handled by both public and private agencies and by private individual systems (often septic systems). Disposal of waste by public agencies is through CSAs, CSDs, and PUDs. Individual private disposal generally occurs through a septic tank and leach line or cesspool system. Potable water is provided by the multiple water districts within unincorporated Kern County.

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on commercial cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A does not provide opportunities for business development and thus would not result in an increase in residents or employees within the County, as discussed in detail in Section 4.12, *Population and Housing*. Therefore, Option A would not result in the construction of new water or wastewater treatment facilities or the expansion of existing facilities, the construction of which could cause significant environmental effects. No impact would occur in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently more than 20 retail cannabis stores with or without mobile delivery (refer to Figure 3-3) in operation and Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

The majority of water and wastewater facility needs would result from future cannabis cultivation activities (indoor and outdoor), processing and packaging, and distribution operations. Future activities could, depending on location relative to existing infrastructure, require construction of new or expanded water and wastewater systems for a water district, CSA, CSD, PUD, or a septic system. All applicable federal, State, and local requirements and best management practices (BMPs) would be incorporated into construction of new or modified structures. Compliance with federal, State, and local rules, regulations, and policies, and implementation of Mitigation Measure MM 4.16-1 would reduce impacts resulting from the need to construct new or expanded water or wastewater treatment facilities.

Future medical and adult use retail cannabis stores with or without mobile delivery would be allowed in areas where commercial and industrial land uses are allowed. Future retail cannabis stores with or without mobile delivery would have similar wastewater generation as the existing dispensaries. These facilities generally generate low demand for water and low amounts of wastewater as they typically service only the employees. Consumers at these facilities typically do not stay longer than is necessary to acquire the products being sold. Therefore, retail cannabis stores with or without mobile delivery are not anticipated to generate wastewater beyond what is currently generated. In addition, there is an existing overconcentration of medical cannabis dispensaries in unincorporated communities within the County. Option B would result in up to two retail cannabis stores per unincorporated community. Thus, an overconcentration would not occur and any wastewater generation would be distributed evenly throughout the County and, thus, throughout the CSAs, CSDs, PUDs, and septic systems within the County. Future retail cannabis stores would not result in the need for new or expanded water or wastewater treatment facilities and infrastructure. Impact are less than significant in this regard.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing before the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial

medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to the need for new or expanded water or wastewater treatment facilities and infrastructure would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Water and Wastewater Treatment Facilities

1. California Water Code Section 13260 requires a person who discharges waste that could affect the quality of water to submit a report of waste discharge to the applicable RWQCB.
2. Porter-Cologne Act authorizes RWQCB regulations to ensure water rights and water quality are met.
3. KCGP Land Use, Open Space, and Conservation Element Section 1.4, Public Facilities and Services Goals 1 and 9; Policies 1, 2, and 3; and Implementation Measure C relate to providing adequate public utilities and facilities to residents and businesses and establish the proportional share of the local costs of infrastructure improvements required to service new developments.
4. KCGP Land Use, Open Space, and Conservation Element Section 1.10.1, General Provisions, Public Services and Facilities Policies 9, 12, 15, 16, and 40 and Implementation Measure E relate to new development paying its pro rata share of local cost of expansions in utility services, facilities and infrastructure. In addition, these also relate to meeting all standards for wastewater treatment per public health codes.
5. KCGP Safety Element Section 4.2, General Policies and Implementation Measure, which apply to more than one safety constraint Policy 4 and KCGP Safety Element Section 4.3, Seismically Induced Surface Rupture, Ground Shaking and Ground Failure Implementation Measures G, H, and I guide development of utilities and other lifeline infrastructure to maintain services.
6. MBGP Public Services and Facilities Element, General Utilities Goal 4, Policy 5, and Implementation Measure 4 establish the funding mechanisms for new development to pay for improvements required to maintain utility services, facilities, and infrastructure.
7. MBGP Public Services and Facilities Element, Water Distribution Goal 1, Policy 3, and Implementation Measure 3 ensure adequate water services.
8. MBGP Public Services and Facilities Element, Sewer Service Goal 1 and Implementation Measure 6 ensure adequate sewer services and require specific development infrastructure within County Service Area No. 71.
9. Title 14 of the Kern County Code of Ordinances establishes water and waste discharge regulations and requirements.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

- MM 4.16-1** As part of the submittal application for a site plan or conditional use permit, the applicant shall provide a will-service letter for connection to a public sewer or provisions for an onsite septic system. Cannabis processing and packaging facilities shall comply with all requirements for the disposal of wastewater and waste materials as reviewed and approved by applicable Regional Water Quality Control Board and Kern County Public Health Environmental Services Division.

Level of Significance after Mitigation

No impact would occur with respect to Option A. Impacts regarding Option B would be less than significant.

Impact 4.16-3: Require or Result in the Construction of New Stormwater Drainage Facilities or Expansion of Existing Facilities, the Construction of Which Could Cause Significant Environmental Effects

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on commercial cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. As further discussed in Section 4.9, *Hydrology and Water Quality*, implementing Option A would not result in new development and thus would not result in an increase in stormwater runoff. Therefore, Option A would not result in the need for construction of new stormwater drainage facilities or the expansion of existing facilities, the construction of which could cause significant environmental effects. No impact would occur in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are

currently more than 20 retail cannabis stores with or without mobile delivery (refer to Figure 3-3) in operation and Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

As discussed in Section 4.9, *Hydrology and Water Quality*, if future cannabis-related facilities are located within existing structures, then it is not anticipated that stormwater runoff would change from existing conditions. Therefore, any existing stormwater drainage facilities would be able to accommodate stormwater runoff upon implementation and buildup of Option B. If cannabis-related facilities are proposed in new structures or other facilities, then stormwater runoff could increase depending on the proposed facility type and size. Future activities could, depending on location relative to existing infrastructure, require construction of new or expanded stormwater drainage facilities. All applicable federal, State, and local requirements and BMPs would be incorporated into construction of new or modified structures. In addition, the implementation of Mitigation Measure 4.9-1 (as described in Section 4.9, *Hydrology and Water Quality*) and Mitigation Measure MM 4.16-1 would further reduce impacts resulting from the need to construct stormwater drainage facilities.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing before the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to the need for new or expanded stormwater drainage facilities and infrastructure would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Stormwater Drainage Facilities

1. NPDES controls discharges of pollutants from point sources, including stormwater provisions.
2. KCGP Land Use, Open Space, and Conservation Element Section 1.4, Public Facilities and Services Goals 1 and 9; Policies 1, 2, and 3; and Implementation Measure C relate to providing adequate public utilities and facilities to residents and businesses and establish the proportional share of the local costs of infrastructure improvements required to service new developments.
3. KCGP Land Use, Open Space, and Conservation Element Section 1.10.1, General Provisions, Public Services and Facilities Policies 9, 12, 15, 16, and 40 and Implementation Measure E relate to new development paying its pro rata share of local cost of expansions in utility services, facilities and infrastructure. In addition, these also relate to meeting all standards for wastewater treatment per public health codes.
4. KCGP Safety Element Section 4.2, General Policies and Implementation Measure, which apply to more than one safety constraint Policy 4 and KCGP Safety Element Section 4.3, Seismically Induced Surface Rupture, Ground Shaking and Ground Failure Implementation Measures G, H, and I guide development of utilities and other lifeline infrastructure to maintain services.

5. MBGP Public Services and Facilities Element, General Utilities Goal 4, Policy 5, and Implementation Measure 4 establish the funding mechanisms for new development to pay for improvements required to maintain utility services, facilities, and infrastructure.
6. MBGP Public Services and Facilities Element, Storm Drainage Goal 1 ensures adequate stormwater drainage facilities.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

Implement Mitigation Measure MM 4.16-1, as described above, and Mitigation Measure MM 4.9-1, as described in Section 4.9, *Hydrology and Water Quality*.

Level of Significance

No impact would occur with respect to Option A. Impacts regarding Option B would be less than significant.

Impact 4.16-4: Have Sufficient Water Supplies Available to Serve the Project from Existing Entitlements and Resources, or Are New or Expanded Entitlements Needed

Water supply for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities would be site specific and dependent on the location of the facility. Therefore, this analysis looks at the program in general and the overall water supply based on region: Valley Region, Mountain Region, Desert Region. This section generally identifies water supply and areas where water supply may be overextended, including adjudicated groundwater basins.

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on commercial cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A does not provide opportunities for business development and thus would not result in an increase in residents or employees within the County, as discussed in detail in Section 4.12, *Population and Housing*.

Option A would allow individual to grow up to six plants per Proposition 64. As discussed above, the cultivation of a cannabis plant would consume approximately the same amount of water as a tomato plant. Therefore, up to six cannabis plants grown on individual properties would be similar to a personal garden. Thus, Option A would not result in an increased demand for water and would have no impact on water supply within the County. Impacts would be less than significant in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation facilities, processing and packaging facilities, distribution facilities, and retail cannabis stores with or without mobile delivery. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery which are limited to 2 stores per unincorporated community. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, retail cannabis stores that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently more than 20 retail cannabis stores with or without mobile delivery, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

As discussed in Section 4.16.2, *Environmental Setting*, the County has a variety of water purveyors and relies mainly on SWP and CVP water, as well as the Kern River and groundwater. With respect to groundwater, in January 2016, the Kern County Subbasin (DWR Groundwater Basin 5-022.14) and the Indian Wells Valley Basin (DWR Groundwater Basin 6-054), were identified by DWR as subject to critical conditions of overdraft. In addition, the Kern County Subbasin was also subject to major boundary modifications to address jurisdictional, geologic, hydrologic, and other considerations (DWR, 2016). This resulted in reducing the size of the Kern County Subbasin (5-022.14) and adding the White Wolf Subbasin (DWR Groundwater Subbasin 5-022.18).

Water demand for cannabis crops varies based on cultivation location (i.e., Valley, Mountain, or Desert Region), cultivation structures (i.e., greenhouse, warehouse, or outdoors), cultivation methods (i.e., hydroponics, drip irrigation, use of recycled water, etc.). Table 4.16-2, *Agricultural Crops and Estimated Water Demands*, provides estimates of water demand per unit of cannabis (one joint, or approximately 0.5 grams) as compared to other agricultural crops. Water demand estimates for cannabis range from less than one gallon of water per plant per day to as high as six gallons of water per plant per day, with an average of approximately 2.3 gallons of water per plant per day (California NORML [CA NORML], 2015).

Table 4.16-2. Agricultural Crops and Estimated Water Demands		
Crop Type	Crop Unit	Water Demands to Produce Crop Unit (gallons)
Cannabis	One joint (approximately 0.5 gram)	0.167 to 0.5
Wine Grapes	One glass of wine	15 to 30
Tomato	One tomato	3.3 gallons
Almonds	One almond	1 to 1.1

Table 4.16-2. Agricultural Crops and Estimated Water Demands		
Crop Type	Crop Unit	Water Demands to Produce Crop Unit (gallons)
Pistachio	One pistachio	0.75 gallons
Strawberry	One strawberry	0.4 gallons
Cattle – beef	1/3-pound hamburger	330 gallons

Source: CA NORML, 2015.

For indoor cannabis cultivation, on average a 10,000 ft² facility contains approximately 3,000 cannabis plants (Conran, 2016). Water demand estimates for indoor cannabis cultivation range from 610 gallons (0.002 acre-feet) per year to 586,000 gallons (1.8 acre-feet) per year, with an average of 52,300 gallons (0.16 acre-feet) per year (Bustic and Brenner, 2016).

For outdoor cannabis cultivation, according to *BioScience*, 130,000 plants on approximately 247 acres would require approximately 113,593,100 gallons (348.6 acre-feet) per growing season (Carah et. al, 2015). This assumes a growing season is June through October (153 days) and only one growing season would occur annually. Therefore, 1 acre of property would require approximately 459,891 gallons per acre (1.41 acre-feet) per year. Colorado State University Extension determined that the water use for outdoor cannabis is similar to corn, alfalfa, tomato, peach, and hops crops (Hammon et. al, 2015); refer to Table 4.16-3, *Outdoor Cultivation Water Use Requirements*.

Table 4.16-3. Outdoor Cultivation Water Use Requirements		
Crop Type	Water Use Requirements	
	Inches per year	Acre-Feet ¹
Hemp	12-15	1-1.25
Cannabis	25-35	2.1 – 2.9
Corn	20-25	1.7 – 2.1
Alfalfa	30-40	2.5 – 3.3
Tomato	15-25	1.25 – 2.1
Peach	30-40	2.5 – 3.3
Hops	20-30	1.7 – 2.5

Source: Hammon et. al, 2015.

¹ Conversion from inches per year to acre-feet for outdoor cultivation was calculated as follows: 12 inches (1 foot) per year applied to 1 acre = 1 acre-foot; 15 inches (1.25 feet) per year applied to 1 acre = 1.25 acre-feet

Using the largest water consumption rate of 586,000 gallons (1.8 acre-feet) per year of water use for 1 acre (325,900 ft²) for indoor cannabis cultivation, a 10,000 ft² indoor cannabis cultivation facility would require approximately 17,981 gallons (0.55 acre-feet) of water per year. The largest water consumption rate for future outdoor cannabis cultivation is approximately 459,891 gallons per acre (1.41 acre-feet) per year. Option B allows for a countywide maximum of 2,000,000 ft² (approximately 45.9 acres) of future indoor cultivation and 150 acres of future outdoor cultivation. Therefore, future indoor cannabis cultivation facilities under Option B would result in a total demand of 3,596,200 gallons (11.04 acre-feet) of water per year. Future outdoor cannabis cultivation facilities under Option B would result in a total demand of 68,983,650 gallons per acre (211.7 acre-feet) of water per year.

A future cannabis processing and packaging facility's water demand would be dependent on the number of employees, the size of the facility, and the specific process used (i.e., carbon dioxide [CO₂], alcohol, heat presses, ice water extractions, liquid nitrogen, or dry ice processes); refer to Section 4.8, *Hazards and Hazardous Materials*, for details regarding cannabis processing. The variables in water demand for processing and packaging facilities are similar to industrial and manufacturing processes.

Thus, future processing and packaging facilities would be treated as industrial and manufacturing facilities.

Distribution and transport facilities would be similar in nature to existing distribution facilities, such that the largest water demand would be from employees because a distribution center would provide a location for transport operations to take cannabis and cannabis products from one facility to another.

Future cannabis-related activities could occur within a water district, CSA, CSD, PUD, or groundwater basin that does not have sufficient water supply for the demand of a future cannabis facility. For a future cannabis-related project, a Water Supply Assessment (WSA) would be triggered through SB 610 if the facility included one or more of the following:

- A proposed business establishment employing more than 1,000 persons or having more than 500,000 ft² of floor space.
- A proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 ft² of floor area.
- A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500-dwelling unit project.

Mitigation Measures are required to reduce impacts related to water demand and sufficient water supply. Cultivation facilities would be required use water efficient methods such as hydroponics, the use of recycled water when applicable, or equivalent technology to reduce the demand on water. In addition, mitigation measures would require all facilities obtain a will serve letter from the appropriate water district, CSA, CSD, or PUD, or to provide proof of the ability to pump sufficient water. Mitigation measures would require future cultivation facilities of more than 40 acres or processing, packaging, and distribution facilities 500,000 ft² or more to conduct a WSA in addition to the requirements for written evidence of pumping rights or public water delivery. Even with mitigation measures, impacts could be significant depending size of the facility, location within the County, groundwater basin, and water district, CSA, CSD, or PUD.

Future retail cannabis stores with or without mobile delivery would be allowed in areas where commercial and industrial land uses are allowed with a CUP. Future retail cannabis stores with or without mobile delivery would have similar water uses and demand as the existing dispensaries. These facilities generally generate low demand for water as they typically service only the employees. Consumers at these facilities typically do not stay longer than is necessary to acquire the products being sold. Therefore, retail cannabis stores with or without mobile delivery are not anticipated to use water supplies beyond what is currently used. In addition, there is an existing overconcentration of medical cannabis dispensaries in unincorporated communities within the County. Option B would result in up to two retail cannabis stores per unincorporated community with a countywide total of 40 retail cannabis stores. Thus, an overconcentration would not occur and any water demand on the water supply would be distributed evenly throughout the County and, thus, throughout the water districts, CSAs, CSDs, PUDs, and groundwater basins within the County. Future retail cannabis stores would result in an increased use in water because Option B would increase the number of retail cannabis stores by a maximum of 18 retail stores; however, these stores would have similar water uses and demand as existing dispensaries and would be distributed evenly throughout unincorporated Kern County. Each retail cannabis store would require a CUP (as outlined in Chapter 3, *Project Description*, and further explained in the Option B proposed ordinance language provided in

Appendix C of this EIR). Therefore, all future retail cannabis stores would require project-specific review under CEQA, which would further analyze water demand and supply.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing before the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to sufficient water supply would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Water Supply

1. AB1881 enacted landscape efficiency recommendations for improving efficiency of water use in new and existing irrigated landscapes
2. SGMA require that all groundwater basins designated as high or medium priority in the DWR CASGEM Program be managed under a Groundwater Sustainability Plan.
3. The Recycled Water Policy increases the amount of recycled water used for new development and provides direction to the RWQCBs.
4. SB 610 and 221 promote collaborative planning between local water suppliers and local agencies (cities and counties) by requiring water supply assessments for specific development projects.
5. California Drought Regulations, EO B-37-16 provides water use reduction targets and emphasizes long-term water conservation measures.
6. KCGP Land Use, Open Space, and Conservation Element Section 1.4, Public Facilities and Services Goals 1 and 5; Policies 1, 2, and 3; and Implementation Measure C relate to providing adequate public utilities and facilities to residents and businesses and establish the proportional share of the local costs of infrastructure improvements required to service new developments.
7. KCGP Land Use, Open Space, and Conservation Element Section 1.10.1, General Provisions, Public Services and Facilities Policies 9, 12, 15, 16, 40, and 41 and Implementation Measure E relate to new development paying its pro rata share of local cost of expansions in utility services, facilities and infrastructure. In addition, these also relate to meeting all standards for wastewater treatment per public health codes.
8. KCGP Safety Element Section 4.2, General Policies and Implementation Measure, which apply to more than one safety constraint Policy 4 and KCGP Safety Element Section 4.3, Seismically Induced Surface Rupture, Ground Shaking and Ground Failure Implementation Measures G, H, and I guide development of utilities and other lifeline infrastructure to maintain services.
9. MBGP Public Services and Facilities Element, General Utilities Goal 4, Policy 5, and Implementation Measure 4 establish the funding mechanisms for new development to pay for improvements required to maintain utility services, facilities, and infrastructure.

10. MBGP Public Services and Facilities Element, Water Distribution Goal 1, Policy 3, and Implementation Measure 3 ensure adequate water services.
11. Title 14 of the Kern County Code of Ordinances establishes water supply system regulations and requirements.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

Implement Mitigation Measures MM 4.9-2 through MM 4.9-5, as described in Section 4.9, *Hydrology and Water Quality*.

Level of Significance after Mitigation

No impact would occur with respect to Option A. Impacts regarding Option B would be significant and unavoidable.

Impact 4.16-5: Be Served by a Landfill with Sufficient Permitted Capacity to Accommodate the Project's Solid Waste Disposal Needs

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on commercial cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A does not provide opportunities for business development and thus would not result in an increase in residents or employees within the County, as discussed in detail in Section 4.12, *Population and Housing*. Implementing Option A in the long-term would not generate new sources of solid waste.

Option A would result in the closure of existing cannabis dispensaries over a two-year period which could result in solid waste as dispensaries are closed and cannabis products and supplies are removed from the dispensary sites. The existing dispensaries are located throughout the County, therefore not all of the solid waste would go to any one landfill, but instead the solid waste from closing these stores would be distributed among the nine public landfills and three private landfills serving the County. This generation of solid waste would also be distributed over a multi-year period; therefore, landfills would not receive a sudden influx of solid waste over a short period of

time. Option A would have a less than significant impact on landfill capacity and solid waste generation.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently more than 20 retail cannabis stores with or without mobile delivery (refer to Figure 3-3) in operation and Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

Option B could result in the closure or relocation of existing cannabis dispensaries over a one- to two-year timeframe, to allow for amortization of the business investment, could result in solid waste as dispensaries are closed and cannabis products and supplies are removed from the dispensary sites. The existing dispensaries are located throughout the County, therefore not all of the solid waste would go to any one landfill, but instead the solid waste from closing these stores would be distributed among the nine public landfills and three private landfills serving the County. This generation of solid waste would also be distributed over a multi-year period; therefore, landfills would not receive a sudden influx of solid waste over a short period of time. In addition, mitigation measures would be required for reducing solid waste generation during the closure of the existing dispensary businesses.

Option B could result in construction related waste, depending on if future cannabis related facilities require new structures. Construction related waste typically consists of non-hazardous building material or debris generated during the construction, renovation, and demolition of buildings, roads, and bridges. The materials often contain bulky, heavy materials, such as concrete, wood, metals, glass, and salvaged building components. Waste generated during construction activities is considered a one-time waste stream as opposed to an annual waste stream. The CALGreen Code requires a minimum of 50 percent of nonhazardous construction and demolition waste be presorted and delivered to the appropriate landfill ready for diversion. The remaining 50 percent of non-recyclable and/or contaminated construction waste would be landfilled. Individuals are not required to recycle 50 percent of construction waste; the 50 percent diversion rate is a Countywide rate and takes into account all landfills and disposal sites. Recycling of construction debris would reduce the potential amount of waste disposed of at landfills in the County, and would contribute to the recycling goals set forth by the County and AB 939. Taking construction waste to a construction and demolition material recovery facility would be generally less expensive than paying the gate fees at a landfill. The proposed project's construction-related impacts would be reduced to a less than significant level.

The majority of solid waste would be generated by future cannabis cultivation activities (indoor and outdoor), processing and packaging, and distribution operations. Solid waste from greenhouse and indoor grows would include, but would not be limited to, HID lights, plastics, lab wastes, pesticides,

and fertilizers. Non-cannabis wastes associated with cannabis operations are generally the same as those found in any other business. All applicable federal, State, and local requirements and BMPs would be incorporated into future cannabis facilities to reduce solid waste. Mitigation measures are required to reduce impacts resulting from solid waste generation on landfill facilities.

Future medical and adult use retail cannabis stores with or without mobile delivery would be allowed in areas where commercial and industrial land uses are allowed. Future retail cannabis stores with or without mobile delivery would have similar solid waste generation as the existing dispensaries. These facilities generally generate low solid waste, which includes solid waste generated by business operations (i.e., expired products, equipment, lightbulbs, etc.) and employees. Consumers at these facilities typically do not stay longer than is necessary to acquire the products being sold. Therefore, retail cannabis stores with or without mobile delivery are not anticipated to generate solid waste beyond what is currently generated. In addition, there is an existing overconcentration of medical cannabis dispensaries in unincorporated communities within the County. Option B would result in up to two retail cannabis stores per unincorporated community. Thus, an overconcentration would not occur and any solid waste generation would be distributed evenly throughout the County and, thus, throughout the public landfills within the County. Mitigation measures are required to reduce impacts resulting from solid waste generation on landfill facilities. Future retail cannabis stores would not generate solid waste amounts that would exceed existing landfill capacities. Impact are less than significant in this regard.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing before the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to landfill capacity would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Landfill Capacity

1. AB 939, SB1016, AB 341, and AB 1826 establish the CIWMB and implemented waste management plan requirements; require commercial solid waste to be reduced by 75 percent of solid waste generated by source; and create the recycling of yard trimmings and food scraps.
2. California Green Building Standards Code requires the reduction of solid waste for construction activities.
3. KCGP Land Use, Open Space, and Conservation Element Section 1.4, Public Facilities and Services Goals 1 and 10; Policies 1, 3, and 13; and Implementation Measure C relate to providing adequate public utilities and facilities, including landfills with adequate capacity, to residents and businesses and establish the proportional share of the local costs of infrastructure improvements required to service new developments.
4. KCGP Land Use, Open Space, and Conservation Element Section 1.10.1, General Provisions, Public Services and Facilities Policies 9, 15, and 16 relate to new development paying its pro rata

- share of local cost of expansions in utility services, facilities and infrastructure as related to landfills.
5. KCGP Safety Element Section 4.2, General Policies and Implementation Measure, which apply to more than one safety constraint Policy 4 and KCGP Safety Element Section 4.3, Seismically Induced Surface Rupture, Ground Shaking and Ground Failure Implementation Measures G, H, and I guide development of utilities and other lifeline infrastructure to maintain services.
 6. MBGP Public Services and Facilities Element, General Utilities Goal 4, Policy 5, and Implementation Measure 4 establish the funding mechanisms for new development to pay for improvements required to maintain utility services, facilities, and infrastructure.
 7. KCIWMP and the Kern County and Incorporated Cities Hazardous Waste Management Plan address solid and hazardous waste management issues.
 8. Title 8 of the Kern County Code of Ordinances, Chapter 8.28, regulates proper storage, transportation and disposal of solid waste.

Mitigation Measures

Options A

No mitigation measures are required.

Option B

MM 4.16-2 During construction of future cannabis-related facilities, the project applicant shall not store construction waste on-site for longer than the duration of the construction activity, or transport any waste to any unpermitted facilities. The project applicant shall also reduce construction waste transported to landfills by recycling solid waste construction materials, such as taking materials to recycling and reuse locations listed in the brochure on recycling construction and demolition materials available on the Kern County Waste Management Department Website.

MM 4.16-3 In order to reduce the amount of waste generated from cannabis-related operations being taken to the landfill, the following shall be incorporated into the conditions of approval for each project applicant:

Businesses generating four cubic yards or more of commercial solid waste per week are required to recycle and take one, or any combination, of the following actions:

- 1) Subscribe to source separated recycling service with a regional franchise hauler authorized to provide service for the area in which the business is located;
- 2) Subscribe to a mixed solid waste recycling service with a regional franchise hauler authorized to provide service for the areas in which the business is located; and
- 3) Self-recycle and certify compliance with Kern County Ordinance No. G-8337

- 4) Undertake a combination of such measures, or such alternate measures as may be approved by the County to reduce the amount of waste from the commercial sector being taken to a landfill.

MM 4.16-4

Prior to issuance of grading or building permits, or as detailed on a site plan submittal for a conditional use permit, or the approval of a site plan, the project applicant shall construct, subject to the review and approval of the Building Inspection Division of the Kern County Public Works Department and the Kern County Planning and Natural Resources Department, adequate, segregated, onsite screened storage for collection of commercial solid waste and source separated recyclable materials if constructing new facilities or if existing facilities do not provide such areas. The area shall be designed to be architecturally compatible with the development and shall not prevent security of the recyclables. Recycling areas of the bins or containers must provide for the preclusion of vectors and offer protection against adverse environmental conditions, such as rain or snow, which might render the collected materials unmarketable. Driveways and/or travel aisles shall provide, at a minimum, unobstructed access for collection vehicles and personnel. A sign clearly identifying all recycling/solid waste collection and loading areas and the materials accepted shall be posted adjacent to all points of direct access to the area.

Level of Significance after Mitigation

Impacts associated with Option A would be less than significant. Impacts regarding Option B would be less than significant.

Impact 4.16-6: Comply with Federal, State, and Local Statutes and Regulations Related to Solid Waste

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on commercial cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A does not provide opportunities for business development and thus would not result in an increase in residents or employees within the County, as discussed in detail in Section 4.12, *Population and Housing*. Implementing Option A in the long-term would not generate new sources of solid waste. Compliance with federal, State, and local statutes and regulations would continue to be complied with as they are under existing conditions.

As discussed in Impact 4.15-5, above, the implementation of Option A of the proposed project would generate solid waste during the closure of existing cannabis dispensaries. Common waste may include metals, masonry, plastic pipe, rocks, dirt, cardboard, or green waste related to land development. AB 939, SB 1016, AB 341, and AB 1826 require Kern County to attain specific waste diversion goals, as does the KCIWMP. The nine public landfills and three private landfills serving the County have available capacity. Compliance with federal, State, and local statutes and regulations would continue to be complied with as they are under existing conditions. Impacts would be less than significant in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently more than 20 retail cannabis stores with or without mobile delivery (refer to Figure 3-3) in operation and Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

As discussed in Impact 4.15-5, above, the implementation of Option B of the proposed project would generate solid waste during potential future construction and operation of cannabis-related facilities as well as closure or relocation of existing cannabis dispensaries. Common construction waste may include metals, masonry, plastic pipe, rocks, dirt, cardboard, or green waste related to land development. AB 939, SB 1016, AB 341, and AB 1826 require Kern County to attain specific waste diversion goals, as does the KCIWMP. The nine public landfills and three private landfills serving the County have available capacity. Implementation of Mitigation Measures MM 4.16-2 through MM 4.16-4 would ensure compliance with policies to reduce waste sent to landfills. Impacts would be less than significant in this regard.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing before the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to compliance with federal, State and local statutes and regulation for solid waste would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Solid Waste Regulations

Refer to Impact 4.16-5, above, for a summary of applicable existing regulations and policies related to Solid Waste.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

Implement Mitigation Measures 4.16-2 through MM 4.16-4, as described above.

Level of Significance after Mitigation

Impacts regarding Option A would be less than significant. Impacts regarding Option B would be less than significant.

Impact 4.16-7: Exceed Capacity of an Energy Supplier to Meet the Project's Need

Proposed Project Option A

Option A would result in no commercial medical and adult use cannabis activities and facilities within unincorporated Kern County. Option A would continue to allow cultivation and possession on an individual basis as defined in Proposition 64. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Commercial cultivation of more than 12 plants is not allowed under the current ordinance and any cultivation for commercial use of more than 6 plants would be required to cease operations (refer to Appendix B for specific wording of the proposed ordinance under Option A).

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A does not provide opportunities for business development and thus would not result in an increase in residents or employees within the County, as discussed in detail in Section 4.12, *Population and Housing*. Option A would continue to allow individuals to cultivate up to six plants on private property. Any energy demands generated would be similar to energy demands generated from residential uses. Therefore, Option A would not exceed energy supplies. Impacts would be less than significant in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing,

packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, dispensaries that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

Future cannabis-related facilities could require construction activities. Construction activities that would require electricity include activities such as the use of power tools. Construction of future cannabis-related facilities under Option B would have power demands on the electrical grid would be relatively small in scope and would end upon completion of each facility. These facilities would be distributed throughout unincorporated Kern County. This electricity demands would also be distributed between PG&E and SCE. Impacts from construction on the electrical services would be less than significant.

The majority of energy demands would result from future cannabis cultivation activities (mainly indoor cultivation), processing and packaging, and distribution operations. It is estimated that four mature cannabis plants require the equivalent of energy used by 24 refrigerators for indoor warehouse cultivation. Energy consumption associated with open field cultivation would be similar to other agricultural crops. Greenhouses use approximately a quarter of the lightbulbs that indoor warehouse cultivation facilities required. A 90,000 square-foot warehouse with LED lighting and roof-top solar would have an electric bill of approximately \$1 million monthly (The Statesman, 2015). In Pueblo, Colorado, 10 indoor grow facilities used 2.1 million kilowatt hours (kWh) in 2014 (Colorado Public Radio, 2015). Both future cannabis cultivation activities (mainly indoor cultivation), processing and packaging, and distribution operations would require heating, ventilation, and air conditioning (HVAC) systems necessary for odor control as well as equipment used to harvest and process cannabis products. Based on the above research, it was estimated that indoor cultivation would consume 60 to 120 kWh per square-foot per year. Given the indoor cultivation facilities could be up to 2,000,000 ft², this could create a demand of up to 120,000 to 240,000 megawatt-hours (MWh) per year. From indoor cultivation alone, there could be a substantial drain on the capacity of energy suppliers if there were no conservation measures or on-site electrical generation. The proposed project includes development standards to reduce energy consumption per square-foot and well as to require on-site energy generation (see Chapter 3, *Project Description*).

Open field cultivation would not require grow-lights, nor would it require HVAC systems necessary for odor control during flowering and harvesting. Fuel consumption for future indoor and outdoor cannabis cultivation as well as cannabis processing and packaging and distribution would occur from farming equipment, employee commutes to the fields, on-site structures related to the cultivation and business of commercial cannabis, and fuel consumed by transport from one facility to the other. Therefore, future cannabis-related activities could, depending on location within Kern County, the energy demand could substantially exceed the energy supply. All applicable federal, State, and local requirements and BMPs would be incorporated into construction of new or modified structures. Mitigation measures would reduce impacts; however, impacts would be significant.

Future medical and adult use retail cannabis stores with or without mobile delivery would be allowed in areas where commercial and industrial land uses are allowed. Future retail cannabis stores with or without mobile delivery would have similar energy demands as the existing dispensaries. These facilities generally generate energy demands similar to other businesses, requiring lighting, HVAC, and security. Consumers at these facilities typically do not stay longer than is necessary to acquire the products being sold. Therefore, retail cannabis stores with or without mobile delivery are not anticipated to generate energy demands beyond what is currently generated. In addition, there is an existing overconcentration of medical cannabis dispensaries in unincorporated communities within the County. Option B would result in up to two retail cannabis stores per unincorporated community. Thus, an overconcentration would not occur and any energy demands would be distributed evenly throughout the County and, thus, throughout the PG&E, SCE, and other energy suppliers within the County. Future retail cannabis stores would not exceed the capacity of energy suppliers. Impact are less than significant in this regard.

Certain future cannabis-related activities and facilities would require processing a CUP and additional future project-specific review under CEQA. A project requiring a CUP requires a noticed public hearing before the Kern County Planning Commission. The CUP process, with CEQA review, would be required for future indoor cannabis cultivation facilities that are proposed within a warehouse or other structure in zone classifications C-2 (General Commercial) and CH (Highway Commercial) and all future retail cannabis stores with or without mobile delivery. In addition, any future commercial medical or adult use cannabis cultivation (indoor or outdoor), processing and packaging, or distribution facilities that are not consistent with development standards would require CUP processing and additional CEQA review. Therefore, project-specific, as well as cumulative, impacts related to energy supply and capacity would be considered and mitigated during the CUP process.

Summary of Applicable Existing Regulations and Policies Related to Energy

1. CEC regulates the provisions of natural gas and electricity within the State.
2. KCGP Land Use, Open Space, and Conservation Element Section 1.4, Public Facilities and Services Goals 1, 3, and 4; Policies 1, 2, and 3; and Implementation Measure C relate to providing adequate public utilities and facilities to residents and businesses and establish the proportional share of the local costs of infrastructure improvements required to service new developments.
3. KCGP Land Use, Open Space, and Conservation Element Section 1.9, Resources Policy 19 promotes regulatory responsibility concerning energy-related issues.
4. KCGP Land Use, Open Space, and Conservation Element Section 1.10.1, General Provisions, Public Services and Facilities Policies 9, 15, and 16 relate to new development paying its pro rata share of local cost of expansions in utility services, facilities and infrastructure.
5. KCGP Safety Element Section 4.2, General Policies and Implementation Measure, which apply to more than one safety constraint Policy 4 and KCGP Safety Element Section 4.3, Seismically Induced Surface Rupture, Ground Shaking and Ground Failure Implementation Measures G, H, and I guide development of utilities and other lifeline infrastructure to maintain services.
6. MBGP Public Services and Facilities Element, General Utilities Goal 4, Policy 5, and Implementation Measure 4 establish the funding mechanisms for new development to pay for improvements required to maintain utility services, facilities, and infrastructure.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

Implement Mitigation Measures MM 4.16-2 through MM 4.16-4, as described above, and Mitigation Measures 4.7-2 and MM 4.7-3, as described in Section 4.7, *Greenhouse Gas Emissions*.

Level of Significance after Mitigation

Impacts would be less than significant for Option A. Impacts would be less than significant for Option B with respect to retail cannabis stores with or without mobile delivery. Impacts would be significant and unavoidable with respect to Option B cannabis cultivation, processing and packaging, and distribution facilities and operations.

Cumulative Setting Impacts and Mitigation Measures

Cumulative Setting

The geographic scope for cumulative impacts on utilities and service systems includes both the KCGP and the regional growth plan and projections included in the Kern COG Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) approved in 2014, as defined in Section 3.7, *Cumulative Projects*. This is a large enough area to encompass any effects of the proposed project on utilities and service systems that may combine with similar effects caused by other projects, and provides a reasonable context wherein cumulative actions could affect these resources. The cumulative analyses consider whether the proposed project, Option A or Option B, in combination with the past, present, and reasonably foreseeable projects, could cumulatively affect utilities and service systems resources.

Cumulative Impacts and Mitigation Measures

Impact 4.16-8: Contribute to Cumulative Impacts to Utilities and Service Systems

Proposed Project Option A

Option A of the proposed project would ban all commercial medical and adult use cannabis-related activities other than what is allowed for personal use under Proposition 64. Option A would not result in an increase in residents or employees within the County. As discussed above, Option A would not exceed wastewater treatment requirements of the Central Valley or Lahontan RWQCB (Impact 4.16-1), require the construction of a new water or wastewater treatment facility (Impact 4.16-2), require the construction of a new storm drainage facility (Impact 4.16-3), exceed water supplies (Impact 4.16-4), or exceed capacity of an energy supplier (Impact 4.16-7). Therefore, Option A would not contribute to cumulative impacts when combined with past, present, or reasonably foreseeable projects. Less than significant impacts would occur in this regard.

With respect to exceeding landfill capacity (Impact 4.16-5) and conflicting with federal, State, and local statutes and regulations related to solid waste (Impact 4.16-6), Option A would require existing dispensaries to cease operation within the County. The closure of these dispensaries would occur over a one- to two-year timeframe to allow for amortization of the business investment. Closing

activities would be required to comply with federal, State, and local rules, regulations, and policies. Other projects in the cumulative area would be required to adhere to federal, State, and local requirements, as well as project-specific mitigation measures regarding solid waste and recycling. Therefore, Option A would not contribute to cumulative impacts when combined with past, present, or reasonably foreseeable projects. Less than significant impacts would occur in this regard.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis store with or without mobile delivery facilities. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B). The County currently allows medical cannabis dispensaries.

Implementation of Option B would not exceed wastewater treatment requirements of the Central Valley or Lahontan RWQCB (Impact 4.16-1). Option B would require that future cannabis-related facilities and activities comply with federal, State, and local requirements. Future cannabis cultivators within the Central Valley RWQCB would also be required to enroll in the Cannabis Cultivation Waste Discharge Regulatory Program. Other projects in the cumulative area would be required to comply with federal, State, and local requirements, as well as requirements from the Central Valley and Lahontan RWQCBs and project-appropriate mitigation measures. Therefore, Option B would not combine with those impacts of other past, present, and reasonably foreseeable future projects to result in a significant cumulative impact.

Regarding the capacity of existing water and wastewater treatment facilities (Impact 4.16-2) and stormwater drainage facilities (Impact 4.16-3), Option B would require that future cannabis-related facilities and activities comply with federal, State, and local requirements, as well as incorporate Mitigation Measure MM 4.16-1 and Mitigation Measures MM 4.9-1 through MM 4.9-5. Other projects in the cumulative area would be required to comply with federal, State, and local requirements, as well as project-appropriate mitigation measures. However, capacity of water and wastewater treatment facilities and stormwater drainage facilities may be able to accommodate individual project, but when combined, may exceed their capacity, resulting in the need to expand existing facilities or construct new facilities. Therefore, Option B would contribute to cumulative impacts when combined with past, present, or reasonably foreseeable projects. Cumulative impacts would be significant.

Regarding sufficient water supply (Impact 4.16-4), Option B would result in impacts to water supply. The majority of the water demand would result from future cannabis cultivation activities (indoor and outdoor), processing and packaging, and distribution operations. Future indoor cultivation would have a countywide total water demand of 3,596,200 gallons (11.04 acre-feet) per year and future outdoor cannabis cultivation facilities would have a total water demand of 68,983,650 gallons per acre (211.7 acre-feet) per year. Future activities could occur within a water district, CSA, PUD, or groundwater basin that does not have sufficient water supply for the demand of a future cannabis facility. Option B would require the implementation of mitigation measures; however, because the proposed project would potentially develop cannabis-related facilities and activities within areas that do not have sufficient water supply, there could be a significant and

unavoidable impact. Impacts to water supply, including groundwater supply, when combined with past, present, or reasonably foreseeable projects could result in groundwater demand that exceeds the groundwater supply, especially in areas where a water purveyor's or where groundwater basins are identified as not having sufficient water supply or are considered in overdraft. Therefore, Option B would contribute to cumulative impacts when combined with past, present, or reasonably foreseeable projects. Cumulative impacts would be significant.

With respect to exceeding landfill capacity (Impact 4.16-5) and conflicting with federal, State, and local statutes and regulations related to solid waste (Impact 4.16-6), Option B would require existing dispensaries to close and/or relocate, resulting in solid waste generation. Option B could also result in construction related waste, depending on if future cannabis related facilities require new structures. Finally, Option B could result in solid waste generation from the operation of future cannabis-related facilities, especially from cultivation and processing and packaging facilities. Option B would require implementation of Mitigation Measures MM 4.16-2 through MM 4.16-4 regarding solid waste that could result from the implementation of the proposed project. Other projects in the cumulative area would be required to adhere to federal, State, and local requirements, as well as project-specific mitigation measures regarding solid waste and recycling. Therefore, Option B would not contribute to cumulative impacts when combined with past, present, or reasonably foreseeable projects. Less than significant impacts would occur in this regard.

With respect to the capacity of an energy supplier (Impact 4.16-7), Option B would result in an increase in energy consumption. Option B includes development standards to reduce energy consumption as well as requires on-site energy generation. Future cannabis facilities would comply with federal, State, and local requirements and BMPs, and well as implement mitigation measures; however, because the proposed project would potentially develop cannabis-related facilities and activities within areas that do not have sufficient energy supply, there could be a significant and unavoidable impact. Impacts to energy supply when combined with past, present, or reasonably foreseeable projects could result in energy consumption that exceeds the supply. Therefore, Option B would contribute to cumulative impacts when combined with past, present, or reasonably foreseeable projects. Cumulative impacts would be significant.

Mitigation Measures

Option A

No mitigation measures are required.

Option B

Implement Mitigation Measures MMs 4.16-1 through MM 4.16-4, as described above, as well as Mitigation Measures MM 4.7-2 and MM 4.7-3, as described in Section 4.7, *Greenhouse Gas Emissions*, and Mitigation Measures MM 4.9-1 through MM 4.9-5, as described in Section 4.9, *Hydrology and Water Quality*.

Level of Significance after Mitigation

With respect to Option A, cumulative impacts would be less than significant. Cumulative impacts resulting from Option B would be significant and unavoidable regarding capacity of water and wastewater treatment facilities, capacity of stormwater drainage facilities, water supply, and energy supply. Potential Option B cumulative impacts to all other utilities would be less than significant.

Chapter 5

Consequences of Project Implementation

Chapter 5

Consequences of Project Implementation

5.1 Environmental Effects Found to Be Less than Significant

Section 15128 of the California Environmental Quality Act (CEQA) Guidelines requires that an Environmental Impact Report (EIR) “contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the EIR.”

Kern County has engaged the public in the scoping of the environmental document. Comments received during scoping have been considered in the process of identifying issue areas that should receive attention in the EIR. The contents of this EIR were established based on an Initial Study (IS)/Notice of Preparation (NOP) prepared in accordance with the CEQA Guidelines and on public and agency input received during the scoping process. Issues that were found to have no impact or less-than-significant impacts during preparation of the IS/NOP do not need to be addressed further in this EIR. Based on the findings of the NOP and the results of scoping, a determination was made that the resource area Mineral Resources would not be significantly impacted by the proposed project, either Option A or Option B, and are therefore not addressed in this EIR.

After further study and environmental review in this EIR, direct and indirect impacts of the proposed project (not including cumulative impacts) would be less than significant or could be reduced to less-than-significant levels with mitigation measures for the resources areas listed in Table 5-1, *Summary of Less than Significant Impacts of the Proposed Project*.

5.2 Significant Environmental Effects that Cannot Be Avoided

Section 15126.2(b) of the CEQA Guidelines requires that the EIR describe any significant impacts, including those that can be mitigated but not reduced to less-than-significant levels. Potential environmental effects of the project and proposed mitigation measures are discussed in detail in Chapter 4, *Environmental Analysis*, of this EIR.

The environmental impacts determined to be significant and unavoidable and described in Table 5-2, *Summary of Significant Impacts of the Proposed Project*.

Table 5-1. Summary of Less Than Significant Impacts of the Proposed Project			
EIR Section	Resource	Proposed Project Impacts	
		Option A	Option B
4.1	Aesthetics	X	X
4.2	Agriculture and Forest Resources	X	
4.4	Biological Resources	X	
4.5	Cultural and Tribal Cultural Resources	X	X
4.6	Geology and Soils	X	X
4.8	Hazards and Hazardous Materials	X	X
4.9	Hydrology and Water Quality	X	
4.10	Land Use and Planning	X	X
4.11	Noise	X	X
4.12	Population and Housing	X	X
4.13	Public Services		X
4.14	Recreation	X	X
4.15	Transportation and Traffic		X
4.16	Utilities and Service Systems	X	

Notes:
X = Proposed project impacts were found to be one of the following: no impact; less than significant; or less than significant with implementation and mitigation measures.

Cumulative impacts are discussed in Sections 5.2 and 5.4, and are described in Table 5.2.

Table 5-2. Summary of Significant Impacts of the Proposed Project

Resources	Project Impacts		Cumulative Impacts	
	Option A	Option B	Option A	Option B
Aesthetics	Mitigation measures are not required for aesthetics. Impacts would be less than significant.	Mitigation measures would reduce impacts for aesthetics to a less than significant level.	Mitigation measures are not required for aesthetics. Cumulative impacts would be less than significant.	Option B would result in new cannabis facilities occupying both existing and new structures within the Valley, Mountain, and Desert regions of the County. In combination with past, present, and reasonably foreseeable projects, this would adversely alter the existing visual character of the area, introduce new sources of light and glare, and effect scenic resources. Therefore, Option B's cumulative contribution after implementation of mitigation measures would remain cumulatively significant and unavoidable.
Agriculture and Forest Resources	Mitigation measures are not required for agriculture and forest resources. No impacts would occur or impacts would be less than significant.	Implementation of Option B could affect areas that contain oak woodland, forest land, and Prime Farmland, Unique Farmland, and Farmland of Statewide Importance; Option B would result in the conversion of agriculture to non-agricultural land uses. With implementation of mitigation measure these impacts would remain significant and unavoidable.	Mitigation measures are not required for agriculture and forest resources. No cumulative impacts would occur or cumulative impacts would be less than significant.	Implementation of Option B could affect areas that contain oak woodland, forest land, and Prime Farmland, Unique Farmland, and Farmland of Statewide Importance, and could convert forest land to non-forest land and agriculture to non-agricultural land. In combination with past, present, and reasonably foreseeable projects, Option B would contribute to cumulative impacts. Even with implementation of mitigation measure impacts would remain cumulatively significant and unavoidable.
Air Quality	Option A would require customers to travel to other cities within Kern County or to travel outside of Kern County to purchase cannabis products. This would increase vehicle trips and vehicle miles travelled (VMT). The increased vehicle trips and VMT would result in exceedance of criteria air pollutant	Option B would implement mitigation measures, including a Developer Mitigation Contract (DMC), to reduce emissions of ROG, NO _x , PM ₁₀ , and PM _{2.5} to below the thresholds in the San Joaquin Valley Air Pollution Control District (SJVAPCD) and the Eastern Kern Air Pollution Control District (EKAPCD). However, even with	Mitigation measures would reduce most cumulative impacts to less than significant level. Option A would generate substantial levels of criteria air pollutant emissions through increasing VMT and would have an adverse effect on obstruction of an air quality plan. This increase in emissions, when	Implementation of Option B would incorporate mitigation measures to reduce impacts associated to ROG, NO _x , PM ₁₀ , and PM _{2.5} . In combination with past, present, and reasonably foreseeable projects, Option B would contribute to cumulative impacts. However, even with implementation of

Table 5-2. Summary of Significant Impacts of the Proposed Project

Resources	Project Impacts		Cumulative Impacts	
	Option A	Option B	Option A	Option B
	emissions thresholds, and operation-related criteria pollutant emissions thresholds, and could conflict with applicable air quality plans. Even with implementation of mitigation measure, these impacts would remain significant and unavoidable.	implementation of mitigation measures, emissions of nonattainment pollutants would be significant and unavoidable.	combined with past, present, or reasonably foreseeable projects, would result in cumulatively substantial levels of criteria air pollutants and would thus contribute to the obstruction of an air quality plan. Therefore, even with implementation of mitigation measures, Option A would be cumulatively significant and unavoidable for criteria air pollutant emissions and obstruction of an air quality plan.	mitigation measures, emissions of nonattainment pollutants associated with ROG and NO _x would be cumulatively significant and unavoidable.
Biological Resources	Mitigation measures are not required for biological resources. Impacts would be less than significant.	Implementation of Option B could affect areas that contain riparian areas, other sensitive habitats, and lands that may be occupied by special-status plant and animal species. Any future construction and operation activities associated with cannabis related facilities could introduce invasive species or degrade habitat through introducing weeds, dust, emissions, light, or through spills of hazardous materials, which would harm special-status species or habitat. Impacts to special-status species and their habitat would be significant and unavoidable	Mitigation measures are not required for biological resources. Cumulative impacts would be less than significant	Implementation of Option B could affect areas that contain riparian areas, other sensitive habitats, and lands that may be occupied by special-status plant and animal species. Any construction and operation of cannabis related facilities could introduce invasive species or degrade habitat through introducing weeds, dust, emissions, light, or through spills of hazardous materials, which would harm special status-species or habitat. In combination with past, present, and reasonably foreseeable projects, Option B would contribute to cumulative impacts. Even with mitigation measures, impacts would be cumulatively significant and unavoidable
Cultural and Tribal Cultural Resources	Mitigation measures are not required for cultural resources. Impacts would be less than significant.	Mitigation measures are not required for cultural resources. Impacts would be less than significant.	Mitigation measures are not required for cultural resources. Cumulative impacts would be less than significant.	Each cannabis related facility under Option B would be required to comply with all applicable State, federal, and County regulations concerning protection of cultural and tribal cultural resources, and would implement mitigation measures. However, each incremental development would have

Table 5-2. Summary of Significant Impacts of the Proposed Project

Resources	Project Impacts		Cumulative Impacts	
	Option A	Option B	Option A	Option B
				the potential to cause a considerable contribution in combination with impacts from past, present, or reasonably foreseeable projects. Therefore, impacts would be considered cumulatively significant and unavoidable.
Greenhouse Gas Emissions	Option A would require customers to travel to other cities within Kern County or to travel outside of Kern County to purchase cannabis products. This would increase vehicle trips and VMT. The increase in travel would increase mobile source greenhouse gas (GHG) emissions. Even with implementation of mitigation measure, these impacts would be significant and unavoidable.	Option B would result in GHG emissions from construction and operation activities associated with future cannabis related facilities. The proposed project would generate GHG emissions, either directly or indirectly, that could have a potentially significant impact on the environment. Even with the implementation of mitigation measures impacts to GHG emissions would be significant and unavoidable.	Options A and B would not result in a 29 percent reduction from BAU. Kern County does not have the jurisdictional authority to control the various cumulative sources of GHGs in the County, or the GHG emissions from sources around the globe, which all contribute to climate change. Although the County and other agencies with the necessary jurisdiction are currently taking action to reduce GHG emissions, the County cannot assure that these measures would ultimately be implemented or sufficient to address climate change. Therefore, even with implementation of mitigation measures, GHG emissions for Option A and Option B would be considered cumulatively significant and unavoidable.	
Hydrology and Water Quality	Mitigation measures are not required for hydrology and water quality. Impacts would be less than significant.	The majority of water demand for future cannabis facilities under Option B would be from cannabis cultivation and processing and packaging activities. Based on their locations, future cannabis related facilities may be located in water districts without adequate water supply. Mitigation measures would be implemented. However, because the proposed project would potentially develop cannabis-related facilities and activities within areas that do not have sufficient water supply, impacts to groundwater supply would be significant and unavoidable.	Mitigation measures are not required for hydrology and water quality. Cumulative impacts would be less than significant.	The majority of water demand for future cannabis facilities under Option B would be from cultivation and processing and packaging activities. Impacts to groundwater supply, when combined with past, present, or reasonably foreseeable projects could result in groundwater demand that exceeds the groundwater supply, especially in areas where groundwater basins are identified as not having sufficient water supply or are considered in overdraft. Therefore, impacts to hydrology and water quality would be cumulatively significant and unavoidable.

Table 5-2. Summary of Significant Impacts of the Proposed Project

Resources	Project Impacts		Cumulative Impacts	
	Option A	Option B	Option A	Option B
Public Services	A total ban on commercial cannabis-related activities, that are legal under Proposition 64 State wide while allowing personal adult use, would result in the need for an enforcement task force to coordinate across County agencies and seek State and federal funding. Mitigation Measure MM 4.13-1 requires the formation of the Cannabis Activity Enforcement Task Force. However, the funding source for this task force, outside the County's General Fund, is not known with certainty. Therefore, impacts would be significant and unavoidable in this regard.	Mitigation measures would reduce impacts to less than significant levels.	Option A would create an enforcement impact for law enforcement protection, County Counsel, and the District Attorney, as well as coordinating County Departments. Mitigation Measure MM 4.13-1 would provide mitigation for the enforcement requirements however the funding is uncertain. Option A would contribute to cumulative impacts when combined with past, present, or reasonably foreseeable projects. Therefore, impacts to public services would be cumulatively significant and unavoidable.	Mitigation measures would reduce cumulative impacts to less than significant levels.
Transportation and Traffic	Option A would result in large VMT and potential consumers would be required to travel distances ranging from approximately 15 miles to more than 267 miles. The increase in VMT and distances traveled would increase traffic and thus increase use of the circulation system. Given the uncertain nature of which jurisdictions would allow sales of cannabis and cannabis project, Option A could conflict with applicable plans and ordinances related to the performance of the circulation system as well as conflict with applicable congestion management plans. No mitigation measures are feasible to reduce impacts. Therefore, impacts would be significant and unavoidable in this regard.	Mitigation measures would reduce impacts to less than significant levels.	The projected population increases within the County, both unincorporated and incorporated areas, and the uncertain nature of which jurisdictions would allow sales of cannabis and cannabis products, cumulative distances traveled and VMT would increase. This increase in use of the circulation system could cumulatively conflict with applicable plans and ordinances related to the performance of the circulation system as well as conflict with applicable congestion management plans. No mitigation measures are feasible to reduce impacts. Therefore, impacts would be cumulatively significant and unavoidable in this regard.	The projected population increases within the County, both unincorporated and incorporated areas, and the uncertain nature of which jurisdictions would allow sales of cannabis and cannabis products, cumulative distances traveled and VMT could increase. This increase in use of the circulation system could cumulatively conflict with applicable plans and ordinances related to the performance of the circulation system as well as conflict with applicable congestion management plans. No mitigation measures are feasible to reduce impacts. Therefore, impacts would be cumulatively significant and unavoidable in this regard.
Utilities and Service Systems	Mitigation measures are not required for utilities and service systems. Impacts would be less than significant.	The majority of water demand for future cannabis facilities under Option B would be from cultivation and processing and packaging activities. Based on their locations, future cannabis facilities may be	Mitigation measures are not required for utilities and service systems. Cumulative impacts would be less than significant.	The majority of water demand and energy consumption for future cannabis related activities and facilities under Option B would result from cultivation and processing and

Table 5-2. Summary of Significant Impacts of the Proposed Project

Resources	Project Impacts		Cumulative Impacts	
	Option A	Option B	Option A	Option B
		located in water districts without adequate water supply. Similarly, indoor cultivation and processing and packaging consume the most energy of the cannabis related activities. The energy demand from future cannabis-related activities could, depending on location within Kern County, could substantially exceed the energy supply. Even with the implementation of mitigation measures, impacts to utilities and service systems would be significant and unavoidable.		packaging activities. Option B when combined with past, present, or reasonably foreseeable projects could result in water demand and energy consumption that exceed the supply. Therefore, impacts to utilities and service systems would remain cumulatively significant and unavoidable.

5.3 Significant Irreversible Impacts

Section 15126.2(c) of the CEQA Guidelines defines an irreversible impact as an impact that uses nonrenewable resources during the initial and continued phases of the project. Irreversible impacts can also result from damage caused by environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to ensure that such consumption is justified. Implementation of Option A of the proposed project would commit nonrenewable resources during any demolition activities and fuel consumption related to increased vehicle miles traveled (VMT) during Option A operations. Implementation of Option B of the proposed project would commit nonrenewable resources during any construction activities and future cannabis related facility operations. During Option B implementation, future cannabis related operations, oil, gas, and other nonrenewable resources would be consumed for the cultivation, processing and packaging, distribution, and sales of cannabis products. Therefore, an irreversible commitment of nonrenewable resources would occur as a result of either Option A or Option B. However, assuming that those commitments occur in accordance with the adopted goals, policies, and implementation measures of the Kern County General Plan (KCGP) and Metropolitan Bakersfield General Plan (MBGP), as a matter of public policy, those commitments have been determined to be acceptable. The KCGP and MBGP ensure that any irreversible environmental changes associated with those commitments will be minimized.

5.4 Significant Cumulative Impacts

According to Section 15355 of the CEQA Guidelines, the term *cumulative impacts* “refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.” Individual effects that may contribute to a cumulative impact may be from a single project or a number of separate projects. Individually, the impacts of a project may be relatively minor, but when considered along with impacts of other closely related or nearby projects, including newly proposed projects, the effects could be cumulatively considerable.

This EIR has considered the potential cumulative effects of the proposed project. Impacts for the following issue areas have been found to be cumulatively considerable:

- Aesthetics (Option B);
- Agriculture and Forest Resources (Option B);
- Air Quality (Options A and B);
- Biological Resources (Option B);
- Cultural and Tribal Resources (Option B);
- Greenhouse Gas Emissions (Options A and B);
- Hydrology and Water Quality (Option B);
- Public Services (Option A);
- Transportation and Traffic (Options A and B); and
- Utilities and Service Systems (Option B).

Each of these significant cumulative impacts is discussed in the applicable section of Chapter 4, *Environmental Analysis*, of this EIR.

5.5 Growth Inducement

The KCGP and MBGP recognize that certain forms of growth are beneficial, both economically and socially. Section 15126.2(d) of the CEQA Guidelines provides the following guidance on growth-inducing impacts: a project is identified as growth inducing if it “could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment.”

Growth inducement can be a result of new development that requires an increase in dwelling units or an increase in employment, removes barriers to development, or provides resources that lead to secondary growth.

Proposed Project Option A

The purpose of the proposed project is to implement changes to the Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on cannabis-related activities. Under Option A of the proposed project, commercial cannabis-related activities would not be allowed. Option A would require the existing medical cannabis dispensaries to cease operation within the County over a one- to two-year timeframe to allow for amortization of the business investment. Certain medical dispensary facilities that opened after the establishment of the moratorium would be required to cease operation immediately. Therefore, Option A would not directly or indirectly result in the physical construction of residential units or other structures within unincorporated Kern County. Development of properties within unincorporated Kern County would occur as shown in the KCGP land use designations and Zoning Ordinance; however, land uses related to medical and adult use cannabis related activities would not be allowed. No roadway improvements or extension of roads or other infrastructure would occur as a result of Option A.

Therefore, Option A would not induce substantial population growth in the County either directly, by proposing new homes or businesses, or remove barriers indirectly, through extension of roads or other infrastructure, and would not exceed existing community services capacities such that new facilities would be needed. Option A does not provide opportunities for commercial cannabis activities. As such, Option A would not lead to substantial or economic growth that would induce substantial population growth and this impact is less than significant.

Proposed Project Option B

Option B would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis stores with or without mobile delivery. Future cannabis-related activities authorized under Option B, within unincorporated Kern County, would result in the development of up to 2,000,000 ft² of indoor cultivation activities, up to 150 acres of outdoor cultivation activities, up to 500,000 ft² of processing, packaging, and distribution operations, and up to 40 retail cannabis stores with or without mobile delivery. The County currently allows medical cannabis dispensaries. Option B would result in closing, and or relocating, retail cannabis stores that opened before and any illegally opened after the moratorium and are currently being reviewed for compliance by the County, because there are currently 22 dispensaries, many of which are within the same unincorporated community (refer to Figure 3-3). Option B would allow for 2 retail cannabis stores with or without mobile delivery in each unincorporated community with a countywide

total of 40 retail cannabis stores with or without mobile delivery (refer to Appendix C for specific wording of the proposed ordinance under Option B).

Future cannabis-related activities authorized under Option B are not anticipated to result in a population increase beyond what has been identified in the KCGP and the regional growth plan and projections included in the Kern COG Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). At this time, specific development related to cannabis-related activities is not proposed as part of Option B. Future development would be required to be consistent with the updated standards and conditions resulting from Option B, as well as consistent with other County land uses, development, and design programs, policies, standards, guidelines, and regulations contained in the KCGP, MBGP, and the Kern County Code of Ordinances. As future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis stores with or without mobile delivery facilities are proposed, the County would review projects on a case-by-case basis to determine if a future project is compliant with Option B and any other relevant Kern County planning documents.

Given the history of development within Kern County, including the oil and gas, wind, solar, and agricultural industries, as well as urban development including industrial, commercial, and residential, the general industries of farm, manufacturing (including food manufacturing), private service providing industries such as wholesale trade and retail trade (including food and beverage services as well as general merchandise), and other services, are expected to continue to sustain a substantial share of employment for Kern County residents. It is anticipated that the existing labor force residing in Kern County is sufficient to provide the industry workforce needed to accommodate the countywide maximums identified in Option B. Any increase in the workforce, including increases as a direct result of cannabis-related activities, would be consistent with the Kern COG's population and housing growth projects for the County as a whole. In addition, as discussed in Section 4.12, *Population and Housing*, unemployment in Kern County, as of December 2016, was approximately 9.9 percent; therefore, there would be an available labor pool to fill the anticipated nominal growth in employment.

A project could induce population growth in an area either directly or indirectly. More specifically, the development of new homes or businesses could induce population growth directly, whereas the extension of roads or other infrastructure could induce population growth indirectly. Option B would not construct new residential units nor would it result in the need for roadway improvements or expansions, therefore, Option B would not directly induce population growth in this regard. As outlined above, Option B would result in future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, testing, and retail cannabis stores with or without mobile delivery facilities which would result in new employment opportunities; however, Kern County has an available workforce to accommodate any increase in employment as a result of the cannabis-related industry. Therefore, Option B would not induce substantial population growth in the County.

5.6 Energy Conservation

Public Resources Code Section 21100(b)(3) and CEQA Guidelines Appendix F requires a description (where relevant) of the wasteful, inefficient, and unnecessary consumption of energy caused by a project. In 1975, the California State Legislature adopted Assembly Bill 1575 (AB 1575) in response to the oil crisis of the 1970s. Appendix F of the CEQA Guidelines provides

guidance for assessing potential impacts that a project could have on energy supplies, focusing on the goal of conserving energy by ensuring that projects use energy wisely and efficiently. Because Appendix F of the CEQA Guidelines does not include specific significance criteria, this threshold is based on the goal of Appendix F of the CEQA Guidelines; therefore, an energy impact is considered significant if the project would:

Develop land uses and patterns that cause wasteful, inefficient, and unnecessary consumption of energy or construct new or retrofitted buildings that would have excessive energy requirements for daily operation.

Future cannabis cultivation activities, processing and packaging activities, distribution activities, and sales of cannabis products have a very high probability of generating substantial demands on regional energy supplies. Section 4.7, *Greenhouse Gas Emissions*, describes effects on greenhouse gas (GHG) emissions that would be caused by implementation of the proposed project, both Options A and B, including a discussion on the effects of the proposed project on energy as it relates to GHG emissions. Section 4.16, *Utilities and Services Systems*, describes impacts on water and electricity consumption from cultivation activities. Also, compliance with all applicable building codes, as well as with County policies and proposed mitigation measures identified in this EIR, result in lower energy and water consumption and higher energy and water conservation than older structures built under prior editions of applicable building code requirements. The proposed project, Option B, does include 2,000,000 ft² of indoor cannabis cultivation, known for its substantial energy-consumption patterns and potentially 120,000 to 240,000 Mega-Watt hour (MWh) per year; one of the mitigation strategies is to conserve energy to the most practical extent possible and incorporate alternative sources of energy (such as solar arrays on indoor cultivation facilities) (see Section 4.16, *Utilities and Services Systems*, Impact 4.16-7 for more information).

As discussed above, resources that would be consumed as a result of proposed project implementation include water, electricity, and fossil fuels during construction and operation. Additionally, any construction activities resulting from the implementation of the proposed project would require the manufacturing of new materials, some of which would not be recyclable, and the energy required for the production of these materials would also result in an irretrievable commitment of natural resources. The anticipated equipment, vehicles, and materials required for construction of the proposed project are detailed as part of the technical appendices of Section 4.3, *Air Quality*. The amount and rate of consumption of these resources would result in significant environmental impacts and the potentially unnecessary, inefficient, or wasteful use of resources. Compliance with all applicable building codes, as well as County policies and the mitigation measures identified in this EIR would ensure that all natural resources are conserved to the maximum extent possible.

Title 24, California's Energy Efficiency Standards for Residential and Non-residential Buildings, was established by the California Energy Commission (CEC) in 1978 in response to a legislative mandate to create uniform building codes to reduce California's energy consumption, and provide energy efficiency standards for residential and non-residential buildings. In 2010, the CEC updated Title 24 standards with more stringent requirements. The 2010 Standards are expected to substantially reduce the growth in electricity and natural gas use. Additional savings result from the application of the Standards on building alterations. For example, requirements for cool roofs,

lighting, and air distribution ducts are expected to save electricity. These savings are cumulative, doubling as years go by.

The reduction in energy consumption and associated emissions is not directly proportional to the extent that Title 24 requirements are exceeded; that is, the reduction is less than the 25 percent improvement above Title 24 requirements. The degree of reduction for generation of electricity also reflects future requirements of the Renewal Portfolio Standard in that a higher percentage of renewable energy in the serving utilities energy mix would reduce the GHG emissions per unit of electricity used (e.g., kilowatt-hour) and the corresponding GHG emission reduction on a mass basis would be less. Table 4.7-8, *Project Consistency with Scoping Plan Greenhouse Gas Emission Reduction Strategies*, demonstrates consistency with all feasible Scoping Plan emission reduction strategies. Finally, the proposed project would adhere to all federal, State, and local requirements for energy efficiency.

Therefore, the proposed project would be designed to reduce the inefficient, wasteful, or unnecessary consumption of building energy and be as energy efficient as possible. Because indoor cannabis cultivation would place a relatively high rate per square-foot of electricity demand within Kern County (potentially 60 to 120 kWh per square-foot per year), even with energy conservation strategies, the proposed project would result in a substantial consumption of building energy, demand on regional energy supplies and could be characterized as wasteful, inefficient, and unnecessary consumption of energy.

Chapter 6

Alternatives

Chapter 6

Alternatives

6.1 Introduction

The California Environmental Quality Act (CEQA) requires that an Environmental Impact Report (EIR) describe a range of reasonable alternatives to the proposed project or to the location of the project site that could feasibly avoid or lessen any significant environmental impacts of the project while attaining most of the proposed project's basic objectives. An EIR also must compare and evaluate the environmental effects and comparative merits of the alternatives. This chapter describes alternatives considered but eliminated from further consideration, including the reasons for elimination, and compares the environmental impacts of several alternatives retained with those of the proposed project.

The following are key provisions of the CEQA Guidelines (Section 15126.6):

- The discussion of alternatives shall focus on alternatives to the project or its location that are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be costlier.
- The No Project Alternative shall be evaluated, along with its impacts. The no project analysis shall discuss the existing conditions at the time the notice of preparation was published, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services.
- The range of alternatives required in an EIR is governed by a “rule of reason;” therefore, the EIR must evaluate only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project.
- For alternative locations, only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR.
- An EIR need not consider an alternative whose effects cannot be reasonably ascertained and whose implementation is remote and speculative.

The range of feasible alternatives is selected and discussed in a manner to foster meaningful public participation and informed decision making. Among the factors that may be taken into account when addressing the feasibility of alternatives, as described in Section 15126.6(f)(1) of the CEQA Guidelines, are environmental impacts, site suitability, economic viability, availability of infrastructure, general plan consistency, regulatory limitations, jurisdictional boundaries, and whether the project proponent could reasonably acquire, control, or otherwise have access to an alternative site. An EIR need not consider an alternative whose effects could not be reasonably identified, whose implementation is remote or speculative, and that would not achieve the basic project objectives.

Option A of the proposed project has the potential to have significant adverse effects, at either a project-level or cumulative-level, on air quality, greenhouse gas (GHG) emissions, public services, and transportation and traffic. Option B of the proposed project has the potential to have significant adverse effects, at either a project-level or cumulative-level, on aesthetics, agriculture and forest

resources, air quality, biological resources, cultural and tribal cultural resources, GHG emissions, hydrology and water quality, transportation and traffic, and utilities and service systems. Even with the mitigation measures described in Chapter 4, *Environmental Analysis*, of this EIR, impacts in these issue areas would be significant and unavoidable. Therefore, per the CEQA Guidelines, this section discusses alternatives that are capable of avoiding or substantially lessening effects on these resources. Significant, unavoidable impacts of the proposed project, under both Option A and Option B are summarized below. Following these summaries, Section 6.2, *Project Objectives*, restates the proposed project objectives. Section 6.3, *Alternatives Eliminated from Further Consideration*, presents alternatives to the proposed project that were considered but eliminated for further analysis. Section 6.4, *Alternatives Analyzed in This EIR*, presents alternatives fully analyzed in this EIR, provides a comparison of alternatives, and makes a determination about the environmentally superior alternative.

6.1.1 Significant Impacts of the Project

Aesthetics

Options B

Significant and unavoidable aesthetic impacts of the proposed project include: Impact 4.1-5 (Contribute to Cumulative Aesthetic Impacts).

As explained in Section 4.1, *Aesthetics*, with respect to future cannabis cultivation (indoor and outdoor), per Proposition 64, cultivation of cannabis would not be visible by normal unaided vision from a public space. Option B of the proposed project would have less than significant impacts at the project level, with the incorporation of mitigation measures. However, these incremental impacts, even with the incorporation of mitigation measures, when combined with the aesthetic effects of other past, present, and reasonably foreseeable projects, would be cumulatively considerable. Therefore, Option B of the proposed project would combine with aesthetic impacts of other past, present, and reasonably foreseeable projects to result in a significant and unavoidable impact.

Agriculture and Forest Resources

Options B

Significant and unavoidable agriculture and forest resources impacts of the proposed project include: 4.2-1 (Convert Prime Farmland Unique Farmland, or Farmland of Statewide Importance [Farmland] to Non-Agricultural Use); Impact 4.2-5 (Involve Other Changes in the Existing Environment which, due to their Location or Nature, Could Result in Conversion of Farmland to Nonagricultural Use or Forest Land to Non-Forest Use); and Impact 4.2-7 (Contribute to Cumulative Agriculture and Forest Resource Impacts).

As discussed in Section 4.2, *Agriculture and Forest Resources*, for the purposes of this EIR, the total maximum acreage that could be converted from agricultural land to non-agricultural land is approximately 208 acres. When compared to countywide agricultural land, the loss of 208 acres accounts for 0.007 percent of the total acreage of agriculture in the County; however, such a loss could be considered significant for the region. Mitigation measures would reduce the severity of the impact of the loss of this agriculture and forest land by protecting regional agricultural and forest lands at a ratio of one acre protected for every one acre of farmland or forest land on the future project site that is converted to another use by employing one or more preservation mechanisms. These mitigation measures would only preserve agricultural land and farmland that otherwise might be

converted; it would not create new agricultural land or farmland. Therefore, after implementation of the mitigation measure, the impacts would remain significant and unavoidable.

In addition, conversion or agriculture and forest resources, when combined with past, present, or reasonably foreseeable projects are often small on an individual project scale, but large on a combined scale. Therefore, Option B would contribute to cumulative impacts when combined with past, present, or reasonably foreseeable projects. Cumulative impacts are significant and unavoidable.

Air Quality

Options A

Significant and unavoidable air quality impacts of the proposed project include: Impact 4.3-1 (Conflict with or Obstruct Implementation of an Applicable Air Quality Plan); Impact 4.3-2 (The Project Would Violate Any Air Quality Standards as Adopted in c(i) or c(ii) or as Established by EPA or Air District or Contribute Substantially to an Existing or Projected Air Quality Violation); and Impact 4.3-3 (Result in a Cumulatively Considerable Net Increase of Any Criteria Pollutant for Which the Project Region Is Nonattainment under Applicable Federal or State Ambient Air Quality Standards).

As discussed in Section 4.3, *Air Quality*, while the amount of potential criteria air pollutant emissions from the potential demolition or renovation cannot be quantified and is therefore unknown, potential new businesses using closed dispensary structures would be required to obtain appropriate permits from Kern County and other regulatory agencies and potential criteria air pollutant emissions would be considered at that time. The closing of the existing medical dispensaries would result in customer trips being displaced to cities within the County that would allow for the sale of cannabis products or to outside the County. This increase in travel would increase mobile source criteria air pollutant emissions. Option A would generate substantial levels of mobile source criteria air pollutant emissions through increasing vehicle miles traveled (VMT) and would have a potentially adverse effect on obstruction of an air quality plan. This impact would be significant and unavoidable, even with implementation of mitigation measures.

Options B

Significant and unavoidable air quality impacts of the proposed project include: Impact 4.3-3 (Result in a Cumulatively Considerable Net Increase of Any Criteria Pollutant for Which the Project Region Is Nonattainment under Applicable Federal or State Ambient Air Quality Standards); and Impact 4.3-6 (Result in a Cumulatively Considerable Net Increase of Any Criteria Pollutant for which the Project Region is in Nonattainment under an Applicable National or State Ambient Air Quality Standard).

As discussed in Section 4.3, *Air Quality*, the annual San Joaquin Valley Air Pollution Control District (SJVAPCD) thresholds for reactive organic gases (ROGs), nitrogen oxides (NO_x), and particulate matter 10 microns in diameter or less (PM₁₀) would be exceeded during operation of the buildup of option B. However, Option B projects would be subject to the SJVAPCD Indirect Source Rule which requires mitigation through onsite and offsite project reduction. If the emissions exceed the ISR then in the nonattainment SJVAPCD area, the mitigation requires that a Developer Mitigation Contract be executed with the air district to provide funding for projects to offset the remaining emissions of ROG, NO_x, and PM₁₀ (inclusive of PM_{2.5}) emissions, including stationary source emissions;; therefore, the proposed project would not result in project-specific impacts for these pollutants. While the reductions would offset NO_x and PM₁₀ emissions

to no net increase, actual reduction of ROG remains not possible to certify as 100 percent reduced to no net increase. Therefore, this uncertainty and small unknown quantities remaining under CEQA make air quality impacts cumulatively significant and unavoidable. In the Eastern Kern Air Pollution Control District (EKAPCD) while in attainment, mitigation through project design may still not achieve complete mitigation of all ROG.

Proposed project-generated operational carbon monoxide (CO) emissions would be below the SJVAPCD operational CO emissions threshold; additionally, Kern County is in attainment of federal and State CO standards, and therefore the proposed project would not substantially contribute to an existing or projected CO air quality violation. The proposed project's potential to result in a cumulatively considerable net increase of any criteria pollutant for which the proposed project region is nonattainment under an applicable federal or State ambient air quality standard would be significant and unavoidable.

With implementation of mitigation measures, the proposed project would not result in significant project-specific impacts or a cumulatively considerable contribution to air quality impacts of ROG, NO_x, PM₁₀, and PM_{2.5} per the SJVAPCD and EKAPCD guidance. Therefore based on the uncertainty for the ROG reductions to not occur, and because other future projects within the San Joaquin Valley Air Basin (SJVAB) and Mojave Desert Air Basin (MDAB) are not required to fully offset air emissions, so that cumulative emissions of these nonattainment pollutants would continue to be significant and unavoidable.

Biological Resources

Options B

Significant and unavoidable cumulative biological resources impacts of the proposed project include: Impact 4.4-1 (Have a Substantial Adverse Effect, Either Directly or through Habitat Modifications, on any Species Identified as a Candidate, Sensitive, or Special Status Species in Local or Regional Plans, Policies, or Regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service); Impact 4.4-2 (Have Substantial Adverse Effect on Any Riparian Habitat or Other Sensitive Natural Community Identified in Local or Regional Plans, Policies, Regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service); and Impact 4.4-7 (Contribute to Cumulative Biological Resources Impacts).

Although extensive mitigation measures are required to protect special-status species and sensitive habitats and prevent disturbed areas from becoming established with invasive, non-native species that can spread into suitable habitat, as well as establish a mitigation ratio to help protect significant stretches of undisturbed land. However, because the proposed project would potentially develop previously undeveloped lands, there could be a significant and unavoidable impact to special status plant and wildlife species or their habitat. Additionally, inherent uncertainties affect the annual and seasonal effectiveness of mitigation measures (e.g., based on drought or wildfire conditions), hence this project-level impact is considered significant and unavoidable.

Option B would require mitigation measures that would reduce the severity of impacts to candidate, sensitive, or special status species, as well as riparian habitat or other sensitive natural communities; however, because the proposed project would potentially develop previously undeveloped lands, there could be a significant and unavoidable loss of habitat. Impacts to special status plants and wildlife species and sensitive habitats and natural communities, when combined with past, present,

or reasonably foreseeable projects are often small on an individual project scale, but large on a combined scale. Therefore, Option B cumulative impacts associated with the having a substantial adverse effect on candidate, sensitive, or special status species, as well as riparian habitat or other sensitive natural communities would be significant and unavoidable.

Cultural and Tribal Cultural Resources

Options B

Significant and unavoidable cultural and tribal cultural resources impacts of the proposed project include: Impact 4.5-6 (Contribute to Cumulative Cultural Resources Impacts).

Option B of the proposed project would update standards and conditions for future commercial medical and adult use cannabis cultivation, processing and packaging, distribution, and retail cannabis stores with or without mobile delivery. Each incremental development resulting from the implementation of Option B in combination with other past, present, and reasonably foreseeable projects in the County would be required to comply with all applicable State, federal, and County regulations concerning preservation, salvage, or handling of cultural and paleontological resources, including compliance with required mitigation. However, due to the Option B's potential to encounter unknown historical, archaeological, paleontological, buried human remains, and/or tribal cultural resources, Option B would have the potential to cause a considerable contribution in combination with impacts from past, present, or reasonably foreseeable projects to result in a significant and unavoidable cumulative impact to historic and archaeological resources.

Greenhouse Gas Emissions

Options A

Significant and unavoidable greenhouse gas emissions impacts of the proposed project Option A include: Impact 4.7-1 (Generate Greenhouse Gas Emissions, Either Directly or Indirectly, that may have a Significant Impact on the Environment) and Impact 4.7-3 (Cumulative Greenhouse Gas Emissions Impacts).

As further discussed in Section 4.7, *Greenhouse Gas Emissions*, for the purposes of this analysis, it is assumed that cannabis customers would travel to cities within the County that would allow for the sale of cannabis products or to outside the County in order to obtain cannabis products. As estimated in Section 4.15, *Transportation and Traffic*, the total VMT would be up to 3.5 times more for Option A than for Option B. This increase in travel would increase mobile source greenhouse gas emissions (GHG) emissions. Using Option B data as in Section 4.7, *Greenhouse Gas Emissions*, mobile source GHG emissions account for 63 percent of total GHG emissions for Option B. Assuming mobile source GHG emissions under Option A are 3.5 times greater than Option B, then total GHG operations emissions for Option A would be more than two times greater than for Option B. Therefore, Option A would have a significant and unavoidable effect on operations-related GHG emissions, even after implementation of mitigation measures.

Global climate change is a cumulative impact, and there are currently no established thresholds for assessing whether the GHG emissions of a project would be considered a cumulatively considerable contribution to global climate change. While Option A would not result in a 29 percent reduction from BAU, many measures incorporated in the analysis are regional or statewide in nature and do not provide a mechanism that guarantees GHG emission reductions on a cumulative basis. In addition, Kern County does not have the jurisdictional authority to control the various cumulative

sources of GHGs in the County, or the GHG emissions from sources around the globe, which all contribute to climate change. Although many other agencies with the necessary jurisdiction are currently taking action to reduce GHG emissions, the County cannot assure that these measures would ultimately be implemented or sufficient to address climate change. The proposed project's GHG emissions would be considered cumulatively significant and unavoidable.

Options B

Significant and unavoidable greenhouse gas emissions impacts of the proposed project Option B include: Impact 4.7-1 (Generate Greenhouse Gas Emissions, Either Directly or Indirectly, that may have a Significant Impact on the Environment) and Impact 4.7-3 (Cumulative Greenhouse Gas Emissions Impacts).

As further discussed in Section 4.7, *Greenhouse Gas Emissions*, Option B would generate a total of approximately 28,983 MT CO₂e in SJVAB and 28,983 MT CO₂e in MDAB during construction of the proposed project in the year 2017. Option B's estimated annual operational GHG emissions would generate an approximate 4.8 to 5.25 percent reduction from BAU. The proposed project Option B would result in a 5 to 5.5 percent reduction in GHGs from BAU, which is less than the reduction from BAU than the 29 percent established as the SJVAPCD's threshold of significance. Mitigation measures would be required; however, impacts regarding Option B would be significant and unavoidable.

Global climate change is a cumulative impact, and there are currently no established thresholds for assessing whether the GHG emissions of a project would be considered a cumulatively considerable contribution to global climate change. While Option B for the proposed project would not result in a 29 percent reduction from BAU, many measures incorporated in the analysis are regional or statewide in nature and do not provide a mechanism that guarantees GHG emission reductions on a cumulative basis. In addition, Kern County does not have the jurisdictional authority to control the various cumulative sources of GHGs in the County, or the GHG emissions from sources around the globe, which all contribute to climate change. Although many other agencies with the necessary jurisdiction are currently taking action to reduce GHG emissions, the County cannot assure that these measures would ultimately be implemented or sufficient to address climate change. The proposed project's GHG emissions would be considered cumulatively significant and unavoidable.

Hydrology and Water Quality

Options B

Significant and unavoidable hydrology and water quality impacts of the proposed project include: Impact 4.9-2 (Substantially Deplete Groundwater Supplies or Interfere Substantially with Groundwater Recharge such that There Would be a Net Deficit in Aquifer Volume or a Lowering of the Local Groundwater Travel Level) and Impact 4.9-10 (Contribute to Cumulative Hydrology and Water Quality Impacts).

As discussed in Section 4.9, *Hydrology and Water Quality*, as well as Section 4.16, *Utilities and Service Systems*, the proposed project would result in an impact to groundwater supplies if construction or operation (implementation of Option B to countywide maximums) activities require a substantial supply of local groundwater resources or alter existing groundwater recharge, such as through the creation of substantial new impermeable areas. Option B is not anticipated to substantially interfere with groundwater recharge and impacts would be less than significant. With respect to groundwater supply, Option B could have significant impacts on groundwater supply

depending on size of the facility, location within the County, groundwater basin, and water district, county service area (CSA), community service district (CSD), or public utilities district (PUD). The Kern County Subbasin and the Indian Wells Valley Basin were identified by DWR as subject to critical conditions overdraft. Therefore, even with implementation of mitigation measures, impacts resulting from Option B regarding groundwater supply would be significant and unavoidable.

Option B would require the implementation of mitigation measures; however, because the proposed project would potentially develop cannabis-related facilities and activities within areas that do not have sufficient water supply, there could be a significant and unavoidable impact. Impacts to groundwater supply, when combined with past, present, or reasonably foreseeable projects could result in groundwater demand that exceeds the groundwater supply, especially in areas where groundwater basins are identified as not having sufficient water supply or are considered in overdraft. Therefore, Option B would contribute to cumulative impacts when combined with past, present, or reasonably foreseeable projects. Cumulative impacts would be significant and unavoidable.

Public Services

Options A

Significant and unavoidable public services impacts of the proposed project Option A include: Impact 4.13-1 (Result in Substantial Adverse Physical Impacts Associated with the Provision of New or Physically Altered Governmental Facilities, Need for New or Physically Altered Governmental Facilities, the Construction of Which Could Cause Significant Environmental Impacts in Order to Maintain Acceptable Service Ratios, Response Times, or Other Performance Objectives for Law Enforcement, Protection, Schools, Parks, or Other Public Facilities) and Impact 4.13-2 (Contribute to Cumulative Public Service Impacts).

As further discussed in Section 4.13, *Public Services*, the closing of the existing medical dispensaries would result in no impacts on library services and less than significant impacts on fire services and schools.

With respect to law enforcement protection and other public services, Option A of the proposed project would result in the need for an enforcement task force to coordinate across County agencies and seek State and federal funding. This task force would also coordinate with the State on cannabis operations that are not allowed in the County and, therefore, cannot legally obtain State permitting. If such commercial operations continue to sell, cultivate, or manufacture products they would be illegal under both local and State law. Therefore, Option A would result in the need to increase law enforcement and would result in the need for new equipment and altered protection facilities for the Kern County Sheriff's Office (KCSO), Kern County Counsel, and Kern County Public Health Services. A mitigation measure provides for the formation of Cannabis Activity Enforcement Task Force comprised of the following new positions:

- Kern County Sheriff – 1 Supervisor, 5 Deputies, 1 Clerical
- District Attorney – 1 Supervisor, 2 Attorneys, 1 Paralegal
- Kern County Counsel – 1 Supervisor, 2 Attorneys, 1 Paralegal
- Support Staff – 1 Office Service Specialist, 1 Code Compliance, 1 Planner

- Coordination with Kern County Public Health Services Department, Kern County Agricultural Commissioner, Kern County Environmental Health, and Kern County Fire Department

The first year would require partial staffing as the State resolves licensing issues with full staffing the second and third year for focused, enhanced activity. Depending on the level of remaining activities the fourth year and beyond could be reduced. These impacts could be reduced with the implementation of mitigation measures; however, the funding source outside the General Fund is not known with certainty. Therefore, the impacts on public services for law enforcement protection and other public services are significant and unavoidable.

With respect to cumulative impacts, Option A of the proposed project would create an enforcement impact for law enforcement protection, Kern County Counsel, and Kern County Public Health Services. The formation of Cannabis Activity Enforcement Task Force would help to reduce cumulative impacts; however, the funding is uncertain. Therefore, Option A would contribute to cumulative impacts when combined with past, present, or reasonably foreseeable projects. Cumulative impacts on public services are significant and unavoidable.

Traffic and Transportation

Options A

Significant and unavoidable transportation and traffic impacts of the proposed project include: Impact 4.15-1 (Conflict with an Applicable Plan, Ordinance, or Policy Establishing Measures of Effectiveness for the Performance of the Circulation System); Impact 4.15-2 (Conflict with an Applicable Congestion Management Program, Including, but Not Limited to Level of Service Standards and Travel Demand Measures, or Other Standards Established by the County Congestion Management Agency or Adopted County Threshold for Designated Roads or Highways); and Impact 4.15-7 (Contribute to Cumulative Transportation and Traffic Impacts).

As discussed in Section 4.15, *Transportation and Traffic*, the closing of the existing medical dispensaries would result in customer trips being displaced to cities within the County that would allow for the sale of cannabis products or to outside the County. Thus, the 11,968 average daily trips (ADT) associated with Option A would be redistributed within and outside the County and would result in 343,264 VMT. Within Kern County, travel distance could range from approximately 15 miles to approximately 116 miles. Outside of Kern County, travel distances could range from approximately 22 miles to approximately 267 miles. These distances could increase depending on future retail cannabis store locations, as each jurisdiction (local agency) provides individual regulations regarding whether to allow or ban commercial cannabis activities, including sales. The increase in VMT would increase traffic thereby potentially conflicting with applicable plans and ordinances related to the performance of the circulation system, including conflicts with established congestion management plans. There are no feasible mitigation measures at this time that would reduce VMT and increased use of the circulation system. These impacts would be significant and unavoidable.

With respect to cumulative impact, the total population of unincorporated Kern County that is 21 years or older is estimated to be 216,145 people in 2018 and is anticipated to increase to 247,957 people by the year 2027 (refer to Appendix K of this EIR). In addition, the incorporated areas of Kern County are estimated to have a population of people 21 years or older of 391,416 people in 2018 and is anticipated to increase to 449,473 people by the year 2027 (refer to Appendix K of this EIR).

It is unknown at this time what percentage of the population estimates would be potential cannabis consumers; however, the number of potential cannabis consumers would increase from existing numbers because the uses would now include both medical and adult-use. Based on the closing of existing medical cannabis dispensaries, it is anticipated that the cumulative VMT would increase above 343,264, because of the population increase of potential consumers, as well as the uncertainty of which jurisdictions would allow sales of cannabis and cannabis products. Therefore, Option A would contribute to cumulative impacts when combined with past, present, or reasonably foreseeable projects. Impacts are considered significant and unavoidable.

Options B

Significant and unavoidable transportation and traffic impacts of the proposed project include: Impact 4.15-7 (Contribute to Cumulative Transportation and Traffic Impacts).

As discussed in Option A, the total population of unincorporated Kern County that is 21 years or older is estimated to be 216,145 people in 2018 and is anticipated to increase to 247,957 people by the year 2027 (refer to Appendix K of this EIR). In addition, the incorporated areas of Kern County are estimated to have a population of people 21 years or older of 391,416 people in 2018 and is anticipated to increase to 449,473 people by the year 2027 (refer to Appendix K of this EIR). It is unknown at this time what percentage of the population estimates would be potential cannabis consumers; however, the number of potential cannabis consumers would increase from existing numbers because the uses would now include both medical and adult-use. Based on the closing of existing medical cannabis dispensaries, it is anticipated that the cumulative VMT would increase above 96,552, because of the population increase of potential consumers, as well as the uncertainty of which jurisdictions would allow sales of cannabis and cannabis products. Therefore, Option B would contribute to cumulative impacts when combined with past, present, or reasonably foreseeable projects. Cumulative impacts are considered significant and unavoidable, even with the incorporation of mitigation measures.

Utilities and Service Systems

Options B

Significant and unavoidable utilities and service system impacts of the proposed project include: Impact 4.16-4 (Have Sufficient Water Supplies Available to Serve the Project from Existing Entitlements and Resources, or are New or Expanded Entitlements Needed); Impact 4.16-7 (Exceed Capacity of an Energy Supplier to Meet the Project's Need); and Impact 4.16-8 (Contribute to Cumulative Impacts on Utilities and Service Systems).

As discussed in Section 4.16, *Utilities and Service Systems*, as well as Section 4.9, *Hydrology and Water Quality*, cultivation facilities would be required to use water efficient methods such as hydroponics, the use of recycled water when applicable, or equivalent technology to reduce the demand on water. In addition, mitigation measures would require future cultivation facilities under 40 acres or processing and packaging facilities under 500,000 ft² to obtain a will serve letter from the appropriate water district, CSA, CSD, or PUD, or to provide proof of ability to pump water in sufficient quantities from an appropriate governing entity. Mitigation measures would also require future cultivation facilities of more than 40 acres or processing and packaging facilities 500,000 ft² or more to conduct a water supply assessment (WSA) and obtain a will serve letter from the appropriate water district, CSA, CSD, or PUD, or to provide proof of ability to pump water in sufficient quantities from an appropriate governing entity. Given the long-term planning needed

to achieve sustainability in over drafted and adjudicated basins even with mitigation measures, impacts would be significant and unavoidable.

Impacts to water supply, including groundwater supply, when combined with past, present, or reasonably foreseeable projects could result in groundwater demand that exceeds the groundwater supply, especially in areas where a water purveyor's or where groundwater basins are identified as not having sufficient water supply or are considered in overdraft. Therefore, Option B would contribute to cumulative impacts when combined with past, present, or reasonably foreseeable projects. Cumulative impacts would be significant and unavoidable even with the implementation of mitigation measures.

As discussed in Section 4.16, *Utilities and Service Systems*, it is estimated that four mature cannabis plants require the equivalent of energy used by 24 refrigerators for indoor warehouse cultivation. Energy consumption associated with open field cultivation would be similar to other agricultural crops. Greenhouses use approximately a quarter of the lightbulbs that indoor warehouse cultivation facilities required. Both future cannabis cultivation activities (mainly indoor cultivation), processing and packaging, and distribution operations would require heating, ventilation, and air conditioning (HVAC) systems necessary for odor control as well as equipment used to harvest and process cannabis products. From indoor cultivation alone, there could be a substantial drain on the capacity of energy suppliers if there were no conservation measures or on-site electrical generation. The proposed project includes development standards to reduce energy consumption per square-foot and well as to require on-site energy generation. Fuel consumption for future indoor and outdoor cannabis cultivation, cannabis processing and packaging, and distribution activities would occur from farming equipment, employee commutes to the fields, on-site structures related to the cultivation and business of commercial marijuana. Therefore, the energy demand from future cannabis-related activities could, depending on location within Kern County, could substantially exceed the energy supply. All applicable federal, State, and local requirements and best management practices (BMPs) would be incorporated into construction of new or modified structures. Mitigation measures are required to reduce impacts; however, impacts would be significant and unavoidable. Additionally, impacts to energy supply when combined with past, present, or reasonably foreseeable projects could result in energy consumption that exceeds the supply. Therefore, cumulative impacts resulting from Option B would be significant and unavoidable regarding capacity of energy supply.

6.1.2 Other Impacts of the Proposed Project

Impacts of the proposed project on the other resources evaluated in this EIR were found to be either less than significant or less than significant after mitigation for both Options A and B. Therefore, consideration of alternatives that would further reduce impacts on these resources is not required by CEQA. Only alternatives that reduce or substantially lessen the proposed project's impacts on aesthetics, agriculture and forest resources, air quality, biological resources, cultural and tribal cultural resources, greenhouse gas emissions, hydrology and water quality, transportation and traffic, and utilities and service systems are considered in this EIR. If one of the alternatives would cause a greater adverse impact on a resource when compared to the largest impact between proposed project Option A or Option B, these impacts are disclosed below. in Section 6.4, *Alternatives Analyzed in this EIR*. Otherwise, impacts to the remaining resources evaluated in this EIR are not discussed further in this section.

6.2 Project Objectives

The County has defined the following objectives for the project:

- Provide county-specific land use and fiscal information and policy recommendations to the Kern County Board of Supervisors for compliance with Proposition 64 (The California Marijuana Legalization Initiative 2016, also known as the Adult Use of Marijuana Act [AUMA]) and permitting by the State of California for Medical and Adult Use Cannabis.
- Implement changes to Kern County Code of Ordinances to reflect Kern County Board of Supervisors direction on commercial cannabis-related activities within its boundaries and changes in laws and regulations by outside agencies for the purposes of reducing or eliminating potential significant environmental impacts, to the extent feasible, by ensuring that current County regulation reflects the County's interest in protecting the health, safety, and general welfare of residents and visitors.
- Continue Kern County's ongoing commitment to consult and cooperate with federal, State, regional and local agencies by periodically reviewing adopted regulations to ensure the long-term viability of Kern County's resources, and Kern County Board of Supervisors policy direction.
- Encourage appropriate economic development that creates jobs and promotes capital investment in Kern County to enable the County to invest in capital improvement projects and social programs, which benefit County residents, retail businesses, and capital industries which ensures the County's fiscal stability.

CEQA requires that an EIR describe a reasonable range of alternatives to the proposed project, or to the location of the proposed project, that would avoid or substantially lessen any of the significant effects of the proposed project and that would feasibly attain most of the basic project objectives (Title 14, Section 15126.6). Attainment of the project objectives is discussed for each retained alternative in Section 6.4.

6.3 Alternatives Eliminated from Further Consideration

Alternatives may be eliminated from detailed consideration in an EIR if they fail to meet most of the project objectives, are infeasible, or do not avoid or substantially lessen any significant environmental effects (CEQA Guidelines, Section 15126.6[c]). Alternatives that are remote or speculative, or the effects of which cannot be reasonably predicted, also do not need to be considered (CEQA Guidelines, Section 15126[f][2]). Per CEQA, the lead agency may make an initial determination as to which alternatives are feasible and warrant further consideration and which are infeasible. The following alternatives were initially considered but were eliminated from further consideration in this EIR because they do not meet project objectives, were infeasible, and/or they do not substantially lessen any significant environmental effects.

6.3.1 Alternate Site Alternative

This alternative would apply to the amendment of the Kern County Zoning Ordinance to direct future cannabis related facilities and activities to another area of unincorporated Kern County. In order to do this, future cannabis related facilities would need to be allowed in other zone districts beyond what was considered in Option B of the proposed project. These areas could be zone districts such as, but not limited to, estate, residential, open space, or natural resources zone districts. Placing agricultural

production activities, manufacturing activities, or retail and distribution activities in other zones would be inconsistent with the Kern County General Plan (KCGP), the Metropolitan Bakersfield General Plan (MBGP) and the Kern County Zoning Ordinance for allowable uses. In addition, placing future commercial cannabis cultivation, processing and packaging, distribution, and retail cannabis stores within these zone districts could violate Proposition 64, with respect to setbacks pertaining to a school, day care center, or youth center while children are present. Cannabis activities are not allowed on public lands, such as State or federal forest land, or federal, State, or local park lands, as this would be a violation of Proposition 64 as well as a violation of federal law. For these reasons, the Alternative Site Alternative was dismissed from analysis in this EIR.

It should also be noted that, while CEQA requires an EIR to identify project alternatives, it does not require the EIR to identify alternative project locations. Per the CEQA Guidelines, an EIR must include a reasonable range of “alternatives to the project, *or* to the location of the project.” (14 California Code of Regulations Section 15126.6(a)(emphasis added)). Applicable case law recognizes that CEQA grants lead agencies flexibility to elect to analyze either onsite or offsite alternatives, or both (Mira Mar Mobile Community v. City of Oceanside (2004) 119 Cal.App.4th 447, 491). There is no requirement under CEQA that an EIR always explore an alternative site, or offsite, alternative (California Native Plant Society v. City of Santa Cruz (2009) 177 Cal.App.4th 957, 933). Thus, CEQA does not require this EIR to analyze the Alternative Site Alternative.

6.3.2 Cannabis Facilities in EKAPCD and Attainment Areas of SJVAPCD Only

In developing a reasonable range of alternatives, the County considered the potential to develop Option B within the EKAPCD and the attainment areas of SJVAPCD, the Mountain Regions. This would result in the countywide maximums of 2,000,000 square feet (ft^2) of indoor cultivation, 150 acres of outdoor cultivation, 500,000 ft^2 of processing, packaging, and distribution, and up to 40 retail cannabis stores, located within the EKAPCD and the attainment areas of the SJVAPCD.

This alternative would not reduce any of the significant and unavoidable impacts that were identified for the proposed project. This alternative would not reduce the countywide maximums for cannabis related facilities; however, it would reduce the project site to the Mountain and Desert regions. Even with this reduction, the alternative would have similar impacts to the proposed project Option B and no impacts would be reduced from significant and unavoidable to less than significant.

- The Air Quality analysis, refer to Section 4.3, *Air Quality*, and Appendix G of this EIR, found that project-generated operational unmitigated emissions would exceed the SJVAPCD and EKAPCD annual thresholds for ROG, NO_x and PM₁₀ during full buildup of the proposed project Option B. This alternative would not reduce emissions and would continue to exceed thresholds.
- This alternative would be anticipated to increase VMT, because potential cannabis consumers in the Valley Region would be required to travel to the Mountain or Desert regions, or outside the County. The VMT would be less than Option A or the proposed project; however, it would be more than Option B of the proposed project. Emissions associated with VMT would not be reduced under this alternative.
- This alternative would place all future cannabis facilities in the Mountain and Desert regions, therefore it would increase the impacts associated with water supply for these areas.
- This alternative would not reduce impacts associated with aesthetics, agriculture and forest resources, air quality, biological resources, cultural and tribal cultural resources, GHG emissions,

hydrology and water quality, public services, traffic and transportation, and utilities and service systems.

The alternate site alternative has been rejected from further consideration because it fails to avoid or substantially lessen any significant environmental effects (CEQA Guidelines, Section 15126.6[c]).

6.3.3 Unlimited Retail Stores, Limited Cultivation, Processing and Packaging, and Distribution

In developing a reasonable range of alternatives, the County considered the potential to develop Option B with no limit on the countywide number of retail cannabis stores. This would result in the countywide maximums of 2,000,000 ft² of indoor cultivation, 150 acres of outdoor cultivation, 500,000 ft² of processing, packaging, and distribution, and unlimited retail cannabis stores.

- The Air Quality analysis, refer to Section 4.3, *Air Quality*, and Appendix G of this EIR, found that project-generated operational unmitigated emissions would exceed the SJVAPCD and EKAPCD annual thresholds for ROG, NO_x and PM₁₀ during full buildout of the proposed project Option B. This alternative would not reduce emissions and would continue to exceed thresholds.
- Each retail cannabis store is anticipated to generate 554 average daily trips (ADT). With an unlimited number of retail cannabis stores allowed within unincorporated Kern County, this alternative has the potential to increase traffic on roadways and intersections, thus reducing roadway or intersection level of service (LOS) to below acceptable levels.
- An increase in retail cannabis stores could result in conflicts with congestion management plans or land use compatibility.
- This alternative would not reduce impacts associated with aesthetics, agriculture and forest resources, air quality, biological resources, cultural and tribal cultural resources, GHG emissions, hydrology and water quality, public services, traffic and transportation, and utilities and service systems.

The unlimited retail stores, limited cultivation, processing and packaging, and distribution alternative has been rejected from further consideration because it fails to avoid or substantially lessen any significant environmental effects (CEQA Guidelines, Section 15126.6[c]).

6.3.4 Cultivation, Processing and Packaging, and Distribution Only

In developing a reasonable range of alternatives, the County considered the potential to develop Option B of the proposed project at a reduced scope, allowing for future commercial cannabis activities and facilities related to cultivation (indoor and outdoor), processing and packaging, and distribution facilities only. The future commercial cannabis cultivation (indoor and outdoor), processing and packaging, and distribution facilities under this alternative would have the same zone classification restrictions, countywide maximums, and 0.5-mile setbacks as described in Option B of the proposed project.

- This alternative would increase impacts as compared to both Options A and B of the proposed project.
- This would not allow for retail cannabis stores, thus, VMT under this alternative would increase. It combines the VMT associated with proposed project Option A with the VMT discussed in

proposed project Option B as related to future cannabis cultivation and processing and packaging. Therefore, this alternative would increase impacts associated with transportation and traffic.

- The increase in VMT under this alternative would result in an increase in pollutant emissions and thus would increase impacts associated with air quality and GHG emissions.
- This alternative would not reduce impacts associated with aesthetics, agriculture and forest resources, air quality, biological resources, cultural and tribal cultural resources, GHG emissions, hydrology and water quality, public services, traffic and transportation, and utilities and service systems.

The cultivation, processing and packaging, and distribution only alternative has been rejected from further consideration because it fails to avoid or substantially lessen any significant environmental effects (CEQA Guidelines, Section 15126.6[c]).

6.4 Alternatives Analyzed in This EIR

Alternatives that would avoid or substantially lessen any of the significant effects of the proposed project and that would feasibly attain most of the basic project objectives are analyzed below. Each alternative is discussed with respect to its relationship to the proposed project's objectives. Kern County has considered the following alternatives, which are summarized in Table 6-1, *Summary of Alternatives*. Impacts associated with each alternative as they relate to the impacts associated with the proposed project are summarized in Table 6-2, *Comparison of Alternatives*. The alternatives analyzed individually include the following:

- Alternative A: No Project Alternative;
- Alternative B: Retail Cannabis Stores Only; and
- Alternative C: Reduced Project.

As discussed above, Options A and B of the proposed project result in different levels of significance for each resource area. Impacts resulting from the implementation of either Option A or Option B of the proposed project that were found to be less than significant are not analyzed for the below alternatives. As discussed in Section 6.1.2, *Other Impacts of the Proposed Project*, consideration of alternatives regarding resources with impacts that are found to be less than significant are not required by CEQA. However, if one of the alternatives would cause a greater adverse impact on a resource when compared to the largest impact between proposed project Option A or Option B, these impacts are disclosed below.

Table 6-1. Summary of Alternatives

Alternative	Description	Basis for Section and Summary of Analysis
Cannabis Land Use Ordinance Project	<ul style="list-style-type: none"> • Two options for the decision makers • Option A bans all medical and adult-use cannabis related activities and facilities • Option A would require existing dispensaries to cease operations • Option A allows personal cultivation and use as defined by Proposition 64 • Option B allows medical and adult-use cannabis activities and facilities: <ul style="list-style-type: none"> ◦ Countywide maximum of 2,000,000 square feet (ft^2) of indoor cultivation ◦ Countywide maximum of 150 acres of outdoor cultivation ◦ Countywide maximum of 500,000 ft^2 of processing, packaging, and distribution facilities (limit of 3 distribution facilities countywide) ◦ Countywide maximum of 40 retail cannabis stores (2 per unincorporated community) • Option B would require some existing dispensaries to cease operations. • Option B would allow commercial cannabis cultivation, processing/packaging, and distribution facilities when full compliance with development standards is achieved. • Option B require a conditional use permit (CUP) for all retail cannabis stores and any other facility that does not meet development standards • Option B allows personal cultivation and use as defined by Proposition 64 	--
Alternative A: No Project Alternative	<ul style="list-style-type: none"> • Medical cannabis dispensaries allowed in any commercial or industrial zone • Medical cannabis dispensaries allowed anywhere that a pharmacy is allowed • Allows up to 12 plants indoor/outdoor for personal use only • No cultivation, processing and packaging, and distribution facilities and activities are allowed • Allows adult-use personal cultivation and use as defied by Proposition 64 	<ul style="list-style-type: none"> • Required by CEQA • Avoids Option B impacts to agricultural and forest lands • Reduces most Option B impacts • Reduces all Option A impacts • Increases Option B impacts on 3 resources • Conflicts with Proposition 64 related to personal cultivation of cannabis plants
Alternative B: Retail Cannabis Stores Only	<ul style="list-style-type: none"> • Allows development of retail cannabis stores only • Up to 40 retail cannabis stores allowed countywide • Limit 2 retail stores per unincorporated community • Retail cannabis stores allowed in commercial and industrial zones • No cultivation, processing and packaging, and distribution facilities and activities are allowed • Allows adult-use personal cultivation and use as defied by Proposition 64 	<ul style="list-style-type: none"> • Avoids Option B impacts to agricultural lands and forest lands • Reduces all significant impacts for both Option A and Option B • Complies with Proposition 64 personal cultivation of cannabis plants

Table 6-1. Summary of Alternatives

Alternative	Description	Basis for Section and Summary of Analysis
Alternative C: Reduced Project	<ul style="list-style-type: none"> Allows development of indoor cultivation, processing/packaging, and retail cannabis stores only Countywide maximum of 500,000 square feet (ft²) of indoor cultivation Countywide maximum of 150,000 ft² of processing, packaging, and distribution facilities (limit of 1 distribution facility countywide) Up to 10 retail cannabis stores allowed countywide, limit 1 per unincorporated community No outdoor cultivation is allowed Allows adult-use personal cultivation and use as defied by Proposition 64 	<ul style="list-style-type: none"> Reduces Option B impacts to agricultural lands Increases Option B distances travelled Many Option A impacts become similar to, but less than, Option B Complies with Proposition 64 personal cultivation of cannabis plants

Table 6-2. Comparison of Alternatives

Environmental Resource	Proposed Project		Alternative A	Alternative B	Alternative C
	Option	Significance Level			
Aesthetics: Cumulative Effects	Option A	Less than Significant	N/A	N/A	N/A
	Option B	Significant / Unavoidable	Fewer	Fewer	Fewer
Agriculture and Forest Resources: Convert Prime Farmland	Option A	Less than Significant	N/A	N/A	N/A
	Option B	Significant / Unavoidable	Fewer	Fewer	Fewer
Agriculture and Forest Resources: Convert Agricultural Land to Non-Agricultural Land and Forest Land to Non-Forest Land	Option A	Less than Significant	N/A	N/A	N/A
	Option B	Significant / Unavoidable	Fewer	Fewer	Fewer
Agriculture and Forest Resources: Cumulative Effects	Option A	Less than Significant	N/A	N/A	N/A
	Option B	Significant / Unavoidable	Fewer	Fewer	Fewer
Air Quality: Conflict with an Air Quality Plan	Option A	Significant/ Unavoidable	Fewer	Fewer	Fewer
	Option B	Less than Significant	N/A	N/A	N/A
Air Quality: Violate Air Quality Standards	Option A	Significant / Unavoidable	Fewer	Fewer	Fewer
	Option B	Less than Significant	N/A	N/A	N/A
Air Quality: Cumulative net increase of nonattainment pollutants	Option A	Significant / Unavoidable	Fewer	Fewer	Fewer
	Option B	Significant / Unavoidable	Greater	Fewer	Similar
Air Quality: Cumulative effects	Option A	Less than Significant	N/A	N/A	N/A
	Option B	Significant / Unavoidable	Greater	Fewer	Similar
Biological Resources: Habitat and Special-Status Species	Option A	Less than Significant	N/A	N/A	N/A
	Option B	Significant / Unavoidable	Fewer	Fewer	Fewer
Biological Resources: Riparian Habitat and Sensitive Natural Communities	Option A	Less than Significant	N/A	N/A	N/A
	Option B	Significant / Unavoidable	Fewer	Fewer	Fewer
Biological Resources: Cumulative effects	Option A	Less than Significant	N/A	N/A	N/A
	Option B	Significant / Unavoidable	Fewer	Fewer	Fewer

Table 6-2. Comparison of Alternatives

Environmental Resource	Proposed Project		Alternative A	Alternative B	Alternative C
	Option	Significance Level			
Cultural and Tribal Cultural Resources: Cumulative effects	Option A	Less than Significant	N/A	N/A	N/A
	Option B	Significant / Unavoidable	Fewer	Fewer	Fewer
Greenhouse Gas Emissions: Generate GHG emissions	Option A	Significant / Unavoidable	Fewer	Fewer	Fewer
	Option B	Significant / Unavoidable	Greater	Fewer	Similar
Greenhouse Gas Emission: Cumulative effects	Option A	Significant / Unavoidable	Fewer	Fewer	Fewer
	Option B	Significant / Unavoidable	Greater	Fewer	Similar
Hydrology and Water Quality: Deplete Groundwater Supplies	Option A	Less than Significant	N/A	N/A	N/A
	Option B	Significant / Unavoidable	Fewer	Fewer	Fewer
Hydrology and Watery Quality: Cumulative effects	Option A	Less than Significant	N/A	N/A	N/A
	Option B	Significant / Unavoidable	Fewer	Fewer	Fewer
Public Services: Law Enforcement Protection	Option A	Significant / Unavoidable	Fewer	Fewer	Fewer
	Option B	Less than Significant	N/A	N/A	N/A
Public Services: Other Public Services	Option A	Significant / Unavoidable	Fewer	Fewer	Fewer
	Option B	Less than Significant	N/A	N/A	N/A
Public Services: Cumulative effects	Option A	Significant / Unavoidable	Fewer	Fewer	Fewer
	Option B	Less than Significant	N/A	N/A	N/A
Transportation and Traffic: Impede the Performance of the Circulation System	Option A	Significant / Unavoidable	Fewer	Fewer	Fewer
	Option B	Less than Significant	N/A	N/A	N/A
Transportation and Traffic: Conflict with an Applicable Congestion Management Program	Option A	Significant / Unavoidable	Fewer	Fewer	Fewer
	Option B	Less than Significant	N/A	N/A	N/A
Transportation and Traffic: Cumulative Effects	Option A	Significant / Unavoidable	Fewer	Fewer	Fewer
	Option B	Significant / Unavoidable	Greater	Fewer	Greater
Utilities and Service Systems: Sufficient Water Supply	Option A	Less than Significant	N/A	N/A	N/A
	Option B	Significant / Unavoidable	Fewer	Fewer	Fewer
Utilities and Service Systems: Exceed Capacity of Energy Supplier	Option A	Less than Significant	N/A	N/A	N/A
	Option B	Significant / Unavoidable	Fewer	Fewer	Fewer
Utilities and Service Systems: Cumulative effects	Option A	Less than Significant	N/A	N/A	N/A
	Option B	Significant / Unavoidable	Fewer	Fewer	Fewer
Meet Project Objectives?	Option A	Yes	No	Yes	Yes
	Option B	Yes	No	Yes	Yes
Reduce Any Significant and Unavoidable Impacts to No Impact or Less than Significant?	Option A	—	Yes, most impacts	Yes, all impacts	Yes, most impacts
	Option B	—	Yes, most impacts	Yes, all impacts	Yes, most impacts

6.4.1 Alternative A: No Project Alternative

Under Alternative A, an amendment to Kern County Code of Ordinances Title 19 – Kern County Zoning Ordinance focused on Chapter 19.120 (Cannabis Land Use Regulation) for land use regulation for all activities related to cannabis would not occur. Because of the complex history of cannabis ordinances in Kern County, as detailed in Chapter 3, *Project Description*, Section 3.2.2, *Kern County Regulatory Background*, Alternative A would reinstate Ordinance No. G-7849 (2009 Ordinance) which was codified under the Kern County Code of Ordinances Title 5 – Business Licenses and Regulations, Chapter 5.84 – Medical Marijuana Cooperatives or Collectives. The only restrictions expressly place medical cannabis dispensaries are as follows:

- (a) A medical marijuana cooperative or collective may not be located within one thousand (1,000) feet of a school, recreation center, or youth center measured from the primary entrance to a cooperative or collective and the closest property line of the property of a school, recreation center, or youth center or on which a school, recreation center, or youth center is operated.
- (b) A medical marijuana cooperative or collective shall be treated as a pharmacy for zoning purposes.
- (c) “Medical marijuana cooperative” and “medical marijuana collective” are defined as set forth in section IV of the California Attorney General Guidelines for the Security and Non-diversion of Marijuana Grown for Medical Use issued in August, 2008, as they read or as amended.
- (d) Any person who violates and provision in this section is guilty of a misdemeanor.

The 2009 Ordinance applies only to “Medical Marijuana Cooperatives of Collectives,” a term defined by the 2008 *Guidelines for the Security and Non-Diversion of Marijuana Grown for Medical Use* issued by the California Attorney General.

The Kern County Zoning Ordinances identifies “pharmacy” under the chapter and section headings of Permitted Uses/Commercial Uses/General Retail Sales - Drugs and Pharmaceuticals and is listed under the following zone districts: C-1 (Neighborhood Commercial), C-2 (General Commercial), CH (Highway Commercial), M-1 (Light Industrial), M-2 (Medium Industrial), and M-3 (Heavy Industrial). To open a new “pharmacy” in any of the listed zone district would require an applicant to apply for and receive approval through one of two types of land use review application processes listed in the Kern County Zoning Ordinance: 1) Chapter 19.56 Precise Development (PD) Combining District; or 2) Chapter 19.80 Special Development Standards. All commercial and industrial zone districts that *do not* include the PD Combining District are subject to the provisions called out in the Kern County Zoning Ordinance Section 19.80.030 Development and Performance Standards of the Kern County Zoning Ordinance and may be subject to Section 19.80.040 Plot Plan Review and Approval if the proposed project requires a building permit.

Any proposed projects that are being considered on project sites that already have an approved PD plan, would be subject to the review and approval of either a ministerial “minor” PD Plan modification application process with following the guidelines called out in Section 19.102.040.E. Minor Plan Modifications of the Kern County Zoning Ordinance or a discretionary “major” PD Plan modification application process which would be evaluated by the Planning Director to determine whether the requested modification(s) constitute a substantial change in the previously approved

project. If that determination is made, the application process for a “major” modification would follow the same provisions of the original application process for a publicly noticed hearing.

If an applicant is required to obtain a building permit, the enforcing agency would then notify the Kern County Planning and Natural Resources Department that an application has been made. Kern County Planning staff would then conduct a site plan review to see if the project meets the necessary land use requirements; such as, is the proposed land use allowed in that particular zone district and if so, will the project be subject to further review of development standards or a zoning land use permit processed per Kern County Ordinance Section 19.80.040, as previously stated. All ministerial permit applications are subject to the provisions of Kern County Ordinance Section 19.102.050 Application – Approval or Denial.

Aesthetics

Option B

Under Alternative A, medical cannabis dispensaries would continue to be allowed anywhere that pharmacies are allowed, assuming they are 0.5 mile from schools. Alternative A does not provide a countywide limit on the number of medical cannabis dispensaries that would be allowed. Alternative A would not allow for cultivation, processing and packaging, and distribution facilities. While this alternative would have the potential to introduce new structures where none currently exist, any new structures would be located in areas that allow pharmacies, which generally are commercial and industrial areas. These areas are generally within close proximity of already developed areas. Future medical cannabis dispensaries opening under Alternative B would be required to comply with the Kern County Code of Ordinances, which include development standards. Alternative A does not provide a countywide maximum for the number of medical cannabis dispensaries allowed within unincorporated areas; however, they would be limited to commercial and industrial areas. Therefore, when this alternative is combined with other past, present and reasonably foreseeable projects, Alternative A would reduce aesthetic impacts as compared to Option B of the proposed project.

Agriculture and Forest Resources

Option B

Alternative A would allow for medical cannabis dispensaries would continue to be allowed anywhere that pharmacies are allowed, assuming they are 0.5 mile from schools. Alternative A does not provide a countywide limit on the number of medical cannabis dispensaries that would be allowed. Alternative A would not allow for cultivation, processing and packaging, and distribution facilities. Alternative A would avoid impacts to agriculture and agricultural resources. Impacts associated with forest and forest land would be less than those associated with Option B of the proposed project, because future medical cannabis dispensaries would be allowed in specific areas only under Alternative A, which reduces the potential for forest land to be present. Thus, this alternative would not directly convert agricultural land to non-agricultural land or forest land to non-forest land. Indirect impacts associated with converting agricultural land to non-agricultural land or forest land to non-forest land would also be reduced, as commercial and industrial zone districts within unincorporated Kern County are generally within close proximity of already developed areas. Therefore, impacts associated with Alternative A on agriculture and forest resources would be less than Option B of the proposed project.

Air Quality

Option A

Under Alternative A, medical cannabis dispensaries would continue to be allowed anywhere that pharmacies are allowed, assuming they are 0.5 mile from schools. Alternative A does not provide a countywide limit on the number of medical cannabis dispensaries that would be allowed. Alternative A would not allow for cultivation, processing and packaging, and distribution facilities. This would result in a distribution of medical cannabis dispensaries and would allow access to these future dispensaries throughout Kern County. Therefore, medical customer VMT and distances traveled would be reduced as compared to Option A of the proposed project, because medical customers could obtain cannabis products within close proximity to their location. However, adult use customers would continue to travel to areas outside of unincorporated Kern County, thus, adult use customer VMT and distance travelled would remain similar to Option A. Overall, VMT and distance travelled would be reduced as compared to option A. Reducing VMT would in turn reduce the amount of mobile source criteria air pollutant emissions as compared to Option A. However, as adult use customers would continue to have VMT and distances travelled that are similar to Option A. While Alternative A would reduce VMT and distance traveled as compared to Option A, this alternative would continue to potentially conflict with or obstruct implementation of an air quality plan and would be anticipated to violate an air quality standard. Implementation of similar mitigation measures as those identified for the proposed project would continue to be required. Therefore, Alternative A, after implementation of mitigation measures, would have reduced, but would continue to be significant, impacts associated with criteria air pollutants and cumulative impacts as compared to Option A of the proposed project.

Option B

Under Alternative A, construction and operation activities would continue to occur for medical cannabis stores; however, no construction or operation activities would occur in association with cultivation, processing and packaging, and distribution facilities. Therefore, future construction and operation activities would result in a reduced intensity as compared to Option B of the proposed project. Alternative A would continue to be consistent with the development projected in the Kern COG RTP/SCS and mitigation measures similar to the proposed project would continue to be required. No criteria air pollutants would be emitted in association with cultivation, processing and packaging, and distribution facilities under this alternative. Alternative A would have similar criteria air pollutants associated with medical cannabis sales. However, Alternative A would result in an increase in VMT and distances traveled for adult use cannabis sales, as adult use cannabis customers would be required to travel to areas outside of the unincorporated areas of the County, to either an incorporated city or outside the County. Alternative C would increase the cumulatively considerable net increase of any criteria pollutant for which region is nonattainment under an applicable federal or State ambient air quality standard because even though it would have reduced development intensity, it would increase mobile air pollutant sources as a result of adult use customer VMT increases. Alternative A would require similar mitigation measures as Option B of the proposed project and impacts to air quality would be greater than Option B of the proposed project because of the increase in VMT.

Biological Resources

Option B

Under this alternative, the project site would have a reduced development footprint focused on areas identified for commercial and industrial zone districts only. While some construction may still occur under Alternative A in association with new retail cannabis stores, it is assumed that, similar to Option B of the proposed project, some most stores would utilize existing structures. Alternative A would require similar mitigation measures as those identified under Option B of the proposed project, as related to development of undeveloped lands and construction or demolition of structures. Alternative A would only allow for medical cannabis dispensaries; therefore, Alternative A would not result in development within agricultural zone districts, thus further reducing impacts to biological resources as compared to the proposed project. Therefore, impacts associated with Alternative A on biological resources would be less than Option B of the proposed project with implementation of similar mitigation measures.

Cultural and Tribal Cultural Resources

Option B

Alternative A would allow medical cannabis dispensaries only within any zone that allows a pharmacy, generally commercial and industrial zones. Alternative A would not include a countywide maximum medical cannabis dispensaries. Medical cannabis dispensaries would be allowed in zone districts that generally contain existing development and structures. In addition, Alternative A would not allow for cultivation, processing and packaging, and distribution facilities. Alternative A would result in less opportunity for cultural and tribal cultural resources to be disturbed because there would be less new development allowed as compared to the proposed project. Alternative A would result in fewer new structures in undeveloped areas, as compared to Option B of the proposed project. Therefore, when this alternative is combined with other past, present, and reasonably foreseeable projects, Alternative A would reduce cultural and tribal cultural impacts as compared to the proposed project.

Greenhouse Gas Emissions

Option A

Under Alternative A, medical cannabis dispensaries would continue to be allowed anywhere that pharmacies are allowed, assuming they are 0.5 mile from schools. Alternative A does not provide a countywide limit on the number of medical cannabis dispensaries that would be allowed. Alternative A would not allow for cultivation, processing and packaging, and distribution facilities. This would result in a distribution of medical cannabis dispensaries and would allow access to these future medical dispensaries throughout Kern County. Therefore, medical customer trips would be reduced as compared to Option A of the proposed project. However, adult use customers would continue to be required to travel larger distances to areas outside of unincorporated Kern County. Therefore, adult use customer VMT and distance travelled would not be reduced under this alternative and would remain similar to Option A. Overall, VMT and distance travelled would be reduced as compared to option A. Overall customer VMT would be reduced under Alternative A as compared to Option A of the proposed project, because medical customers would not be required to travel further distances, but rather could obtain cannabis products within close proximity to their location; adult use customers would continue to have VMT and distances travelled that are similar to Option A. Reducing overall

VMT would in turn reduce the amount of mobile source GHG emissions as compared to Option A. Therefore, impacts associated with Alternative A regarding GHG emissions, after implementation of mitigation measures, would be less than Option A of the proposed project, although impacts may continue to be potentially significant.

Option B

Under Alternative A, construction and operation activities would continue to occur for medical cannabis stores; however, no construction or operation activities would occur in association with cultivation, processing and packaging, and distribution facilities. Therefore, future construction and operation activities would result in a reduced intensity as compared to Option B of the proposed project. Alternative A would continue to be consistent with the development projected in the Kern COG RTP/SCS and mitigation measures similar to the proposed project would continue to be required. Alternative A would have similar mobile source GHG emission associated with medical cannabis sales. However, Alternative A would result in an increase in VMT and distances traveled for adult use cannabis sales; therefore, mobile source GHG emissions associated with this alternative would be greater than Option B. No GHG emissions would occur in association with cultivation, processing and packaging, and distribution facilities under this alternative. Alternative C would require similar mitigation measures as Option B of the proposed project and impacts regarding GHG emissions would be greater than Option B of the proposed project, because of the increase in VMT.

Hydrology and Water Quality

Option B

Under Alternative A, medical cannabis dispensaries would continue to be allowed anywhere that pharmacies are allowed, assuming they are 0.5 mile from schools. Alternative A does not provide a countywide limit on the number of medical cannabis dispensaries that would be allowed. Alternative A would not allow for cultivation, processing and packaging, and distribution facilities. Medical cannabis dispensaries would be allowed in zone districts that generally contain existing development and structures. Similar to Option B of the proposed project, future medical cannabis dispensaries would have similar water uses and demand as the existing dispensaries. These facilities generally generate low demand for water as they typically service only the employees. Consumers at these facilities typically do not stay longer than is necessary to acquire the products being sold. Alternative A would have less demand on water supply than Option B of the proposed project because Alternative A would not result in cultivation, processing and packaging, and distribution activities. Under Alternative A, water demand on the water supply would be distributed throughout the County; however, in some areas, water purveyors may not have the supply to meet the demand of one or more medical cannabis dispensaries. Alternative A would require similar mitigation measures as Option B of the proposed project. Therefore, impacts associated with Alternative A regarding water supply, while still potentially significant, would be less than Option B of the proposed project.

Public Services

Option A

Under Alternative A, medical cannabis dispensaries would continue to be allowed anywhere that pharmacies are allowed, assuming they are 0.5 mile from schools. Alternative A does not provide a countywide limit on the number of medical cannabis dispensaries that would be allowed. Alternative A would not allow for cultivation, processing and packaging, and distribution facilities. This would result in a distribution of medical cannabis dispensaries and would allow access to these future

dispensaries throughout Kern County. The County currently allows medical cannabis dispensaries. There would be a potential increase in the number of dispensaries within the unincorporated areas of Kern County under Alternative A because there is no countywide limit. This could result in the demand for law enforcement services from the KCSO. In addition, Alternative A could result in the need for regulatory oversight of cannabis-related facilities and activities which could ultimately require the services of other public services such as Kern County Counsel and Kern County Public Health Services. These public service demands, however, would be less than those identified under Option A of the proposed project. While Alternative A would reduce the demand on law enforcement protection and other public services as compared to Option A, this alternative would continue to require public services and could continue to result in the need for additional staff and equipment. In addition, Alternative A would result in the need for increased facilities for the Kern County Treasurer-Tax Collector in order to handle the cash and counting activities required for Alternative A. This would be an increase in other public services as compared to Option A. Implementation of similar mitigation measures as those identified for the proposed project would continue to be required. Therefore, Alternative A, after implementation of mitigation measures, would have reduced impacts associated with public services and cumulative impacts as compared to Option A of the proposed project.

Transportation and Traffic

Option A

Under Alternative A, medical cannabis dispensaries would continue to be allowed anywhere that pharmacies are allowed, assuming they are 0.5 mile from schools. Alternative A does not provide a countywide limit on the number of medical cannabis dispensaries that would be allowed. Alternative A would not allow for cultivation, processing and packaging, and distribution facilities. This would result in a distribution of medical cannabis dispensaries and would allow access to these medical dispensaries throughout Kern County. Medical customer VMT and distances traveled would be reduced as compared to Option A of the proposed project, because medical customers could obtain cannabis products within close proximity to their location. However, adult use customers would continue to travel to areas outside of unincorporated Kern County, thus, adult use customer VMT and distance travelled would remain similar to Option A. Overall, VMT and distance travelled would be reduced as compared to option A. Reducing VMT would in turn reduce traffic on County roadways, thereby reducing the potential to conflict with applicable plans and ordinances related to the circulation system, including established congestion management plans. Mitigation measures, similar to those identified for Option B, would be applicable to this alternative. Therefore, impacts associated with Alternative A regarding transportation and traffic, after implementation of mitigation measures, would be less than Option A of the proposed project.

When this alternative is combined with other past, present, and reasonably foreseeable projects, Alternative A would reduce the VMT and distances traveled to levels less than Option A. This would thus reduce transportation and traffic impacts as compared to the proposed project. While Alternative A would reduce cumulative impacts on transportation and traffic, because of the estimated population increases and the uncertainty of which jurisdictions would allow adult use sales of cannabis and cannabis products, impacts would still be potentially significant.

Option B

Under Alternative A, construction and operation activities would continue to occur for medical cannabis stores; however, no construction or operation activities would occur in association with

cultivation, processing and packaging, and distribution facilities. Therefore, future construction and operation activities would result in a reduced intensity as compared to Option B of the proposed project. Alternative A would continue to be consistent with the development projected in the Kern COG RTP/SCS and mitigation measures similar to the proposed project would continue to be required. No vehicle trips would occur in association with cultivation, processing and packaging, and distribution facilities under this alternative. Alternative A would have similar VMT and distances traveled with respect to medical cannabis customers, thus reducing traffic, as compared to the proposed project. However, Alternative A would result in an increase in VMT and distances traveled for adult use cannabis sales because adult use cannabis customers would be required to travel to areas outside of the unincorporated areas of the County, to either an incorporated city or outside the County. This would increase traffic in comparison with Option B of the proposed project. Alternative A would require similar mitigation measures as the proposed project. When this alternative is combined with other past, present, and reasonably foreseeable projects, Alternative B would increase the VMT and distances traveled as compared to Option B. This would thus increase transportation and traffic impacts as compared to the proposed project. In addition, estimated population increases and the uncertainty of which jurisdictions would allow sales of adult use cannabis and cannabis products, impacts would continue to be significant, even with the incorporation of mitigation measures.

Utilities and Service Systems

Option B

Under Alternative A, medical cannabis dispensaries would continue to be allowed anywhere that pharmacies are allowed, assuming they are 0.5 mile from schools. Alternative A does not provide a countywide limit on the number of medical cannabis dispensaries that would be allowed. Alternative A would not allow for cultivation, processing and packaging, and distribution facilities. Alternative A would result in less demand for utilities and service systems, specifically water and energy supply, as compared to the proposed project. As discussed above, Alternative A would result in reduced demand on the water supply as compared to the proposed project. Under Alternative A, water demand on the water supply would be distributed throughout the County; however, in some areas, water purveyors may not have the supply to meet the demand of one or more medical cannabis dispensaries. Alternative A would not allow for indoor cultivation and processing and packaging, which are the activities that have the largest water and energy demand related to the cannabis industry. Alternative A would require similar mitigation measures as Option B of the proposed project. Therefore, impacts associated with Alternative A on utilities and service systems, while still potentially significant, would be less than Option B of the proposed project.

Conclusion and Relationship to Project Objectives

Alternative A Compared to Proposed Project Option A

- Alternative A would reduce significant impacts associated with air quality, GHG emission, public services, and transportation and traffic.
- Alternative A would introduce construction impacts as compared to Option A; however, similar mitigation measures as required for proposed project Option B would be required for this alternative.
- Alternative A would increase impacts associated with land use and planning because Alternative A would result in a conflict between the Kern County Code of Ordinances and the State's Proposition 64.

- Alternative A would fulfill some of the project's objectives; however, Alternative A would not fulfill key objectives such as the following:
 - Alternative A would not provide County-specific land use and fiscal information to the Kern County Board of Supervisors;
 - Alternative A would not provide County-specific policy recommendations to the Kern County Board of Supervisors for compliance with Proposition 64; and
 - Alternative A would not implement changes to the Kern County Code of Ordinances to reflect changes in laws and regulations by outside agencies.

Alternative A Compared to Proposed Project Option B

- Alternative A would avoid impacts to agriculture and forest lands.
- Alternative A would reduce significant impacts associated with aesthetics, biological resources, cultural and tribal cultural resources, hydrology and water quality, and utilities and service systems.
- Alternative A would increase significant impacts associated with air quality, GHG emissions, and transportation and traffic.
- Alternative A would increase impacts associated with land use and planning because Alternative A would result in a conflict between the Kern County Code of Ordinances and the State's Proposition 64.
- Alternative A would fulfill some of the project's objectives; however, Alternative A would not fulfill key objectives such as the following:
 - Alternative A would not provide County-specific land use and fiscal information to the Kern County Board of Supervisors;
 - Alternative A would not provide County-specific policy recommendations to the Kern County Board of Supervisors for compliance with Proposition 64; and
 - Alternative A would not implement changes to the Kern County Code of Ordinances to reflect changes in laws and regulations by outside agencies.

6.4.2 Alternative B: Retail Cannabis Stores Only

Alternative B would consist of an amendment to the Kern County Code of Ordinances Title 19 and other related ordinances to include updated standards and conditions for future commercial medical and adult use cannabis activities and facilities related to retail cannabis stores with or without mobile delivery. Alternative B would amend the Kern County Zoning Ordinance similar to Option B of the proposed project, as it relates to retail cannabis stores. Alternative B would allow retail cannabis stores with or without mobile delivery in the following zone classifications: C-1 (Neighborhood Commercial); C-2 (General Commercial); CH (Highway Commercial); M-1 (Light Industrial); M-2 (Medium Industrial); and M-3 (Heavy Industrial). Under Alternative B, a countywide maximum of 40 retail cannabis stores with or without mobile delivery would be allowed within unincorporated portions of Kern County, and no more than 2 retail cannabis stores would be allowed in each unincorporated community identified in the KCGP or the Kern County Housing Element. Retail cannabis stores with or without mobile delivery would be required to meet all setbacks, including being 0.5 mile or more from a school, day care center, or youth center while children are present, as specified in Proposition 64.

Aesthetics

Option B

Alternative B would allow retail cannabis stores only and would include a countywide maximum of 40 retail cannabis stores. Retail cannabis stores would be allowed in zone districts that generally contain existing development and structures. In addition, Alternative B would not allow for cultivation, processing and packaging, and distribution facilities. While this alternative would have the potential to introduce new structures where none currently exist, any new structures would be located in areas zoned for commercial or industrial facilities and would be in areas that are likely already developed. Future retail cannabis stores opening under Alternative B would be required to comply with the County's development standards. Alternative B would result in fewer new structures in undeveloped areas, as compared to Option B of the proposed project. Therefore, when this alternative is combined with other past, present, and reasonably foreseeable projects, Alternative B would reduce aesthetic impacts as compared to the proposed project.

Agriculture and Forest Resources

Option B

Alternative B would not allow for development within agricultural land. Therefore, Alternative B would avoid impacts to agriculture and agricultural resources. Impacts associated with forest and forest land would be less than those associated with Option B of the proposed project, because future retail cannabis stores would be allowed in specific commercial and industrial areas only under Alternative B, which reduces the potential for forest land to be present. Thus, this alternative would not directly convert agricultural land to non-agricultural land or forest land to non-forest land. Alternative B. Indirect impacts associated with converting agricultural land to non-agricultural land or forest land to non-forest land would also be reduced, as commercial and industrial zone districts within unincorporated Kern County are generally within close proximity of already developed areas. Therefore, impacts associated with Alternative B on agriculture and forest resources would be less than the proposed project.

Air Quality

Option A

Under Alternative B, future retail cannabis stores would be allowed in certain commercial and industrial zone districts with a countywide maximum of 40 retail cannabis stores. This would result in an even distribution of retail cannabis stores and would allow access to these future stores throughout Kern County. Therefore, customer trips would be reduced as compared to Option A of the proposed project. Option A would result in increased VMT and would increase mobile source criteria air pollutant emissions. Customer VMT would be reduced under Alternative B as compared to Option A of the proposed project, because customers would not be required to travel further distances, but rather could obtain cannabis products within close proximity to their location. Reducing VMT would in turn reduce the amount of mobile source criteria air pollutant emissions as compared to Option A. Therefore, Alternative B would not conflict with or obstruct implementation of an air quality plan and would not be anticipated to violate an air quality standard. With implementation of similar mitigation measures as those identified for the proposed project, Alternative B would reduce impacts associated with criteria air pollutants and cumulative impacts. Therefore, impacts associated with Alternative B, after implementation of mitigation measures,

would be less than Option A of the proposed project, although certain impacts may continue to be potentially significant.

Option B

Under Alternative B, construction and operation activities would continue to occur for retail cannabis stores; however, no construction or operation activities would occur in association with cultivation, processing and packaging, and distribution facilities. Therefore, future construction and operation activities would result in a reduced intensity as compared to Option B of the proposed project. Alternative B would continue to be consistent with the development projected in the Kern COG RTP/SCS and mitigation measures similar to the proposed project would continue to be required. Alternative B would reduce criteria air pollutants as compared to the proposed project, because Alternative B would allow for only retail cannabis stores to be developed. No criteria air pollutants would be emitted in association with cultivation, processing and packaging, and distribution facilities under this alternative. Alternative B would reduce the cumulatively considerable net increase of any criteria pollutant for which region is nonattainment under an applicable federal or State ambient air quality standard because it would have reduced development intensity. Therefore, Alternative B would require similar mitigation measures as Option B of the proposed project and impacts to air quality, while still potentially significant, would be less than Option B of the proposed project.

Biological Resources

Option B

Under this alternative, the project site would have a reduced development footprint focused on areas identified for commercial and industrial zone districts only. While some construction may still occur under Alternative B in association with new retail cannabis stores, it is assumed that, similar to Option B of the proposed project, some most stores would utilize existing structures. Alternative B would require similar mitigation measures as those identified under Option B of the proposed project, as related to development of undeveloped lands and construction or demolition of structures. Alternative B would only allow for retail cannabis stores; therefore, Alternative B would not result in development within agricultural zone districts, thus further reducing impacts to biological resources as compared to the proposed project. Therefore, impacts associated with Alternative B on biological resources would be less than the proposed project with implementation of similar mitigation measures.

Cultural and Tribal Cultural Resources

Option B

Alternative B would allow retail cannabis stores only and would include a countywide maximum of 40 retail cannabis stores. Retail cannabis stores would be allowed in zone districts that generally contain existing development and structures. In addition, Alternative B would not allow for cultivation, processing and packaging, and distribution facilities. Alternative B would result in less opportunity for cultural and tribal cultural resources to be disturbed because there would be less development allowed as compared to the proposed project. Alternative B would result in fewer new structures in undeveloped areas, as compared to Option B of the proposed project. Therefore, when this alternative is combined with other past, present, and reasonably foreseeable projects, Alternative B would reduce cultural and tribal cultural impacts as compared to the proposed project.

Greenhouse Gas Emissions

Option A

Under Alternative B, future retail cannabis stores would be allowed in certain commercial and industrial zone districts with a countywide maximum of 40 retail cannabis stores. This would result in an even distribution of retail cannabis stores and would allow access to these future stores throughout Kern County. Therefore, customer trips would be reduced as compared to Option A of the proposed project. Option A would result in increased VMT and would increase mobile source GHG emissions. Customer VMT would be reduced under Alternative B as compared to Option A of the proposed project, because customers would not be required to travel further distances, but rather could obtain cannabis products within close proximity to their location. Reducing VMT would in turn reduce the amount of mobile source GHG emissions as compared to Option A. Therefore, impacts associated with Alternative B regarding GHG emissions, after implementation of mitigation measures, would be less than Option A of the proposed project, although impacts may continue to be potentially significant.

Option B

Under Alternative B, construction and operation activities would continue to occur for retail cannabis stores; however, no construction or operation activities would occur in association with cultivation, processing and packaging, and distribution facilities. Therefore, future construction and operation activities would result in a reduced intensity as compared to Option B of the proposed project. Alternative B would continue to be consistent with the development projected in the Kern COG RTP/SCS and mitigation measures similar to the proposed project would continue to be required. Alternative B would reduce GHG emission as compared to the proposed project, because Alternative B would allow for only retail cannabis stores to be developed. No GHG emissions would occur in association with cultivation, processing and packaging, and distribution facilities under this alternative. Therefore, Alternative B would require similar mitigation measures as Option B of the proposed project and impacts regarding GHG emissions, while still potentially significant, would be less than Option B of the proposed project.

Hydrology and Water Quality

Option B

Under Alternative B, future retail cannabis stores would be allowed in certain commercial and industrial zone districts with a countywide maximum of 40 retail cannabis stores. Retail cannabis stores would be allowed in zone districts that generally contain existing development and structures. In addition, Alternative B would not allow for cultivation, processing and packaging, and distribution facilities. Similar to Option B of the proposed project, future retail cannabis stores with or without mobile delivery would have similar water uses and demand as the existing dispensaries. These facilities generally generate low demand for water as they typically service only the employees. Consumers at these facilities typically do not stay longer than is necessary to acquire the products being sold. Alternative B would have less demand on water supply than the proposed project because Alternative B would not result in cultivation, processing and packaging, or distribution activities. Under Alternative B, water demand on the water supply would be distributed evenly throughout the County; however, in some areas, water purveyors may not have the supply to meet the demand of a retail cannabis store. Alternative B would require similar mitigation measures as Option B of the

proposed project. Therefore, impacts associated with Alternative B regarding water supply, while still potentially significant, would be less than Option B of the proposed project.

Public Services

Option A

Under Alternative B, future retail cannabis stores would be allowed in certain commercial and industrial zone districts with a countywide maximum of 40 retail cannabis stores. This would result in an even distribution of retail cannabis stores and would allow access to these future stores throughout Kern County. Because medical currently allows medical cannabis dispensaries, Alternative B would have a reduced demand for law enforcement services from the KCSO as compared to Option A. Alternative B could result in the need for regulatory oversight of cannabis-related facilities and activities which could ultimately require the services of other public services such as Kern County Counsel and Kern County Public Health Services. These public service demands, however, would be less than those identified under Option A of the proposed project. While Alternative B would reduce the demand on law enforcement protection and other public services as compared to Option A, this alternative would continue to require public services and could continue to result in the need for additional staff and equipment. In addition, Alternative B would result in the need for increased facilities for the Kern County Treasurer-Tax Collector in order to handle the cash and counting activities required for Alternative B. This would be an increase in other public services as compared to Option A. With implementation of similar mitigation measures as those identified for the proposed project, Alternative B would reduce impacts associated with law enforcement protection, other public services, and cumulative impacts. Therefore, impacts associated with Alternative B, after implementation of mitigation measures, would be less than Option A of the proposed project, although certain impacts may continue to be potentially significant.

Transportation and Traffic

Option A

Under Alternative B, future retail cannabis stores would be allowed in certain commercial and industrial zone districts with a countywide maximum of 40 retail cannabis stores. In addition, Alternative B would not allow for cultivation, processing and packaging, and distribution facilities. This would result in an even distribution of retail cannabis stores and would allow access to these future stores throughout Kern County. Therefore, potential customer trips would be reduced as compared to Option A of the proposed project. Option A would result in increased VMT and distances traveled ranging from approximately 15 miles to more than 267 miles. Customer VMT and total distance traveled would be reduced under Alternative B as compared to Option A of the proposed project, because customers would not be required to travel further distances, but rather could obtain cannabis products within close proximity to their current location. Reducing VMT would in turn reduce traffic on County roadways, thereby reducing the potential to conflict with applicable plans and ordinances related to the circulation system, including established congestion management plans. Mitigation measures, similar to those identified for Option B, would be applicable to this alternative. Therefore, impacts associated with Alternative B regarding transportation and traffic, after implementation of mitigation measures, would be less than Option A of the proposed project.

When this alternative is combined with other past, present, and reasonably foreseeable projects, Alternative B would reduce the VMT and distances traveled to levels similar to, but less than, Option B. This would thus reduce transportation and traffic impacts as compared to the proposed project.

While Alternative B would reduce cumulative impacts on transportation and traffic, because of the estimated population increases and the uncertainty of which jurisdictions would allow sales of cannabis and cannabis products, impacts would still be potentially significant.

Option B

Under Alternative B, construction and operation activities would continue to occur for retail cannabis stores; however, no construction or operation activities would occur in association with cultivation, processing and packaging, and distribution facilities. Therefore, future construction and operation activities would result in a reduced intensity as compared to Option B of the proposed project. Alternative B would continue to be consistent with the development projected in the Kern COG RTP/SCS and mitigation measures similar to the proposed project would continue to be required. Alternative B would reduce VMT and distances traveled, thus reducing traffic, as compared to the proposed project, because Alternative B would allow for only retail cannabis stores to be developed. No vehicle trips would occur in association with cultivation, processing and packaging, and distribution facilities under this alternative. When this alternative is combined with other past, present, and reasonably foreseeable projects, Alternative B would reduce the VMT and distances traveled as compared to Option B. This would thus reduce transportation and traffic impacts as compared to the proposed project. However, because of the estimated population increases and the uncertainty of which jurisdictions would allow sales of cannabis and cannabis products, even though cumulative impacts would be reduced under this alternative, impacts would continue to be significant, even with the incorporation of mitigation measures.

Utilities and Service Systems

Option B

Under Alternative B, future retail cannabis stores would be allowed in certain commercial and industrial zone districts with a countywide maximum of 40 retail cannabis stores. Retail cannabis stores would be allowed in zone districts that generally contain existing development and structures. In addition, Alternative B would not allow for cultivation, processing and packaging, and distribution facilities. Alternative B would result in less demand for utilities and service systems, specifically water and energy supply, as compared to the proposed project. As discussed above, Alternative B would result in reduced demand on the water supply as compared to the proposed project. Similarly, the largest energy demand resulting from Option B of the proposed project occurs from indoor cultivation, processing and packaging, and distribution facilities. Alternative B would not allow for these future cannabis related activities, thus, Alternative B would have a reduced demand on energy as compared to the proposed project. Therefore, impacts associated with Alternative B on utilities and service systems, while still potentially significant, would be less than Option B of the proposed project.

Conclusion and Relationship to Project Objectives

Alternative B Compared to Propose Project Option A

- Alternative B would reduce significant impacts associated with air quality, GHG emission, public services, and transportsations and traffic.
- Alternative B would introduce construction impacts as compared to Option A; however, similar mitigation measures as the proposed project Option B would be required for this alternative.

- Alternative B would fulfill the project's objectives.

Alternative B compared to Proposed Project Option B

- Alternative B would avoid impacts to agriculture and forest lands.
- Alternative B would reduce significant impacts associated with aesthetics, air quality, biological resources, cultural and tribal cultural resources, GHG emissions, hydrology and water quality, transportation and traffic, and utilities and service systems.
- Alternative B would fulfill the project's objectives.

6.4.3 Alternative C: Reduced Project

Alternative C would consist of an amendment to the Kern County Code of Ordinances Title 19 and other related ordinances to include updated standards and conditions for future commercial medical and adult use cannabis activities and facilities related to cultivation (indoor), processing and packaging facilities, distribution facility, and retail cannabis stores; no outdoor cultivation would be allowed under this alternative. Alternative C would amend the Kern County Zoning Ordinance similar to Option B of the proposed project, as it relates to future cannabis indoor cultivation, processing and packaging, and retail cannabis store facilities and activities. This alternative would allow for a countywide maximum of 500,000 ft² of indoor cultivation, 150,000 ft² of processing, packaging facilities, including one distribution facility, and 10 retail cannabis stores with or without mobile delivery. No outdoor cultivation would be allowed under this alternative.

Future cannabis cultivation, processing and packaging, and distribution facilities would be required to meet all setbacks, including being 0.5 mile or more from a school, day care center, youth center while children are present, or incorporated city limit boundary. Retail cannabis stores with or without mobile delivery would be required to meet all setbacks, including being 0.5 mile or more from a school, day care center, or youth center while children are present, as specified in Proposition 64.

Aesthetics

Option B

Alternative C would allow for 500,000 ft² of indoor cultivation, 150,000 ft² of processing, packaging, and distribution facilities, and 10 retail cannabis stores with or without mobile delivery. No outdoor cultivation would be allowed under this alternative. While this alternative would have the potential to introduce new structures where none currently exist, the number of new structures would be reduced as compared to Option B of the proposed project. Future cannabis cultivation, processing and packaging, distribution, and retail stores opening under Alternative C would be required to comply with the County's development standards. Alternative C would result in fewer new structures in undeveloped areas, as compared to Option B of the proposed project. Therefore, when this alternative is combined with other past, present, and reasonably foreseeable projects, Alternative C would reduce, but not avoid, aesthetic impacts as compared to the proposed project.

Agriculture and Forest Resources

Option B

Alternative C would not allow for outdoor cannabis cultivation. Therefore, Alternative C would avoid impacts to 150 acres of agriculture and agricultural resources associated with outdoor cannabis cultivation. Alternative C would reduce indoor cultivation to a total of 500,000 ft² countywide with a combination of greenhouses and other structures; this is a reduction of 1,500,000 ft² as compared to

Option B. Alternative C allow indoor cannabis cultivation within zone classifications A, A-1, M-1, M-2, and M-3. Therefore, the impacts to agriculture and agricultural resources associated with indoor cultivation would be reduced as compared to Option B of the proposed project. Impacts associated with forest and forest land would be less than those associated with Option B of the proposed project, because future cannabis activities would be reduced by 70 percent or more, which reduces the potential for forest land to be present. This alternative would directly convert agricultural land to non-agricultural land or forest land to non-forest land; however, at a greatly reduced rate as compared to Option B. Indirect impacts associated with converting agricultural land to non-agricultural land or forest land to non-forest land would also be reduced. Therefore, impacts associated with Alternative C on agriculture and forest resources would be less than Option B of the proposed project, however, could continue to be significant.

Air Quality

Option A

Under Alternative C, construction and operation activities would occur for future cannabis related facilities at an increased rate of Option A; no construction or operation activities would occur in association with outdoor cultivation. Therefore, future construction and operation activities would result in an increased intensity as compared to Option A of the proposed project. Mitigation measures, similar to those required for Option B of the proposed project, would be required for Alternative C. This would result in impacts that are increased as compared to Option A. Alternative C would add vehicle trips associated with future indoor cultivation, processing and packaging, and distribution facilities and activities as compared to Option A; however, it would redistribute the existing trips associated with retail cannabis stores from the existing 22 dispensaries to the 10 future retail cannabis stores allowed under this alternative. VMT would increase as compared to Option A with respect to future cannabis indoor cultivation, processing and packaging, and distribution facilities. Potential customer VMT would be reduced, but would still be significant, as compared to Option A, because while traveling within the County, some customers would continue to be required to travel long distances. Therefore, the overall VMT for Alternative C would be slightly reduced as compared to Option A. Slightly reducing VMT would in turn slightly reduce the amount of mobile source criteria air pollutant emissions as compared to Option A. With implementation of similar mitigation measures as both Options A and B of the proposed project, Alternative C would reduce, but not avoid, impacts associated with criteria air pollutants and cumulative impacts. Therefore, impacts associated with Alternative C, after implementation of mitigation measures, would be less than Option A of the proposed project, although they would continue to be significant.

Option B

Under Alternative C, construction and operation activities would continue to occur for future cannabis related facilities at a reduced rate of Option B and no construction or operation activities would occur in association with outdoor cultivation. Therefore, future construction and operation activities would result in a reduced intensity as compared to Option B of the proposed project. Alternative C would continue to be consistent with the development projected in the Kern COG RTP/SCS and mitigation measures similar to the proposed project would continue to be required.

Alternative C would have similar criteria air pollutants as compared to the proposed project, because Alternative C would be a reduced version of Option B. VMT would be reduced for future cannabis cultivation, processing and packaging, and distribution facilities and activities; however, VMT would increase with respect to retail cannabis stores because potential customers would be required to travel

further distances to stores when compared to Option B. The overall VMT for Alternative C would be similar as compared to Option B. This would result in similar amounts of mobile source criteria air pollutant emissions as compared to Option B. No criteria air pollutants would be emitted in association with outdoor cannabis cultivation under this alternative. Alternative C would have similar cumulative criteria pollutant emissions for which region is nonattainment under an applicable federal or State ambient air quality standard because it would have reduced development intensity. Therefore, Alternative C would require similar mitigation measures as Option B of the proposed project and impacts to air quality would similar to Option B of the proposed project.

Biological Resources

Option B

Alternative C would allow for 500,000 ft² of indoor cultivation, 150,000 ft² of processing, packaging, and distribution facilities, and 10 retail cannabis stores with or without mobile delivery. No outdoor cultivation would be allowed under this alternative. While some construction may still occur under Alternative C in association with new facilities, it is assumed that, similar to Option B of the proposed project, some future cannabis related facilities would utilize existing structures. In addition, Alternative C would further reduce impacts by not allowing for 150 acres of outdoor cannabis cultivation. Alternative C would require similar mitigation measures as those identified under Option B of the proposed project, as related to development of undeveloped lands and construction or demolition of structures. Alternative C would result in reduced development within agricultural zone districts, thus reducing impacts to biological resources as compared to the proposed project. Therefore, impacts associated with Alternative C on biological resources would be less than the proposed project with implementation of similar mitigation measures.

Cultural and Tribal Cultural Resources

Option B

Alternative C would allow for 500,000 ft² of indoor cultivation, 150,000 ft² of processing, packaging, and distribution facilities, and 10 retail cannabis stores with or without mobile delivery. No outdoor cultivation would be allowed under this alternative. Alternative C would result in less opportunity for cultural and tribal cultural resources to be disturbed because there would be less development allowed as compared to the proposed project. Alternative C would result in fewer new structures in undeveloped areas, as compared to Option B of the proposed project. Therefore, when this alternative is combined with other past, present, and reasonably foreseeable projects, Alternative C would reduce cultural and tribal cultural impacts as compared to the proposed project.

Greenhouse Gas Emissions

Option A

Alternative C would allow for 500,000 ft² of indoor cultivation, 150,000 ft² of processing, packaging, and distribution facilities, and 10 retail cannabis stores with or without mobile delivery. No outdoor cultivation would be allowed under this alternative. Under Alternative C, construction and operation activities would occur for future cannabis related facilities at an increased rate of Option A; no construction or operation activities would occur in association with outdoor cultivation. Therefore, future construction and operation activities would result in an increased intensity as compared to Option A of the proposed project. Mitigation measures, similar to those required for Option B of the proposed project, would be required for Alternative C.

As discussed above, Alternative C would add vehicle trips associated with future indoor cultivation, processing and packaging, and distribution facilities and activities as compared to Option A; however, it would redistribute the existing trips associated with retail cannabis stores from the existing 22 dispensaries to the 10 future retail cannabis stores allowed under this alternative. VMT would increase as compared to Option A with respect to future cannabis indoor cultivation, processing and packaging, and distribution facilities and activities. Potential customer VMT would be reduced, but would still be significant, as compared to Option A, because while traveling within the County, some customers would continue to be required to travel long distances. Therefore, the overall VMT for Alternative C would be slightly reduced as compared to Option A. Slightly reducing VMT would in turn slightly reduce the amount of mobile source GHG emissions as compared to Option A. Therefore, impacts associated with Alternative C regarding GHG emissions, after implementation of mitigation measures, would be less than Option A of the proposed project, although impacts may continue to be significant.

Option B

Under Alternative C, construction and operation activities would continue to occur for future cannabis related facilities at a reduced rate of Option B and no construction or operation activities would occur in association with outdoor cultivation. Therefore, future construction and operation activities would result in a reduced intensity as compared to Option B of the proposed project. Alternative C would continue to be consistent with the development projected in the Kern COG RTP/SCS and mitigation measures similar to the proposed project would continue to be required. Alternative C would have similar GHG emission as compared to the proposed project, because Alternative C would be a reduced version of Option B and VMT would be slight increased as compared to Option B. No GHG emissions would occur in association with outdoor cultivation under this alternative. Therefore, Alternative C would require similar mitigation measures as Option B of the proposed project and impacts regarding GHG emissions would be similar to Option B of the proposed project.

Hydrology and Water Quality

Option B

Alternative C would allow for 500,000 ft² of indoor cultivation, 150,000 ft² of processing, packaging, and distribution facilities, and 10 retail cannabis stores with or without mobile delivery. Future cannabis indoor cultivation, processing and packaging, and distribution facilities would be located in both existing and new structures and would be required to comply with proposed development standards such as using recycled water. Retail cannabis stores would be allowed in zone districts that generally contain existing development and structures. In addition, Alternative C would not allow for outdoor cultivation. Future cannabis indoor cultivation, processing and packaging, distribution, and retail cannabis stores with or without mobile delivery would have similar water uses and demand as Option B; however, the countywide maximums would be reduced. Alternative C would have less demand on water supply than Option B of the proposed project because Alternative B would substantially reduce the countywide maximum for future cannabis indoor cultivation, processing and packaging, distribution, and retail store facilities and would not result in outdoor cultivation activities. Under Alternative C, water demand on the water supply would be distributed throughout the County; however, in some areas, water purveyors may not have the supply to meet the demand. Alternative C would require similar mitigation measures as Option B of the proposed project. Therefore, impacts associated with Alternative C regarding water supply, while still potentially significant, would be less than Option B of the proposed project.

Public Services

Option A

Under Alternative C, future cannabis indoor cultivation, processing and packaging, distribution, and retail cannabis stores would be allowed at a reduced rate and outdoor cannabis cultivation would not be allowed. Construction and operation activities would occur for future cannabis related facilities at an increased rate of Option A; no construction or operation activities would occur in association with outdoor cultivation. Therefore, future construction and operation activities would result in an increased intensity as compared to Option A of the proposed project. Mitigation measures, similar to those required for Option B of the proposed project, would be required for Alternative C.

Alternative C would have a reduced demand for law enforcement services from the KCSO as compared to Option A. Alternative C could result in the need for regulatory oversight of cannabis-related facilities and activities which could ultimately require the services of other public services such as Kern County Counsel and Kern County Public Health Services. These public service demands, however, would be less than those identified under Option A of the proposed project. While Alternative C would reduce the demand on law enforcement protection and other public services as compared to Option A, this alternative would continue to require public services and could continue to result in the need for additional staff and equipment. In addition, Alternative C would result in the need for increased facilities for the Kern County Treasurer-Tax Collector in order to handle the cash and counting activities required for Alternative C. This would be an increase in other public services as compared to Option A. With implementation of similar mitigation measures as identified for Option B of the proposed project, Alternative C would reduce, but not avoid, impacts associated with law enforcement protection, other public services, and cumulative impacts. Therefore, impacts associated with Alternative C, after implementation of mitigation measures, would be less than Option A of the proposed project, although they would continue to be significant.

Transportation and Traffic

Option A

Under Alternative C, future cannabis indoor cultivation, processing and packaging, distribution, and retail cannabis stores would be allowed at a reduced rate and outdoor cannabis cultivation would not be allowed. Construction and operation activities would occur for future cannabis related facilities at an increased rate of Option A; no construction or operation activities would occur in association with outdoor cultivation. Therefore, future construction and operation activities would result in an increased intensity as compared to Option A of the proposed project. Mitigation measures, similar to those required for Option B of the proposed project, would be required for Alternative C. This would result in construction related transportation and traffic impacts that are increased as compared to Option A.

Alternative C would add vehicle trips associated with future indoor cultivation, processing and packaging, and distribution facilities and activities as compared to Option A; however, it would redistribute the existing trips associated with retail cannabis stores from the existing 22 dispensaries to the 10 future retail cannabis stores allowed under this alternative. VMT would increase as compared to Option A with respect to future cannabis indoor cultivation, processing and packaging, and distribution facilities. Potential customer VMT would be reduced, but would still be significant, as compared to Option A, because while traveling within the County, some customers would continue to be required to travel long distances. Therefore, the overall VMT for Alternative C would be slightly

reduced as compared to Option A. Slightly reducing VMT would in turn slightly reduce traffic on County roadways, thereby slightly reducing the potential to conflict with applicable plans and ordinances related to the circulation system, including established congestion management plans. Mitigation measures, similar to those identified for Option B, would be applicable to this alternative. Therefore, impacts associated with Alternative C regarding transportation and traffic, after implementation of mitigation measures, would be less than Option A of the proposed project.

When this alternative is combined with other past, present, and reasonably foreseeable projects, Alternative C would have similar VMT and distances traveled as compared to Option B. This would thus reduce transportation and traffic impacts as compared to Option A of the proposed project. While Alternative C would reduce cumulative impacts on transportation and traffic, because of the estimated population increases and the uncertainty of which jurisdictions would allow sales of cannabis and cannabis products, impacts would still be potentially significant.

Option B

Under Alternative C, construction and operation activities would continue to occur but at a reduced rate, as countywide maximum allowable development for future cannabis indoor cultivation, processing and packaging, distribution, and retail cannabis stores, would be reduced as compared to Option B. No construction or operation activities would occur in association with outdoor cultivation. Therefore, future construction and operation activities would result in a reduced intensity as compared to Option B of the proposed project. Alternative C would continue to be consistent with the development projected in the Kern COG RTP/SCS and mitigation measures similar to the proposed project would continue to be required. VMT would be reduced for future cannabis cultivation, processing and packaging, and distribution facilities due to the reduced countywide maximum; however, VMT would increase with respect to retail cannabis stores because potential customers would be required to travel further distances to stores when compared to Option B. The overall VMT for Alternative C would be similar as compared to Option B. No vehicle trips would occur in association with outdoor cultivation under this alternative. When this alternative is combined with other past, present, and reasonably foreseeable projects, Alternative B would be similar to Option B for VMT and increase distances traveled as compared to Option B. This would potentially increase transportation and traffic impacts as compared to the proposed project, due to an increase in VMT and distances traveled as they relate to future retail cannabis stores. Therefore, impacts would be increased as related to Option B, even with the incorporation of mitigation measures.

Utilities and Service Systems

Option B

Under Alternative C, future cannabis indoor cultivation, processing and packaging, distribution, and retail cannabis stores would be allowed at a reduced rate and outdoor cannabis cultivation would not be allowed. Future cannabis indoor cultivation, packaging and processing, and retail cannabis store facilities would occur in existing and new structures. Alternative C would result in less demand for utilities and service systems, specifically water and energy supply, as compared to the proposed project. As discussed above, Alternative C would result in reduced demand on the water supply as compared to the proposed project. Similarly, the largest energy demand resulting from Option B of the proposed project occurs from indoor cultivation, processing and packaging, and distribution facilities. Alternative C would reduce these future cannabis related activities by 70 percent or more, thus, Alternative C would have a reduced demand on energy as compared to the proposed project.

Therefore, impacts associated with Alternative C on utilities and service systems, while still potentially significant, would be less than Option B of the proposed project.

Conclusion and Relationship to Project Objectives

Alternative C Compared to Propose Project Option A

- Alternative C would reduce significant impacts associated with air quality, GHG emission, public services, and transportations and traffic.
- Alternative C would increase impacts associated with aesthetics, agriculture and forest resources, biological resources, cultural and tribal cultural resources, hydrology and water quality, and utilities and service systems.
- Alternative C would introduce construction impacts as compared to Option A; however, similar mitigation measures as the proposed project Option B would be required for this alternative.
- Alternative C would increase construction-related impacts for all resource areas.
- Alternative C would fulfill the project's objectives.

Alternative C Compared to Propose Project Option B

- Alternative C would reduce significant impacts associated with aesthetics, agriculture and forest resources, biological resources, cultural and tribal cultural resources, hydrology and water quality, and utilities and service systems.
- Alternative C would have similar impacts as Option B for air quality and GHG emissions.
- Alternative C would increase significant impacts associated with transportation and traffic.
- Alternative C would fulfill the project's objectives.

6.4.4 Environmentally Superior Alternative

An EIR must identify the environmentally superior alternative to the proposed project. Section 15126.6(e)(2) of the CEQA Guidelines states that if the no project alternative is found to be environmentally superior, "the EIR shall also identify an environmentally superior alternative among the other alternatives." Alternative B: Retail Cannabis Store Only would be environmentally superior to the proposed project, when compared to both Options A and B, on the basis of the minimization or avoidance of physical environmental impacts. Alternative B would avoid agriculture and forest resources impacts and would reduce, but not avoid, impacts to aesthetics, air quality, biological resources, cultural and tribal cultural resources, GHG emissions, hydrology and water quality, transportation and traffic, and utilities and service systems. Alternative B reduces impacts when compared to both Option A and Option B of the proposed project. Accordingly, it is considered the environmentally superior alternative.

Chapter 7

Response to Comments

Chapter 7

Response to Comments

This Chapter is being reserved for, and will be included with, the Final Environmental Impact Report (EIR).

Chapter 8

Organizations and Persons Consulted

Chapter 8

Organizations and Persons Consulted

The below entities were either notified or contacted directly to ask for or directly receive consultation on their applicable area of expertise in respect to this proposed project. This may not be an all-inclusive list. In addition, the distribution list for the Notice of Preparation (NOP) and Initial Study (IS) is provided in Appendix A while the distribution list for the Draft Program Environmental Impact Report (EIR) is provided in the pages following the title page at the beginning of this EIR.

Federal Agencies

- U.S. Army Corps of Engineers
- U.S. Bureau of Land Management
- U.S. Department of Agriculture/Natural Resources Conservation Service
- U.S. Environmental Protection Agency—Region IX
- U.S. Fish and Wildlife Service
- U.S. Forest Service
- Federal Aviation Administration
- China Lake Naval Weapons Center
- Edwards Air Force Base

State Agencies

- California Air Resources Board
- California Farm Bureau
- California Highway Patrol
- Department of Conservation
- Department of Fish and Wildlife Region 4
- Department of Food and Agriculture
- Department of Forestry and Fire Protection
- Department of Health Services
- Department of Parks and Recreation
- Department of Toxic Substances Control
- Department of Transportation Districts 06 and 09
- Department of Transportation Division of Aeronautics
- Department of Water Resources
- Integrated Waste Management Board
- Native American Heritage Commission
- Office of Historic Preservation

Public Utilities Commission
California Energy Commission
Regional Water Quality Control Board – Central Valley Region
Regional Water Quality Control Board – Lahontan Region
State Clearinghouse Office of Planning and Research

Regional and Local

Boron Chamber of Commerce
California Native Plant Society
California City
City of Arvin
City of Bakersfield
City of Delano Planning Department
City of Maricopa
City of McFarland
City of Ridgecrest
City of Shafter
City of Taft
City of Tehachapi
City of Wasco
County of Inyo
County of Kings
County of Los Angeles
County of San Bernardino
County of San Luis Obispo
County of Santa Barbara
County of Tulare
County of Ventura
Kern Council of Governments
Kern County Airports Department
Kern County Department of Agriculture
Kern County Fire Department
Kern County Parks and Recreation
Kern County Planning and Natural Resources Department
Kern County Public Works Department
Kern County Sheriff Department
Kern County Superintendent of Schools
Kern County Water Agency

Pacific Gas & Electric Company
San Joaquin Valley Air Pollution Control District
Eastern Kern Air Pollution Control District
Southern California Gas Company
Southern California Edison

Native American Consultation

Chumash Council of Bakersfield
Kern Valley Indian Council
Kitanemuk & Yowlumne Tejon Indians
San Fernando Band of Mission Indians
Santa Rosa Rancheria
Tabatulabals of Kern County
Tejon Indian Tribe
Tule River Indian Tribe

In addition, in accordance with Assembly Bill (AB) 52 and the California Tribal Consultation guidelines, the appropriate native groups were provided copies of the NOP/IS on January 24, 2017. In addition, the County has sent four (4) AB 52 letters to tribal contacts that have requested consultation. As of the publishing of this EIR, one comment letter was received from Twenty-Nine Palms Band of Mission Indians requesting a copy of this EIR and concerns regarding the potential of impacts to resources, depending on specific development locations, as the project area is adjacent to the Chemehuevi Traditional Use Area. No other comments have been received with respect to the proposed project's potential impacts on Native American places, features, and objects.

Chapter 9

Preparers

Chapter 9 Preparers

Lead Agency

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Mr. Mark Assi, Transportation and Traffic

Insight Environmental

Mr. Ron Hunter, Managing Principal, Air Quality, Greenhouse Gas Emissions, and Energy

Ms. Valerie Rosenkrantz, Senior Consultant, Air Quality, Greenhouse Gas Emissions, and Energy

Chapter 10

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Chapter 11

Acronyms and Abbreviations

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Acronyms and Abbreviations

°F	Degrees Fahrenheit
µg/m ³	Micrograms per cubic meter
A	Exclusive Agriculture (Zoning District)
A-1	Limited Agriculture (Zoning District)
AB	Assembly Bill
ACBM	Asbestos-Containing Building Material
ACHP	Advisory Council on Historic Preservation
ACM	Asbestos Containing Material
ACTM	Airborne Toxic Control Measures
ADT	Average Daily Trips
AFB	Air Force Base
AFY	Acre Feet Per Year
AGL	Above Ground Level
A-1	Limited Agriculture
ALUCP	Airport Land Use Compatibility Plan
AMSL	Above Mean Sea Level
ANSI	American National Standards Institute
ANSS	Advanced National Seismic System
APCD	Air Pollution Control District
AQAP	Air Quality Attainment Plan
AQMP	Air Quality Management Plan
ARB	Air Resources Board
AR4	Fourth Assessment Report
ATSDR	Agency for Toxic Substances and Disease Registry
AUMA	Adult Use Marijuana Act
AVEK	Antelope Valley-East Kern Water Agency
BAT	Best Available Technology
BACT	
BCT	Best Conventional Pollutant Control Technology
BAU	Business-as-Usual
Bena SLF	Bakersfield Metropolitan Sanitary Landfill
BGEPA	Bald and Golden Eagle Protection Act
BLM	Bureau of Land Management
BMP	Best Management Practice
BNSF	Burlington North Santa Fe

BP	Before Present
BPS	Best Performance Standards
BSA	Bank Security Act
BUOW	Burrowing Owl
C-1	Neighborhood Commercial (Zoning District)
C-2	General Commercial (Zoning District)
CA EDD	California Economic Development Department
CAA	(Federal) Clean Air Act
CAAQS	California Ambient Air Quality Standards
CAFE	Corporate Average Fuel Economy
CalARP	California Accidental Release Prevention Program
CALM	California Living Museum
CRC	California Resources Corporation
CalEEMod	California Emissions Estimator Model
Cal/EPA	California Environmental Protection Agency
CDFA	California Department of Agriculture
CAL FIRE	California Department of Forestry and Fire Protection
CALGreen	California Green Building Standard Code
CALGreen Code	California Green Building Standards Code
CALVEG	Classification and Assessment with Landsat of Visible Ecological Groupings
Cal/OSHA	California Division of Occupational Safety and Health
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CASGEM	California Statewide Groundwater Elevation Monitoring
CBC	California Building Code
CCAA	California Clean Air Act of 1988
CCR	California Code of Regulations
CDC	Center for Disease Control and Prevention
CDCA	California Desert Conservation Act
CDFA	California Department of Food and Agriculture
CDFW	California Department of Fish and Wildlife
CDMG	California Division of Mines and Geology
CDPH	California Department of Public Health
CEC	California Energy Commission
CEC	Constituents of Emerging Concerns

Central Valley RWQCB or CVRWQCB	Central Valley Regional Water Quality Control Board
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESA	California Endangered Species Act
cf	Cubic Feet
cfs	cubic feet per second
CFCs	Chlorofluoro carbons
CFH	Cubic Feet per Hour
CFR	Code of Federal Regulations
CGS	California Geological Survey
CH	Highway Commercial (Zoning District)
CH ₄	Methane
CH ₄ H ₁₀	Butane
CHL	California Historical Landmark
CHP	California Highway Patrol
CHRIS	California Historical Resources Information System
CI	
CIP	Capital Improvement Plan
CIWMB	California Integrated Waste Management Board
CL	Cluster
CMA	Congestion Management Agency
CMP	Congestion Management Program
CNDDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNLM	Center for Natural Lands Management
CNPS	California Native Plant Society
CNRA	California Natural Resources Agency
CO	Carbon Monoxide
CO ₂	Carbon Dioxide
CO _{2e}	Carbon Dioxide Equivalent
COG	Council of Governments
CPNM	Carrizo Plain National Monument
CPUC	California Public Utilities Commission
CRHR	California Register of Historical Resources
CSA	County Service Area
CSA	Controlled Substances Act

CSC	California Species of Special Concern
CSD	Community Services District
CTC	California Transportation Commission
CTR	California Toxics Rule
CUA	Compassionate Use Act
CUP	Conditional Use Permit
CUPA	Certified Unified Program Agencies
CUWCC	California Urban Water Conservation Council
CVC	California Vehicle Code
CVC	Cross Water Canal
CVP	Central Valley Project
CVPIA	Central Valley Project Improvement Act
CWA	Clean Water Act
CWD	County Water District
cy	Cubic Yards
C2ES	Climate and Energy Solutions
DAR	Dial-A-Ride
dB	Decibel
dBA	A-Weighted Decibel Scale
DHS	Department of Health Services
DMC	Development Mitigation Contract
DOC	California Department of Conservation
DOD	Department of Defense
DOE	U.S. Department of Energy
DOF	Department of Finance
DOGGR	(California) Division of Oil, Gas and Geothermal Resources
DOI	Department of Interior (United States)
DRECP	Desert Renewable Energy Conservation Plan
DPR	Department of Pesticide Regulation
DPR 523	Department of Parks and Recreation 523 forms for cultural resources
DTSC	Department of Toxic Substances Control
DWR	California Department of Water Resources
A	Exclusive Agriculture
Ed-Data	Education Data Partnership
EEE	Eastern Equine Encephalitis
EHOF	Elk Hills Oil Field
EIA	U.S. Energy Information Administration
EIR	Environmental Impact Report

EIS	Environmental Impact Statement
EKAPCD	Eastern Kern Air Pollution Control District
EMF	Electromagnetic Fields
EMS	Emergency Medical Services
EO	Executive Order
Ep	Erosion Potential
EPA	Environmental Protection Agency
ESA	Endangered Species Act
ESTA	Eastern Sierra Transit Authority
FAA	Federal Aviation Administration
FEIR	Final Environmental Impact Report
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
FESA	Federal Endangered Species Act
FHSZ	Fire Hazard Severity Zone
FHWA	Federal Highway Administration
FIFRA	Federal Insecticide, Fungicide and Rodenticide Act
FIRM	Flood Insurance Rate Map
FMMP	Farmland Mapping and Monitoring Program
FPP	Floodplain Primary (Combining District)
FPPA	Farmland Protection Policy Act
ft ²	square feet
FTIP	Federal Transportation Improvement Program
GAL	GET-A-Lift
GAMAQI	Guidance for Assessing and Mitigating Air Quality Impacts
GET	Golden Empire Transit
GHG	Greenhouse Gas
GPA	General Plan Amendment
gpm	Gallons Per Minute
GSP	Groundwater Sustainability Plan
GWP	Global Warming Potential
H ₂ O	Water
H ₂ S	Hydrogen Sulfide
HAPs	Hazardous air pollutants
HCP	Habitat Conservation Plan
HDM	Highway Design Model
HEPA	High-Efficiency Particulate Air
HFC	Hydrofluorocarbon

HID	High-Intensity Discharge
HMBP	Hazardous Material Business Plan
hr	Hour
HSWA	Hazardous and Solid Waste Act
HUD	U.S. Department of Housing and Urban Development
HVAC	Heating, Ventilation, and Air Conditioning
HWCA	Hazardous Waste Control Act
I	Industrial
I	Interstate
I-5	Interstate 5
ICS	International Commission on Stratigraphy
ID4	Improvement District No.4
IBA	Important Bird Area
IPCC	Intergovernmental Panel on Climate Change
IRWMP	Integrated Regional Water Management Plan
ID	Irrigation District
IS	Initial Study
ISR	Indirect Source Review
ITE	Institute of Transportation Engineers
ITP	Incidental Take Permit
IWMB	(California) Integrated Waste Management Board
KCFD	Kern County Fire Department
KCGP	Kern County General Plan
KCIWMP	Kern County Integrated Waste Management Plan
KCWA	Kern County Water Agency
PGKCWMD	Kern County Waste Management District
Kern COG	Kern Council of Governments
KCSO	Kern County Sheriff Office
KOP	Key Observation Point
KRT	Kern Regional Transit
LADWP	Los Angeles County Department of Water and Power
LAFCO	Local Agency Formation Commission
L _{dn}	Day – Night Average Sound Level
L _{eq}	Equivalent Sound Level
L _{max}	Maximum Sound Level
L _{min}	Minimum Sound Level
LID	Low Impact Development
LHCP	Lokern Habitat Conservation Plan

LOS	Level of Service
LRA	Local Responsibility Area
M-1	Light Industrial (Zoning District)
M-2	Medium Industrial (Zoning District)
M-3	Heavy Industrial (Zoning District)
MBGP	Metropolitan Bakersfield General Plan
MBHCP	Metropolitan Bakersfield Habitat Conservation Plan
MBTA	Migratory Bird Treaty Act
MDAB	Mojave Desert Air Basin
mg	milligrams
mg/L	Milligrams Per Litter
mg/m ³	Milligram Per Cubic Meter
mgd	Million Gallons per Day
MHMP	Multi-Hazard Mitigation Plan
MMBtu	Million Metric British Thermal Unit
MMP	Medical Marijuana Program
MMT	Million Metric Tons
mph	Miles Per Hour
MT	Metric Tons
MW	Megawatt
MWh	Megawatt hours
MWD	Municipal Water District
N ₂ O	Nitrous Oxide
NAAQS	National Ambient Air Quality Standards
NAC	Noise Abatement Criteria
NAGPRA	Native American Graves Protection and Repatriation Act
NAHC	Native American Heritage Commission
NAWS	Naval Air Weapons Station
NBOSA	Northeast Bakersfield Open Space Area
NEHRP	National Earthquake Hazards Reduction Program
NFPA	National Fire Protection Association
NCCP	Natural Community Conservation Plan
NCP	National Contingency Plan
NDFE	Non-Disposal Facility Element
NEPA	National Environmental Policy Act
NESHAPs	National Emission Standards for Hazardous Air Pollutants
NF ₃	Nitrogen Trifluoride
NFIP	National Flood Insurance Program

NHPA	National Historic Preservation Act
NHTSA	National Highway Traffic Safety Administration
NIEHS	National Institute of Environmental Health Sciences
NIOSH	National Institute for Occupational Safety and Health
NIST	National Institute of Standards and Technology
NMFS	National Marine Fisheries Service
NO ₂	Nitrogen Dioxide
N ₂ O	Nitrous oxides
NO _x	Nitrogen Oxides
NOP	Notice of Preparation
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
NPS	National Park Service
NRCS	Natural Resource Conservation Service
NRHP	National Register of Historic Places
NSF	National Science Foundation
NSPS	New Source Performance Standards
NTIS	National Technical Information Service
NTSA	National Trails System Act of 1969
NWR	National Wildlife Refuge
NWS	National Weather Service
O ₃	Ozone
OADP	Ozone Attainment Demonstration Plan
OAV	Outdoor Activity Value
ODT	Odor Detection Value
OEHHA	Office of Environmental Health Hazard Assessment
OES	(California) Office of Emergency Services
OHP	(California) Office of Historic Preservation
OHV	Off-Highway Vehicle
OHW	Ordinary High Water
OPR	Office of Planning and Research
OSHA	Occupational Safety and Health Administration
Pb	Lead
PBSD	Performance-based Seismic Design
PCB	Polychlorinated Biphenyls
PCT	Pacific Crest Trail
PEER	Permit-Exempt Equipment Registration
PFC	Perfluorocarbon

PG&E	Pacific Gas and Electric Company
PM ₁₀	Particulate Matter 10 microns or less in diameter
PM _{2.5}	Post Meridian 2.5 microns or less in diameter
ppb	Parts per billion
ppd	Pounds Per Day
ppm	Parts per million
ppmv	parts per million by volume
PPV	Peak Particle Velocity
PRC	Public Resources Code
PSD	Prevention of Significant Deterioration
psi	Pounds per Square Inch
PUD	Public Utilities District
PVC	Polyvinyl Chloride
PXP	Plains Exploration and Production Company
Quimby Act	California Government Code Section 66477 of the California Subdivision Map Act
RACM	Reasonable Available Control Measure
RCRA	Resource Conservation and Recovery Act
RHNA	Regional Housing Needs Assessment
ROG	Reactive Organic Gases
ROP	Rate of Progress
ROW	Right of Way
RPS	Renewable Portfolio Standard
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SAB	State Allocation Board
SARA	Superfund Amendments and Reauthorization Act
SB	Senate Bill
SC	Scenic Corridor
SCAG	Southern California Association of Governments
SCE	Southern California Edison
SCS	Sustainable Communities Strategy
SDWA	Safe Drinking Water Act
SF ₆	Sulfur Hexafluoride
SGMA	Sustainable Groundwater Management Act
SHRC	State Historic Resources Commission
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan

SJVAB	San Joaquin Valley Air Basin
SJVAPCD	San Joaquin Valley Air Pollution Control District
SJVR	San Joaquin Valley Railroad
SLF	Sacred Lands File
SMARA	State Mining and Reclamation Act
SMGB	State Mining and Geology Board
SO ₂	Sulfur Dioxide
SO ₄ ²⁻ , SO ₃ , or SO ₄	Sulfates
SO _x	Sulfur Oxides
SP	Special Planning (Zoning District)
SP	Southern Pacific
SR	State Route
SRA	State Responsibility Area
SRRE	Source Reduction and Recycling Element
SSJVIC	Southern San Joaquin Valley Information Center
SSURGO	Soil Survey Geographic Database
STIP	State Transportation Improvement Program
SUSMP	Standard Urban Stormwater Mitigation Plan
SWMP	Solid Waste Management Plan
SWP	State Water Project
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	Toxic Air Contaminant
TAZ	Traffic Analysis Zone
TCM	Transportation Control Measure
TDA	Transportation Development Act
TEPP	Transportation Emergency Preparedness Program
THC	Tetrahydrocannabinol
TMDL	Total Maximum Daily Load
tpy / TPY	Tons Per Year
TUMSHCP	Tehachapi Uplands Multiple Species Habitat Conservation Plan
TWCEP	Treated Water Capacity Expansion Project
UBC	Uniform Building Code
UCMP	University of California Museum of Paleontology
UNFCCC	United Nations Framework Convention on Climate Change
US	United States
USACE	United States Army Corps of Engineers
USBR	United States Bureau of Reclamation

USC	United States Code
USDA	United States Department of Agriculture
USDOJ	United States Department of Justice
USDOT	United States Department of Transportation
U.S. EPA or USEPA	United States Environmental Protection Agency
USFS	United States Forest Service
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UST	Underground Storage Tank
UV	Ultraviolet
UWMP	Urban Water Management Plan
V/C	Volume-to-Capacity
VdB	Vibration Decibels
VERA	Voluntary Emission Reduction Agreement
VOC	Volatile Organic Compound
VFHCP	Valley Floor Habitat Conservation Plan
VMT	Vehicle miles traveled
VRPs	Visibility-reducing particles
WMD	Waste Management District
WDR	Waste Discharge Requirement
WEAP	Worker Environmental Awareness Program
WE	Wind Energy
WMP	West Mojave Plan
WHO	World Health Organization
WRI	World Resources Institute
WSA	Water Supply Assessment
WSD	Water Storage District
WTG	Wind Turbine Generator
ZNE	Zero Net Energy