Date of Report:

BURNED-AREA REPORT

PART I - TYPE OF REQUEST

A. Type of Report

- ☐ 2. No Treatment Recommendation

B. Type of Action

- ☑ 1. Initial Request (Best estimate of funds needed to complete eligible stabilization measures)
- □ 2. Interim Request #
 □ Updating the initial funding request based on more accurate site data or design analysis

PART II - BURNED-AREA DESCRIPTION

A. Fire Name: Bonita B. Fire Number: CA-RRU-007737

C. State: CA D. County: Riverside

E. Region: 05 F. Forest: San Bernardino NF

G. District: San Jacinto H. Fire Incident Job Code: NS64

I. Date Fire Started: 01/15/2021 J. Date Fire Contained: 01/26/2021

K. Suppression Cost: WFDSS estimate \$2 million

- L. Fire Suppression Damages Repaired with Suppression Funds (estimates):
 - 1. Fireline repaired (miles):
 - 2. Other (identify):

M. Watershed Numbers:

Table 1: Acres Burned by Watershed

HUC#	Watershed Name	Total Acres	Acres Burned	% of Watershed Burned
180702020101	Upper South Fork San Jacinto River	40838	210	0.5%
180702020102	Strawberry Creek – San Jacinto River	16275	505	3.1%

N. Total Acres Burned:

Table 2: Total Acres Burned by Ownership

OWNERSHIP	ACRES
NFS	693
OTHER FEDERAL (LIST	
AGENCY AND ACRES)	
STATE	
PRIVATE	22
TOTAL	

O. Vegetation Types:

Vegetation within the Bonita Fire area was primarily composed of red shank chaparral (43%), lower montane mixed chaparral (36%), mixed conifer (13%), and meadow (9%).

Red Shank and Lower Montane Mixed Chaparral

Red shank chaparral and lower montane mixed chaparral are the dominant vegetation communities within the burn area. These communities occur throughout the burn area on all aspects. These vegetation communities are composed of red shank (*Adenostoma sparsifolium*), chamise (*Adenostoma fasciculatum*), Eastwood manzanita (*Arctostaphylos glandulosa*), Mexican manzanita (*Arctostaphylos pungens*) buck brush (*Ceanothus cuneatus*), cupped-leaf ceanothus (*Ceanothus perplexans*), birchleaf mountain-mahogany (*Cercocarpus betuloides*), interior live oak (*Quercus wislizeni var. frutescens*), thick-leaved yerba santa (*Eriodictyon crassifolium* var. *crassifolium*), sugar bush (*Rhus ovata*), and chaparral yucca (*Hesperoyucca whipplei*).

Most of the chaparral vegetation burned at a low to moderate intensity. These plants have evolved with fire and should rapidly regenerate in the burn by sprouting and/or seeding. Fire usually kills any seed on the ground surface, however, buried seed remains insulated from extreme temperatures. Some species, especially those of ceanothus, manzanita, and fire-following herbs, are obligate seeders after fire. Chaparral vegetation recovery will be lower in areas that experienced mortality from past fires and areas previously disturbed by fuel-breaks and dozer lines constructed during this and previous fires. These fuel-breaks and dozer lines were already in the process of type converting from chaparral vegetation to non-native annual grasslands. Repeated ground disturbance will allow for a further increase in non-native plant dominance in the fuel-breaks. Furthermore, the burn has opened up the chaparral canopy, creating opportunities for weed seed in soil adjacent to fuel-breaks to germinate and outcompete native vegetation, thereby allowing for the continued spread of type converting non-native annuals.

Mixed Conifer - Pine

Mixed conifer forest stands composed of Jeffrey pine and Coulter pine occurred in the northern and eastern portions of the Bonita Fire perimeter. Due to the short fire return interval in these areas (2013, 2018, and 2021), natural regeneration occurring post-fire and plantings from the Mountain Fire Restoration Project have likely been lost. There is a high likelihood of type conversion to shrub-fields and/or non-native grasslands.

Meadow Habitat

Approximately 65 acres of meadow habitat exists within the burn area. Meadows are associated with seasonally moist to water-logged soils in valleys and flats and are composed of a rich mix of native grasses and forbs along with a component of non-native grasses and forbs. Meadows provide habitat for many Forest Service Sensitive plant and animal species. As emphasized in Part 2 of the LMP (LMP, 2005) enhancement of wildlife habitat for threatened, endangered, proposed, candidate, and sensitive

species, such as bald eagles, Quino checkerspot butterfly (QCB), and unique plant species will be emphasized in all management activities.

- P. Dominant Soils: Pacifico-Preston families complex, 2 to 30 percent slopes (DdDE): 47%
 - Loamy coarse sand, very low available water capacity
 - Rocky chapparal areas draining to the meadows and towards the private land to the west
 - Rated as a combination of low to moderate SBS
 - Erosion Hazard moderate

Wind River-Oak Glen families association, 2 to 15 percent slopes (KoD): 43%

- Sandy loam, moderate available water capacity
- Comprises most of Johnson Meadow and May Valley pastures
- Rated Low SBS
- Erosion Hazard slight

Typic Xerothents-Morical family, dry association, 30 to 75 percent slopes (MoFG): 8%

- Very gravelly loamy sand, low available water capacity
- Edges of fire south of Johnson meadow and just above the private land
- Rated as low to moderate SBS
- Erosion hazard severe
- Q. **Geologic Types:** The burned area is within the San Jacinto Mountains. The San Jacinto Mountains are the northernmost part of the Peninsular Ranges, a NW-SE trending range composed mostly of Mesozoic age granitic rocks (tonalite). The San Jacinto Mountains are an uplifted fault block bounded by the San Jacinto fault on the west and the San Andreas Fault system on the east (Matti and Morton, 2000).
- R. Miles of Stream Channels by Order or Class:

Table 3: Miles of Stream Channels by Order or Class

STREAM TYPE	MILES OF STREAM
PERRENIAL	0
INTERMITTENT	1.05
EPHEMERAL	0
OTHER	Johnson Meadow
(DEFINE)	

S. Transportation System:

Trails: National Forest (miles): 1.20 Other (miles): **Roads:** National Forest (miles): 1.34 Other (miles):

PART III - WATERSHED CONDITION

A. Burn Severity (acres):

Table 4: Burn Severity Acres by Ownership

Soil Burn Severity	NFS	Other Federal (List Agency)	State	Private	Total	% within the Fire Perimeter
Unburned	60				60	8.4%
Low	493				493	69.0%
Moderate	140			22	162	22.6%
High						
Total	693			22	715	100%

B. Water-Repellent Soil (acres): 162

C. Soil Erosion Hazard Rating: Moderate

D. Erosion Potential:

E. Sediment Potential: 20% chance that sediment delivery will exceed 14 tons/acre (compared to 0.16 tons per acre natural)

F. Estimated Vegetative Recovery Period (years): 2 (meadow), 5 (chaparral)

G. Estimated Hydrologic Response (brief description):

Hydrologic Response:

The area affected by the January 2021 Bonita Fire primarily drains Coldwater Creek, which is tributary to Dry Creek and then Strawberry Creek. Surface waters are not expected to be heavily impacted in these watersheds due to the small footprint of the fire, it's placement near the ridge area, and the low to moderate soil burn severity. A smaller portion of the fire are in the upper headwaters of tributaries of Herkey Creek which leads to lake Hemet.

Wildfires affect water quality through increased sedimentation. As a result, the primary water quality constituents or characteristics affected by this fire include color, sediment, settleable material, suspended material, and turbidity. The loss of riparian shading and the sedimentation of channels by floods and debris flows may increase stream temperature. Fire-induced increases in mass wasting along with extensive tree mortality can result in increases in floating material – primarily in the form of large woody debris. Post-fire increases in runoff and sedimentation within the urban interface, and burned structures and equipment within the fire perimeter may also lead to increases in chemical constituents, oil/grease, and pesticides

Based on historic precipitation patterns, summer thunderstorms may occur during the summer season as well as longer storms in the winter. There is a moderate chance of increased hydrologic response in localized areas downgradient from the fire.

Erosion Response:

There is very little diversity in the soils within the fire area. Soils are derived either from residuum granitic parent material or alluvium washed from the steep hillslopes. In the majority of the upland areas, the soils are shallow with high amounts of boulder rock cover. The soils have low productivity due to the predominance of coarse granitic sands. These coarse textured sandy soils have little water holding capacity and are susceptible to droughty conditions. Much of the duff was not burned, and where it was, the micro-roots were still notable below the ash layer. The vegetation in this area was burned during the 2013 Mountain fire and despite the drought that precluded vegetative recovery growth immediately after that fire, the chaparral had returned to stabilize the slopes. It is expected that this same regrowth will continue to stabilize the slopes with the highest soil burn severity.

PART V - SUMMARY OF ANALYSIS

Introduction/Background

The Bonita Fire started on Friday, January 15, 2021 in the vicinity of the Bonita Vista community in Mountain Center, CA and burned approximately 715 acres of National Forest System lands. Most of the burn was within the fire scars of the 2013 Mountain Fire and the 2018 Cranston Fire. There were 4 miles of dozer line, 1 mile of hand line, and 2 miles of roads within the Bonita Fire burn area.

A. Describe Critical Values/Resources and Threats (narrative):

	Table 5:	Critical	Value	Matrix
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Probability of	Magnitude of Consequences				
Damage or Loss	Major Moderate Minor				
	RISK				
Very Likely	Very High	Very High	Low		
Likely	Very High	High	Low		
Possible	High	Intermediate	Low		
Unlikely	Intermediate	Low	Very Low		

- 1. Human Life and Safety (HLS): The roads of the area are generally closed to the general public; there is a mountain biking/hiking trail on the south side of Johnson Meadow within the confiers, some of which show scorch and burn and could have limbs that could fall if sufficiently weakened; a range allotment utilizes the meadow pastures in the area.
 - Probability: Unlikely; Magnitude of Consequences: Moderate = LOW
- 2. Property (P):Forest Service Roads: 5S05 and 5S21 are ridge roads; assessment did not identify burned hillsides that would increase watershed response to damage these roads Probability: Unlikely; Magnitude of Consequences: Moderate = LOW
 - b. Living Free access road from State Route 74: Flows exiting Johnson Meadow are not expected to increase noticeably as a result of the fire in this location Probability: Unlikely; Magnitude of Consequences: Minor = VERY LOW
 - c. Mountain Bike trail on south side of Johnson Meadow: this route traverses the south side of the fire's edge; the trail shows signs of erosional issues from drainage off the Forest Service roads that may be the result of previous fires, such as the 2013 Mountain Fire; the Bonita Fire should not exacerbate these issues Probability: Unlikely; Magnitude of Consequences: Minor = VERY LOW
 - d. Range Infrastructure: A corral in Johnson meadow burned and about half mile of fence burned. These areas are not in danger from watershed response. Restoring these range infrastructure issues will need to be addressed separately.

e. Range water troughs constructed with PVC: The above ground PVC was inspected; though it shows some scorching, there was no loss of integrity.

Probability: Unlikely; Magnitude of Consequences: Minor = VERY LOW

3. Natural Resources (NR): The fire burned suitable habitat for the federally-endangered quino checkerspot butterfly. Quino checkerspot butterflies are known to occur in very close proximity to the fire, but presence/absence surveys within the fire area have been very limited. The most commonly used primary host plant (adults deposit eggs on it) is *Plantago erecta*, but other documented primary host plants include *P. patagonica*, *Antirrhinum coulterianum*, and *Cordylanthus rigidus*. Other species of *Plantago* may be used as primary host plants. Secondary host plants (adults don't deposit eggs on it, but larvae eat it) include *Castilleja exserta* and perhaps other species belonging or related to the figwort family (Scrophulariaceae). Soil disturbance, particularly degradation of cryptobiotic crusts, can substantially hamper the ability of *Plantago* and other native annuals to persist at a site. Consequently, ground-disturbing activities such as OHV traffic can contribute to the decline of quino checkerspot food plants or cause larval mortality. In addition, invasion of non-native plants pose a significant threat as they can out-compete the native annual host plants.

Probability: Likely; Magnitude of Consequences: Moderate = HIGH

- b. Vegetative recovery (threat of type conversion from frequent fire, off-trail mountain bikes, weeds, and grazing)
 - i. Forest Service policy mandates the Forest to minimize the establishment of nonnative invasive species to prevent unacceptable degradation of the burned area. Several species of invasive weeds are known from within the fire area and on access routes used by fire suppression equipment (Appendix B). A weed washing station was not utilized and weed seed could have been transported into the burn area on suppression vehicles and equipment.
 - ii. Fire and related suppression activities are known to promote establishment of weed species. In general, these weeds pose a threat to the burned area because of their inherent invasiveness, the vulnerability of burned soil surface, the addition of nutrients via retardant drops, fresh soil disturbance from suppression efforts, and decreased competition related to the removal of the vegetation canopy.
 - iii. The recent short fire return interval in this area (2013, 2018, and 2021) may hinder native plant communities from re-establishing which could result in type conversion and longer-term habitat loss for native plant and wildlife species. Noxious weed invasions may interfere with habitat recovery and ecosystem health within burned areas. Noxious weeds may hinder the recovery of habitat due to aggressive colonization and reduction of water availability for competing native vegetation. Resource concerns include known mapped suitable habitat for Federally Endangered QCB and native plant communities that have not been degraded by noxious weed invasions. Many of these native plant communities also contain populations of Forest Service Sensitive plant species including Munz's Mariposa lily (Calochortus palmeri var. munzii), Mojave tarplant (Deinandra mohavensis), California bedstraw (Gallium californicum ssp. primum), pumice alpinegold (Hulsea vestita ssp. callicarpha), Sierra skullcap (Scutellaria bolanderi ssp. austromonatum), and San Bernardino aster (Symphyotrichum defoliatum). These species would benefit from invasive weed inventory and treatments within year one post-fire.
 - iv. Johnson Meadow is an area of concern for invasive weed introduction and spread. A fire engine was driven across the middle section of the meadow during

fire suppression activities, which may create an avenue for invasive weed introduction and illegal OHV use. This area also has mapped suitable QCB habitat and numerous FSS plant populations. There is a population of invasive bull thistle (*Cirsium vulgare*) within Johnson meadow that may potentially spread due to the fire and fire suppression activities, but with EDRR treatments this population could be eliminated or controlled and would help meadow recovery.

- v. Probability: Likely; Magnitude of Consequences: Moderate = **HIGH**
- c. Forage for grazing needs Johnson meadow and May Valley pasture were impacted by the Bonita Fire. Though off-season burning is generally good for meadow systems and much of the observed areas burned with low SBS, the hillslopes surrounding had moderate SBS areas that could contribute increased flow and sediment. There is also the risk of invasive weed spread. In addition, there ability of the local brush to contain the cattle within the pasture still needs to be assessed.
 - i. Probability: Possible; Magnitude of Consequences: Moderate = INTERMEDIATE

4. Cultural and Heritage Resources: None identified

B. Emergency Treatment Objectives:

The primary objective of this Burned Area Emergency Response Report is to recommend prompt actions deemed reasonable and necessary to effectively protect, reduce or minimize significant threats to human life and property and prevent unacceptable degradation to natural and cultural resources. The application of these BAER treatments are expected to minimize on-site and downstream damages to the identified values at risk previously mentioned. The emergency treatments being recommended by the Bautista Fire BAER Team are specifically designed to achieve the following results:

Proposed Land Treatments

The objective of the land treatments are to:

- a. Retard the spread of noxious weeds as a result of supression repair activities. (L1)
- b. Allow for natural recovery on the Garner allotment affect by the fire. (L2)

Proposed Protection/Safety Treatments:

There are no proposed protection/safety treatments.

Proposed Channel Treatments:

There are no proposed channel treatments.

Proposed Road Treatments:

There are no proposed road treatments.

C. Probability of Completing Treatment Prior to Damaging Storm or Event:

Land: 75% Channel: NA Roads/Trails: NA Protection/Safety: NA

D. Probability of Treatment Success

Table 6: Probability of Treatment Success

	1 year after treatment	3 years after treatment	5 years after treatment
Land	70	75	80
Channel	NA	NA	NA
Roads/Trails	NA	NA	NA
Protection/Safety	NA	NA	NA

- E. Cost of No-Action (Including Loss):
- F. Cost of Selected Alternative (Including Loss):

ì.	Skills Represe	ented on Burned-Area	a Survey Team:		
	Soils		□ Engineering	☐ GIS	☐ Archaeology
		□ Recreation	☐ Fisheries	Wildlife	
	☐ Other:				
		r: Robert Taylor t.taylor2@usda.gov	Phone(s)	: 1-909-693-2875	
	Forest BAEI	R Coordinator: Robe	rt Taylor		
	Email:		Phone(s)	:	

Team Members: Table 7: BAER Team Members by Skill

Skill	Team Member Name
Team Lead(s)	Robert Taylor
Soils	Robert Taylor/Rae Kursky (t)
Hydrology	Robert Taylor/Rae Kursky (t)
Engineering	
GIS	
Archaeology	
Weeds	Lance Woolley
Recreation	Andy Smith
Other	Kim Boss (Wildlife), Lance Criley (Range)

H. Treatment Narrative:

Land Treatments:

L1 - Invasive Weed Detection and Control Treatment related to suppression: Early weed detection will be necessary to determine whether ground disturbing activities related to the Bonita Fire Incident suppression have resulted in new introductions or spread of existing weed infestations. Detection work is proposed for the first year following the fire to document the suspected infestations and assess the feasibility of effective treatment and potential impact on native plant communities in the area. There were

4 miles of dozer line, 1 mile of hand line, and 2 miles of roads within the Bonita Fire burn area. Treatments proposed for these areas and riparian corridors within sensitive resource areas include weed detection surveys and noxious weed removal within year one (Appendix A).

Weed Detection Survey Locations

In and along roads, dozer lines, hand lines, staging areas, intermittent streams, meadows, adjacent to known sensitive and invasive plant populations, and for Endangered Quino Checkerspot butterfly (QCB) suitable habitat.

Weed Detection Survey Design and Methodology

Early weed detection and rapid response (EDRR) will be necessary to determine whether ground disturbing activities related to fire suppression have resulted in new introductions or spread of existing weed infestations and have the potential to impact native plant communities in the area. Detection work is proposed for the first year following the fire to document the suspected infestations and conduct eradication treatments where feasible.

Surveys and rapid response eradication treatments will begin in early spring of 2021 during the flowering periods of weed species. Because of differences in rainfall and flowering times for all potential species, two visits may be required. Many annual and biennial weed species germinate and are detectable in the early spring.

Surveying will include documentation and hand pulling of new weed occurrences at the time of inspection. New weed occurrences will be pulled to root depth, placed in sealed plastic bags, and properly disposed. Documentation of new infestations will include:

- Mapping perimeter of new infestations
- Description of methods
- Filling out Weed Element Occurrence Form (Appendix C)
- Incorporating data into local GIS spatial database
- Entering data into National Resource Information System (NRIS) database
- Entering data into FACTS database
- Evaluating success of treatment in subsequent inspections

Weed Control Treatment

Early detection dramatically increases the likelihood of successful treatment. If weeds are detected, and control is warranted, eradication efforts will be initiated immediately. Control, if warranted, must occur prior to seed set to prevent seed production and further infestation the following year. For some species this will be in early spring to be effective, for others flowering and seed set occur later in the season. Weed control will occur at the same time as the detection surveys whenever feasible. For larger infestations where a weed crew is warranted, control will occur as soon as the crew is available.

Rapid response eradication efforts would occur immediately or at the time when the target species is in a stage where eradication is most effective (for example before seed development in annual or biennial weeds).

Weed control will be considered warranted if the weed found is

- known to be invasive in that habitat type
- not already widespread throughout the immediate area
- is feasible to effectively control by manual methods (cutting, clipping seed heads, hand-pulling).

Suppression Area and areas used by suppression resources:

EDRR weed treatments are requested on suppression related disturbance features including dozer lines (4 miles), constructed hand line (1 mile) and the one staging area. Suppression resources also used the roads within the interior of the fire area (2 miles), the trail to the south of Johnson meadow within the mapped suitable QCB habitat (1.4 miles), and the path of the fire engine that was driven across the center of the meadow (1 mile). Work may be implemented by 1 GS-5 Biological Technician

and 1 GS-9 Botanist. The Botanist will lead implementation, monitor treatment efficacy, and complete administrative coordination.

Table 1. Estimated EDRR costs for burned areas.

Item	Units	Unit Cost	# of Units	Total Cost
1 GS-5 Biological Science Technician	Day	\$180.00	8	\$1440.00
1 GS-9 Botanist	Day	\$350.00	8	\$2800.00
Vehicle Mileage	Miles	\$0.58	180	\$104.00
Supplies – hand tools	Each	\$250.00	1	\$250.00
Total				\$4,594.00

L2 Rest Garner Allotment Subunit: It is recommended that Garner Allotment subunits of May Valley and Johnson Meadow should be rested to allow for significant vegetation recovery. In the case of May Valley this should not result in significant hardship to the permittee. Johnson Meadow should be rested as well. This will impact the permittees operation. It is expected that the actual meadow just needs through the end of the next growing season without grazing, which should end in June/July 2021 depending on rainfall. However, recovery of the vegetation and hydrologic function of the slopes surrounding Johnson Meadow should be assessed to determine if non-use of the subunit needs to be extended.

Channel Treatments: NA

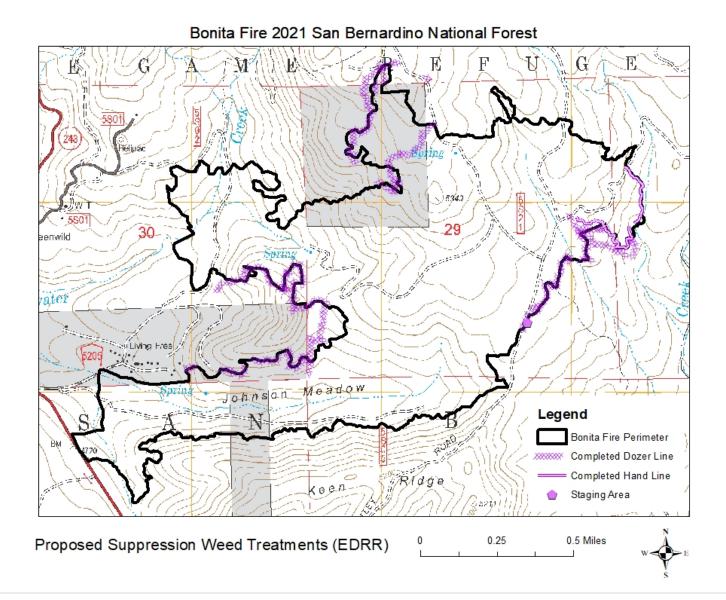
Roads and Trail Treatments: NA

Protection/Safety Treatments: NA

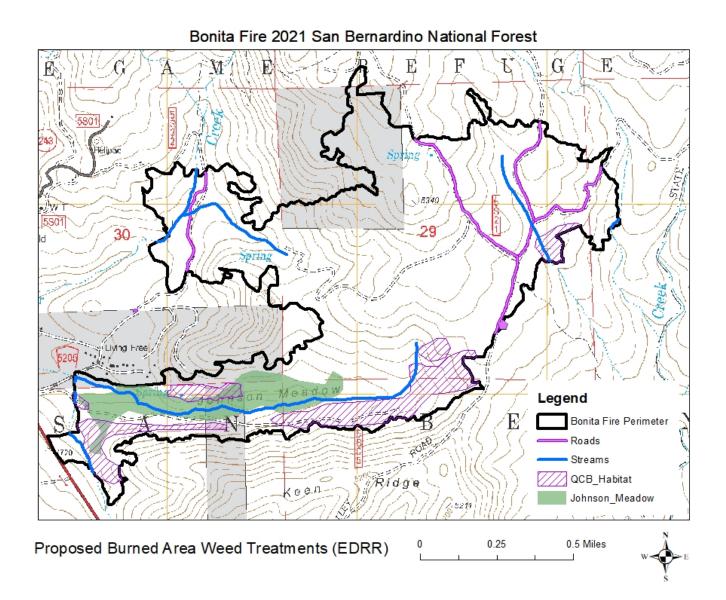
I. Monitoring Narrative:

The monitoring associated with the L1 and L2 treatments are the only requests.

Appendix A: Proposed EDRR Weed Survey and Treatment Areas



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Appendix B: Non-Native Invasive Plant Species in the Vicinity of Bonita Fire

Appendix B: No	In-Native invasive Plant Spec	The violinty	Or Bonnta i n	Occurs
		CDFA Noxious	CAL-IPC	within
Common Name	Scientific Name	Weed ¹	Rating ²	Burn Area
wild oat	Avena fatua		Moderate	X
Saharan mustard	Brassica tournefortii	Х	High	
ripgut brome	Bromus diandrus		Moderate	Х
soft brome	Bromus hordeacus		Limited	Х
red brome	Bromus rubens		High	X
cheatgrass	Bromus tectorum		High	Х
bull thistle	Cirsium vulgare	X	Moderate	Х
poison hemlock	Conium maculatum		Moderate	
Bermuda grass	Cynodon dactylon		Moderate	
herb sophia	Descurainia sophia		Limited	
redstem stork's bill	Erodium cicutarium		Limited	X
ryegrass	Festuca perennis		Moderate	
Short-pod mustard	Hirschfeldia incana		Moderate	X
barley	Hordeum murinum		Moderate	
prickly lettuce	Lactuca serriola		Not Rated	X
sweetclover	Melilotus officinalis		Not Rated	X
Tree tobacco	Nicotiana glauca		Moderate	X
stinknet	Oncosiphon piluliferum		Not Rated	
English plantain	Plantago lanceolata		Limited	X
Kentucky bluegrass	Poa pratensis		Limited	X
prostrate knotweed	Polygonum aviculare		Not Rated	
rabit foot grass	Polypogon monspeliensis		Limited	X
common sheep sorrel	Rumex acetosella		Limited	
curly dock	Rumex crispus		Limited	
Mediterranean grass	Schismus barbatus		Limited	X
tall tumblemustard	Sisymbrium altissimum		Not Rated	X
London rocket	Sisymbrium irio		Limited	
spiny sowthistle	Sonchus asper		Not Rated	X
saltcedar	Tamarix ramosissima	X	High	
intermediate wheatgrass	Thinopyrum intermedium		Not Rated	
yellow salsify	Tragopogon dubius		Not Rated	X
puncturevine	Tribulus terrestris	X	Limited	X
periwinkle	Vinca major		Moderate	
annual fescue	Vulpia myuros		Moderate	X

¹CDFA= California Department of Food and Agriculture. **Noxious weed =** any species of plant that is, or is liable to be, troublesome, aggressive, intrusive, detrimental, or destructive to agriculture, silviculture, or important native species, and difficult to control or eradicate, which the director, by regulation, designates to be a noxious weed. In determining whether or not a species shall be designated a noxious weed for the purposes of protecting silviculture or important native plant species, the director shall not make that designation if the designation will be detrimental to agriculture.

²Cal-IPC Rating (California Invasive Plant Council)

High - These species have severe ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal and establishment. Most are widely distributed ecologically. **Moderate** - These species have substantial and apparent—but generally not severe—ecological impacts

on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal, though establishment is generally dependent upon ecological disturbance. Ecological amplitude and distribution may range from limited to widespread.

Limited - These species are invasive but their ecological impacts are minor on a statewide level or there was not enough information to justify a higher score. Their reproductive biology and other attributes result in low to moderate rates of invasion. Ecological amplitude and distribution are generally limited, but these species may be locally persistent and problematic.

Appendix C. Weed Occurrence Form

USDA Forest Service

Weed Occurrence Form
Region 5 Forest: BDF District:

	ence % ID Auth: Hickman et al., 1993
Project	Current land use:
Surveyor	Current/potential threats:
Directions to site:	
	04 114
	Other biota: None
	Existing EO? Yes No #
	Entire extent of pop mapped? Y N
Gt. 1	Photographer
Site descrip:	Repository
	Vouch spec # Repository
	Look-alike species: None
	Research needs
(circle) Point Polygon Line	
GPS Unit: XT GeoEx3 Ipaq1 Ipaq2	Conserv/Mngt concerns
Mag # Thales Other	
GPS Staff ID:	#individuals, genets est, precise
Unique ID #: #pts/poly4EO	Vigor? vfeeble feeble normal vigor exvirg N/A
	Method:
Northing: Easting:	(circle) Disease Predation Herbivory None
Elevation (feet):	Explain
Quad name:	Distribution/Density: prominent common scattered patchy rare
T-R-S: T R S	common scattered patchy rare
¹⁄₄ of ¹⁄₄ of	Gross (Total) area: est, precise
	Infested (Weed cover only) area:
Slope Min% Max%	Cover: Sp% Grd%
Aspect (°):	
Substrate:	Phenology method: est, count
Soil text: sand, loam, silt, clay, other	% seedlings % leaf % bud
Moisture regime: mesic xeric hydric	% flwr %immat frt % mature frt
Soil moisture: dry moist saturated	% dispersing seed % senescent
inundated seasonal seepage other	Treated before: Y N
Horz dist. to H2O vert.	Method of treatment:
Light expos: full sun part shade full shade	Fr suc: Exlt Gd Marg Pr Unkn Fair None
Veg series:	Germ suc: Exlt Gd Marg Pr Unkn Fair None
Ass. tree/shrubs:	Repro: Exlt Gd Marg Pr Unkn Fair None
Canopy:% Shrub:% Forb:	Dispersal: Exlt Gd Marg Pr Unkn Fair None
Assoc plants (include other non-natives):	Estab: Exlt Gd Marg Pr Unkn Fair None
• ` ` '	Veg suc: Exlt Gd Marg Pr Unkn Fair None
	Fl suc: Exlt Gd Marg Pr Unkn Fair None
	General observations
Disturbance:	
	Condition: Exlt Gd Marg Pr Unkn Fair None
	Quality: Exlt Gd Marg Pr Unkn Fair None
	Defense: Exlt Gd Marg Pr Unkn Fair None
	Rank: Exlt Gd Marg Pr Unkn Fair None

PART VI - EMERGENCY STABILIZATION TREATMENTS AND SOURCE OF FUNDS

		NFS Lands					Other Lands			All
		Unit	# of		Other	# o	Fed	# of	Non Fed	Total
Line Items	Units	Cost	Units	BAER\$	\$	unit	s \$	Units	\$	\$
A. Land Treatments										
L1 - EDDR suppression	each	4,594	1	\$4,594	\$0		\$0		\$0	\$4,594
				\$0	\$0		\$0		\$0	\$0
					\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
Insert new items above this	line!			\$0	\$0		\$0		\$0	\$0
Subtotal Land Treatments				\$4,594	\$ 0		\$0		\$0	\$4,594
B. Channel Treatments										
				\$0	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
Insert new items above this				\$0	\$0		\$0		\$0	\$0
Subtotal Channel Treatment	s			\$0	\$0		\$0		\$0	\$0
C. Road and Trails										
				\$0	\$0		\$0		\$0	\$0
				\$0	\$0		\$0		\$0	\$0
Insert new items above this	line!			\$0	\$0		\$0		\$0	\$0
Subtotal Road and Trails				\$0	\$ 0		\$0		\$0	\$0
D. Protection/Safety										
				\$0	\$0		\$0		\$0	\$0
					\$0		\$0		\$0	\$0
Insert new items above this	line!			\$0	\$0		\$0		\$0	\$0
Subtotal Protection/Safety				\$0	\$0		\$0		\$0	\$0
E. BAER Evaluation										
Initial Assessment	Report	\$2,500	1		\$2,500		\$0		\$0	\$2,500
				\$0	\$0		\$0		\$0	\$0
Insert new items above this	line!				\$0		\$0		\$0	\$0
Subtotal Evaluation				\$0	\$2,500		\$0		\$0	\$2,500
F. Monitoring										
				\$0	\$0		\$0		\$0	\$0
Insert new items above this	line!			\$0	\$0		\$0		\$0	\$0
Subtotal Monitoring				\$0	\$0		\$0		\$0	\$0
G. Totals				\$4,594	\$2,500		\$0		\$0	\$7,094
Previously approved	<u> </u>							<u> </u>	<u> </u>	

PART VII - APPROVALS

1.
/s/ Ellen Shaw
Acting Forest Supervisor

Date February 24, 2021