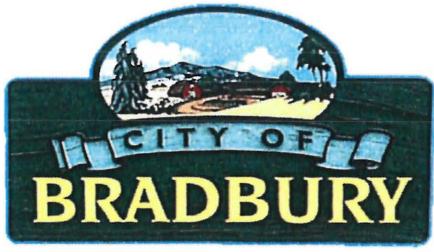




City of Bradbury

# GENERAL PLAN 2012-2030

February 2014



City of Bradbury, CA

# General Plan 2012-2030 Update

## Table of Contents

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### Acknowledgements

### Introduction

- 1. Land Use Element**
- 2. Circulation-Transportation Element**
- 3. Housing Element**
- 4. Community Resources Element**  
(Open-Space and Conservation Elements Combined)
- 5. Health and Safety Element**  
(Noise and Safety Elements Combined)
- 6. Climate Action Plan**

# General Plan 2012-2030 Update

## Introduction

### Table of Contents

<u>Topic</u>	<u>Pg. No.</u>
Purpose of the General Plan	1
Role of the General Plan	1
Overview of the City of Bradbury	2
Local Setting	3
City Governance	4
Municipal Services	4
History	4
Memorable Places	5
Bradbury Today and Tomorrow	6
Mission Statement	6
Tomorrow's Vision Statement	6
Goals	6
Public Participation	6
General Plan Content	7
General Plan Amendment Process	8
Implementing the Plan	9

### Exhibits

Exhibit No. 1 Regional Location Map (Los Angeles County California)	2
Exhibit No. 2 Vicinity Map	3
Exhibit No. 3. City of Bradbury Council Districts	4

# **General Plan 2012 -2030 Update**

## **INTRODUCTION**

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### **PURPOSE OF THE GENERAL PLAN**

The Bradbury General Plan is a long-range policy document designed to guide future conservation, enhancement, and development in the City. It defines the framework by which the City's environmental and economic resources are managed. It represents the basic policy direction created by the community regarding values, ideals, and aspirations. The General Plan addresses all aspects of development including land use, circulation/transportation, housing, community resources, health and safety and climate action plan.

This General Plan is a public document that guides day-to-day decisions of the City Council, its commissions, and staff. The General Plan provides a framework for the City Council to compare and evaluate specific development projects. Using the General Plan, the City Council will be able to prioritize resources; and to help determine that City policies and programs respond to residents' needs. As the "Constitution" for development in the City of Bradbury, all other policy documents and regulations should be consistent with the provisions of the General Plan.

### **ROLE OF THE GENERAL PLAN**

California State Law (GC Section 65300) requires that each city and county adopt a comprehensive, internally consistent, long-term general plan to guide its future. The plan must be periodically reviewed and it must guide the physical development of the city and its sphere of influence. The plan must address issues related to land use; circulation; housing; open space; conservation; noise; and community health and safety. The General Plan is required to address certain issues specified by state law. However, local jurisdictions may organize the General Plan in a way that best suits the City. The document must be clearly written, accessible to all those concerned with the community's development, and easy to administer.

Recently, the State legislature added requirements that each jurisdiction adopt goals designed to reduce greenhouse gas emissions. Goals and targets for the reduction of greenhouse gases for passenger vehicles and light trucks are included in the Climate Action Plan.

The City of Bradbury's General Plan addresses the future physical development of the community and the provision of municipal services. It is the foundation document that will serve as a guide for the development and preservation of the community as it is envisioned by the residents. The City has adopted this General Plan to maintain and enhance valued residential characteristics. This General Plan strives to promote a way of life that is sustainable and in balance with the natural environment.

This General Plan is the tool that will be used to evaluate the appropriateness of future development proposals. It will assist decision makers in the allocation of community resources. Decision makers may rely on the General Plan goals and policies in order to set the course toward realizing the community's vision.

Government Code Section 65352 requires that the general plan or any significant amendment be referred to a variety of potentially interested jurisdictions or agencies for review and comment before adoption by the City Council.

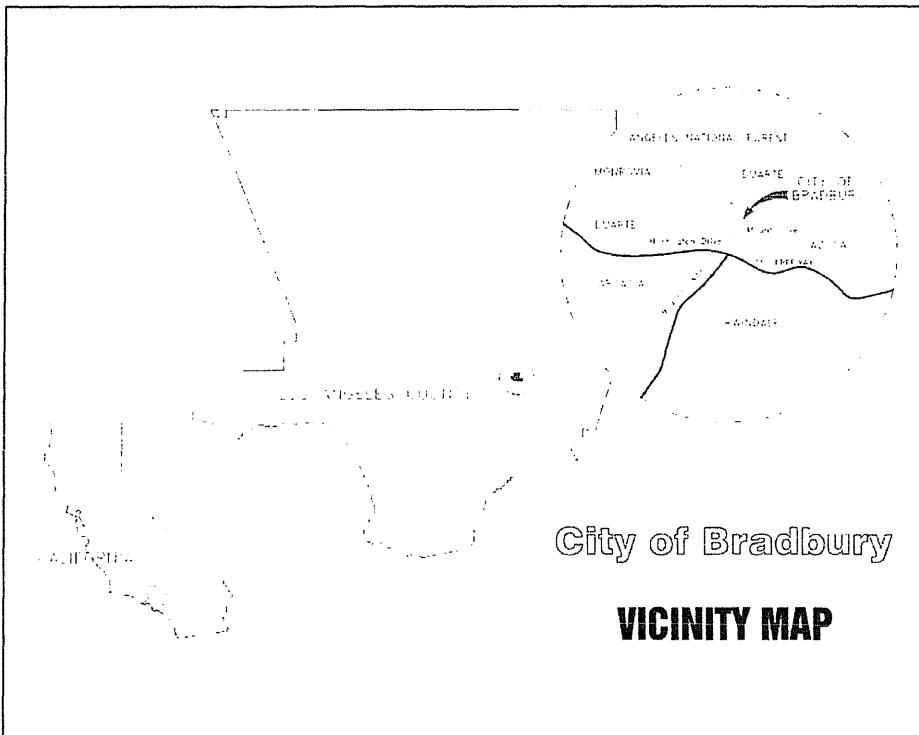
## OVERVIEW OF THE CITY OF BRADBURY

**Regional Setting:** Bradbury is a small 1.9-square mile, exclusive residential community located in the Los Angeles County San Gabriel Valley, 22-miles northeast of downtown Los Angeles. The City is located at the base of the south facing foothills of the San Gabriel Mountains. The City is easily reached by the Interstate I-210 freeway which traverses east-west along the base of the San Gabriel Mountains. This freeway conveniently connects San Bernardino County in the east to the City of Pasadena in the west.



**Exhibit No. 1**  
**Regional Location Map**  
**Los Angeles County, California**

The City of Bradbury is located northwest of the intersection of the I-210 and I-605 freeways. The north-south I-605 freeway connects the City of Bradbury to the City and port of Long Beach.



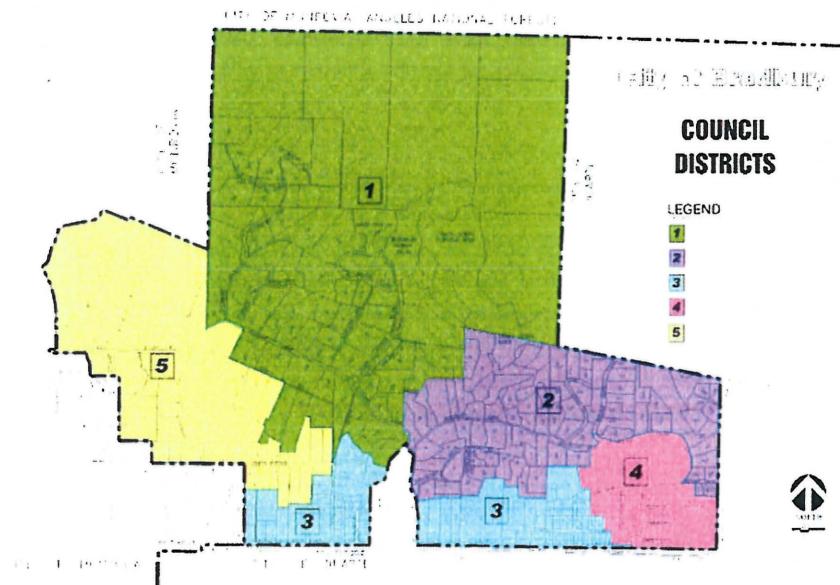
**Exhibit No. 2**

### **City of Bradbury Vicinity Map**

**Local Setting:** Bradbury is developed exclusively with single-family detached residential dwelling units. It is a quiet hillside community composed of orchards and equestrian facilities, many of the streets are privately owned and maintained. Large estate lots are located within gate guarded neighborhoods accessed by meandering narrow roads bordered by lush landscaping. Agricultural endeavors are encouraged. Among the orchards the rearing and training of horses is a lifestyle historically enjoyed by many residents. Exclusive private residential estates are intermingled with the hillside ranches and farms. Situated against the foothills of the San Gabriel Mountains, Bradbury's northern boundary is shared with the cities of Monrovia and Duarte; and the Angeles National Forest. The mountain peaks range from 1,200 feet to 10,064 feet above sea level. The northern slopes of Bradbury are covered with dense chaparral that changes to pine and fir tree covered hillsides in the higher elevations. Since much of the development in Bradbury is situated on hillsides overlooking the San Gabriel Valley, the homes offer incredible panoramic views to the east, south and west.

Residents enjoy peaceful secluded neighborhoods with an abundance of open-space, and a serene lifestyle within close proximity to a variety of urban amenities.

**City Governance:** The City of Bradbury is governed by five elected Council members and managed by a City Manager. The City is divided into five council districts. One representative from each district is elected to the City Council. Annually the City Council elects a mayor and mayor pro tem from its membership. A Planning Commission is appointed by the City Council. One member from each council district is appointed to serve a two-year term on the Commission.



**Exhibit No. 3**  
**City of Bradbury Council Districts**

**Municipal Services:** The City has three permanent employees. The City contracts with various public and private agencies and firms to provide municipal services. Police services are provided by the Los Angeles County Sheriff's Department. Fire protection services are provided by the Los Angeles County Fire Department. Public Works improvements and maintenance are provided by the County of Los Angeles. Landscaping and maintenance services are provided via contract with a privately owned firm. Building, Planning and Engineering services are provided under contracts with privately owned companies. Solid waste removal and disposal services are provided by a privately owned company.

## **HISTORY**

Native American Indians known as the San Gabriel Valley Hahamongna resided in this area once called "the land of flowing waters and fruitful valley". The Tongva or Gabriellino Native Americans settled on the bluffs of the San Gabriel Mountains overlooking the Los Angeles River. The Spaniards who settled in the valley called the seasonal running river Arroyo Seco or "dry riverbed".

In 1841, Bradbury was settled by Andres Duarte, a Mexican Army corporal, who was awarded a 6,596-acre land grant by Mexican Governor Juan B. Alvarado. The ranch was originally developed with orchards. As the years passed the 6,596-acre ranch was eventually subdivided into large ranch type parcels. In 1886 gold was discovered in a canyon on the ranch. Mines were actively worked for at least two years. However, after the gold mining subsided, the property was sold and the new land owners, Alexander Weil and William Wolfskill, further divided the property into 42-acre parcels which were offered for sale.

Early residents discovered the unique characteristics of the soil, water, subtropical type climate, and protection from the elements provided by the San Gabriel Mountains. This locale was an ideal setting for farming and growing productive orchards. The San Gabriel River provided an abundance of excellent quality water. Transporting the water from the river to the fields and orchards was inexpensive and made agricultural endeavors profitable. The residents took advantage of the ideal conditions and planted avocados and citrus groves that became some of the best known and coveted crops worldwide.

Louis Leonard Bradbury, a wealthy financier, who made his fortune in gold and silver mining, purchased land from Alexander Weil and constructed a home north of Oak Street and Royal Oaks Lane. Louis Bradbury lived in this home for many years. His daughter, Rosario, continued to live on the estate until the late 1930's. The City of Bradbury was named after this wealthy early resident. The once stately Bradbury manor was converted and expanded into the retirement and assisted living community known as "Be Royal Oaks" formerly known as the Royal Oaks Manor. This 17-acre facility is located on the north side of Royal Oaks Drive North just east of Braewood Drive. This County unincorporated area is surrounded on the east, north and west by the City of Bradbury.

**Memorable Places:** Wooline Estate, built by T. S. McKee in 1889 is located at the northwest corner of Winston Avenue and Royal Oaks Drive North. The third owner, bank president William Wooline, named the estate Royal Oaks commemorating the numerous Coast Live Oak trees located on the property and possibly also in reference to the Spanish Cork Oak trees planted by Louis Bradbury along the north side of Royal Oaks Drive.

Places having local historic significance include:

- 1775 Royal Oaks Drive North. This property contains an old stone milk house, and cistern.
- 5 Bradbury Hills Road. This property contains a single-story prairie style home that was designed by the Frank Lloyd Wright studio.
- 555 Deodar Lane. This site contains an old building referred to as the stone carriage house.
- 2001 Gardi Street. This site is the location of an 1890's two-story Queen Ann Farm House.

## **BRADBURY TODAY AND TOMORROW**

The City of Bradbury is one of the ten smallest cities in Los Angeles County with 1.9 square miles and 1,048 residents (U.S. Census 2010). The City has grown from 855 persons in 2000 to the 1,048 residents in 2010. Over the past ten years, the median age has decreased from

49.1 years to 42 years old. The population under the age of 18 has decreased from 24.7% to 16.5% (Census 2010). The senior population has increased from 15% to almost 20%.

The City has some of the highest income levels in Los Angeles County. The annual per capita median income is \$100,454 whereas the annual per capita median income for the County of Los Angeles is \$57,717. The 2010 Census reported that there is no one living in the City at or below the poverty level.

The community's overwhelming response was that they loved the City as it exists today. Preservation of open-space, natural physical resources, rural agricultural atmosphere and financial independence were issues of public concern.

**Mission Statement:** The City's Mission Statement, “**Preserving Rural Tranquility**”, is a policy as relevant now as it was decades ago when it was initially adopted. The Mission Statement provides guidance to local decision makers in the implementation of the community's land use policies.

**Tomorrow's Vision Statement:** The City of Bradbury recognizes its unique single-family residential character and by maintaining fiscally responsible governance and development policies shall strive to provide a stable and sustainable rural community balancing preservation of natural open space with the needs of its residents for a quiet and safe place to live and raise their families.

**Goals:** The objectives and policies expressed throughout this General Plan shall be based on achieving and implementing the following goals:

1. Financial sustainability.
2. Independent local government.
3. Local responsive and responsible governance.
4. Quiet and peaceful living environment.
5. Safe community.
6. Compatibility between rural agriculture and residential estate development.
7. Balance the City's rural character, including agricultural opportunities, preservation of open-space and natural topography, with residential necessities such as traditional municipal services and utilities.
8. Living/housing opportunities for all ages and economic levels.
9. Services for residents that encompass and are sensitive to an aging population and cultural diversity.

The General Plan 2012-2030 Update essentially follows the land use patterns and goals of the General Plan that has been in place since 1993. While the text of the policies may have been expanded upon and some names changed, the core values remain the same and the 2012-2030 General Plan Update is not meant to and does not change any development potential from what was previously approved and adopted.

## **PUBLIC PARTICIPATION**

The City Council appointed a General Plan Steering Committee to take responsibility for soliciting input from the community regarding its vision for the future. Numerous public

hearings, meetings and workshops were held. Information and requests for input and participation were posted on the City's website and published in the community newsletter. Committee members were encouraged to visit with their neighbors and solicit comments concerning the City's vision for the future.

The General Plan process began with collecting data regarding existing conditions of the City. Information such as current demographics; availability of public facilities; municipal services; housing; quality of environmental resources (air, noise, habitat); and existing land uses was collected and analyzed. These analyses are compiled into a report entitled City of Bradbury General Plan 2012 – 2030 Update Background Report. This background milestone report should be used to augment and support the information contained in this General Plan document. The report was made available for public review on the City's website. It set the stage for the preparation of the community's vision, goals, and action plans.

One of the key components in the preparation of a community's General Plan is public participation. The City Council initially conducted a General Plan visioning workshop on May 30, 2012. Then the City Council enlisted the assistance of members of the community to become members of a General Plan Steering Committee. Many Steering Committee meetings were held so the committee could develop a preliminary draft of the General Plan Update that included the community's vision, goals, objectives, policies and implementation action plans. In addition, a community-wide workshop was held on September 10, 2012.

The information contained in the Background Report was used to develop the overview of past accomplishments. The Background Report is intended to be used as an environmental reference document and it can be referred to for more detailed information. Goals, objectives and policies recommended by community residents at the public workshops were developed and inserted in the General Plan Update document.

**Referral, Coordination and Consultation.** During the general plan updating process drafts of the plan were referred to the agencies specified by the State Planning Law Government Code Section 65351 through Section 65352.5. All appropriate agencies were consulted and their comments were coordinated with the local planning aspirations.

When the preliminary draft of the General Plan Update was completed, the public was encouraged to provide comments by contacting staff, participating in public hearings before the Planning Commission and the City Council or providing input through the City's interactive website. The Steering Committee's preliminary draft General Plan was sent to the California State Department of Housing and Community Development (HCD) for review and comment. Comments provided by HCD were responded to and the revised draft General Plan was presented to the Planning Commission at two public hearings. The draft General Plan Update approved by the Planning Commission was then forwarded to the City Council with a recommendation for adoption. The final draft of the General Plan was presented to the City Council at a public hearing on November 19, 2013. Based on input received at the public hearing the City Council decided to refer the draft document back to the Planning Commission for response to the questions and concerns raised by the owners of the 302-acres of undeveloped hillside property. The Planning Commission, at a properly noticed public hearing, reviewed clarifying language added to the initial draft document. The Planning Commission was satisfied that the basic land use patterns and development potential, densities and intensity set forth in the City's 1993 and 2007 General Plans were carried forward and implemented in the

General Plan 2012-2030 Update. Furthermore, the Planning Commission sought assurance that the goals, objectives, policies and action programs recommended by the General Plan Steering Committee were appropriately clarified. The Planning Commission at its meeting of February 26, 2014 adopted a resolution recommending that the City Council adopt the City of Bradbury General Plan 2012-2030 Update. The City Council, at a public hearing in April 2014 considered the recommendation of the Planning Commission regarding the adoption of the General Plan 2012-2030 Update. Input from the general public was solicited and considered before the City Council adopted the General Plan 2012-2030 Update.

As required by State law, an appropriate level of environmental review was prepared and circulated as prescribed by the California Environmental Quality Act (CEQA). The City Council considered all input regarding the potential environmental impacts that may result from the implementation of the goals, objectives and policies set forth in the General Plan 2012-2030 Update. Environmental determinations were made by the City Council prior to the adoption of the General Plan 2012-2030 Update.

## **GENERAL PLAN CONTENT**

California State Law mandates that each General Plan contain seven elements that must address: 1) Land Use; 2) Circulation; 3) Housing; 4) Open Space; 5) Conservation; 6) Noise; and 7) Safety. Recently, the State legislature expressed concern regarding climate change and greenhouse gas emissions. Assembly Bill AB 32, (The California Global Warming Solutions Act of 2006) set the stage for addressing activities that impact the global climate. Senate Bills, SB 375 and SB 575 identify greenhouse gas emission reduction targets for passenger vehicles and light trucks. This General Plan Update 2012 – 2030 contains an element (Climate Action Plan) which outlines the City's goals, policies and action plans that are focused on the reduction of greenhouse gases within the community.

The General Plan 2012–2030 Update contains the seven basic mandated elements plus a Climate Action Plan. Some of the mandated elements have been combined as permitted and encouraged by State law. The following elements are located in the Bradbury General Plan 2012-2030 Update:

1. **Land Use Element;**
2. **Circulation – Transportation Element;**
3. **Housing Element** (*Because the update and revision schedule for the Housing Element differs from that of the remaining general plan elements the Housing Element is an independent document*);
4. **Community Resources Element** (*Combines the mandated Open-Space and Conservation Elements*);
5. **Health and Safety Element** (*Combines the mandated Noise and Safety Elements*);
6. **Climate Action Plan.**

Each element contains the community's goals and implementation measures related to that specific General Plan element.

## **GENERAL PLAN AMENDMENT PROCESS**

California Government Code Section 65400 requires the City to annually review the General Plan and the corresponding Implementation Plan. An annual report should be prepared for review and approval by the City Planning Commission and the City Council and forwarded to the State Office of Planning and Research and the State Housing and Community Development office on or before October 1 of each year. Information and suggestions for preparing the annual review report can be found in the State of California General Plan Guidelines.

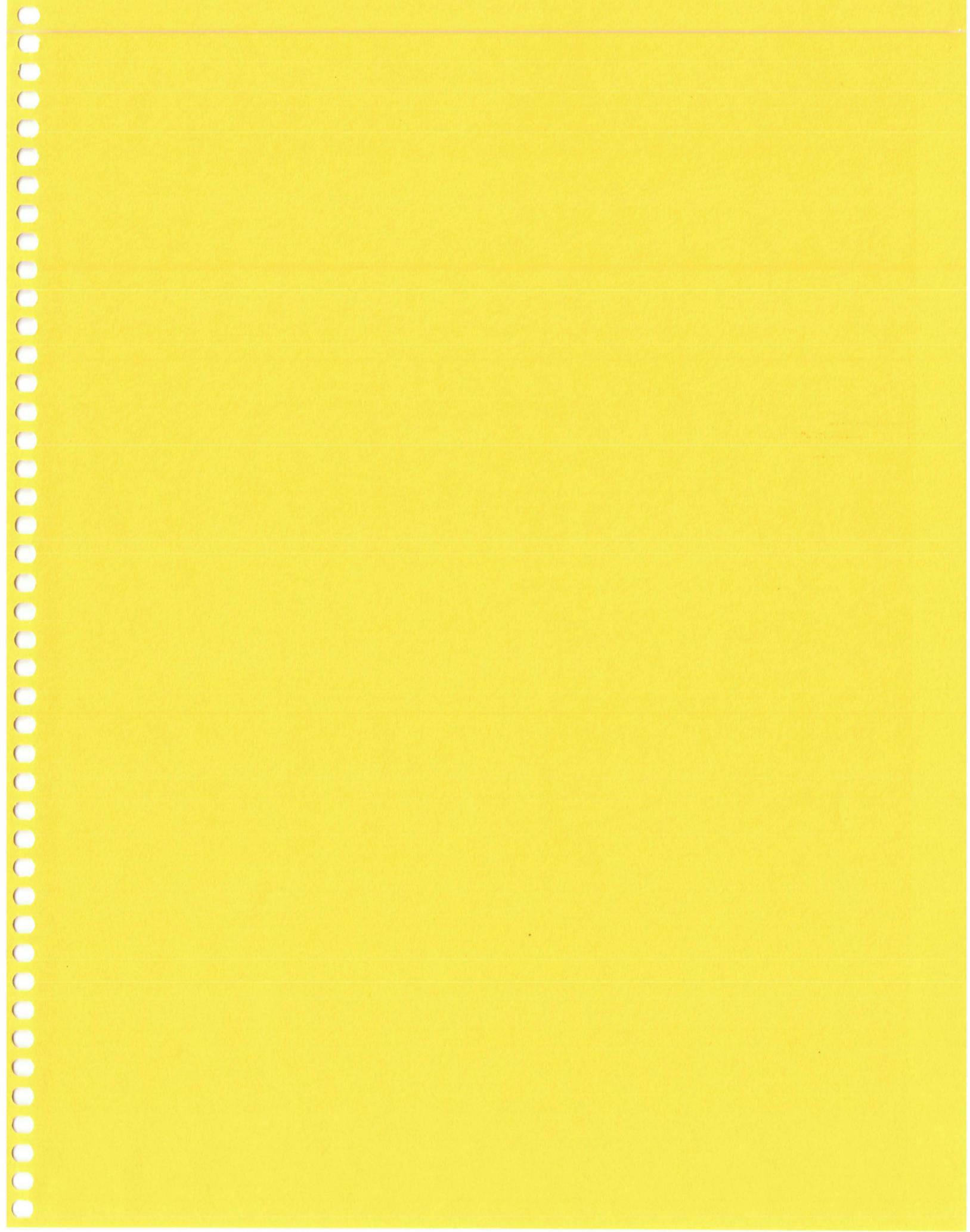
The annual review report is intended to provide information on how the General Plan is being implemented; any necessary course adjustments or modifications to the General Plan needed to improve implementation; the correlation between land use decisions made and existing objectives, policies, and tools; the progress made in meeting the City's share of regional housing needs pursuant to California Government Code Section 65584; and the City's efforts to remove constraints to the maintenance, improvement, and development of housing.

As a living document, the General Plan is reviewed and periodically amended to reflect changes in the housing market, the economy, etc. Should individual elements require amendment; the proposed changes can be proposed up to four times per year after adequate posting of public hearing notice as per State law (See Section 65358 Amendments of the California Government Code).

## **IMPLEMENTING THE PLAN**

The Implementation Programs and actions described in the various General Plan Elements should be regularly reviewed because they outline the actions and methods need to be taken by the City to carry out the General Plan goals and policies.

The Implementation Programs allow decision makers to understand the importance of different programs and the relative priority in advancing the long-term goals of the community. They inform City decision makers about other related planning efforts, such as Capital Improvement Plans and even the annual budgeting process. When used correctly, the General Plan can be the single most powerful tool for effecting long-term change within the community.



# **General Plan 2012-2030 Update**

## **Land Use Element**

### **Table of Contents**

<b>Topic</b>	<b>Pg. No.</b>
Purpose	1
History	1
Relationship to Other General Plan Elements	1
Planning Boundary & Sphere of Influence	1
Local Setting	3
Existing Land Use	4
Land Use Designations	4
Development	8
Existing Development	8
The Bradbury Estates	8
The Woodlyn Lane Improvement Association	8
The Bradbury Hills Road and Lane Association	8
Public Facilities	8
Future Development Potential	8
Category 1	9
Category 2	10
Category 3	11
Total Build-Out	12
Accessory Dwelling Units	13
Key Land Use Goals, Objectives, Policies and Action Programs	14
Mission Statement	14
Vision Statement	14
Land Use Goals	14
Land Use Objectives	15
Land Use Policies	15
Land Use Action Programs	15

### **Tables**

Table LU No. 1	(Land Use Designations and Zoning)	5
Table LU No. 2	(Category 1 - Open Space Privately Owned Undeveloped Parcels)	10
Table LU No. 3	(Category 2 – Vacant Undeveloped Residential Parcels)	10
Table LU No. 4	(Category 3 – Underutilized Parcels)	11

### **Exhibits**

Exhibit LU No. 1	(Sphere of Influence)	3
Exhibit LU No. 2	(Existing Land Use Map)	6
Exhibit LU No. 3	(Land Use Map)	7
Exhibit LU No. 4	(Vacant Undeveloped Parcels)	12
Exhibit LU No. 5	(Underutilized Parcels)	13

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# **General Plan 2012 – 2030 Update**

## **Land Use Element**

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### **Purpose:**

The purpose of the General Plan Land Use Element is to plan for and shape the future physical development of Bradbury. State Planning Law requires that General Plans establish land use designations for various areas in the plan, as well as standards for population density and building intensity. The Land Use Element serves as a guide for future development. The Element's relationship to other General Plan components is central for many aspects. Land use decisions influence: 1) capacity and service levels for transportation and utility systems; 2) housing availability; 3) preservation of resources; and 4) long-term effects related to economic prosperity.

### **History:**

The City of Bradbury incorporated July 26, 1957. The boundaries lie within the northern part of the Rancho Azusa de Duarte, originally a 6,596-acre Mexican Land Grant given in 1841 to Andres Duarte. The original rancho included all of Bradbury and portions of the surrounding cities. It was developed and subdivided into 40+ acre parcels in the 1870's. Around 1883 Lewis Leonard Bradbury acquired 2,750 acres of the rancho which comprises the present day cities of Bradbury and Duarte.

The population of Bradbury has grown from 518 in 1957 to 1,048 in 2010. The City is divided into five council districts representing the various distinctive areas of this unique community. The boundaries of the council districts are adjusted every ten years based on the most current census population data.

### **Relationship to other General Plan Elements**

The Land Use Element responds to detailed State statutory requirements and it has a broad scope. Land Use issues overlap those of all of the other general plan elements. This element is internally consistent with the goals, objectives and policies contained in all of the remaining general plan elements.

### **Planning Boundary & Sphere of Influence:**

As required by State Law, this Land Use Element contains text and maps that designate the future use and reuse of land and standards for residential density within the City and its Sphere of Influence. The General Plan Land Use Map, contained in this Element, graphically represents the City's vision for future development, enhancement and conservation. The planning

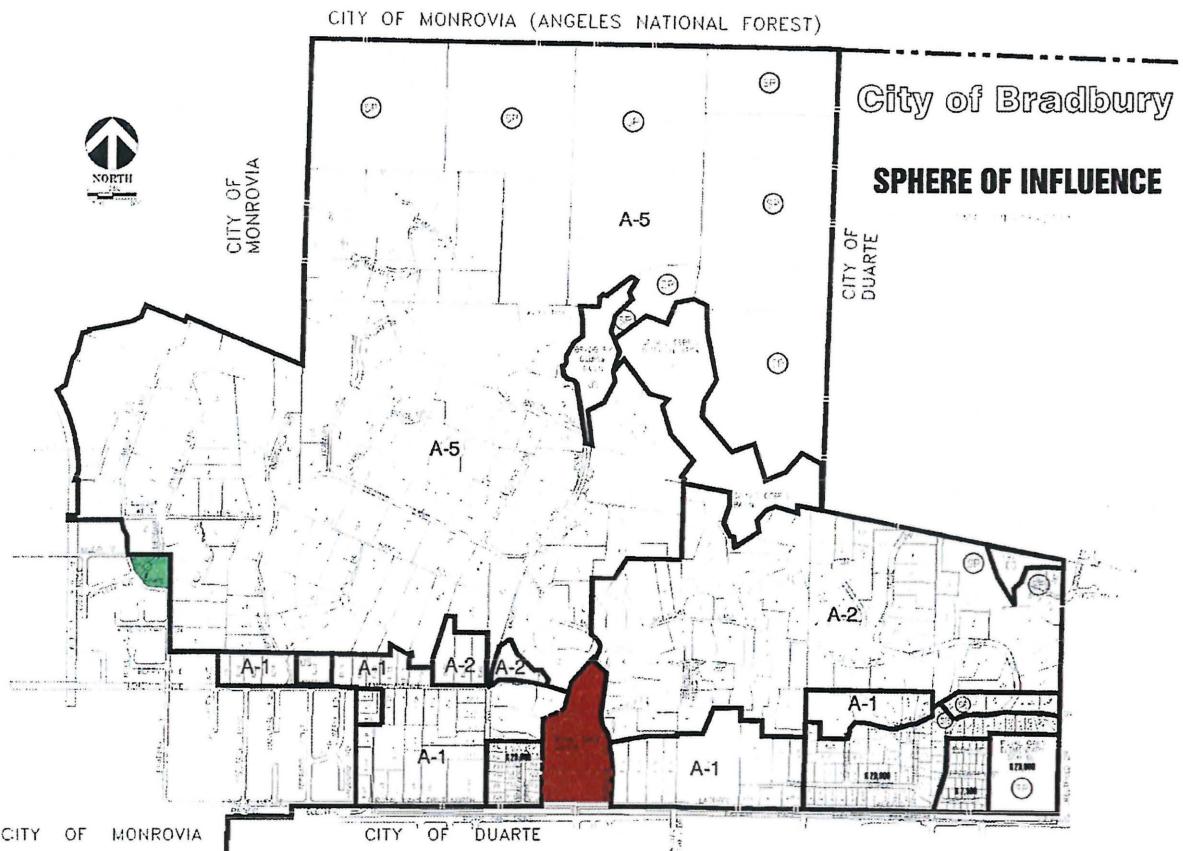
boundaries of the City are identified in Exhibit LU No.1 and they include the existing jurisdictional boundary and the City's Sphere of Influence Area.

The Sphere of Influence includes four (4) parcels of land that are currently located in the City of Monrovia but within the legal authority of the Bradbury Estates Community Service District (CSD). These four parcels include portions of two developed residential estate sites that are located in the Bradbury Estates. Additionally, the main entrance to the Bradbury Estates, including the guard house, is located in the City of Monrovia. It is the City of Bradbury's position that these four tax assessor parcels should logically be part of the City of Bradbury and should be subject to the development policies of this jurisdiction rather than the policies of the City of Monrovia. The physical extension of the City of Bradbury to the right-of-way of Wild Rose Avenue should be pursued with the Local Agency Formation Commission (LAFCO) and the City of Monrovia in the future.

Cities are required to enact and develop policies designed to promote logical and orderly development. Pursuant to Senate Bill SB 244 (adopted in 2011 and enrolled as Chapter 513), prior to the next housing element due date (February 2014 for Bradbury), cities and counties are required to update of their land use element to identify county islands adjacent to their city within their planning boundaries when, in doing so, it promotes logical development. To comply with SB 244, the planning boundaries for the City should include the 17-acre County Island, "Be Royal Oaks" retirement/skilled nursing facility. Since the property is a multi-family residential skilled nursing facility and the site is developed and urban services are provided by the same agencies utilized by the City of Bradbury no unexpected impacts to the City of Bradbury are anticipated.

The City of Bradbury has not and does not include multi-family residential zones, development concepts or policies. The annexation of the Be Royal Oaks retirement/skilled nursing facility has been previously considered by Planning Commissions and City Councils. The concept of annexing this County Island into the City of Bradbury has been considered, reviewed and discarded as a potential expansion of the City of Bradbury. However, if future City Councils determine that annexation of this multi-family residentially developed property is appropriate then detailed studies and analysis of the potential impacts would prepared for consideration before any action is undertaken.

The Bradbury General Plan Existing Land Use Map (Exhibit LU No. 2) identifies the existing uses of land as of the date of adoption of this General Plan 2012-2030 Update. The General Plan Land Use Map (Exhibit LU No. 3) designates the desired land use pattern, development density and intensity envisioned for this planning period. The desired development of land uses is implemented by the application of the various zone districts set forth in the City's Development Code. Development density and intensity is established by the regulations and standards contained in each of the City's zone districts.



**Exhibit LU No. 1  
SPHERE OF INFLUENCE**

**Local Setting:**

The City of Bradbury is a single-family residential community comprised of 1,216-acres of land (1.9 square miles). The community is almost fully developed with a variety of single-family detached residential dwelling units and accessory buildings and structures. Other land uses consisting of non-developable open-space and miscellaneous public uses include: the 1.06-acre Civic Center; the 13-acre Royal Oaks Public Elementary School; 49.67-acres devoted to flood control debris basins owned and operated by the Los Angeles County Flood Control District; the 4.06-acres of privately owned land dedicated as open space; and 3.36-acres owned by California Water Company and used for water reservoirs.

The south/southeastern half of the City is divided in parcels ranging in size from 7,500 square feet to two (2) acres. The north/northwestern half of the City consists of large estate size parcels

of land. The estate zoned parcels range in size from two (2) acres to seventy (70) acres. Many of the parcels are located within areas of steep hillsides.

There are eight (8) large parcels of land comprising approximately 302-acres which are located in the northern portion of the City adjacent to the City of Monrovia/Angeles National Forest that appear to have average slopes that range from 24% to 56.66% based on a cursory review of internet maps and the existing topographical maps on file with the City. The City recognizes that the eight (8) parcels of land, as they currently exist, have the opportunity to be developed with one (1) main dwelling unit and one (1) accessory dwelling per parcel in accordance with the A-5 SP development standards as set forth in the City's Development Code. This General Plan Update therefore uses development of 16 additional dwelling units as a realistic development number for planning purposes for this area. For the purposes of this General Plan Update and pending future detailed development and environmental feasibility studies these 302-acres of undeveloped land are recognized as privately owned Open-Space subject to the City's Hillside Development Standards as set forth in the Development Code.

Limited access to this 302-acre area, lack of urban utilities and the potential existence of sensitive ecological areas and species may render these parcels very difficult or potentially economically infeasible for residential estate development. It should be noted that residential development of this area is not limited to the 16 units; development density may be increased through the utilization of land division and development concepts, such as clustered development, that can be developed through a specific plan. The subject property owners may at their volition file development applications with the City in accordance with the provisions of applicable ordinances and policies for such development. Any development of these 302-acres requires the preparation, review and approval of a Specific Plan. Due to the severe site constraints it is anticipated that special development design considerations will have to be examined in order to provide adequate access to future building sites.

## **Existing Land Uses:**

An analysis of the City's existing land uses identified seven categories: 1) Single-Family Residential; 2) Public Facilities; 3) Education; 4) Open Space, Privately Owned-Undeveloped; 5) Vacant; 6) Water Reservoir; and 7) Open-Space-Dedicated. Table LU No. 1 contains the area tabulations for the various existing land uses. Exhibit LU No. 2 depicts the location of the various existing land uses.

## **Land Use Designations:**

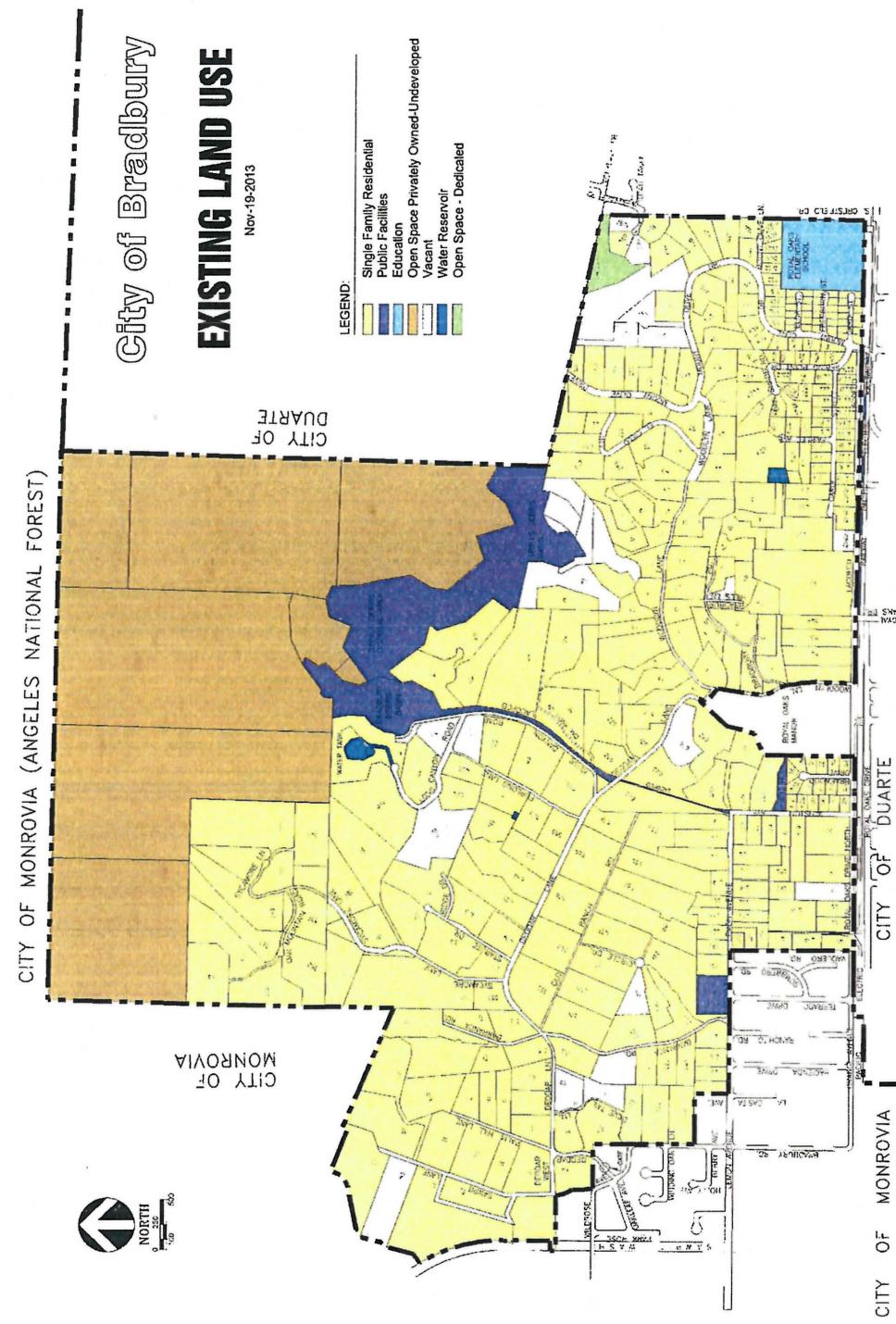
The City's zoning, which will not be changed by the General Plan Update, implements the community's long-standing desire to retain its rural, low-density single-family residential character. The entire City of Bradbury is zoned for single-family detached residential development with only one exception for Open-Space areas that are used for public facilities, flood control debris and disposal areas water reservoirs, and privately owned and dedicated open-space areas.

The following General Plan land Use designations are reflected in Figure LU-3:

- **Agriculture/Estate Residential – Five Acres:** This category refers to agricultural uses of land and large estate residential development on parcels at least five-acres in size.
- **Agriculture/Estate Residential – Two Acres:** This category refers to agricultural uses of land and smaller estate residential development on parcels at least two-acres in size.
- **Agriculture/Estate Residential – One Acre:** This category refers to agricultural uses of land and estate residential development on parcels at least one-acre in size.
- **Single-Family – 20,000 square feet:** This category refers to single-family residential uses on lots containing a minimum area of 20,000 square feet.
- **Single-Family – 7,500 square feet:** This category refers to single-family residential development on lots containing a minimum of 7,500 square feet.
- **Retirement Home – Unincorporated Area** located within the City's Sphere of Influence containing an existing multi-family residential retirement skilled nursing community of approximately 130 dwelling units.
- **Public Facilities**– Areas used for public purposes including schools, water reservoirs and the City's Civic Center.
- **Open Space, Flood Control** – Areas owned and operated by the Los Angeles County Flood Control District for flood control purposes.
- **Open Space, Privately Owned – Dedicated** – Privately owned property that is dedicated as open space in perpetuity.
- **Open Space, Privately Owned Undeveloped** – Undeveloped privately owned land that may be developed but is considered as difficult and possibly economically infeasible for residential development at the density of one dwelling unit per five acres.

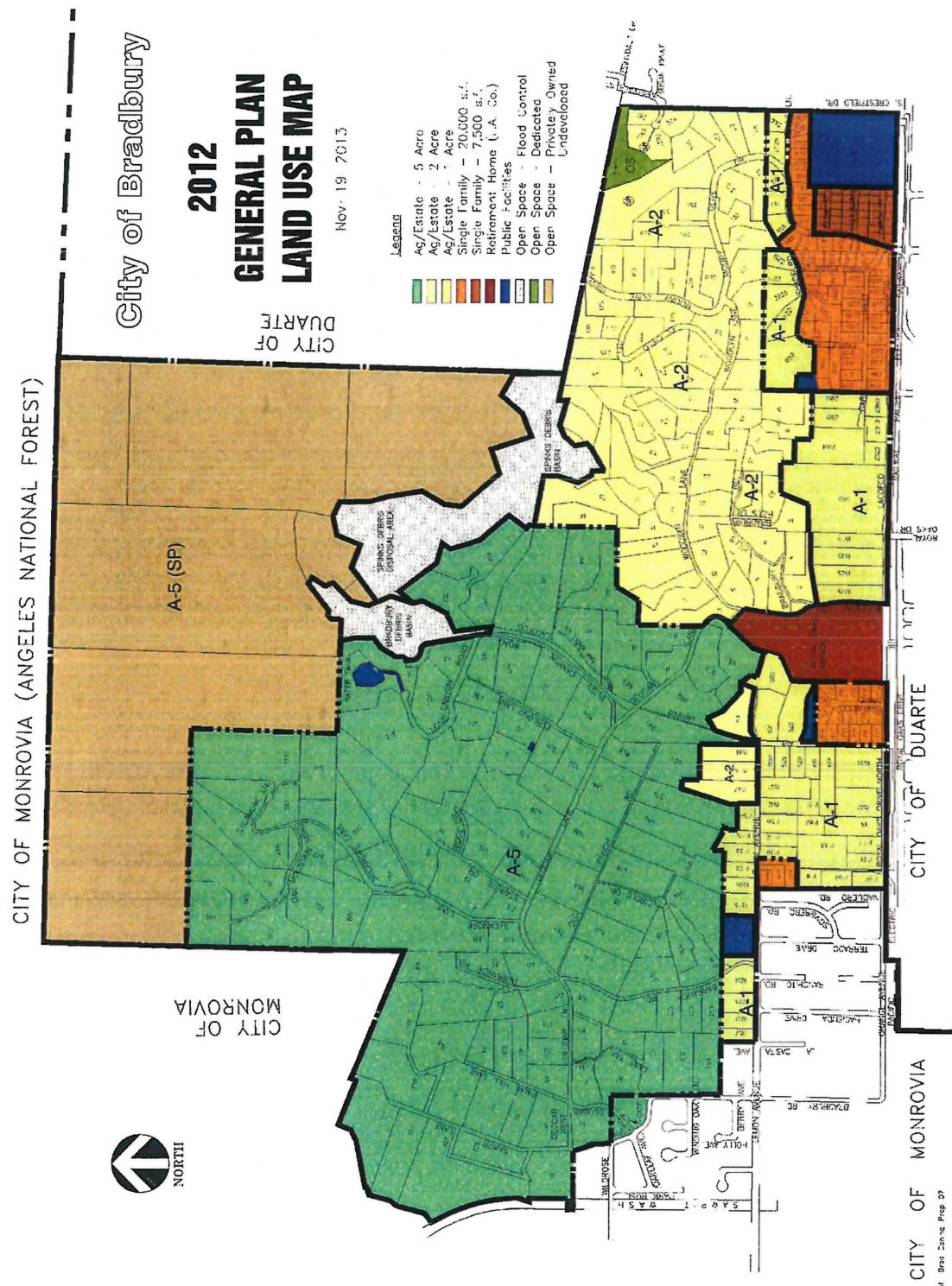
**TABLE LU No. 1  
LAND USE DESIGNATIONS AND ZONING**

Permitted Land Use	Zoning	Acres	Land Use Designation
Single-Family Residential	R-7,500 Single-family Residential	8.00	R-7,500
	R-20,000 Single-family Residential	43.84	R-20,000
	A-1 Agriculture Residential Estate	104.00	A-1
	A-2-Agriculture Residential Estate	195.94	A-2
	A-5-Agriculture Residential Estate	490.78	A-5
	A-5 (SP) Agriculture Residential Estate-Specific Plan	302.19	Open Space Privately Owned Undeveloped
Public Facilities - Education	R-20,000 Single-Family Residential	13.10	Public Facilities
Public Facilities -Civic Center	A-1 Agriculture Residential Estate	1.06	Public Facilities
Public Facilities – Water Reservoir	O-S (Open Space)	3.36	Public Facilities
Public Facilities – Spinks Debris Disposal Area	O-S (Open Space)	36.47	Open Space Flood Control
Public Facilities – Bradbury Debris Basin	O-S (Open Space)	13.20	Open Space Flood Control
Open-Space Privately Owned-Dedicated	O-S-SP (Open Space-Specific Plan)	4.06	Open Space Dedicated
<b>Total Area</b>		<b>1,216</b>	



**Exhibit LU No. 2**

**EXISTING LAND USE MAP- 2012**



**Exhibit LU No. 3**  
**LAND USE MAP -2012 - 2030**

## **Development:**

### **Existing Development:**

Almost the entire City is developed with single-family detached residential dwelling units. Publically owned property consists of the Civic Center; Royal Oaks Public Elementary School; Los Angeles County Flood Control District owned Flood Control Debris Basins and Channels; and privately owned Water Reservoirs. The 2010 Census reported that the City of Bradbury had 400 dwelling units and a population of 1,048. It was reported that forty-six (46) dwelling units were vacant. The reported average household size was 3.1 persons per dwelling unit.

There are three unique and distinct neighborhoods in the City known as the Bradbury Estates, the Woodlyn Lane Improvement Association and the Bradbury Hills Road and Lane Association. The remaining residential areas are traditional single-family detached residential neighborhoods that are accessed from public streets.

**The Bradbury Estates** is a gated community consisting of large residential parcels ranging in size from two to seventy-acres in size. A unique feature of this community is that it is under the jurisdiction of a Community Services District (CSD) which was formed on December 28, 1995. The CSD has the stated responsibility to:

- Equip and maintain additional security services above and beyond that provided by the Los Angeles County Sheriff to protect and safeguard life and property; and
- The construction, opening, widening, extending, straightening, surfacing, and maintaining in whole or part of any street in the district; and
- The construction and improvement of bridges, culverts, curbs, gutters, drains and works incidental thereto.

**The Woodlyn Lane Improvement Association** is a gated community consisting of large residential parcels usually having a minimum of two-acres of land area.

**The Bradbury Hills Road and Lane Association** is a gated community consisting of large residential parcels usually having a minimum of two-acres. There are seventeen (17) residential parcels that have access to the private streets, Bradbury Hills Road and Bradbury Hills Lane.

**Public Facilities:** Royal Oaks Public Elementary School is located within the City's corporate boundary and it occupies 13-acres located at the extreme southeast corner of the City. This school is operated by the Duarte Unified School District.

The Civic Center is located at 600 Winston Avenue in the south central portion of the City and the entire 1.06-acre site is dedicated for public use. The Civic Center contains a recently constructed 2,400 square foot facility that includes offices and a multi-purpose room that has been designed for meetings and civic functions.

### **Future Development Potential:**

The undeveloped parcels within the City fall within three categories. Category 1 consists of eight (8) parcels of land comprising approximately 302-acres. These parcels are located in the

northern most portion of the City and are subject to the City's Hillside Development Standards as set forth in the Development Code which severely restricts grading of slopes which are in excess of 10%. Category 2 consists of 67.82 acres comprising 24 parcels which are vacant and more easily developable for single-family detached residential dwellings. Category 3 consists of 5 underutilized parcels which could support additional development.

**Category 1** is comprised of a 302-acre area consisting of eight (8) parcels located in the City's northern boundary adjacent to the City of Monrovia and the Angeles National Forest (see Exhibit LU No. 4). The General Plan Land Use Map identifies this area as Open Space, Privately Owned Undeveloped (see Exhibit LU No. 3), having a maximum density of one dwelling unit per five acres. The area has been zoned A-5 SP (Agriculture/Residential 5-acre minimum, Specific Plan). Each parcel may be developed with one main dwelling and one accessory dwelling unit and would provide for a projected increase of 16 units and 50 persons.

Any development or further subdivision of the 302-acres would be subject to review and approval of a specific plan. Associated environmental studies will address the impacts and mitigation measures associated with any such future development and proposed increase in residential density or population over that set forth herein. The area has been reported to contain hillside slopes that range from 24% to over 50%; numerous prominent ridgelines; Blueline streams; earthquake induced landslide zones; lack of existing public or private vehicular access; lack of existing public utilities, and habitat that could include sensitive or endangered flora and fauna. These development constraints lead one to consider that development of the area is physically and economically difficult. This area is further restricted by being located in an area designated as a Very High Fire Hazard Severity Zone in compliance with California State Law. If so desired a Specific Plan could be submitted to the City for consideration of the area's maximum development density potential. Use of this steep hillside potentially environmentally sensitive area could include the creation of a conservation conservancy/easement; the use of development right transfer strategies, and cluster development concepts, at the owner's option.

Any development in this area would be subject to the hillside development standards that are applicable to any site that consists of two-acres of land area having an average slope exceeding 10%. The intent of the hillside development standards is to preserve the pristine hillside mountainous topography. Grading of the hillside property is restricted and controlled. The nature and extent of the grading and development restrictions are based on the average slope of the parcel under consideration.

<b>TABLE LU No. 2 CATEGORY 1 OPEN SPACE PRIVATELY OWNED UNDEVELOPED HILLSIDE PARCELS</b>								
	Parcel No.	Area.	Zone	Land Use	Potential DU's	Potential 2 <sup>nd</sup> DU's	Total DU's	Average Slope
1.	8527-001-001	41.40	A-5 (SP)	Estate 5-Ac	1	1	2	37.45%
2.	8527-001-008	70.00	A-5 (SP)	Estate 5-Ac	1	1	2	34.00%
3.	8527-001-009	20.54	A-5 (SP)	Estate 5-Ac	1	1	2	56.66%
4.	8527-001-010	59.19	A-5 (SP)	Estate 5-Ac	1	1	2	44.23%
5.	8527-001-012	59.30	A-5 (SP)	Estate 5-Ac	1	1	2	32.74%
6.	8527-005-001	8.37	A-5 (SP)	Estate 5-Ac	1	1	2	28.65%
7.	8527-005-002	1.03	A-5 (SP)	Estate 5-Ac	1	1	2	42.01%
8.	8527-005-004	42.36	A-5 (SP)	Estate 5-Ac	1	1	2	24.03%
<b>Total</b>		<b>302.19</b>			<b>8</b>	<b>8</b>	<b>16</b>	-

**Category 2** is comprised of twenty-four (24) vacant undeveloped residentially designated and zoned parcels. All of these sites are considered as appropriate for development for single-family detached residential dwelling units. (See Exhibit LU No. 4.) The identified vacant developable residential parcels on the 67.82 acres could theoretically yield 27 main dwelling units and 26 second dwelling units for a total of 53 additional dwelling units for a projected population of 165 persons for this category.

<b>TABLE LU No. 3 CATEGORY 2 - VACANT UNDEVELOPED RESIDENTIAL PARCELS -</b>							
	Parcel No.	Parcel Size	Zone	Land Use	Potential No. of Main Dwellings	Potential No. of 2 <sup>nd</sup> Dwellings	Potential Total No. of Dwellings
1.	8527-002-023	5.58	A-5	Estate 5-Ac	1	1	2
2.	8527-004-020	2.12	A-5	Estate 5-Ac	1	1	2
3.	8527-006-019	4.96	A-2	Estate 2-Ac	1	1	2
4.	8527-007-023	0.39	A-2	Estate 2-Ac	1	1	2
5.	8527-007-024	1.96	A-2	Estate 2-Ac	1	1	2
6.	8527-007-025	2.14	A-2	Estate 2-Ac	1	1	2
7.	8527-007-026	2.32	A-2	Estate 2-Ac	1	1	2
8.	8527-007-027	2.87	A-2	Estate 2-Ac	1	1	2

9.	8527-016-009	8.01	A-2	Estate 2-Ac	3	3	6
10.	8527-016-019	2.03	A-2	Estate 2-Ac	1	1	2
11.	8527-016-035	1.35	A-2	Estate 2-Ac	1	1	2
12.	8527-016-036	2.18	A-2	Estate 2-Ac	1	1	2
13.	8527-016-037	1.18	A-2 (SP)	Estate 2-Ac	1	0	1
14.	8527-016-039	1.29	A-2 (SP)	Estate 2-Ac	1	0	1
15.	8527-021-011	1.54	A-2	Estate 2-Ac	1	1	2
16.	8527-021-044	1.13	A-1	Estate 1-Ac	1	1	2
17.	8527-024-032	5.3	A-5	Estate 5-Ac	1	1	2
18.	8527-025-035	2.05	A-5	Estate 5-Ac	1	1	2
19.	8527-026-006	2.90	A-5	Estate 5-Ac	1	2	3
20.	8527-026-033	2.40	A-5	Estate 5-Ac	1	1	2
21.	8527-026-034 & 8527-026-036	2.29	A-5	Estate 5-Ac	1	1	2
22.	8527-029-001	2.54	A-5	Estate 5-Ac	1	1	2
23.	8527-029-017	7.16	A-5	Estate 5-Ac	1	1	2
24.	8527-023-012	2.13	A-1	Estate 1-Ac	2	2	4
<b>Total</b>		<b>67.82</b>			<b>27</b>	<b>26</b>	<b>53</b>

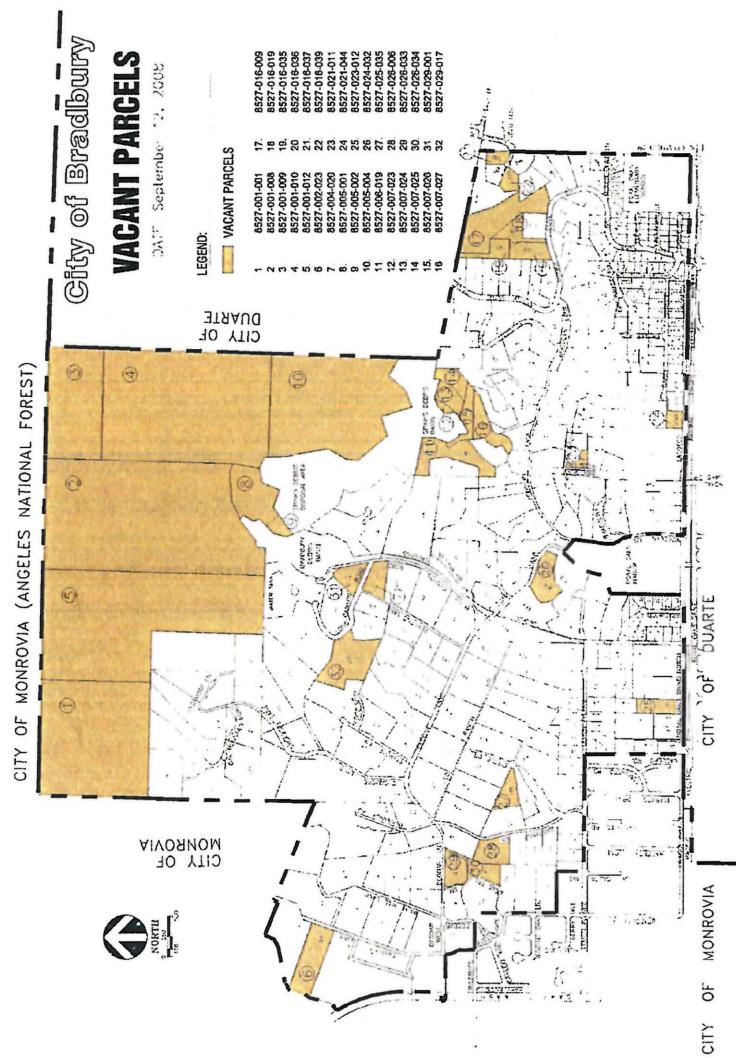
**Category 3** is comprised of 5 underutilized parcels which also have potential for development of single-family detached residential dwellings. The identified underutilized parcels could theoretically yield 12 main dwelling units and 16 second dwelling units for a total of 28 additional dwelling units for a projected population of 87 persons over the 33.83 acres making up this category. (See Exhibit LU No. 5.)

**TABLE LU No. 4  
CATEGORY 3  
- UNDERUTILIZED PARCELS -**

	Parcel No.	Parcel Size	Zone	Land Use	Potential No. of Units	Potential No. of 2nd DU's	Total No. Potential DU's
1.	8527-021-041	12.40-ac	A-1	Estate – 1 unit per acre	6	7	13
2.	8527-023-020	2.75 ac	A-1	Estate – 1 unit per acre	1	2	3
3.	8527-023-021	3.80-ac	A-1	Estate – 1 unit per acre	2	3	5
4.	8527-002-014	12.8-ac	A-5	Estate – 0.2unit per-acre	1	2	3
5.	8527-003-035	2.08 ac	A-1	Estate – 1 unit per acre	2	2	4
<b>Total</b>		<b>33.83 ac</b>			<b>12</b>	<b>16</b>	<b>28</b>

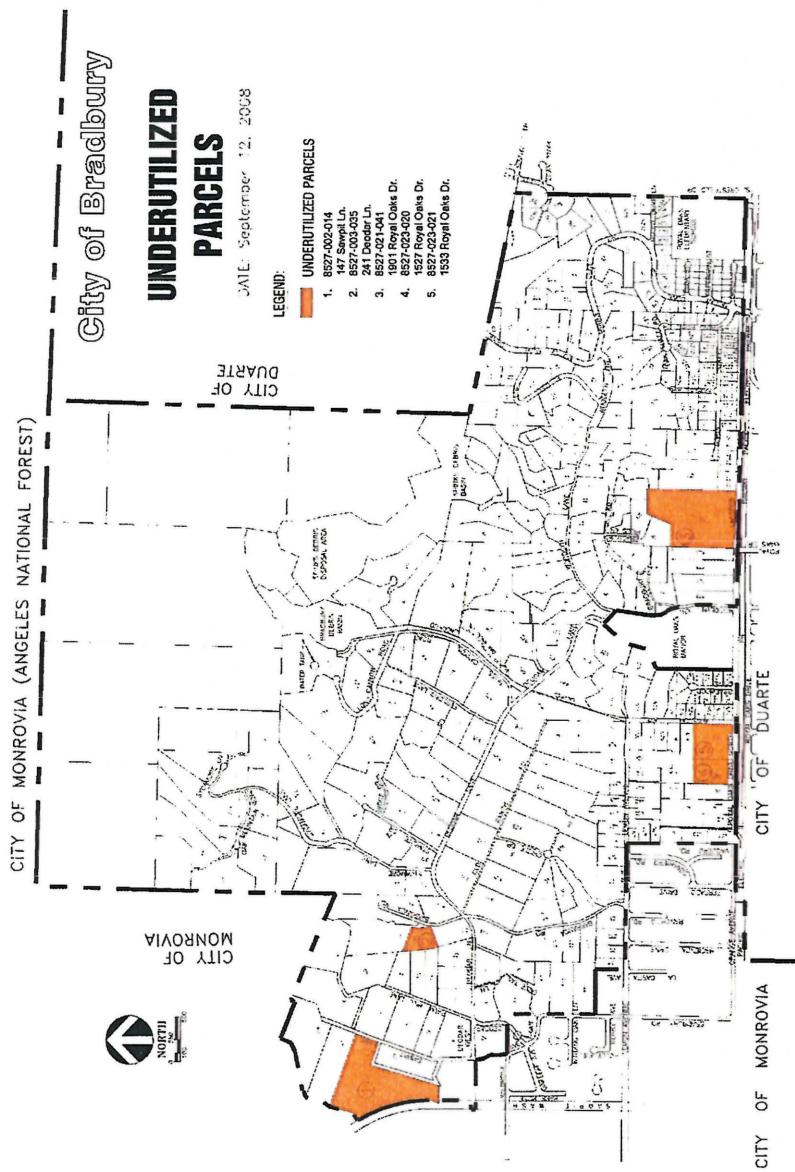
### Total Build-Out:

The follow exhibits (LU No. 4 and LU No. 5) locate the vacant undeveloped parcels of land and the underutilized parcels capable of supporting additional dwelling units. The total projected dwelling unit buildout capacity for the City of Bradbury is ninety-seven (97) additional dwelling units. The existing dwelling unit count is 400, but according to the 2010 census, only 354 units were occupied, providing for an 11.5% vacancy rate. Under current conditions the projected maximum dwelling unit count would be 497 which would include main and accessory dwellings. The 2010 federal Census indicates that the average household size in the City of Bradbury is 3.1 persons. The projected maximum population of the City would then be 497 dwellings multiplied by the average household size of 3.1 for a total buildout population of 1,541 persons.



**Exhibit LU No. 4**

### VACANT UNDEVELOPED PARCELS



**Exhibit LU No. 5**  
**UNDERUTILIZED PARCELS**

**Accessory Dwelling Units** – Accessory Dwelling Units or living quarters provide opportunities for affordable housing. Accessory living quarters identified in Section 9.03.010.020(A) "Definitions" of the City's Development Code include:

1. **Single Room Occupancy Units (SRO's)** defined as living accommodations that may be provided to house personnel involved in the care and maintenance of the primary

dwelling or the associated on-site farming activity. SRO's are also known as servant or domestic quarters, groom's quarters or pool houses.

2. **Second Dwelling Units** defined as attached or detached dwelling units inclusive of complete kitchen facilities. The maximum size of the permitted dwelling units is determined by the zone in which the unit is to be located and range from 1,200 square feet in the R-7,500 zone to 2,500 square feet in the A-5 zone.
3. **Guesthouse** is defined as living accommodations that do not include complete kitchen facilities.
4. **Bunk Houses** designed to house individuals associated with the on-site farming activities. Such facilities shall not include complete kitchen facilities.
5. **Groom's Quarters** designed to house individuals associated with the on-site care of animals. Such facilities shall not include complete kitchen facilities.
6. **Servant or Domestic Quarters** defined as an attached single-room occupancy (SRO) dwelling that does not include kitchen facilities.
7. **Pool Houses** defined as an attached or detached single-room occupancy (SRO) dwelling that does not include kitchen facilities.
8. **Granny House** to be defined as an attached or detached dwelling unit designed for occupancy by one or two adult individuals over the age of 62 provided that such dwelling does not contain complete kitchen facilities. (*Government Code Section 65852.1*)

Second dwelling units are permitted within all residential zones. The City is committed to providing living accommodations for all economic segments of the population.

Currently there are 79 accessory dwelling units located throughout the City. Construction of accessory living quarters is encouraged at every opportunity.

## **Key Land Use Goals, Objectives, Policies and Action Programs**

**Mission Statement:** Preserving Rural Tranquility is a policy as relevant now as it was decades ago when it was initially adopted. The mission statement provides guidance to local decision makers in the implementation of the community's land use policies.

**Vision Statement:** The City of Bradbury recognizes its unique single-family residential character and by maintaining fiscally responsible governance and development policies shall strive to provide a stable and sustainable rural community balancing preservation of natural open space with the needs of its residents for a quiet and safe place to live and raise their families.

### **Land Use Goals**

- Land Use Goal 1:** The Land Use Element maintains the existing rural residential character of the City. The element designates the general location, distribution, and extent of existing and permitted development.
- Land Use Goal 2:** Preserve the identity, image and environmental quality of the hillside and open space areas in perpetuity by enforcing the Hillside Development Standards

**Land Use Objectives**

**Land Use Objective 1:** To maintain the existing character of the community and to preserve those environmental resources and amenities that make the City of Bradbury a desirable place to live.

**Land Use Policies**

**Land Use Policy 1:** The residential character of the community and environmental resources important to the City will be maintained.

**Land Use Action Programs:**

The City of Bradbury intends to complete the following items which address the objectives and policies of the Land Use Element of the General Plan:

**Land Use Action 1:** Encourage as much hillside preservation as possible through the use of conservation easements, acquisition efforts by conservation organizations or preservation as natural preserves that promote the protection of natural hillsides as open-space in perpetuity.

**Land Use Action 2:** Work with the City of Monrovia to adjust the common municipal boundaries to expand the City of Bradbury to the edge of the Wild Rose Avenue right-of-way to be consistent with the legal boundaries of the Bradbury Estates Community Services District.

**Land Use Action 3:** Revise the City's Design Guidelines to promote sustainable building and development design alternatives.

**Land Use Action 4:** Encourage the homeowner associations to consider the update or adoption of design guidelines for their respective jurisdictions.

**Land Use Action 5:** Engage the community and the homeowner associations to explore the need to control development intensity including but not limited to re-examination of lot coverage definitions, relationship of setbacks and building height and the ratio of main dwelling unit footprints to the total parcel size.

**Land Use Action 6:** Perform a biennial review of the Hillside Development Standards and update if necessary to carry out the goals of the General Plan.

# General Plan 2012-2030 Update

## Circulation-Transportation Element

### Table of Contents

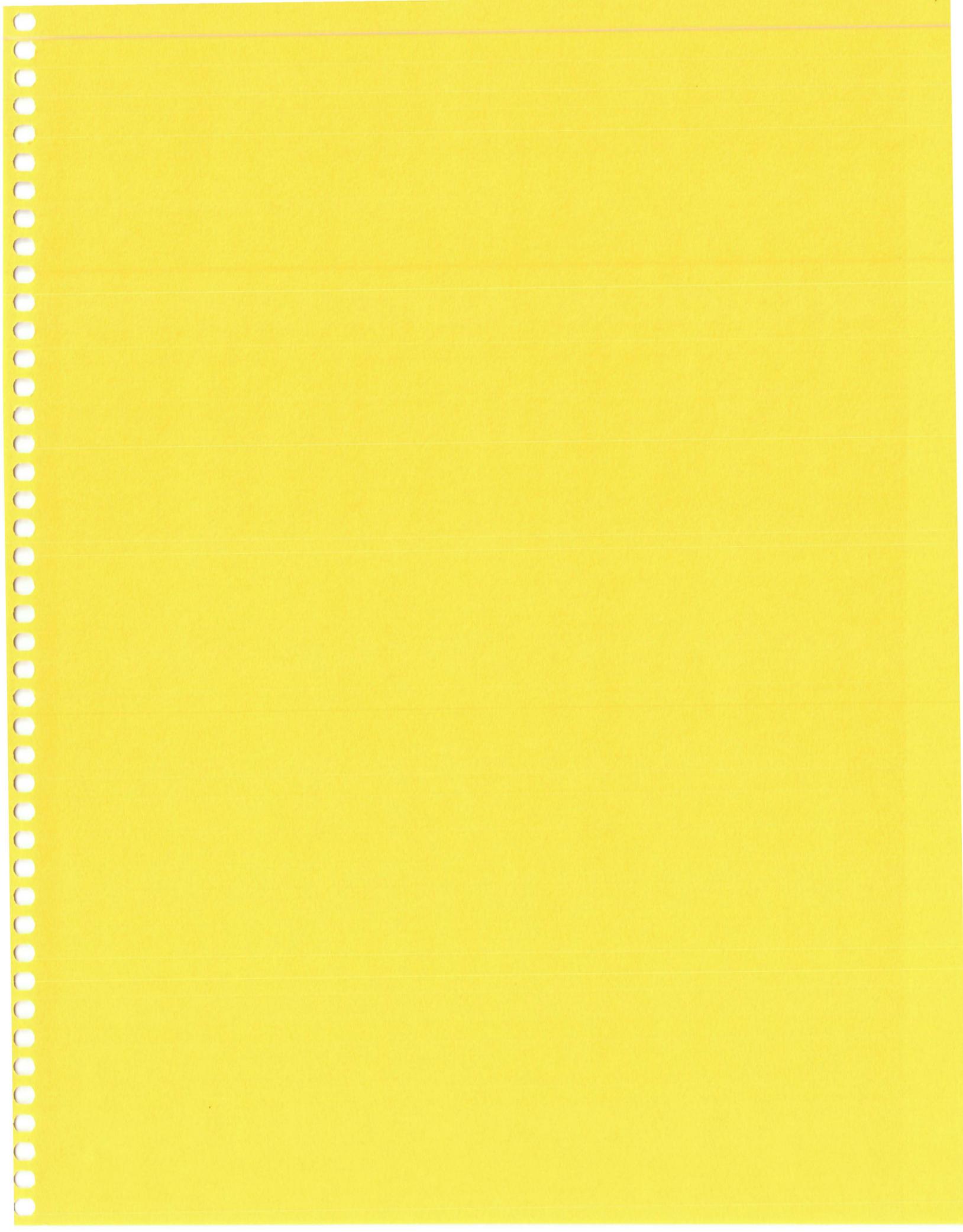
<u>Topic</u>	<u>Pg. No.</u>
Purpose	1
Relationship to Other General Plan Elements	2
Regional Setting	2
Traffic Impacts	3
Railroad Transportation Systems	4
The Metro link	4
Metro Gold Line	4
Air Transportation	4
Mass Transit Bus Systems	4
Foothill Transit	5
Para-Transit	5
Local Setting	5
Emergency Access and Evacuation Plan	8
Roadway Standards	10
Street Lights	12
Public Utilities	12
Overview	12
Key Goals, Objectives, Policies and Implementation Action Programs	13
Goals	13
Objectives	13
Policies	14
Action Programs	15

#### Tables

None

#### Exhibits

Exhibit C-T No. 1	(Regional Location Map)	2
Exhibit C-T No. 2	(Circulation Plan)	7
Exhibit C-T No. 3	(Emergency Access and Evacuation Plan)	9
Exhibit C-T No. 4	(Roadway Concept Plans) )	11



# **General Plan 2012-2030 Update**

## **Circulation-Transportation Element**

### **Purpose**

State statute requires that the General Plan Circulation-Transportation Element correlate directly with the Land Use Element. The Circulation-Transportation Element also has direct relationships with the mandated Housing, Open-Space, Noise and Safety Elements. The Circulation-Transportation Element must address the following issues:

- Major thoroughfares
- Transportation routes
- Terminals
- Local public utilities and facilities

The purpose of the General Plan Circulation-Transportation Element is to plan adequate circulation systems for the community's residents. Circulation includes all facilities that direct and accommodate motorized vehicles, bicycles and pedestrian movement. Transportation includes accommodations for public and privately owned and operated buses, trains and aircraft. Not all methods of transportation may be offered or available within the community. However, the Circulation-Transportation Element will address or identify the systems that are available to the community residents. Emphasis will be made to provide access to all public transportation systems by the disabled. The Circulation-Transportation Element should also establish parameters for new development to insure that minimum standards are met.

In 2008 the Legislature adopted Assembly Bill 1358 (Chapter 657) entitled "The California Complete Streets Act." This law requires that as part of their next substantive update to the Circulation Element after January 1, 2011, local jurisdictions must plan for the development of multi-modal transportation networks. Consistency between regional and local circulation and transportation systems is essential. The coordinated regional and local circulation and transportation systems will create the desired "Complete Streets Network" envisioned by AB 1358.

Providing a "Complete Streets Network" has a multitude of benefits that include streets designed for safe travel including: bicycle and pedestrian facilities that promote and encourage users to engage in healthy transportation alternatives. Availability of facilities that provide alternatives to the use of motorized transportation can reduce miles traveled per day which correlates with air quality improvements and the reduction of Greenhouse Gas Emissions.

The State of Californian legislature also enacted Assembly Bill 32 (AB-32) entitled "The Global Warming Solutions Act of 2006". The stated goal is to reduce Greenhouse Gas Emissions (GHG) to 1990 levels no later than the year 2020. Companion bill, Senate Bill 375 (SB-375), adopted in 2008, targets automobiles and light trucks for immediate Greenhouse Gas Emission reduction.

The City of Bradbury recognizes the benefits of reducing our dependency on automobiles to meet our transportation needs. Residents are encouraged to use alternative modes of transportation.

This Circulation-Transportation Element is meant to be the foundation for the City's commitment to reducing "Vehicles Miles Traveled". Future development should promote the ideals and principles that would reduce the community's reliance on the automobile.

## Relationship to Other General Plan Elements

Future traffic volumes will not significantly increase over the next twenty years. Based on the 2009 National Household Travel Survey prepared by the U.S. Department of Transportation, the average vehicle trips per day per household is 9.84. The accepted industry standard for computing the number of vehicle trips per day per household is 10 trips.

The Land Use Element estimates the total potential increase in the number of dwelling units within the City will be ninety seven (97). The maximum potential number of dwelling units at "Build-Out" condition will be 497. The projected additional vehicle trips per day based on the "Build-Out" condition would be nine hundred and seventy (970). The projected total number of vehicle trips per day would then be 4,970 or approximately a 24% increase in the number of daily vehicle trips.

## Regional Setting

The City of Bradbury is nestled against the San Gabriel Mountains northwest of the intersection of the San Gabriel River Freeway (I-605) and the Foothill Freeway (I-210). Access ramps at Mount Olive Drive, Buena Vista Street and Irwindale Avenue provide direct ingress and egress to the freeway system.

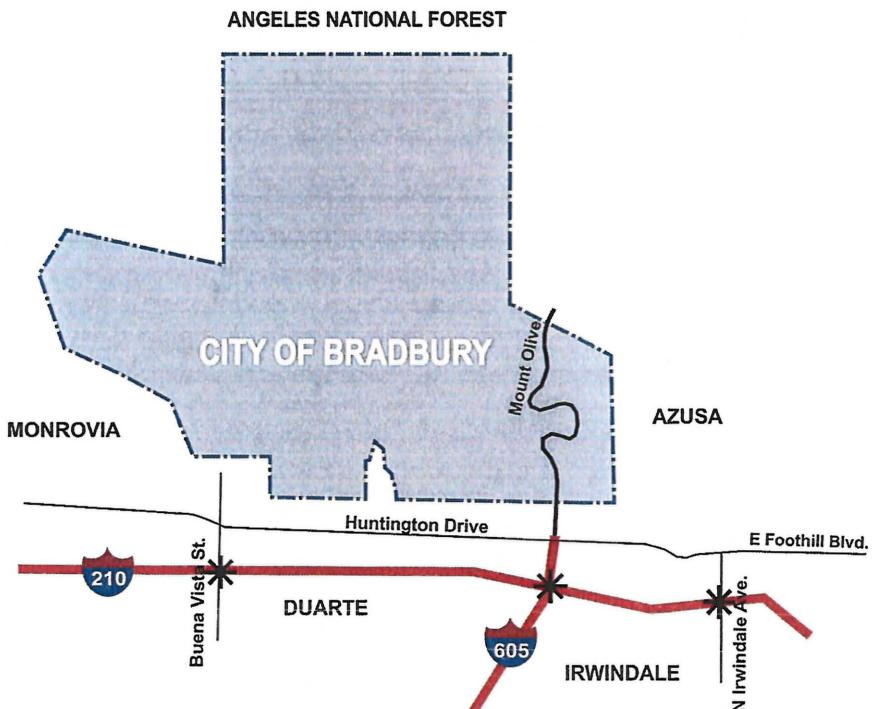


Exhibit C-T No. 1

## REGIONAL LOCATION MAP

**Traffic Impacts:** The primary traffic impact to Bradbury residents will occur as nearby communities experience growth in commercial and industrial development. As nearby communities grow, traffic will increase and the Level-of-Service (LOS) at surrounding arterial highway intersections will decrease.

Level of Service (LOS) is a qualitative indicator that is used to describe the operative conditions of a roadway. Level of Service is computed using methods documented in the Transportation Research Board Publication Highway Capacity Manual. For signalized intersections and all-way-stop-controlled intersections (AWSC), delays in movement and LOS are reported as average values for the entire intersection. For two-way-stop-controlled intersection (TWSC), the average delays and LOS are reported for the “worst-case” movement. The definitions for the various Levels-of-Service are described below:

1. LOS-“A” (Stable Flow) means free-flow conditions with negligible to minimal delays. Excellent progression with most vehicles arriving during the green phase and not having to stop at all. Nearly all drivers find freedom of operation.
2. LOS-“B” (Stable Flow) means good progression with slight delays. Short cycle-lengths typical. Relatively more vehicles stop than under LOS-“A”. Vehicle platoons are formed. Drivers begin to feel somewhat restricted within groups of vehicles.
3. LOS-“C” (Stable Flow) means relatively higher delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear. The number of vehicles stopping is significant, although many still pass through without stopping. Most drivers feel somewhat restricted.
4. LOS-“D” (Approaching Unstable Flow) means somewhat congested conditions. Longer but tolerable delays may result from unfavorable progression, long cycle lengths, and/or high volume-to-capacity ratios. Many vehicles are stopped. Individual cycle failures may be noticeable. Drivers feel restricted during short periods due to temporary back-ups.
5. LOS-“E” (Unstable Flow) means Congested conditions. Significant delays result from poor progression, long cycle lengths, and high volume-to-capacity ratios. Individual cycle failures occur frequently. There are typically long queues of vehicles waiting upstream of the intersection. Driver maneuverability is very restricted.
6. LOS-“F” (Forced Flow) means jammed or grid-lock type operating conditions. Generally considered to be unacceptable for most drivers. Zero or very poor progression, with over-saturation or high volume-to-capacity ratios. Several individual cycle failures occur. Queue spillovers from other locations restrict or prevent movement.

A LOS of “A” refers to a roadway with little or no congestion, LOS “B” refers to very good operation with some traffic congestion. LOS “C” refers to good operating roadways with light congestions and minor delays. LOS “D” refers to a fair operating condition, with congestion and delay at intersection approaches. LOS “E” refers to poor operating conditions with severe congestion and delay and LOS “F” refers to a roadway that has jammed or severe stop-and-go traffic conditions.

The principal east-west arterial roadway serving Bradbury is Huntington Drive. Huntington Drive is an improved four-lane arterial highway with raised, landscaped medians and separate left-turn lanes. The City of Duarte, Circulation Element (November 2007) listed the Huntington Drive roadway as being constructed to a capacity of 32,000 average daily trips (ADT). In November 2005, Huntington Drive was operating at a capacity of between 23,000 and 28,000 ADT's. The roadway was operating at a LOS “C” (from Buena Vista east to Highland) and LOS “D/E” along the remaining portions of the highway within the City of Duarte. Due to projected growth, the City of Duarte has estimated that the conditions for Huntington Drive will continue to worsen. It is anticipated that the

Level of Service will be reduced to a LOS "D" from Buena Vista to Highland and a LOS "E/F" for the remaining portions of the roadway.

Royal Oaks Drive, located in the City of Duarte, borders the City's southern boundary and provides east-west access for community residents as well as those just passing through the City of Duarte. Royal Oaks Drive is a two lane local street with parking on both sides of the street in many residential areas. It connects with Mount Olive Drive on the east and Mountain Avenue on the west. The City of Duarte has determined that it has a capacity of 16,000 ADTs. The roadway operates at a LOS of "A/B" with ADT volumes ranging from 7,610 to 10,650.

Mount Olive Drive provides north-south access to the City of Bradbury. Mount Olive Drive north of Royal Oaks Drive is a long cul-de-sac street that provides the single point of access for many Bradbury residents and residents living in the Duarte Mesa. Mount Olive Drive terminates at the 200 unit Duarte Mesa neighborhood.

**Railroad Transportation Systems:** Several railroad lines operate within the San Gabriel Valley, ranging from light rail to freight rail.

The Metrolink commuter rail system is jointly operated by several regional transit agencies across four counties and services both the northern and southern valley regions through two lines that connect in downtown Los Angeles to the west and the Inland Empire to the east. Amtrak operates interregional trains throughout Southern California, with a single station in the southern valley located in the City of Pomona. For the City of Bradbury, the connecting link to this system is the Metro Gold Line.

**Metro Gold Line:** Los Angeles Metropolitan Transit Authority (Metro) operates the Gold Line light rail train connecting the northwestern San Gabriel Valley to Downtown Los Angeles. In the vicinity of Bradbury the track runs in the median of the I-210 freeway. The eastern terminus of the line is in the City of Pasadena at Madre Street and the I-210. There is a large parking structure there for commuters from the foothill communities, like Bradbury to use to ride the train into Downtown Los Angeles. The nearest station is currently the Sierra Madre Villa Station in Pasadena, but Metro is currently constructing an extension to the line into the City of Azusa, with the ultimate goal of extending it even further to the eastern edge of the San Gabriel Valley. The light rail is a vital transit link to the region and for the residents of Bradbury, providing access to downtown Los Angeles and to other forms of transportation.

**Air Transportation:** There are no international or domestic airline service airports in the San Gabriel Valley, although there are several general-aviation airports, including Brackett Field in La Verne (east) and El Monte Airport in El Monte (south). There are however, several major airports near the San Gabriel Valley which are easily accessible to Bradbury residents. Los Angeles International Airport is located 39 miles southwest of the City and is accessible via-freeway and transit. Ontario International Airport is located 28 miles east of the City and is easily accessible by the I-210 and I-10 freeways. Burbank (Bob Hope) Airport is located 25 miles west of the City and is easily accessible via the I-210 and I-5 freeways.

**Mass Transit Bus Systems:** There are no operating transit routes within the City of Bradbury. The closest lines are located in the City of Duarte along Huntington Drive and include Foothill Transit line 187 and Metro.

Foothill Transit operates the following routes through the City of Duarte:

Route No. 494 - Is a commuter route, traveling west to the El Monte Station where passengers transfer to an express bus serving downtown Los Angeles via the I-10 freeway. To the east, the route terminates at the San Dimas Park & Ride. This route operates on weekdays only.

Route No. 187 - This is a local bus route operating seven days a week. The schedule changes on the weekend. This route will take you west to Pasadena and east to the Montclair Transportation Center. The frequency of scheduled times during peak times is at intervals of 15 minutes.

Route No. 272 - This is a local bus route operating seven days a week. The schedule changes on the weekends. This route originates in Duarte and travels southeast to The Plaza at West Covina via the Baldwin Park Metrolink.

Schedules and information for these routes can be obtained from [www.FoothillTransit.org](http://www.FoothillTransit.org).

Metro operates one route in Duarte. It originates at the City of Hope in Duarte. Information for this route can be obtained by calling the Metro at 1-800-266-6883 or by visiting their website at [www.metro.net](http://www.metro.net)

Route No. 264 - This is a local route traveling west to Altadena via Santa Anita Fashion Park, and the Sierra Madre Gold Line station. This route operates seven days a week. Schedule changes on weekends.

The City also has access to the City of Duarte's fixed route system  
[http://www.accessduarte.com/images/stories/City\\_departments/Administrative\\_services/transit/transitmap2004.pdf](http://www.accessduarte.com/images/stories/City_departments/Administrative_services/transit/transitmap2004.pdf)

**Para-Transit:** Monrovia Transit (Dial-a-Ride). The City contracts with the City of Monrovia to provide a full demand-responsive transportation service. Dial-a-Ride provides curb-to-curb transit service to the general public within the service area. The service area includes: City of Monrovia, City of Bradbury, L.A. County unincorporated areas located south of Monrovia, Target (transfer point to Duarte Transit) and Walmart in Duarte, Medical locations within a three (3) mile radius of Monrovia's City limits, Methodist Hospital in Arcadia; medical offices on Duarte Road in Arcadia; medical offices located in Duarte; and the City of Hope in the City of Duarte.

## **Local Setting**

The City of Bradbury is comprised entirely of single-family residential detached dwelling units. There are no retail commercial, industrial or multi-family uses of land within the City.

The community is comprised of lots that range in size from the traditional 7,500 square foot rectilinear track configuration to large estate uniquely shaped parcels of land containing two to seventy acres. The smaller lots including some 2-acre parcels have direct access to the public street system. The 5-acre estate parcels and numerous 2-acre sized parcels are located within gate guarded neighborhoods. These gate guarded neighborhoods have privately owned and maintained streets.

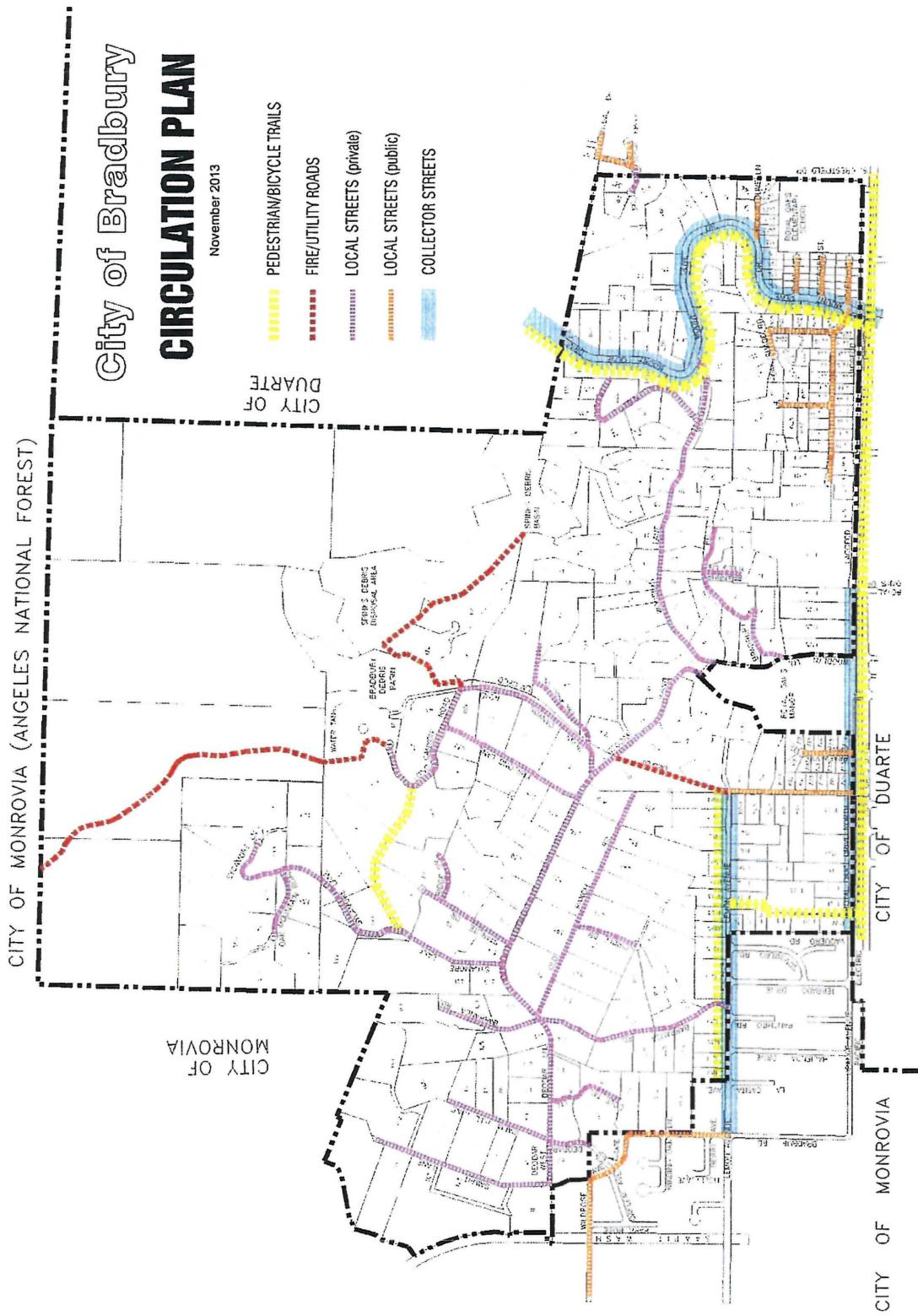
There are no signalized intersections within the City. There are no arterial highways within the City. All of the public and private streets are designated as local or local-collector streets. Lemon

Avenue, Royal Oaks Drive North and Mount Olive Drive collect all of the local traffic and direct it to the arterial highways located in adjacent cities.

Bradbury is nearly “Built Out” therefore; a substantial increase in traffic generated within the community is not expected. In 2010, the average vehicle miles traveled (VMT) was 4,191 miles per year per service population. In comparison with similar sized cities such as La Canada Flintridge, South Pasadena, Claremont, Glendora, and El Monte, Bradbury ranked fifth.

The 2010 Census concluded that the City of Bradbury contained 400 dwelling units. Using an industry accepted planning standard of ten (10) vehicle trips per day per household the City’s consulting traffic engineer estimated that 4,000 daily vehicle trips are generated for the entire community. The traffic generating capacity of the City is easily and adequately handled by the local public and private streets. The impact created by the City of Bradbury to the surrounding arterial highway system is negligible. It is, however, noted that during the morning and evening peak traffic hours the signalized intersections along Huntington Drive operate at a somewhat uncomfortable level. Traffic accidents on the I-210 Freeway often result in the diversion of traffic to Huntington Drive which further impacts the smooth flow of traffic along this and other major highways.

Recently the Bradbury City Council responded to residents’ concerns regarding speeding on the steep Mount Olive Drive public street. Traffic calming improvements have been made to discourage speeding. A pedestrian/equestrian trail was constructed on the west side of the street to separate pedestrians from vehicular traffic. The capacity of the roadway has not been reduced and it adequately accommodates the existing and projected traffic volume.



**Exhibit C-T No. 2**  
**CIRCULATION PLAN**

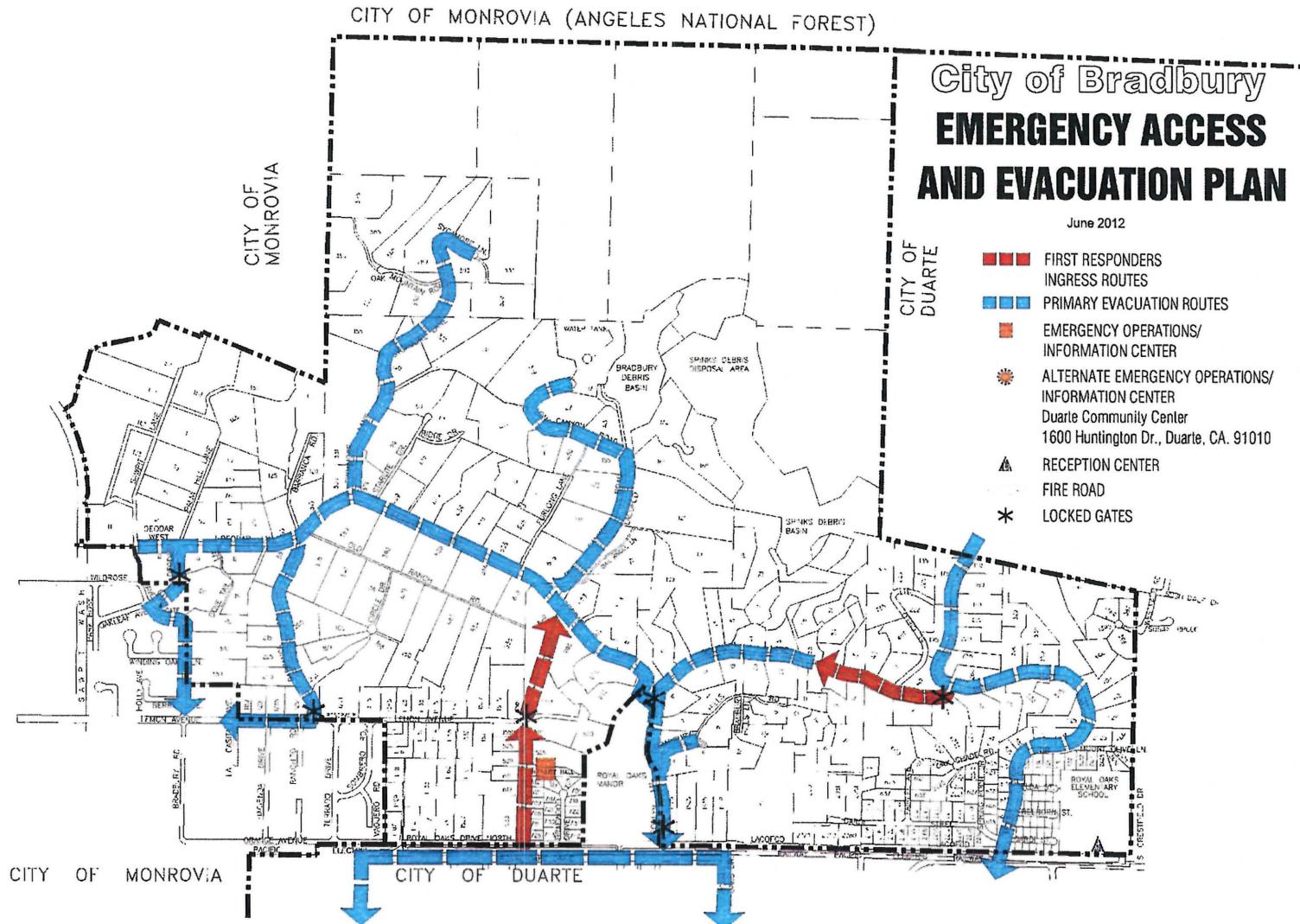
**Emergency Access and Evacuation Plan.** In accordance with the Disaster Mitigation Act of 2002, which requires each city to prepare a Natural Disaster Plan, the City of Bradbury adopted a Natural Hazard Mitigation Plan on October 19, 2004. The Hazard Mitigation Plan addresses such hazards as earthquakes, earth movements, flooding, wildfires and windstorms and multi-hazards, (a combination of more than one hazard occurring at the same time). The plan is evaluated annually to determine the effectiveness of its programs and to reflect changes in land development or programs.

An important element of the Hazard Mitigation Plan is the Evacuation Plan. In the event of a catastrophic event it is extremely important to evacuate the residents, their belongings and their animals. Equally important is providing access to the hillside neighbors for emergency "First Responders". Police, Fire and Medical personnel and their equipment must have access to minimally accessible hillside areas of the community. The following Emergency Access Plan has been reviewed and approved by emergency personnel. Residents are advised of the plan and they are encouraged to participate in making the roadways passable during an emergency.

## City of Bradbury EMERGENCY ACCESS AND EVACUATION PLAN

June 2012

- FIRST RESPONDERS INGRESS ROUTES
- PRIMARY EVACUATION ROUTES
- EMERGENCY OPERATIONS/ INFORMATION CENTER
- ALTERNATE EMERGENCY OPERATIONS/ INFORMATION CENTER  
Duarte Community Center  
1600 Huntington Dr, Duarte, CA. 91010
- ▲ RECEPTION CENTER
- FIRE ROAD
- \* LOCKED GATES



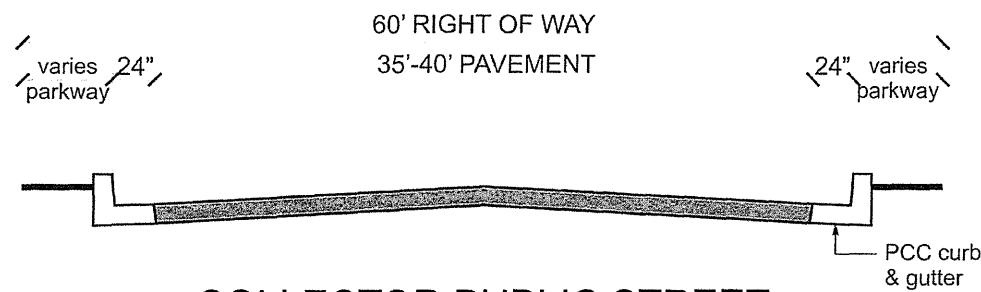
### Exhibit C-T No. 3 EMERGENCY ACCES AND EVACUATION PLAN:

Circulation-Transportation - Page No. 9

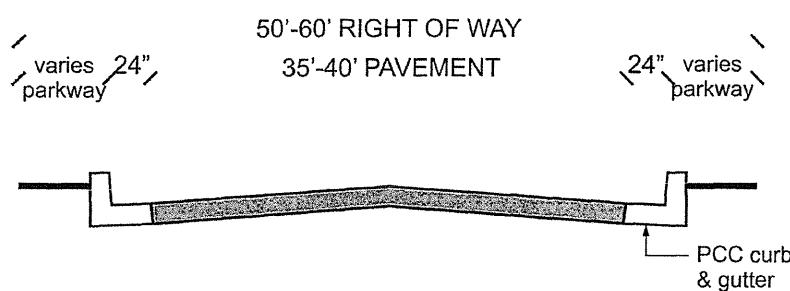
**Roadway Standards.** The roadway classification system describes the standards for the design of each classified roadway. All streets within the City are to be designed and constructed to meet the adopted specifications. The only exception is unimproved fire lanes and utility roads. The City does not regulate the design and construction of these types of roads.

The Bradbury Estates Community Services District (CSD) is responsible for the design, approval and maintenance of the private streets located within its jurisdictional boundary. The City may provide review and suggestions regarding the construction of new private streets within the Estates upon request.

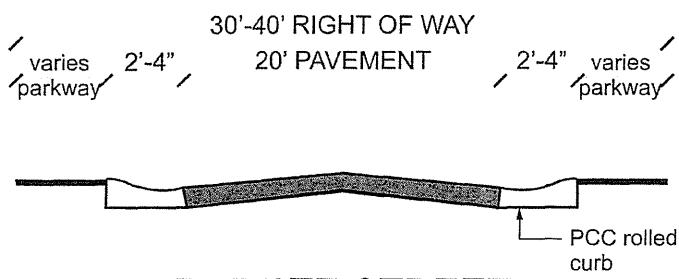
1. **Collector Streets:** A collector street is intended to facilitate traffic moving between arterial and local streets, generally providing direct access to properties. Collector Streets have a typical pavement width of 35 to 40 feet and contain two travel lanes (one in each direction). On-street parking is often permitted depending on the width of the roadway. Roadways classified as collector streets include: Mount Olive Drive, Royal Oaks Drive North, and Lemon Avenue.
2. **Local Streets (Public):** Local public streets provide direct access to individual properties and they are designed to discourage through-traffic. Local Streets have a typical pavement width of 35 to 40 feet and contain two travel lanes. On-street parking is generally permitted. Roadways classified as local streets include: Mount Olive Lane, Elda Street, Freeborn Street, Oak Shade Road, Spring Point Drive, Gardi Street, Fairlee Avenue, Woodlyn Lane (the eastern portion only), Braewood Drive and Winston Avenue.
3. **Local Streets (Private):** Local streets (private) provide direct access to individual properties located within gate guarded neighborhoods. They are most often cul-de-sac streets and lanes. These private roadways are maintained either by a homeowners association or a community services district. The width of these roadways varies from 15 to 26 feet. On-street parking is generally prohibited. Streets included in this category are: Woodlyn Lane, Bradbury Hills Road, Bradbury Hills Lane, El Cielo Lane, Deodar Lane, Deodar Lane West, Sawpit Lane, Palm Hill Lane, Dove Tail Lane, Barranca Road, Sycamore Lane Oak Mountain Road, Starlite Drive, Ridge Drive, Circle Drive, Old Ranch Road, Bliss Canyon Road Oak Knoll Lane and Long Canyon Road
4. **Fire Roads and Utility Lanes:** Fire Roads and Utility Lanes are unimproved, non-paved roadways that vary in width. Public access is discouraged. Roadways included in this category include the Spanish Canyon Fire Road and the Flood Control Access Lane between the Bradbury Debris Basin and the Spinks Canyon Debris Basin.



**COLLECTOR PUBLIC STREET**



**LOCAL PUBLIC STREET**



**PRIVATE STREET**

**Exhibit C-T No. 4**  
**ROADWAY CONCEPT PLANS**

**Street Lights:** The City of Bradbury has a “Dark Sky” policy. Street lights are not required on private streets and roads. The City maintains street lights only on the public streets. The public street system was designed and constructed without sidewalks. Certain recent improvements have been made along the local collector streets in order to separate pedestrians from the lanes devoted to motorized vehicles.

**Public Utilities:** Typical urban/suburban energy sources such as natural gas and electricity are produced or generated well beyond the City limits of Bradbury.

- **Southern California Edison Company** generates electricity in facilities located more than twenty-five miles from the City. Electricity is transmitted to the City and distributed to the single-family dwellings using a network of overhead utility poles and wires. Electricity use in Bradbury has been reported to be 17,652 kWh per residence per year. The Air Quality Control Management District (AQMD) estimates that the average household in Southern California uses 7,300 kWh per year (20 kWh a day per household).
- **Southern California Gas Company;** provides natural gas to the community. Natural gas is imported and distributed via underground pipes.
- **Verizon Telephone Company;** provides landline telephonic communications to the community. The telephone communication system is a network of overhead poles and wires.
- **Time Warner Communications;** provides a landline system that offers direct hard-wire connection for television services. Residents have the option of contracting with companies who provide wireless satellite television service.
- **California American Water Company;** provides domestic potable water service to the community. The network of underground water mainlines also services the fire hydrants located throughout the community. A system of reclaimed water is being expanded each year as part of the water company’s public works program. The water company is aware of the importance of improving the availability of adequate fire flow. A collaborative effort between the City and the water company has resulted in various upgrades of the water system.
- **Los Angeles County Sewer Maintenance District;** is responsible for maintaining the public sewer system within the City. Many of the dwelling units utilize private septic systems. However, as development proposals are submitted to the City the possibility of expanding the public sewer system is explored. The intent is to connect as many dwelling units as possible to the public sewer system.
- **Los Angeles County Flood Control District;** is responsible for maintaining the public storm drain system. Concrete lined channels and large underground storm-drain pipes provide the backbone flood control network. Large agriculture parcels are required to retain surface run-off on-site. The existing storm drain system collects run-off from streets and small parcels of land.

## Overview

As indicated in the Land Use Element, the City of Bradbury is almost entirely residential with the exception of the City Civic Center and Royal Oaks Elementary school. Traffic movement throughout the community flows easily and it is directed to arterial highways and freeways located in adjacent communities.

The single source of traffic congestion occurs at the Royal Oaks Elementary School during peak hours and the congestion is exacerbated during periods of inclement weather. A variety of pedestrian/equestrian trails are located through the community.

A well used pedestrian trail is located in the City of Duarte adjacent to Bradbury's southern boundary. Residents have easy access to this trail through a trail system in Bradbury.

The Bradbury City Council has demonstrated a commitment to providing improved roadway and trail facilities that are accessible to all residents.

## **Key Goals, Objectives, Policies and Action Programs**

The Circulation-Transportation Element indicates the general location and extent of the existing roadways and establishes standards for these roadways. The City has established the following goals and policies for circulation and transportation in the City of Bradbury. The implementation measures are contained at the end of the Chapter.

### **Circulation-Transportation Goals**

#### **Circulation-Transportation Goal 1:**

The Circulation-Transportation Element seeks to maintain safe and efficient circulation systems that do not impact the rural residential character of the City.

#### **Circulation-Transportation Goal 2:**

Maintain transit programs that do not exceed the City's annual transit funding allocation or budget.

#### **Circulation-Transportation Goal 3:**

Inform residents of all available transit programs.

#### **Circulation-Transportation Goal 4:**

Support regional rail services such as the METRO Gold Line light rail system.

#### **Circulation-Transportation Goal 5:**

Promote traffic safety throughout the community

#### **Circulation-Transportation Goal 6:**

Promote a "Dark Sky" development concept for all circulation systems that is consistent with the City's rural character.

### **Circulation-Transportation Objectives**

**Circulation-Transportation Objective 1:** To accommodate existing traffic patterns and plan for future demand.

**Circulation-Transportation Objective 2:** Strive for the creation of new transportation facilities for motorists, equestrians, pedestrians, and bicyclists. Emphasize design standards that result in the construction of circulation and transportation systems that are safe and efficient;

and sensitive to the needs of the disabled and City's unique rural residential character.

### Circulation-Transportation Policies

**Circulation-Transportation Policy 1:**

All public roadways and roadway improvements will be constructed to the City of Bradbury local street standards so as to preserve the rural residential character of the City.

**Circulation-Transportation Policy 2:**

Continue inter-jurisdictional relationships with neighboring cities to coordinate the design and implementation of transportation systems.

**Circulation-Transportation Policy 3:**

Explore all available funding sources and opportunities for improving transportation programs and facilities.

**Circulation-Transportation Policy 4:**

Develop a public information/marketing campaign to advertise the availability of transit services to City residents.

**Circulation-Transportation Policy 5:**

Continue to support and work with regional agencies to support the expansion of the Gold Line and other transportation programs and services for the San Gabriel Valley.

**Circulation-Transportation Policy 6:**

Promote enforcement of speed laws and continue to monitor the use of City streets.

### Circulation-Transportation Implementation Action Programs

The City of Bradbury intends to complete the following items, which address the objectives and policies of the Circulation-Transportation Element of the General Plan.

**Circulation-Transportation Action 1:**

**Safety:** Continue to evaluate traffic calming measures such as speed bumps, bulb-outs, stop signs and other improvements that effectively reduce speed.

**Circulation-Transportation Action 2:**

**Light-Rail:** Promote improvements that expand access to the Gold Line light-rail and other regional transportation systems for community residents. Examine the feasibility of creating a park-and-ride lot at the Civic Center for use by City residents.

**Circulation-Transportation Action 3:**

**Public Information:** Develop a marketing program to provide information to residents on the various available transportation services including Dial-A-Ride, Foothill Transit, and the Gold Line. Post this information on the City website.

- 
- Circulation-Transportation Action 4:** **Para-Transit System:** Maintain a Dial-a-Ride program that does not exceed the City's annual transit funding allocation or budget.
- Circulation-Transportation Action 5:** **Roadway Coordination -** Support roadway improvements to intersections of all streets with the surrounding arterial highway network. Coordinate street improvements with the adjacent cities that may result in the improvement of Level-of-Service (LOS) at all street intersections.
- Circulation-Transportation Action 6:** **Roadway Improvements** – Continue to work with the City of Duarte and the Duarte Unified School District to identify improvements that will reduce traffic congestion and improve pedestrian access to Royal Oaks Elementary School during hours of operation.
- Circulation-Transportation Action 7:** **Complete Streets Network** – Continue to examine the existing circulation system in order to identify improvements that will lead to improved compliance with the “Complete Streets Network” as envisioned by AB 1358.

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# **General Plan 2012-2030 Update**

## **Housing Element**

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The City of Bradbury prepared a General Plan Housing Element 2008 and the City Council adopted the Element October 20, 2009 (Resolution No. 09-35.CC). The State of California Department of Housing and Community Development (HCD) certified the Housing Element as meeting the provisions of the State Planning Law.

Because the cycle for preparation and updating the Housing Element differs from the cycle associated with the review and modification of the remaining mandated elements of the City's General Plan, the Housing Element has been prepared as a separate document and it is not part of this General Plan 2012–2030 Update.

In order to obtain a copy of the City of Bradbury Housing Element please contact the City at 600 Winston Avenue, Bradbury, CA 91008, (626) 358-3218.

# **General Plan 2012-2030 Update**

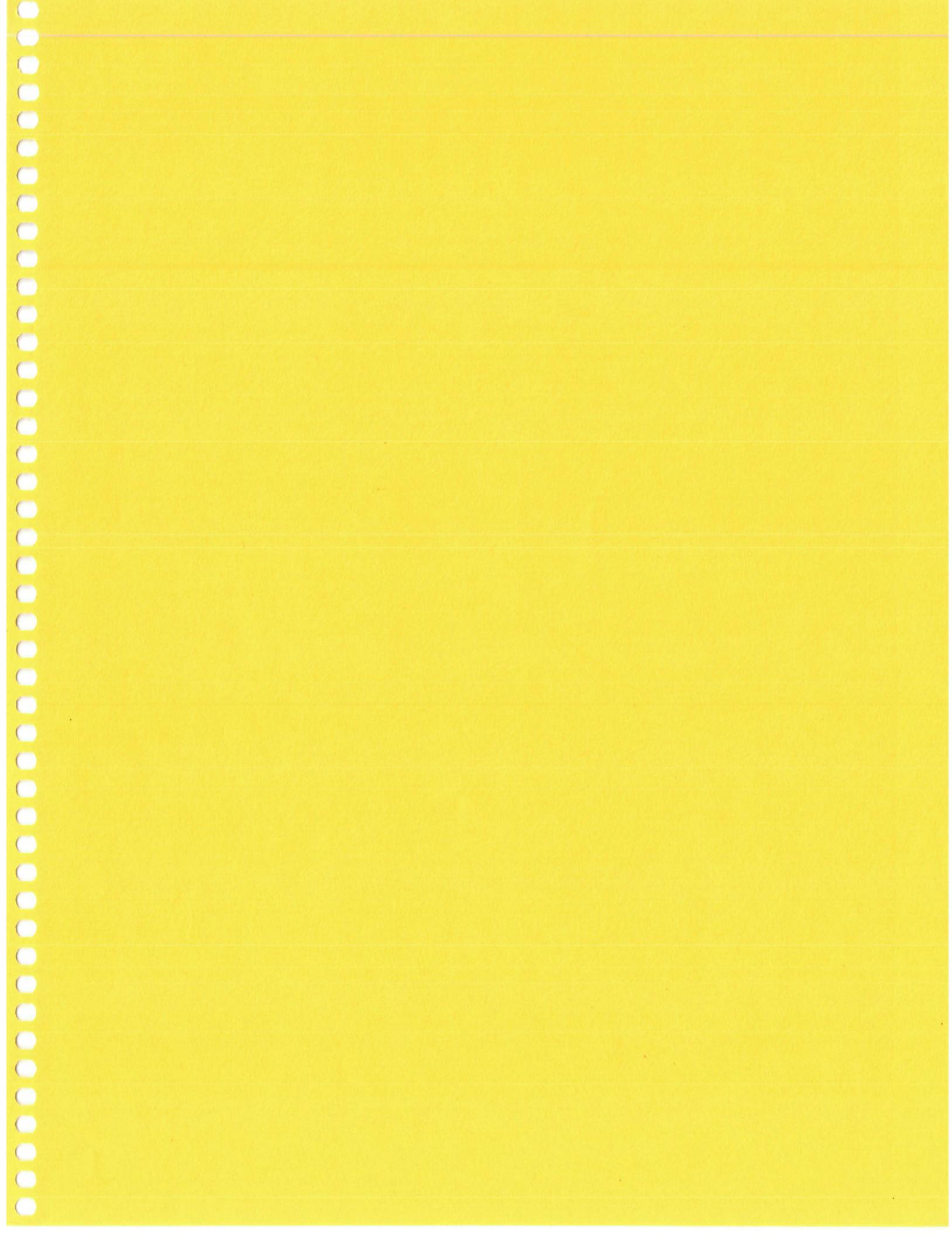
## **Community Resources Element**

(Open-Space and Conservation Elements)

### **Table of Contents**

#### **Community Resources Element (Open Space and Conservation Elements Combined)**

<b>Topic</b>	<b>Pg. No.</b>
<b><u>Open Space Chapter</u></b>	
Purpose	1
Open Space Element Objective	1
Relationship to Other General Plan Elements	2
Overview of Open Space Issues	2
Open-Space for the Preservation of Natural Resources	2
Agricultural Areas	2
Sensitive Hillside Areas	3
Historic Preservation	3
Historically Significant Buildings and Structures	4
Existing Recreational Resources	6
Pedestrian/Equestrian and Bicycle Trails	6
Open-Space for Managed Protection of Resources	6
Open Space Plan	7
Key Open Space Goals, Objectives, Policies and Action Programs	9
<b><u>Conservation Chapter</u></b>	
Purpose	11
Conservation Element Objective	11
Relationship to Other General Plan Elements	11
Overview of Conservation Issues	11
Soil Resources	11
Vista-Amargosa Association	12
Ramona-Placentia Association	12
Hanford Association	13
Wildlife and Biological Resources	13
Coastal Scrub	13
Chaparral	13
Oak Woodland	13
Riparian Woodland	13
Wildlife	13
Sensitive Biological Resources	14
Rivers, Creeks, Streams and Reservoirs	15
Resource Management Areas	15
Mineral Resources	19



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<b>Topic</b>	<b>Pg. No.</b>
Air Quality	20
Setting	20
Emissions of Concern	21
Regional Air Quality Management Plan	23
Visual Resources	23
Energy Resources	23
Cultural and Historical Natural Resources	24
Water Resources	25
Native American Indians	26
Waste Management	27
Recycling (AB 939 and AB 1016)	28
Household Hazardous Waste	28
National Pollutant Discharge Elimination System (NPDES)	29
Impact of Development on Natural Resources	30
Sewer System	30
Water Supply	30
Regulation of Development near Stream Channels	30
Flood Management	30
Urban and Built-Up Land	31
Energy Conservation	31
Key Conservation Goals, Objectives, Policies and Action Programs	32

## **Tables**

Table CR Conservation -No.1 (Water Reservoirs and Capacity)	25
---	----

## **Exhibits**

Exhibit CR Open-Space No. 1 (Sites of Local Historical Significance)	5
Exhibit CR Open-Space No. 2 (Open-Space Areas)	8
Exhibit CR Conservation No. 1 (Resource Management Areas)	16
Exhibit CR Conservation No. 2 (Environmental Resources)	17
Exhibit CR Conservation No. 2-A (Environmental Resources Photograph)	18
Exhibit CR Conservation No. 3 (Mineral Resource Zones)	19
Exhibit CR Conservation No. 4. (Air Quality Management District's)	22
Exhibit CR Conservation No. 5 (Historic Tribal Lands)	27

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# **General Plan 2012-2030 Update**

## **Community Resources Element**

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The City of Bradbury Community Resources Element consists of the combination of the State required Open Space Element and Conservation Element. The required General Plan Elements have been combined because they are closely related and for clarity and to eliminate redundancy.

### **Open Space Chapter**

#### **Purpose**

The Open Space Chapter of the Community Resources Element fulfills the requirements of Section 65560 to 65570 of the California Government Code regarding the preparation of a general plan open space element for the City.

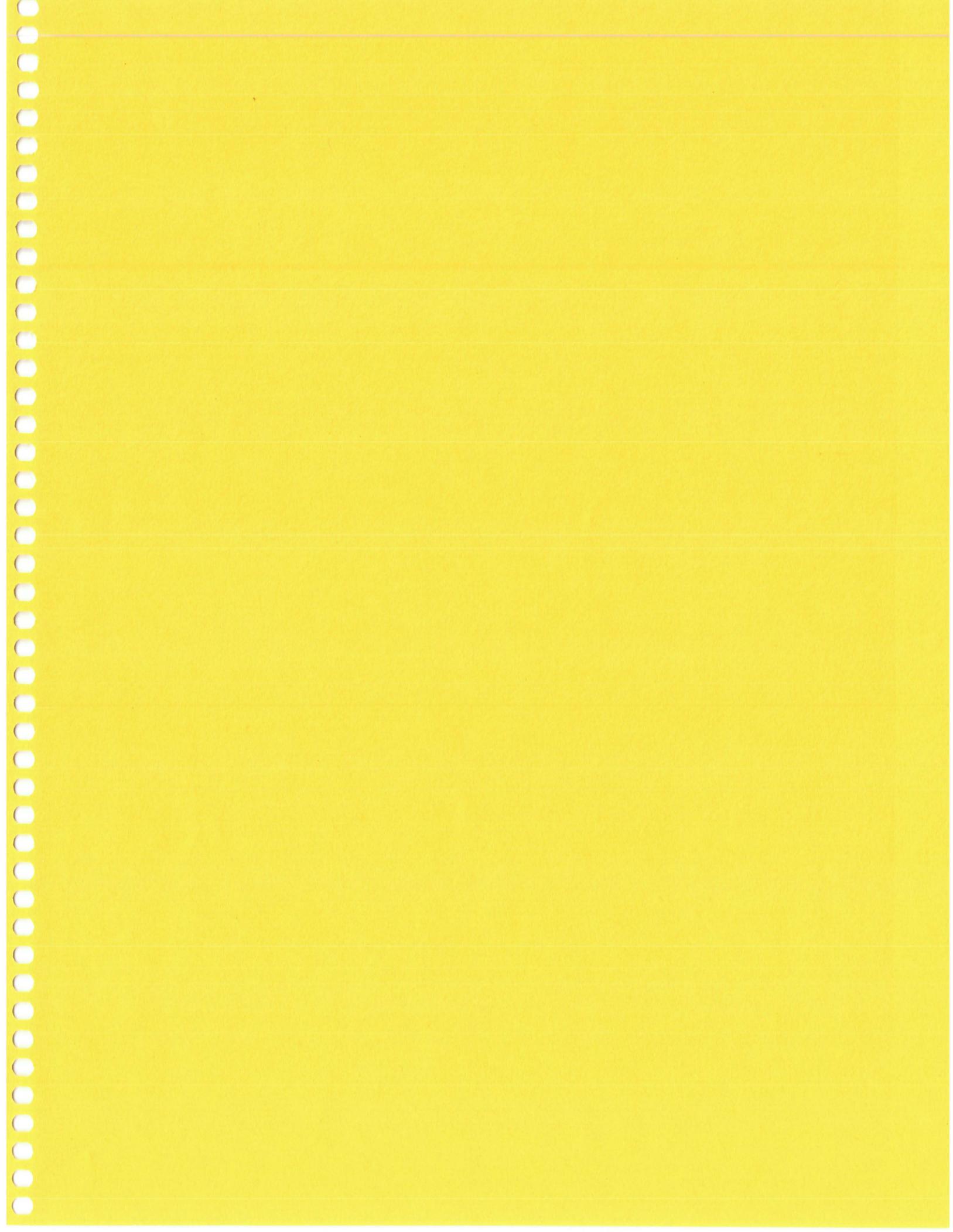
Open space, for purposes of this Chapter, is defined by Section 65560(b) of the Government Code and it refers to land or water which is essentially unimproved and devoted to the preservation of natural resources for outdoor enjoyment and recreation; it is recognized that the land designated as "Open Space, Privately Owned Undeveloped" has potential for development and this Chapter is in no way meant to be interpreted as a prohibition against development in accordance with the existing zoning regulations for such property. The 4.06-acre privately owned parcel located near Sharon Hill Lane has been dedicated as permanent open-space however it is not accessible or available for public use. This 4.06-acre permanent natural open space is maintained and enjoyed by the four dwelling units which were part of the land division.

As further described by Section 65560 of the Government Code open space includes habitat for wildlife; streams and other bodies of water; land used for agricultural purposes; groundwater recharge areas; areas with mineral deposits; hiking and equestrian trails; public and privately owned parks and outdoor recreation areas; utility easements; and scenic highway corridors. Open space lands may also include areas requiring the regulation of hazardous conditions such as earthquake fault zones, unstable soils, flood plains, and watersheds

The Bradbury General Plan Open Space Element establishes long-range goals and objectives for the preservation and maintenance of open space areas.

#### **Open Space Element Objective**

The preservation of open space is essential to the community. The low density agricultural/residential character of the City does not provide the economic resources needed to acquire and maintain an elaborate system of public parks and recreation areas. The City does not contain any commercial or industrially zoned or developed property that would generate



revenue to acquire and maintain such public facilities. The exclusive single-family residential zoning only permits detached dwelling units, many of which are located on large agriculturally zoned parcels of land.

The hillside topography limits development opportunities. The City's zoning regulates lot coverage based on the average slope of the parcel under consideration. The steeper the slope the more area must remain in its natural condition. Allowable grading and lot coverage is significantly reduced on the steeper hillside lots. Open Space is considered a premium asset in the community. City development standards and regulations are based on the objective of creating the maximum feasible amount of natural open space. Community residents have often expressed their desire to retain the rural character of the community and to maximize the existing open space resources.

## **Relationship to other General Plan Elements**

The Open Space Element responds to detailed State statutory requirements and it has a broad scope. Open Space issues overlap those of several general plan elements. This element is commonly combined with other elements such as the Land Use Element, the Conservation Element and the Safety Element. Goals, objectives and policies contained in the Open Space Chapter of the Community Resources Element are consistent with those set forth in the aforementioned elements of this General Plan.

## **Overview of Open Space Issues**

***Open Space for the Preservation of Natural Resources.*** The City of Bradbury is located in the foothills of the San Gabriel Mountains. This 1.9 square mile (1,216-acres) community is developed exclusively with single-family detached residential dwellings. The majority of this hillside community is zoned and subdivided into 1, 2 and 5-acre parcels. These large parcels are zoned for agricultural/residential purposes. In the 1950's and 60's the City contained numerous ranches and commercial citrus orchards. Old farms and orchards have been sold and the new owners have constructed large personal estate type dwellings. Commercial farming and ranching has declined, although many residents use the large agriculturally zone parcels to house their personal livestock which consists primarily of horses.

***Agricultural Areas.*** The early residents of Bradbury discovered that the unique characteristics of the soil, water, subtropical climate, and protection provided by the San Gabriel Mountains created an ideal setting for agriculture. The San Gabriel River provided excellent quality and inexpensive water for crop production. These residents planted citrus and avocados that rapidly gave claim to some of the best crops worldwide. Important varieties included Meyer lemon, Fuertes and Bacon avocados, and Improved Washington Navel oranges, as well as ornamental plant production of hibiscus, cycads (*Cycadaceae*) and deodar (*Cedrus deodara*).

Over the past few decades the development trend in the City has included the removal of citrus and avocado orchards. Large estate type dwellings and accessory structures have replaced the once quaint ranch houses. A few small farms and ranches remain. The water purveyor has made recent changes to abandon the agricultural water irrigation system that once served the community. The cost of water once used to irrigate orchards has rapidly increased and has put many of the existing farm operations in jeopardy. The success of agriculture is dependent on large lots served by affordable irrigation water. During times of drought when water is scarce,

limitations are frequently placed on agricultural irrigation, which leads to the decay and removal of groves and a severe reduction of production.

The City Council acknowledged the benefit, of protecting the existing groves and orchards as well as significant heritage trees. Chapter 9.06.090 of the Bradbury Development Code "Tree Preservation and Protection" provides regulations governing the removal, replacement, and maintenance of trees. Permits are required to remove prominent, native, and orchard trees.

Estate dwelling units cover between 10 and 20 percent of their individual lot area which range in size from one to ten acres. The resulting natural and ornamental open-space can range between 60,000 and 200,000 square feet depending upon the size of the individual parcel of land. The privately owned open-spaces are developed with personal recreational facilities.

**Sensitive Hillside Areas.** Of special note are the 302-acres of undeveloped property located in the northern portion of the City adjacent to the City of Monrovia and the Angeles National Forest. The 302-acre site is subdivided into eight (8) privately owned undeveloped parcels of land. The area contains steep hillsides, prominent ridgelines, and three seasonal Blueline streams (Bliss Canyon, Bradbury Canyon and Spinks Canyon). Abundant wildlife either reside in this area or transverse the area in search of food and shelter. The City's zoning and development standards recognize the importance of maintaining as much of this area in its natural state as possible. Environmental constraints may be so severe that development of some of this area may not be realistic, but that is a determination to be made based on future study and analysis of an actual development proposal. Because of the steep average slope of the existing hillsides, this area is subject to the Hillside Development Standards set forth in the City's Development Code. The property in question has a general plan land use designation of Open Space, Privately Owned Undeveloped and has been zoned A-5 SP (Agricultural/Residential 5-acre minimum, Specific Plan). Therefore, development of the property is subject to the approval of a specific plan prepared in accordance with State law and local regulations. Moving from south to north the City's topography becomes steeper and the required minimum size of new subdivided parcels becomes larger. The average slope of each parcel governs the amount of natural open-space that must be maintained. As the average slope increases the amount of the parcel that can be graded decreases. The community's desire to maintain open space is served by these hillside development standards.

Many of the developed agricultural/residential parcels are feeding grounds for local deer and black bears. Residents have often observed bears frolicking in their yards, trees and swimming pools. The migratory patterns of these large animals are uninhibited by the type and extent of development that is permitted in the City.

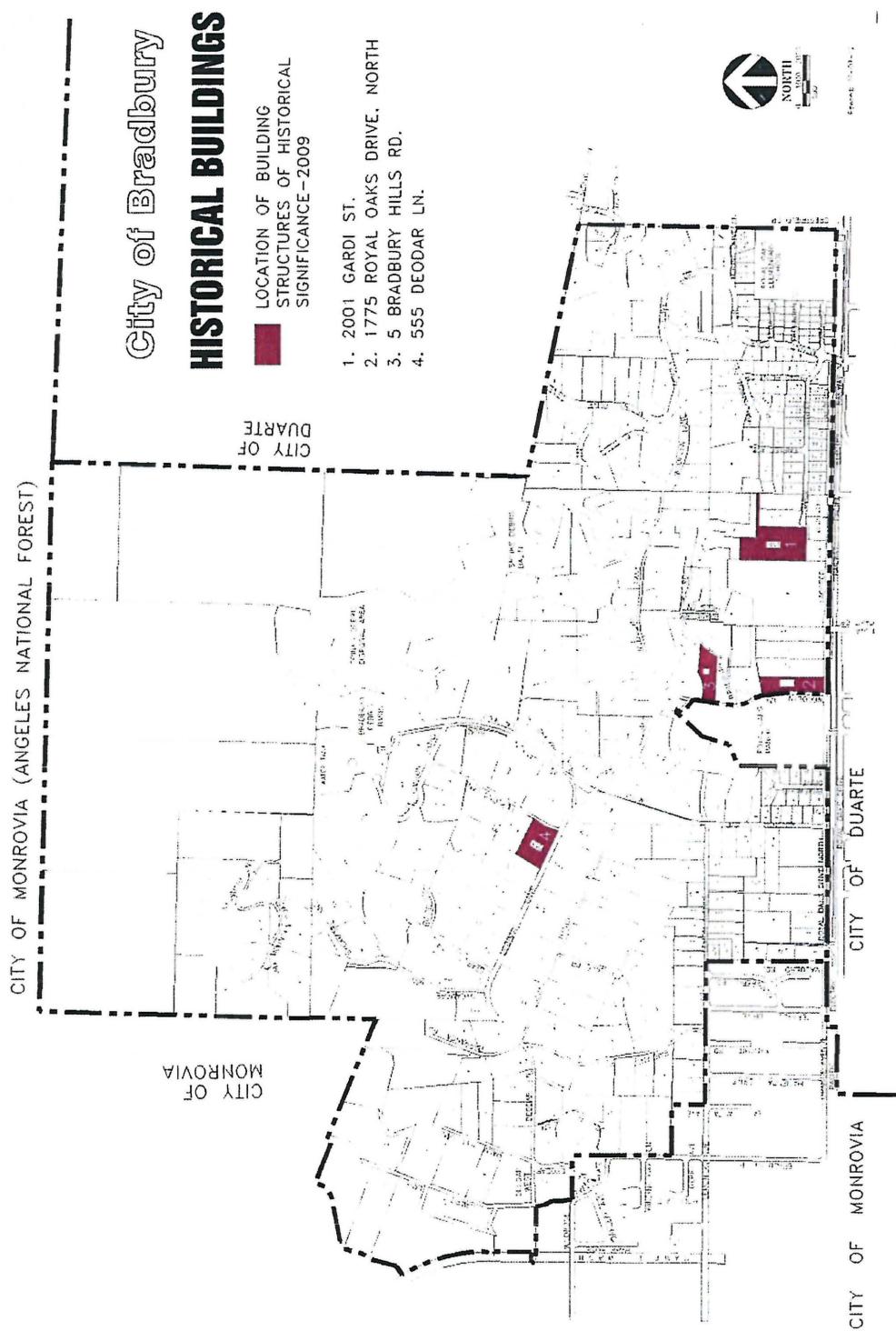
Open-space areas include those areas that are apparently difficult for development due in part to environmental factors that include steep slopes or unstable ground conditions. Other open-space areas remain undeveloped in order to comply with existing land use controls. These include public pedestrian/equestrian trails, building setback areas, utility easements, water reservoirs, drainage debris basins and the school's open-space field.

**Historic Preservation.** Cultural resource management and historic preservation require the cooperation of many government agencies. Bradbury alone, however, has the ability to preserve and enhance many of the City's cultural resources. Furthermore, it is the City's desire to establish facilities and programs which will inspire appreciation for the City's past and that will

encourage participation in a wide range of educational and social activities. Protection of cultural resources is afforded through the California Environmental Quality Act, which requires that a project be considered "significant" in terms of impact if it will disrupt or adversely affect a site of archaeological or historical significance. Protection of these resources during construction activities generally involves the salvage of materials discovered at the site. Future development within the planning area and surrounding region may result in the discovery of new sites. Any proposed project that involves a significant amount of grading should have an archaeological survey conducted prior to construction. In addition, archaeological resources may be discovered in the course of construction and appropriate measures must be taken to ensure that artifacts are recorded and salvaged. The City of Bradbury will seek to avoid damaging archaeological resources whenever feasible.

***Historically Significant Buildings and Structures.*** Places having local historic significance include the following sites: (see Exhibit CR Open-Space No. 1)

- 1775 Royal Oaks Drive, North. This property contains an old stone milk house, and cistern.
- 5 Bradbury Hills Road. This property contains a single-story prairie style home that was designed by the Frank Lloyd Wright studio.
- 555 Deodar Lane. This site contains an old building referred to as the stone carriage house.
- 2001 Gardi Street. This site is the location of an 1890's two-story Queen Ann Farm House.



**Exhibit CR Open-Space No. 1**

## **SITES OF LOCAL HISTORICAL SIGNIFICANCE**

## **Existing Recreational Resources**

Bradbury residents enjoy personally owned private recreational facilities. There is little demand or expressed desire to create public parks or gathering facilities other than pedestrian/equestrian trails. Recent reconstruction of the Bradbury Civic Center created a small 1,200 square foot community center that is available for public and private gatherings. Public pedestrian/equestrian and bicycle trails have recently been constructed to encourage alternative mobility and movement within the City. The Royal Oaks Elementary School offers an open play field for active recreation and organized ball games. The need for public recreation facilities is minimal since there are so many private facilities within Bradbury and an abundance of public active and passive recreation facilities within close proximity to Bradbury.

Additional, public facilities for active recreation such as organized sports (baseball, football, soccer, competitive swimming, golf etc.) are readily available within adjacent communities. Listed below are public parks within the surrounding area:

- Recreation Park, 620 S. Shamrock Avenue, Monrovia
- Duarte Sports Park and Pool, 1401 Central Avenue, Duarte, CA
- Third Street Park, 1634 Third Street, Duarte
- Rancho Duarte Golf Course, 1000 Las Lomas Road Duarte,
- Norm S. Johnson Pool, 405 S. Santa Anita Avenue, Arcadia
- El Monte Aquatic Center, 11001 Mildred Street, El Monte
- Arcadia High School Public Pool, 180 Compass Drive, Arcadia,

The City and County of Los Angeles have numerous parks, theaters, and concert halls within reasonable commuting distance to Bradbury. Passive Recreation, such as hiking, bird watching, rural camping, is available within the Angeles National Forest.

**Pedestrian/Equestrian and Bicycle Trails.** The Royal Oaks Trail, located along the old Pacific Electric Railroad right-of-way provides a connection for bicyclists, hikers, and equestrians to the San Gabriel River Trail. City residents can enjoy the regional San Gabriel River Trail that extends approximately 38 miles from the Ranger Station at the base of the San Gabriel Mountains to the Pacific Ocean at the City of Seal Beach.

The Royal Oaks Drive North/Lemon Avenue trail provides pedestrian and equestrian safe access to the Royal Oaks Drive Trails. The Mount Olive Drive pedestrian/equestrian and bicycle trail also connects with the Royal Oaks Trail. The private gate guarded neighborhood, Bradbury Estates has a street system design to accommodate pedestrian and equestrian use. Access to trails and County maintained fire roads afford the residents the ability to travel into the Angeles National Forest.

**Open Space for Managed Protection of Resources.** The City of Bradbury is located at the foot of the San Gabriel Mountain range most of which is managed by the Angeles National Forest Service. The Angeles National Forest was established by Executive Order in December 1892. It covers over 650,000 acres. The Angeles National Forest manages the watersheds within its boundaries to provide valuable water to southern California and to protect surrounding

communities from catastrophic floods. The Angeles National Park offers hiking, biking, and rural backpacking and camping facilities.

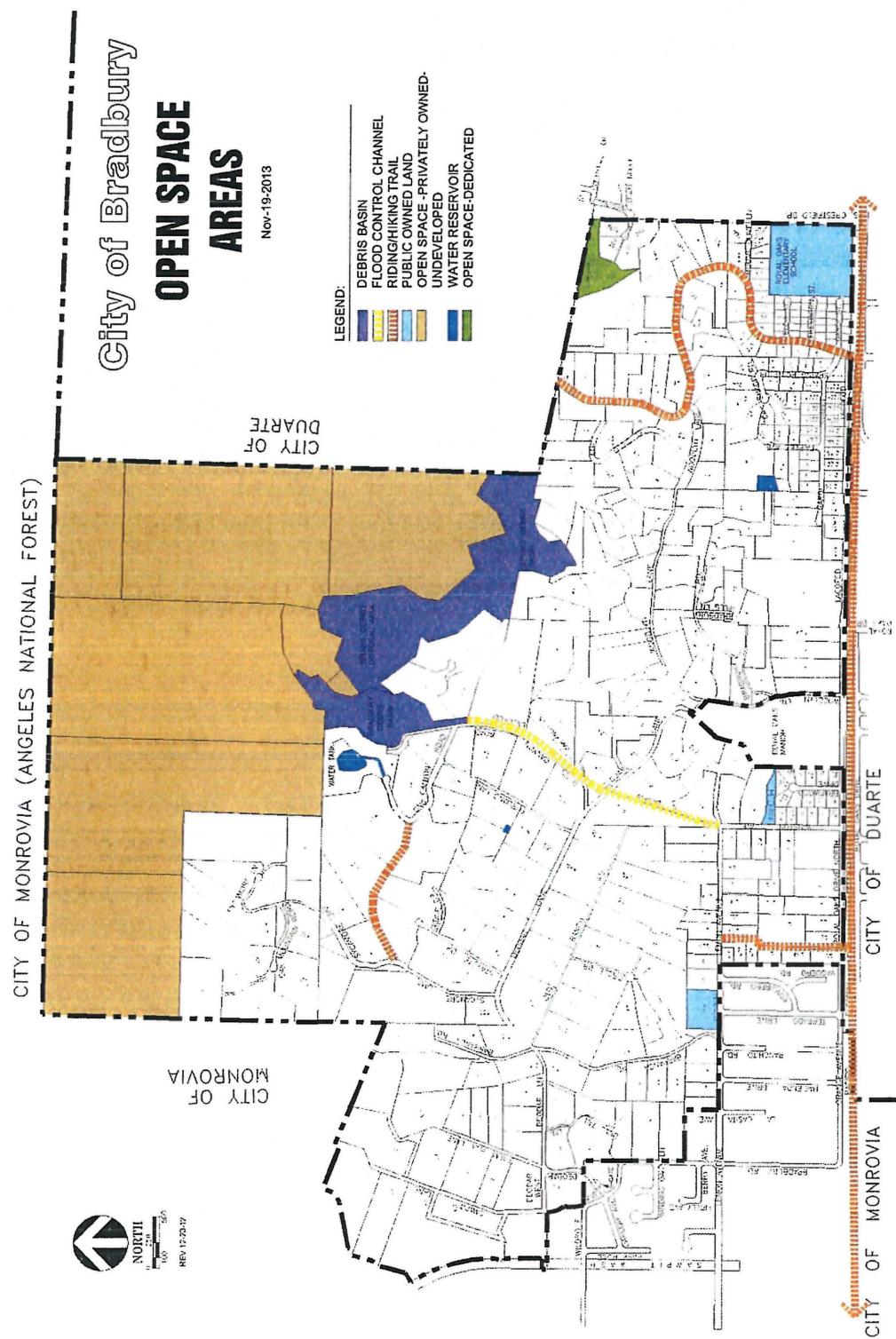
Bradbury's northern boundary is shared with the City of Monrovia, the City of Duarte and the Angeles National Forest. Mountain peaks range from 1,200 feet to 10,064 feet. To the north of Bradbury, Bliss Mountain rises 5,500 feet. Much of the national forest is covered with dense chaparral however, it changes to pine and fir tree covered slopes at the higher elevations.

The San Gabriel Wilderness Area covers over 36,118-acres that have been set aside to preserve the wilderness character of extremely rugged and scenic terrain. Additional open space is located within the Bradbury Debris Basin and the Spinks Debris Basin. The County of Los Angeles prepared a 1604 Streambed Alteration Agreement for the maintenance of debris basins. The County conducted a comprehensive evaluation of the presence or absence of special status or sensitive species and critical habitat. The value of open space land is based on three primary elements: quality, quantity, and connectivity. Open space adjacent to or within National Forests or other protected areas ranked higher than open-space currently used as parkland or golf courses or otherwise hindered in their long-term value for plants and wildlife. Each basin was assessed based on the following three elements: 1) having very high quality (including the type of vegetation and the type of vegetative community); 2) quantity of vegetation; and 3) area size, and connectivity to other open space areas. Areas rated as the most desirable received a high ranking of 3.0 and the least desirable at a ranking of 0.0. Overall, Bradbury Debris Basin was rated at a 2.20 and Spinks Debris Disposal Area at a 2.18.

## **Open Space Plan**

Because the City of Bradbury is virtually built-out the opportunity to acquire and develop public park space is not achievable. Community residents have not expressed interest in the development of public park space. However, the community is supportive of the development and maintenance of pedestrian/equestrian and bicycle trails. The City Council has been committed to researching funding opportunities that can be used to acquire, design and build an improved trail system that will meet community expectations and needs.

Public transit systems are supported and made available to transport residents to parks and recreational facilities located in the surrounding region.



**Exhibit No. CR Open-Space No. 2**

## **OPEN SPACE AREAS**

## **Key Open-Space Goals, Objectives, Policies and Action Programs**

### **Open-Space Goals:**

- Open-Space Goal No. 1:** Protect and enhance Bradbury's Open-Space.
- Open-Space Goal No. 2:** To develop sufficient open-space and park-trail acreage to meet the needs of the community residents.
- Open-Space Goal No. 3:** To provide open-space and recreational opportunities to the greatest extent possible.

### **Open-Space Objectives:**

- Open-Space Objective No. 1.** Make open-space resources available to existing and future residents.
- Open-Space Objective No. 2.** Make open-space resources accessible without the need to use motorized transportation.

### **Open-Space Policies:**

- Open-Space Policy No. 1.** Protect and preserve oak woodlands and mandate replacement planting of native oaks where oak woodlands are proposed for alteration.
- Open-Space Policy No. 2.** Protect water quality.
- Open-Space Policy No. 3.** Mandatory replacement planting of native trees and oaks.
- Open-Space Policy No. 4.** Protect existing Blueline Streams.
- Open-Space Policy No. 5.** Prevention of soil erosion.
- Open-Space Policy No. 6.** Preservation of historically or culturally significant sites.
  
- Open-Space Policy No. 7.** Protect wildlife and their habitats, including rare and endangered species.
- Open-Space Policy No. 8.** Protection of rare and endangered plants.
- Open-Space Policy No. 9.** Promote development and management of public and private parks, trails and recreational areas.
- Open-Space Policy No. 10** Protect areas of outstanding scenic beauty.

**Open Space Action Programs:**

- Open-Space Action No. 1.** Protect water quality.
- Open-Space Action No. 2.** Avoid drainage run-off where possible.
- Open-Space Action No. 3.** Promote landscaping efforts that comply with State water efficient standards, fire department standards, and protection of plant and wildlife communities.
- Open-Space Action No. 4.** Prevent soil erosion.
- Open-Space Action No. 5.** Promote agricultural uses by the use of large-lot zones and overlay zones for hazard areas.
- Open-Space Action No. 6.** Promote public acquisition of open-space land by non-profit land trusts or conservation organizations.
- Open-Space Action No. 7.** Use Specific Plans to set aside open-space areas as part of development proposals .
- Open-Space Action No. 8.** Explore the use of transferring development rights to create and preserve open-space.
- Open-Space Action No. 9.** Explore grant financing opportunities to acquire and develop pedestrian and equestrian trails.

# **Conservation Chapter**

## **Purpose**

The Conservation Chapter of the Community Resources Element emphasizes the conservation, development and utilization of natural resources located within the City of Bradbury. The Conservation Element is designed to protect and maintain the City's natural and cultural resources, and to prevent their exploitation and destruction. Issues regarding natural resources must be addressed in the City's conservation element, as mandated in Government Code Section 65302(d). The General Plan shall include a conservation element for the conservation, development, and utilization of natural resources, including water and its hydraulic force, forests, soils, rivers and other waters, harbors, fisheries, wildlife, minerals, and other natural resources.

## **Conservation Element Objective**

The conservation element provides direction regarding the conservation, development and utilization of natural resources. The major goal of the Conservation Element is the maintenance and protection of the quality of the physical environment, through the conservation of natural resources to include: water courses, soils, and native plant and animal life. Conservation of natural resources should be a significant element in determining development types and density, as well as the preservation of open-space.

## **Relationship to Other General Plan Elements**

California law requires that all elements of the general plan to be internally consistent. While all of the general plan elements are independent, they are also interrelated, some more so than others. The Conservation Chapter overlaps and supports policies found in the City's Land Use, Health and Safety, and Circulation Elements and the Open Space Chapter of this Element. Buildings and structures of local historical significance shall be identified and considered as part of the City's development review process.

## **Overview of Conservation Issues**

The natural resources in the City of Bradbury include soils, water; biotic resources; cultural resources; and energy.

***Soil Resources.*** The City of Bradbury terrain is underlain by three soil types:

- (1) The Vista-Amargosa Association, located in the northern-third of the City;
- (2) The Ramona-Placentia Association, located in the central-third of the City; and
- (3) The Hanford Association, located in the southern-third of the City.

**Vista-Amargosa Association.** The Vista-Amargosa Association soils consist of three categories (Vista, Vista Amargosa and Amargosa) and they occur in steep mountainous areas at elevations ranging from 1,300 to 3,900 feet above mean sea level (amsl).

**Vista soils** occur in the northern one-third of the City in steep mountainous areas. They are 28 to 38 inches deep, are well drained, and have moderately rapid subsoil permeability. They have a brown, slightly acid, coarse sandy loam surface layer about 16 inches thick. The subsoil is brown, neutral, sandy loam about 12 inches thick and contains 2 or 3 percent more clay than the surface layer. Below is yellowish-brown slightly acid gravelly sandy loam layer, containing gravel about 20 percent by volume, and resting on hard granitic rock of about 14 to 20 inches. Erosion has been moderate on these soils, removing from 25 to 40 percent of the original surface soil. Rocky outcrops cover from two to ten percent of the surface and many areas are cut by shallow gullies. Available water-holding capacity is 1.0 to 1.5 inches for 14 to 20 inches of soil depth. Inherent fertility is very low. These soils are used for range, wildlife and watershed.

**Vista-Amargosa soils** also occur in the northern one-third portion of the City, in steep mountainous areas at elevations ranging from 1,300 to 3,900 feet amsl. Natural vegetation consists of mainly annual grasses and forbs and some California Juniper and Manzanita. The soil is 28 to 38 inches deep, well-drained, and has moderately rapid subsoil permeability. They have a brown, slightly acidic, coarse sandy loam surface layer about 16-inches thick. The subsoil is a brown, neutral, sandy loam about 12-inches think containing two or three percent more clay than the surface layer. Below is a yellowish-brown, neutral, coarse sandy loam on hard granite rock. Available water-holding capacity is 2.5 to 3.5 inches for 28 to 38 inches of soil depth. Inherent fertility is low. These soils are used for range, wildlife and watershed.

**Amargosa soils** also occur in the northern one-third portion of the City and are 14 to 20 inches deep, excessively drained, and have moderate to rapid subsoil permeability. They have a brown and yellowish-brown, slightly acidic coarse sandy loam surface layer that is about 13-inches thick. Below is a yellowish-brown slightly acidic gravelly sandy loam layer containing about 20 percent by volume gravel, and resting on hard, granite rock of about 14 to 20 inches. Erosion has been moderate on these soils, removing from 25 to 40 percent of the original surface soil. Rocky outcrops cover from two to ten percent of the surface and many areas are cut by shallow gullies. Available water-holding capacity is 1.0 to 1.5 inches for 14 to 20 inches of soil depth. Inherent fertility is very low. These soils are used for range, wildlife, and watershed.

**Ramona-Placentia Association** occurs in the central one-third of the City and on sloping and rolling terraces between elevations of near sea level to 3,900 feet above mean sea level. Natural vegetation consists mainly of annual grasses and forbs with occasional junipers. Ramona and Placentia soils of this association occur on steeper slopes and are eroded. Gullies are common and about 50 percent of the original surface soil has been removed by erosion. The available water-holding capacity of Ramona soils is about 7.0 to 9.0 percent for 60 inches of rooting depth. Inherent fertility is low. The available water-hold capacity of Placentia sols is about 1.0 to 1.5 for 9 inches of soil. These soils are used for residential purposes and for irrigated orchards.

**Hanford Association** soils are located in the lower one-third portion of the City and are on gently alluvial fans between elevations of near sea level to 3,500 feet above mean sea level. Natural vegetation consists of mainly annual grasses and forbs and occasionally junipers. Hanford soils are over 60 inches deep, well-drained, and have moderately rapid subsoil permeability. They have a pale-brown coarse sandy loam surface layer about eight-inches thick underlain by light yellowish-brown coarse sandy loam and gravelly loamy coarse sand substratum. Typically, they are slightly acidic to mildly alkaline throughout, but occasionally are calcareous in the lower part. Thin layers of coarser material may occur below 40-inches. Available water-holding capacity is 5.0 to 7.5 inches for 60 inches of soil depth. Inherent fertility is moderate. Hanford soils make up about 85 percent of the Association, and 10 percent Yolo soils and 5 percent Hesperia soils. In the Los Angeles basin, these soils are used almost exclusively for residential and industrial purposes. These soils will also support irrigated crops such as alfalfa, small sugar beets, potatoes, and fruit and nut trees.

## **Wildlife and Biological Resources.**

The City of Bradbury is located at the foot of the San Gabriel Mountains, which are vegetated with natural trees and shrubs. The native vegetation and wildlife are typical of steep, hilly chaparral and sage-scrub. The majority of the vegetation in the northern portion of the City is undisturbed. The southern portion of the community has been disturbed by previous farming and residential development activities. There are no commercial forests located within the City. The types of natural vegetation that can be expected in the area include coastal scrub and, chaparral. Mature oak trees are located throughout the City on developed agricultural/residential parcels.

**Coastal Scrub.** Characteristic plants of the coastal scrub community include California Wormwood or Sagebrush, White Sage, Black Sage, Encelia, Yerba Santa, Eriophyllum, California buckwheat, Lemonade berry, Prickly Pears, and Our Lord's Candle.

**Chaparral.** Chaparral's dense cover of evergreen shrubs includes a diversity of shrubs fifteen feet in height including Chemise, Scrub Oak, Foothill Ash, Hard Tack, wild lilacs, Holly-leaf Cherry, Bear Brush, Manzanita's, Tryon and Sugar bush.

**Oak Woodland.** Southern Oak or Foothill Woodlands contain trees 15-75 feet high with scattered shrubs and grassland. Characteristic plants of this community include Big-cone Spruce, Digger Pine Juniper, Black Walnut, Coast Live Oak, Engelmann Oak, and Interior Live Oak. Shrubs associated with this community include Gooseberry, Sugar Bush, Wild Oats, and Wild Mountain Sunflower.

**Riparian Woodland.** The riparian plant community includes plant material such as Spruce, White Alder, Big leaf Maple, Western Sycamore, Black Cottonwood and willows. Various ruderal or weedy plant species are found in disturbed areas. While this vegetation is of little aesthetic value and not considered to be biologically unique, it serves as a food source for seed-eating birds and mammals.

**Wildlife.** Animal species known to occur in the locale include a variety of mammals, birds, reptiles and invertebrates. Most prevalent among the mammals are deer, bear, coyote, bobcats, raccoon, skunk, rabbits, mice, rats, opossums and squirrels. Typical birds include

varieties of Scrub Jay, Hummingbird, Warbler, Wren and Sparrow. Typical reptiles found in hillside areas include lizards, rattlesnakes and garter snakes.

**Sensitive Biological Resources.** Sensitive biological resources are defined as species under study for classification as threatened, endangered, or rare, or having low population densities or a highly restricted range. Sensitive species known to occur along the southern face of the San Gabriel Mountains include Brauton's milk vetch (*Astragalus brauntonii*), San Gabriel bedstraw (*Galium grande*) and lily (*Brodiaea filifolius*). As of this date no sensitive biological resources have been identified within the City. However, an extensive analysis of the 302-acres of privately owned steep hillside undeveloped property has not been conducted.

For planning purposes, three sensitivity categories have been developed to identify the planning area's sensitivity for the presence of special plants and animals. The sensitivity rating is described as follows:

**Low Sensitivity:** Areas with no significant natural habitats are included in this classification. Past development in the urbanized areas is likely to have destroyed or significantly altered native plant communities and animal habitats. This designation is not intended to undervalue the importance of introduced or existing vegetation in the developed areas.

**Moderate Sensitivity:** A number of areas in the City have been developed at densities sufficiently low so that remnants of environmentally significant habitats remain. In addition, some development is located adjacent to ecologically significant zones, which could be adversely impacted by any increase in density or intensity of development.

**High Sensitivity:** The steep hillside areas are considered ecologically significant due to their vacant state and the presence of native vegetation. These areas have a high sensitivity for the presence of important biological resources. Measures should be observed to prevent disturbance or destruction of existing habitats. Development proposals within areas with a high sensitivity rating as shown on Exhibit CR Conservation No. 1 "Resource Management Areas" will be reviewed to determine the extent of significant ecological resources on the property and the potential impacts new development will have on these resources. The following guidelines shall be followed:

Field, surveys to identify potential resources must be undertaken prior to any development or significant alteration of these areas.

- Any fuel modification landscaping related to fire prevention, must be evaluated by knowledgeable professionals to ensure appropriate mitigation is followed.
- All new development in these areas must undergo appropriate environmental review pursuant to the California Environmental Quality Act (CEQA)
- Trustee agencies including the California Department of Fish and Wildlife and local environmental organizations such as the Audubon Society must be notified of large scale development proposals as part of the environmental review process.
- When threatened or endangered species are encountered, the directives of the Department of Interior and the State of California Department of Fish and Wildlife will be considered. In order to protect native plant and animal species in the area, the City shall require that a survey of on-site vegetation be conducted for all projects subject to development review procedures. The survey shall identify existing mature and specimen

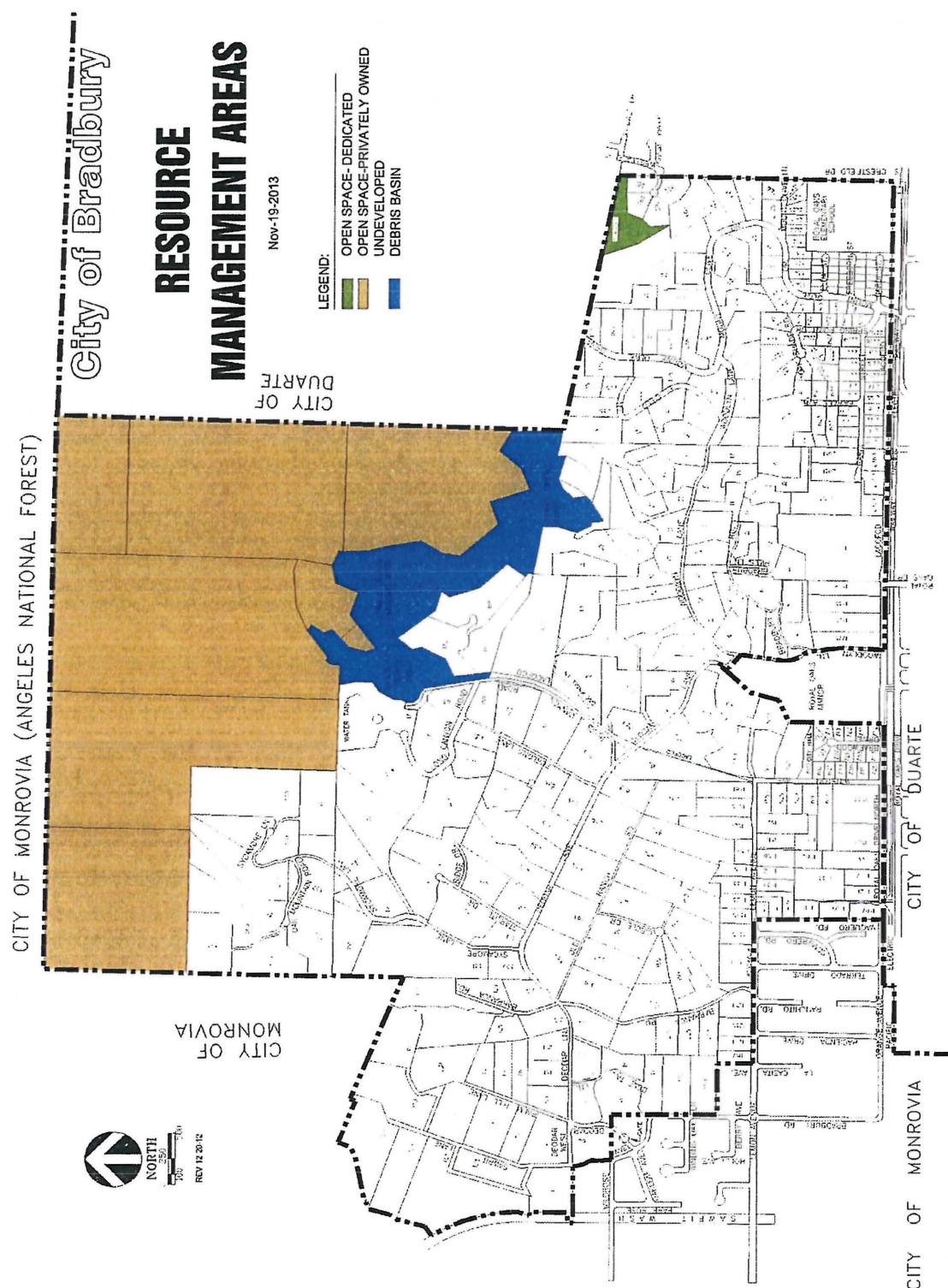
trees and other significant vegetation. Where such landscape is identified, City staff will work with the developer to determine the means by which such landscape may be integrated with the proposed project and preserved. A variance from the site development standards may be considered to preserve the vegetation, if any adverse impacts of such a variance can be mitigated. Projects that would affect sensitive habitats and animal species or wetland areas shall be made to comply with the regulations of the State Department of Fish and Wildlife and the U.S Army Corps of Engineers. Cultural and natural resources in the City shall be preserved to the maximum feasible extent possible. The City will establish and maintain a register of any significant historical, architectural, and cultural resources that are discovered. As part of the City's planning process, guidelines will be implemented for the protection and preservation of any archaeological resources. For new developments, an archaeological survey may be required either prior to or during any earth moving activities, as dictated by the specific project site conditions.

**Rivers, Creeks, Streams and Reservoirs.** The significant natural waterway resources include the nearby San Gabriel River and the following intermittent seasonal streams within canyons located in the steep hillside areas: Sawpit Canyon, Bliss Canyon, Bradbury Canyon and Spinks Canyon. The steep terrain and the City's Hillside Development Standards regulate development in these identified Resource Management Areas. (see Exhibit CR Conservation No. 1).

## **Resource Management Areas**

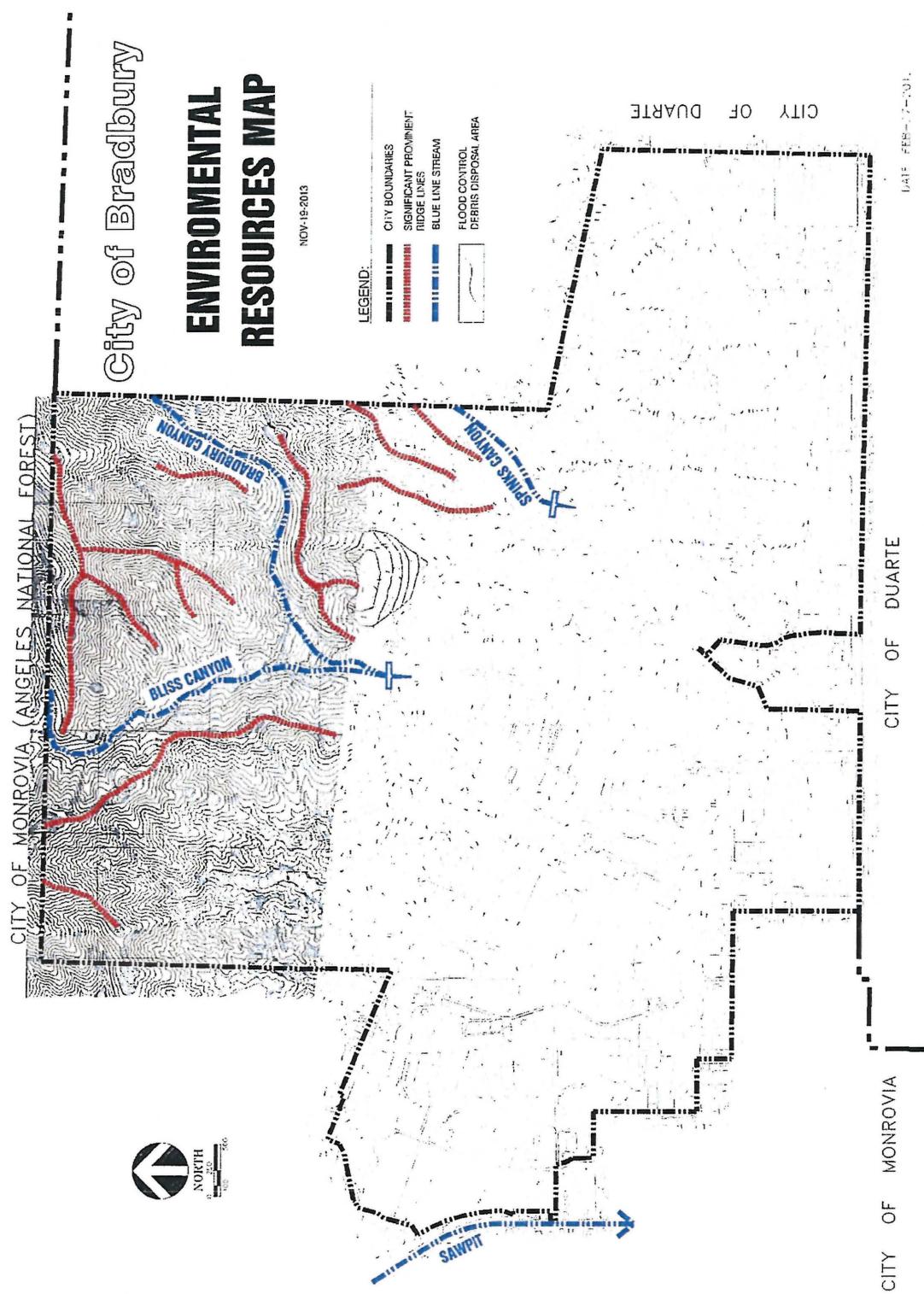
The City of Bradbury recognizes several areas within the community as potential sensitive habitat. The 302-acres of privately owned undeveloped open space located in the northern portion of the City adjacent to the Angeles National Forest and the City of Monrovia is reported to have average slopes that range from 24% to over 50%. This area also contains many significant or prominent ridgelines and three Blueline seasonal streams. Development of this area may be physically and economically difficult due to site constraints, density yield and compliance with the City's environmental and Hillside Development regulations as set forth in the Development Code. However, the determination of feasibility will be made, in part by the private property owner(s), based on his, her or their future design and environmental plans and studies.

Adjacent to this area are the Spinks and Bradbury Drainage Debris Basins which comprise approximately 50-acres. Both of these facilities are owned, managed and maintained by the Los Angeles County Flood Control District. Additionally, a 4.06-acre parcel of privately owned dedicated open-space parcel was created as part of the development project at Sharon Hill Lane. Development rights for this open-space parcel have been dedicated in perpetuity. The City of Bradbury contains 1,216-acres of land area. Approximately 356-acres or 29% of the City's land area either restricts development or development is considered to be very difficult. Exhibit CR Conservation No. 1 locates the land Resource Management Areas. Exhibit CR Conservation No. 2 locates the identified environmental resources which include significant prominent ridgelines, Blueline streams, as shown on the USGS Azusa Quadrangle Map, and flood control debris basins. Exhibit CR Conservation No. 2-A is a photograph of a portion of the northern part of the City of Bradbury which includes the Resource Management Areas.



**Exhibit CR Conservation No. 1**

## **RESOURCE MANAGEMENT AREAS**



**Exhibit CR Conservation No. 2**

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## **ENVIRONMENTAL RESOURCES MAP**



**Exhibit CR Conservation No. 2-A**

**ENVIRONMENTAL RESOURCES AREA PHOTOGRAPH**

## **Mineral Resources**

The Surface Mining and Reclamation Act of 1975 (SMARA) provides for the regulation of surface mining operations to assure that adverse environmental impacts are minimized and mined lands are reclaimed to a usable condition. The SMARA also encourages the production, conservation, and protection of the State's mineral resources. The SMARA also mandates the classification of lands with valuable mineral resources so that land use decisions that may affect mineral-bearing lands will be made with the knowledge of these resources.

The State Mining and Geology Board, (SMGB) has classified land in California based on the availability of mineral resources. Four mineral resource zone (MRZ) designations have been established for the classification of sand, gravel, and crushed rock resources:

- MRZ-1: Adequate information indicates that no significant mineral deposits are present or likely to be present.
- MRZ-2: Adequate information indicates that significant mineral deposits are present or there is a high likelihood for their presence, and development should be controlled.
- MRZ-3: The significance of mineral deposits cannot be determined from the available data.
- MRZ-4: There is insufficient data to assign any other MRZ designation.

There are no MRZ zones in the City of Bradbury. MRZ zones are noted in brown on the map below, Exhibit CR Conservation No. 3.



**Exhibit CR Conservation No. 3  
MINERAL RESOURCE ZONES**

## **Air Quality.**

The City of Bradbury is located within the South Coast Air Basin of California, a 6,745 square-mile area encompassing Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino counties. The basin is bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east.

The U.S. Environmental Protection Agency (USEPA) is responsible for establishing the national ambient air quality standards and enforcing the Federal Clean Air Act. The California Air Resource Board (CARB) became part of the California Environmental Protection Agency (Cal EPA) in 1991. This agency is responsible for ensuring implementation of the California Clean Air Act, meeting state requirements of the Federal Clean Air Act, and establishing state ambient air quality standards.

Because Southern California has one of the worst air quality problems in the nation, the Air Quality Management District (AQMD) was created by the 1977 Lewis Air Quality Management Act. Four county air pollution control agencies were merged into one regional district to better address the issue of improving air quality in Southern California.

Under the act, revised and renamed the Lewis-Presley Air Quality Management Act in 1988, the South Coast Air Quality Management District (SCAQMD) was created and it is the agency principally responsible for comprehensive air pollution control in the South Coast basin. Specifically, the SCAQMD is responsible for monitoring air quality and planning, implementing, and enforcing programs designed to attain and maintain state and federal ambient air quality standards in the district. The SCAQMD enforces air quality rules and regulations through a variety of means, including inspections, educational and training programs.

**Setting.** The South Coast basin is surrounded by mountain, which tend to restrict air flow and concentrate pollutants in the valleys or “basins”. The South Coast basin is almost entirely urban, and its pollution is typically related to dense population and associated area sources, such as mobile sources that include high volumes of vehicular traffic and stationary sources that are related to commercial and industrial activity. A high-pressure cell over the Pacific Ocean primarily controls the climate of the South Coast basin. The counties in the South Coast Air Basin continue to receive an “F” grade for ozone and dust particulate (PM) levels. The climate within the South Coast air basin is one of moderate winters, warm summers, infrequent rainfall, daytime onshore breezes and moderate humidity.

Along with this Mediterranean style climate the coastal winds affect the air quality. During the day the onshore winds reach inland across the Los Angeles Coastal Plain while at nighttime, surface radiation cools the air surrounding the mountains and the hills. The air then flows into the valleys and meanders toward the coast, producing a gentle land breeze. Bradbury’s proximity to the mountains creates cooler periods due to cool mountain air flowing down the slopes to the lower elevations.

The predominant daytime wind patterns are from the west and southwest. At night, the direction of the local offshore flow is generally out of the northeast and east. The predominant patterns for Bradbury are occasionally impacted by winter storms and Santa Ana winds. The Santa Ana winds are strong north and northeasterly breezes originating in the desert of the Great Basin.

The Santa Ana winds occur from September through March. Usually warm, always very dry, and often full of dust, these winds are particularly strong in mountain passes and canyons. On average, Santa Ana winds occur five to ten times a year, each lasting up to a few days.

**Emissions of Concern.** Air pollutants regulated by the Federal Clean Air Act and the California Clean Air Act or other laws are placed in three categories:

- Criteria air pollutants,
- Toxic air contaminants (TAC),
- Global warming and ozone-depleting gases.

Pollutants in each of these categories are monitored and regulated differently. Criteria air pollutants are measured by sampling concentrations in the ambient air. Toxic air contaminants are measured at the source and in the general atmosphere; and, global warming and ozone-depleting gases are not monitored but are subject to federal and regional policies that call for their reduction and eventual elimination.

The United States Environmental Protection Agency (USEPA) established ambient air quality standards for the following air pollutants:

- Ozone (O<sub>3</sub>)
- Nitrogen dioxide (NO<sub>2</sub>)
- Carbon monoxide (CO)
- Sulfur dioxide (SO<sub>2</sub>)
- Lead (Pub)
- Particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>)

The California Air Resources Board (CARB) has also established ambient air quality standards for the six pollutants regulated by the USEPA. Some of the California ambient air quality standards are more stringent than the National Ambient Air Quality Standards (NAAQS). In addition, California has established ambient air quality standards for the following pollutants or air quality conditions:

- Hydrogen sulfide
- Sulfates
- Vinyl chloride
- Visibility

State and Federal law requires that this area meet existing clean air standards by the year 2015 for annual PM 2.5 and by 2023 for the 8-hour average ozone standard. However, tougher federal air quality standards for particulates and ozone issued in 2006 and 2008 will require reductions above and beyond those already planned. AQMD estimates it will take until at least 2020 to meet the new 24-hour average particulate standard and until 2030 to meet the new ozone standard.

The South Coast Air Quality Management District (SCAQMD) conducts 40 monitoring stations throughout the basin. There are three monitoring stations that provide information on air quality for Bradbury. These monitoring stations are located in the City of Pasadena northwest quadrant

of the intersection of Interstate I-210 and State Route SR-39 in the City of Azusa; and in the City of Glendora. (Exhibit CR Conservation No. 4)

According to the lung association, key pollution sources contributing to regional pollution are:

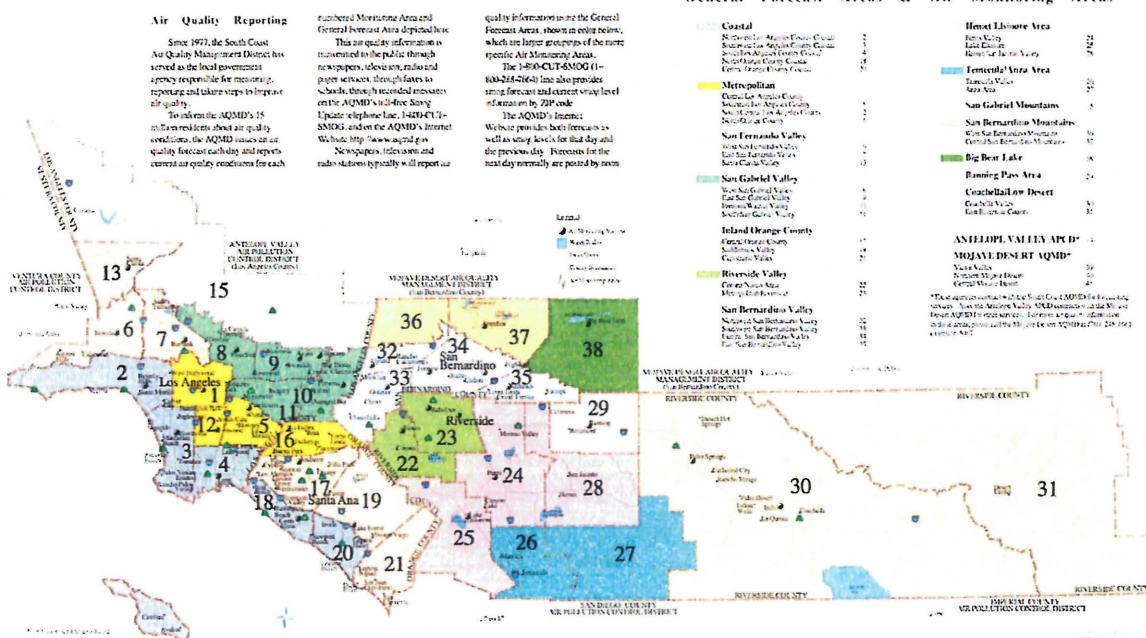
- Mobile sources including on- and off-road diesel fueled vehicles, cars, trucks, buses, and locomotives.
- Ports and goods movements,
- Stationary sources including oil refineries and power plants,
- Area sources including residential wood burning.

Although air quality in the Los Angeles basin has significantly improved over the past three decades, the area still has a long way to go to meet State and Federal standards. The area's average number of high ozone days dropped from 189.5 days per year for the years 1996-1998 to 141.8 per year for the years 2006-2008.

Continued high levels of ozone and particulate matter (PMs) in the Los Angeles basin continues to impact Bradbury. Due to its location against the foothills and the meteorological conditions, the Bradbury area incurs high levels of ozone concentrations that exceed State and Federal levels.

## **SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

21865 Copley Drive, Diamond Bar, CA 91765-4182  
 Information: 1-800-CUT-SMOG (1-800-288-7664)  
 Internet: <http://www.sacmd.org>



**Exhibit CR Conservation No. 4**

## **AIR QUALITY MANAGEMENT DISTRICTS**

## **Regional Air Quality Management Plan.**

The AQMD has the authority to reduce emissions from stationary sources and certain indirect sources. The AQMD is the lead agency charged with the responsibility for the development of the Air Quality Management Plan (AQMP). Input into the creation of the AQMP is provided by the Southern California Association of Governments (SCAG) and the California Air Resources Board (CARB). The AQMP is a comprehensive plan that includes control strategies for stationary and areas sources, as well as for mobile sources. SCAG provides growth projections and the creation of transportation control measures. CARB in coordination with Federal agencies provides the control element for mobile sources.

## **Visual Resources.**

Bradbury is a low density, single-family residential community. There are no commercial, industrial, or multi-family development existing or planned. Approximately one-third of the streets are privately owned and maintained. Two estate type neighborhoods have controlled access for residents. These private neighborhoods contain narrow winding tree-lined streets with beautifully landscaped front yards that include native and ornamental plants and trees.

The hillside terrain provides opportunities to capitalize on the majestic views of the San Gabriel Valley and metropolitan Los Angeles. Many home sites have spectacular panoramic views of the surrounding valley. The City's Design Guidelines protect the views from existing or future dwellings. The Design Guidelines also contain standards for grading, architectural design, and hillside protection to maintain the natural beauty.

The majority of the City is developed. There are twenty-four (24) vacant parcels that could be developed for residential purposes. Five (5) underutilized parcels have the potential for constructing additional dwelling units. Three hundred and two (302) acres have development potential for sixteen (16) units and may have additional potential for residential development at a density greater than the existing parcels permit through a subdivision process. Development of this high sensitivity area, designated as a Resource Management Area, would require a specific plan review and further studies.

The configuration and character of the City has been established and the residents have expressed their desire to maintain the community as it was initially conceived and subsequently developed. The community exists in harmony with the terrain and the native wildlife. The rural character of the community has been expressed as a desirable asset.

## **Energy Resources.**

While there is no known energy producing resource located in the City, existing land uses and residents consume energy in a variety of ways. Energy consumption includes the use of natural resources for transportation, space heating and cooling, water heating, and lighting. Less obvious, but equally important, is the natural energy resources needed to process foods and materials consumed by City residents. All traditional energy resources consumed by land uses

of the City are imported from facilities located in surrounding communities. There are no wells producing oil or natural gas, coal deposits, generating stations, refineries or processing facilities within the City of Bradbury. Natural gas is imported by the Southern California Gas Company ("Gas Company"), from its interstate system. Electrical energy is accessed by transmission and distribution lines from substations owned and operated by the Southern California Edison Company (SCE).

It should be noted that the City of Bradbury is committed to the search for and the use of renewable energy resources.

## **Cultural and Historical Natural Resources.**

Cultural resources can be regarded as symbols of a people and their civilization, and can represent human activity in pre-history, as well as the present. Cultural resources can provide a sense of place, history, and pride of residents for a region. The Los Angeles Basin has a rich cultural history that dates back to the early settlement by American Indians. The Gabrielino Indians, also known as the Tongva, occupied an extensive region stretching from the San Gabriel Mountains to the Pacific Ocean.

Water was the natural resources that attracted the first settlers and succeeding generations to the Arroyo Seco. The Arroyo Seco, meaning "dry stream" in Spanish, is a 25-mile long seasonal river and canyon located in Los Angeles County. The Arroyo Seco has been called the most celebrated canyon in Southern California. While the Spaniards dubbed the watershed Arroyo Seco or "dry riverbed," the Gabrielino/Tongva Native American Indians referred to the region between the Los Angeles and San Gabriel Rivers as Hahamongna, "the land of flowing waters, and fruitful valley." They settled on bluffs overlooking the stream that linked the San Gabriel Mountains to the Los Angeles River. Gabrielino/Tongva villages extended as far east as the City of San Bernardino.

The City of Bradbury lies within the northern part of the historic Rancho Azusa de Duarte, which extended from the San Gabriel River on the east, to Monrovia on the west. The Rancho Azusa de Duarte was a 6,596-acre Mexican land grant given in 1841 by Governor Juan Alvarado to Andres Duarte, a former Mexican army corporal. The rancho was developed and subdivided in the late 1800's by various notable large land owners ranging from Alexander Weill to William Wolfskill. These individuals planted the first commercial citrus and avocado groves in California. Other land owners included: the Bradbury, Meyers, John Scott, Fowler, Spinks, and Fitzgerald families to name a few of the prominent early residents. It is known that they all shared a love of the area's beauty and that they planned to maintain it as a rural community of ranches and large homesteads, free from the usual small-lot developments that lined many of the hillsides in the Los Angeles Metropolitan Area. Cities established on the land of the original Rancho include Arcadia, Bradbury, Duarte, and portions of Monrovia, Irwindale, Azusa, and Baldwin Park.

Louis Leonard Bradbury, a wealthy financier, purchased land from the Weil family estate. Mr. Bradbury constructed a home north of Oak and Royal Oaks Drive. The Bradbury home was later removed and replaced with an assisted living facility for senior citizens known as Be Royal Oaks. This facility is located in an unincorporated County island adjacent to the City of Bradbury. At the corner of Winston Avenue and Royal Oaks Drive North was the Wooline family estate, built in 1889. Subsequently the property was subdivided into several two to three acre parcels and the large house was split into two single-family dwellings.

The City of Bradbury was incorporated July 26, 1957. The first Bradbury City Council members included: Rollin Eckis, who was Executive Vice President of Richfield Oil Company, Jack Martin Roth, Arthur W. Beaucaire, Cliff Poindexter, and E. M. Mazzei. Mr. Eckis became the City's first Mayor. Mayor Eckis published the most comprehensive analyses of the area's geology and groundwater. This technical document remains today as the most definitive reference for this region.

## **Water Resources**

The importance of water as a resource must be approached in terms of its quality and quantity, sources of supply, uses and demands, and the potential for its depletion or contamination, as well as its sustainability. Local groundwater resources in the City are not utilized for domestic consumption. The California-American Water Company provides potable (drinking) water to the City of Bradbury through groundwater wells located in the City of Duarte. Pipe sizes and types vary widely from 4-inch to 12-inch and include asphalt concrete (AC), PVC, and Steel. The reservoirs that serve the City are indicated in Table CR Conservation No. 1.

In 2012, there were 416 water customers which include public private and agricultural users in the City of Bradbury. Average day demand is approximately 1,530 gallons per account per day, which equates to 1.73 acre-feet per customer per year. Maximum daily demand is estimated to be 3,121 gallons per customer. This is equal to the average maximum daily demand of 2,433 gallons per customer. The peak hour factor is assumed to be 1.75.

**Table CR Conservation No. 1  
California-American Water Reservoirs**

Name	Capacity (gallons)	Elevation (msl)
Bliss Canyon	300,000	1040
Fair Oaks	450,000	873.5
Lemon potable	1,500,000	590
Lemon Irrigation	4,000,000	590
High Mesa	280,000	1200

Source: California-American Water

The Federal Safe Drinking Water Act of 1974 and its amendments are intended to ensure the quality of our water supplies. The Federal Government, through the U.S. Environmental Protection Agency (EPA), set standards and monitoring requirements for water utilities. The California Department of Public Health (CDPH) has the primary responsibility of overseeing the implementation and enforcement of the EPA's drinking water regulations.

CDPH has the option of either adopting the EPA's federal standards or setting more stringent ones. These standards are set after considerable research and data gathering, as well as analysis by health experts. California's Health and Safety Code requires CDPH to review its

Maximum Contaminant Levels (MCLs) once every five years. In this review, CDPH's MCLs cannot be less stringent than federal MCLs, and must be as close as is technically and economically feasible to the public health goals (PHGs) established by the Office of Environmental Health Hazard Assessment (OEHHA). Consistent with those criteria, CDPH is to amend any standard if any of the following occur: (1) Changes in technology or treatment techniques that permit a materially greater protection of public health or attainment of the PHG, or (2) New scientific evidence indicates that the substance may present a materially different risk to public health than was previously determined. Each year, by March 1, CDPH is to identify each MCL it intends to review that year. There are currently over >100 primary MCLs in California for constituents of concern that may be found in drinking water and more are expected to be drafted over the next several years.

Testing of the domestic water supply is performed by the California-American Water for various regulated constituents. Analyses for Synthetic Organic Chemicals, Inorganic Chemicals, Volatile Organic Chemicals, Radionuclide, bacteria, disinfection by-products, and all other regulated contaminants are monitored at the frequencies prescribed by federal and state regulations. The results of this testing are reported to CDPH on a monthly, quarterly, and annual basis, in accordance with the regulations. By July 1<sup>st</sup> of each calendar year, California American Water provides a complete annual summary of the analytical results of the testing to every customer in the form of a report known as the Consumer Confidence Report (CCR). A review of the past annual CCRs indicate that water quality consistently meets all state and federal drinking water standards.

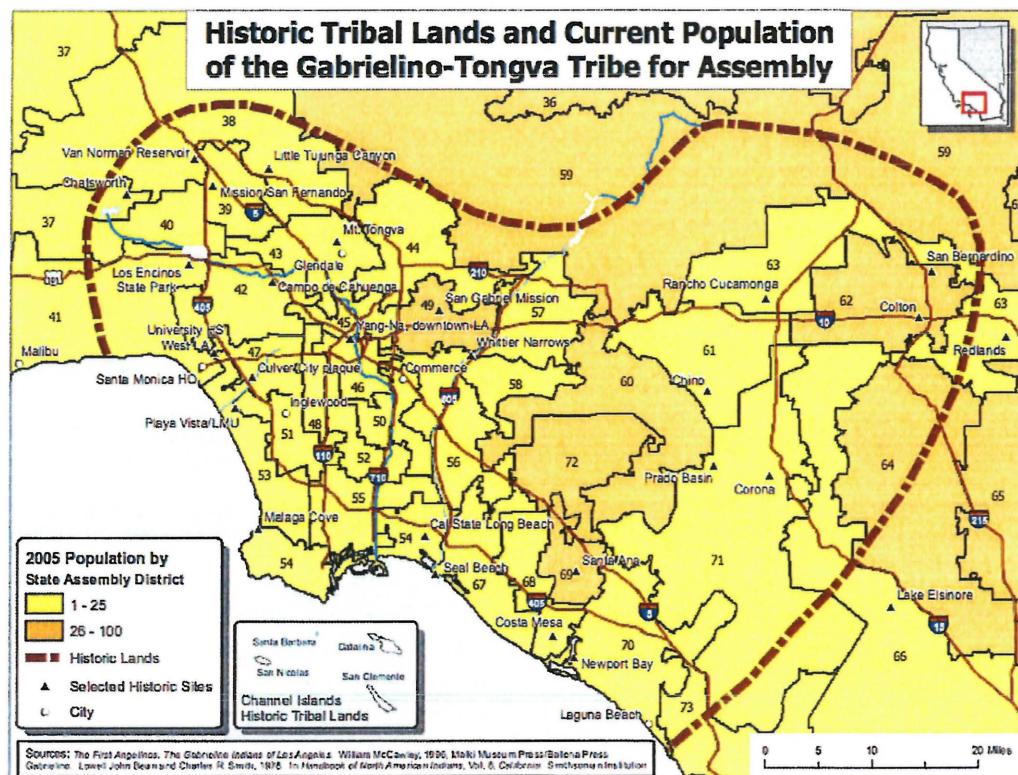
California Water Code Section 10644(a) requires urban water suppliers to file with the Department of Water Resources, the California State Library, and any city or county within which the supplier provides water supplies, a copy of its Urban Water Management Plan (UWMP), no later than 30 days after adoption. California American Water's UWMP will serve as a long-range planning document for water supply, a source of data for development of a regional water plan and a source document for cities and counties as they prepare their general plans.

California Government Code Section 65352 and Section 65958 requires that planning agencies adopting or amending a General Plan shall refer the proposed action, not only to agencies previously designated, but also to public water systems with 3,000 or more service connections. It also provides a standardized process for determining the adequacy of existing and planned future water supplies to meet existing and planned future demands so that projects resulting in increased demands on water supplies can be accommodated.

## **Native American Indians**

California Government Code § 65352.3 requires that prior to adoption of any General Plan, the local jurisdiction shall consult with the California Native American tribes that are on the contact list maintained by the Native American Heritage Commission for the purpose of preserving or mitigating impacts to places, features, and objects of historical significance as described in Sections 5097.9 and 5097.993 of the Public Resources Code. No significant archeological or historic resources have been found in the City. Yet, due to the documentation of early settlers in the region, the activity associated with new development may lead to the discovery of cultural resources. Investigation of site-specific developments for possible cultural resources would occur prior to clearing or grading.

The California Environmental Quality Act (CEQA) requires that investigation be conducted if there is a possibility of uncovering archaeological, paleontological, or historical resources. Protection of these resources during construction activities typically involves some method of salvaging materials discovered on site.



## Exhibit CR Conservation No. 5

### HISTORIC TRIBAL LANDS

#### Waste Management.

The City requires all properties to have trash collection services. The City has an exclusive franchise agreement with Burritec Waste Industries, Inc. to provide collections and recycling services. No other haulers are authorized with the exception of construction projects that elect to file a Waste Management Plan with the City. Working with the waste hauler the City provides the following collection services to residents:

- Trash
- Commingled recyclables
- Green and organic yard waste
- Manure recycling
- E-waste

- Household Sharps
- Used Oil
- Construction and Demolition

Residents pay rates based on the size and number of barrels or bins and the number of times serviced per week. Also included in the contract are two community wide clean-up days and three bulky item pick-ups per year with no additional charge. Burrtec does its own billing and provides customer service relations. City staff serves as a liaison between the service provider and residents.

The majority of Bradbury's refuse is transported to Puente Hills Landfill facility. Curbside Recyclables are delivered to the Allan Company; whereas Green Waste is delivered to the Burrtec West Valley Material Recovery Facility (MRF) located in Fontana. Farm animal manure is delivered to local nurseries. The Puente Hills Landfill is the nation's largest landfill and it is nearing its maximum capacity. The current operating permit expired on November 1, 2013 and the Los Angeles County Sanitation District is actively seeking alternatives for the disposal of this waste stream. It is expected that urban waste disposal cost will rise significantly in the coming years.

### **Recycling – (AB 939 and AB 1016).**

The California Integrated Waste Management Act of 1989 (AB 939) requires each jurisdiction to divert 50 percent of its solid waste from being disposed in landfills. On January 1, 2009 a new per capita disposal measurement system (SB 1016, Wiggins, Chapter 343, Statutes of 2008) became effective. This legislation builds on AB 939 compliance requirements by implementing a simplified measure of local jurisdictions' performance. SB 1016 accomplishes this by changing to a disposal-based indicator where the per capita disposal rate, which uses only two factors: a jurisdiction's population and its disposal weight as reported by disposal facilities. It creates a clearer picture of where the City ranks in its waste reduction efforts, but most importantly, SB 1016 makes it easier to see where improvements are needed, and it frees up resources to address those areas. The City of Bradbury has included these requirements into its contract with the contract urban waste removal purveyor.

The City is also a member of the Los Angeles Regional Agency (LARA) along with seventeen other Southern California cities, including the City of Los Angeles. This agency provides the forum for its members to work cooperatively to increase diversion rates to the maximum extent possible. Public recycling containers are made available at the Civic Center. City staff provides recycling information and outreach through various communication tools such as handouts, brochures, City newsletter and information located on the City's website. City of Bradbury waste diversion rates are currently in compliance with current requirements.

### **Household Hazardous Waste.**

Bradbury residents are provided with opportunities to safely dispose of common household items that are not allowed to be disposed of in the traditional waste stream. Items such as light bulbs, batteries, used oil and electronic waste and certain solvents and cleaners are considered to be hazardous waste that are prohibited from being deposited in the landfills. Special periodic collection events are scheduled to collect household hazardous waste for proper disposal. The City works closely with the County of Los Angeles to create and maintain programs to collect

and safely dispose of such waste. At least once-a-year the City co-hosts a County of Los Angeles sponsored Household Hazardous Waste Round-Up. The City partners with its franchise trash hauler to provide approved containers for the proper disposal of sharp items such as needles, syringes, lancets, etc. Information is made available regarding the location of facilities that will accept these hazardous items for disposal.

## **National Pollutant Discharge Elimination System (NPDES)**

In 1948, the Federal Water Pollution Control Act was passed and then in 1972 it was significantly expanded. In 1977 it became known as the Federal Clean Water Act. It was then that municipalities were required to obtain a National Pollutant Discharge Elimination System (NPDES) permit if any discharges into the storm drain system were directly related to surface run-off waters.

In 1969, the State of California enacted the Porter-Cologne Water Quality Control Act establishing the State Water Quality Board (State Board) and through its Regional Boards, it is responsible for enforcing the requirements of the Federal Clean Water Act. At the local level, the Flood Control District and municipalities must obtain National Pollutant Discharge Elimination System (NPDES) stormwater discharge permit coverage from the State Water Quality Regional Board. Under the respective NPDES permits, municipalities are responsible for cleaning up polluted (impaired) waters within their jurisdictions.

In 1972, the Clean Water Act first established the NPDES permit program and most efforts at improving water quality were focused on regulating pollutant discharges from known end-of-pipe “point sources,” such as factories and sanitary sewer treatment plants. However, the 1987 amendments to the Clean Water Act extended the NPDES program to also encompass the complex and difficult to control “non-point source” pollution found in stormwater and urban runoff. Since their establishment in 1990 by the Federal EPA, stormwater regulations under the NPDES, permit programs have been significantly revised and expanded.

The City is now accountable for complying with regulations that are contained in the most recent NPDES permit which was adopted November 8, 2012. The City is now responsible for eliminating identified pollutants within its jurisdiction that may reach both the San Gabriel River and the Los Angeles River.

The Federal Clean Water Act requires that each State identify pollutants and the acceptable maximum amount that can be tolerated by each watershed or body of water and retain its required daily acceptable level of water quality. The “Total Maximum Daily Load” (TMDL) must be established for each identified pollutant (e.g. trash, bacteria, metal, etc.).The goal is to reduce pollutants deposited in impaired bodies of water to a level that is in compliance with the established water quality standards. TMDLs are developed for pollutants from all sources, including non-point sources. If the testing of a body of water determines that it is not achieving required water quality standards, the body of water is labeled as “Impaired”.

The City is currently regulated by 12 TMDLs – they include the Los Angeles River Trash TMDL, the Los Angeles River Bacteria TMDL, the Los Angeles River Metals TMDL, the Los Angeles River Estuary Bacteria TMDL, the Los Angeles River Harbor's Toxic TMDL, the Peck Park Road Lake Trash TMDL, the Peck Park Road Lake Chlordane TMDL, the Peck Park Road Lake DDT

TMDL, the Peck Park Road Lake Dieldrum TMDL, the Peck Park Road Lake PCBs, the Peck Park Road Lake Nutrients TMDL and the San Gabriel River Metals TMDLs.

The City works collaboratively with surrounding watershed cities in order to meet the requirements of the TMDL's. Additional TMDLs may be assigned to the watershed or sub-watershed in the future. The City may be required to perform additional monitoring, additional reporting, install small and large equipment, conduct scientific studies, create implementation plans and other such activities that could prove to be very difficult to implement because of funding limitations.

Educational Programs required under the National Pollutant Discharge Elimination System (NPDES) permit include making the general public aware of the importance of reducing or eliminating the discharge of pollutants into the public waterways. The City of Bradbury typically meets information compliance requirements by participating with other communities in joint advertising campaigns.

## **Impact of Development on Natural Resources**

**Sewer System.** The City of Bradbury contains 400 single-family dwelling units. The majority of the dwelling units provide privately owned and maintained septic systems to process effluent generated on-site. A relatively small portion of the City has access to public sewer services. The public mainline sewer system is maintained by the Los Angeles County Sewer Maintenance District. The City of Bradbury is nearing a built-out condition. There are thirty-two vacant lots and five underutilized parcels of land. If development were to occur the City could expect to add ninety-one (91) additional dwellings (primary and second dwelling units). Although many of the new dwelling units will not have access to a public sewer system, the existing public sewer system has the capacity to accommodate the projected additional number of dwelling units. The City will utilize its resources to extend the existing public sewer system in order to provide service to as many residents as possible.

**Water Supply.** Domestic and fire flow water is provided by a private water purveyor, California American Water Company. The water company at one time provided affordable irrigation water to the larger agriculturally zoned and working farms and ranches. The water company has abandoned the irrigation water supply system for a variety of economic reasons. The domestic and fire flow system have been improved and it is maintained in adequate condition to meet existing and future demand.

**Regulation of Development near Stream Channels.** The existing seasonal Blueline streams are located in a steep hillside area that is recognized as a resource management area that is privately owned undeveloped open space. The City's Hillside Development regulations and environmental standards seek to maintain the prominent ridgelines and the Blueline streams substantially in their natural state to the greatest extent feasible. Existing regulations strive to protect the stream channels from being unnecessarily impacted by development activities.

**Flood Management.** The City of Bradbury is not located in a Flood Hazard Zone. The foothill location is sufficiently higher than the San Gabriel and Los Angeles Rivers and their tributaries. A system of improved drainage channels maintained by the Los Angeles County Flood Control District surround the City and they accept and direct surface runoff to the major rivers that eventually discharge their contents into the Pacific Ocean. The City is protected from damage

from upstream water shed by a system of flood control and check dams maintained by the County Flood Control District. Current grading regulations require development to retain all surface runoff on-site. The existing flood management system has been successfully operated for the past 55 years since the City incorporated in 1957.

***Urban and Built-Up Land.*** The City of Bradbury is exclusively zoned and developed with single-family detached residential dwelling units. The City has 32 vacant developable parcels of land. No viable development proposals or applications have been filed with the City in the past 56 years concerning the 32 vacant undeveloped parcels of land. The existing 400 dwellings units and a population of 1,048 are expected to remain relatively stable for the foreseeable future. However over 100 years ago it was thought highly unlikely that man would walk on the moon and that data retrieving robots would be landed on Mars. Thus, the City has considered a maximum dwelling unit buildout of 497 and a potential population of 1,541. Primary development activity is more likely anticipated to be reinvestment in already developed parcels. Ninety percent (90%) or 1,096-acres of the City are zoned for agricultural purposes. Residents have continually voiced their opinion that the character of the community should not change. The City Council has expressed its position that the will of the residents is a driving factor in the creation and implementation of the design and development regulations for the City of Bradbury. It is anticipated that the future Bradbury will be very similar in appearance to the City as it exists today.

## **Energy Conservation**

Energy conservation is important in preserving non-renewable energy resources to ensure that these resources are available to future generations. There are a number of benefits associated with energy conservation, such as improved air quality, reduction of energy costs, waste stream reduction, and water conservation. Non-renewable sources of energy are extremely limited. Sprawling urban development, which necessitates extensive automobile use, consumes vast quantities of oil and gasoline. Structures with large areas of exposed glass require elaborate air conditioning in the summer and heating in the winter.

The Southern California Gas Company annually implements conservation programs that address the needs of this residential community. Residential rebate programs have been offered to property owners for the purchase of energy efficient appliances, and for the installation of insulation, weather-stripping, and duct insulation.

The Southern California Edison Company also offers residential conservation programs. The residential rebate program is for dwelling units heated by electricity only. Incentive programs provide rebates for the purchase of energy efficient refrigerators and clothes washers. Rebates are also available for the replacement of existing electric heating/cooling units with more efficient models and for pre-approved, specific heat pumps, air conditioners, and water heaters. The City will provide information regarding the conservation programs offered by the Gas Company and the Southern California Edison Company.

The City will cooperate with Southern California Edison Company and the Gas Company to initiate and facilitate programs for energy audits of existing structures. The audits will define the current levels of use, compare these to current standards for similar types of structures, and prescribe corrective methods to improve energy conservation.

The City will incorporate, at a minimum, the adoption of the State Building Codes and Green Building Codes which include requirements and techniques to conserve energy consumption and reduce the use of nonrenewable energy resources.

## **Key Conservation Goals, Objectives, Policies and Action Programs**

The City has established the following goals, objectives and policies for the conservation of local natural resources to the greatest extent feasible.

### **Conservation Goals:**

- Conservation Goal 1.** Maintain a healthy and clean city.
- Conservation Goal 2.** Ensure adequate and cost effective trash collection for Bradbury residents.
- Conservation Goal 3.** Protect the valuable watershed and natural habitat areas.
- Conservation Goal 4.** Protect and maintain the local water supply to ensure that the City's growing demand for water is properly accommodated.
- Conservation Goal 5.** Protect Bradbury's environment through the use of renewable energy resources.
- Conservation Goal 6.** Prolong the life and safety of landfills and find an environmentally safe alternative means for the disposal of solid waste.
- Conservation Goal 7.** Regulate future surface streets to minimize impacting natural open-space areas.
- Conservation Goal 8.** Ensure that development in the steep foothill area is sensitive to the local environment.
- Conservation Goal 9.** Maintain Land Use policies that have minimal impact on existing air quality.
- Conservation Goal 10.** Maximize efforts to reduce air pollution from mobile sources.
- Conservation Goal 11.** Strive to achieve ambient levels of particulate matter to meet State and Federal clean air standards.

### **Conservation Objectives:**

- Conservation Objective 1.** Continue to improve the waste diversion and recycling programs already in place.

- 
- Conservation Objective 2.** Provide adequate waste disposal systems and increase the use of compatible renewable energy resources.
  - Conservation Objective 3** When markets for new types of recyclables open up, the City should begin implementing new programs with the trash hauler.
  - Conservation Objective 4.** Require that toxic and hazardous waste be disposed of properly.
  - Conservation Objective 5.** Continue to develop a comprehensive NPDES plan that meets State standards.

**Conservation Policies:**

- Conservation Policy 1.** Protect water bodies, watersheds and courses from development impacts.
- Conservation Policy 2.** Assist residents in developing compatible renewable resources and identifying funding sources.
- Conservation Policy 3.** Protect surface water resources from contamination.
- Conservation Policy 4.** Support water purveyor in efforts to provide domestic and agricultural water.
- Conservation Policy 5.** Conserve water supplies (ground and surface).
- Conservation Policy 6.** Conserve riparian vegetation.
- Conservation Policy 7.** Conserve wildlife habitat and assist residents in living with wildlife.
- Conservation Policy 8.** Conserve oak woodlands.
- Conservation Policy 9.** Minimize conflict between agricultural and urban land uses.
- Conservation Policy 10.** Control and prevent erosion.
- Conservation Policy 11.** Enforce preservation landscape design programs.
- Conservation Policy 12.** Protect sensitive plant species and their habitats.
- Conservation Policy 13.** Protect rare, threatened, or endangered species.
- Conservation Policy 14.** Explore the use of Habitat Conservation Plans and Natural Communities Conservation Programs.
- Conservation Policy 15.** Eliminate identified water pollution sources.

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- Conservation Policy 16.** Improve major sewer, water, and storm drainage systems.
  - Conservation Policy 17.** Control hazardous materials in areas where water pollution is possible.
  - Conservation Policy 18.** Implement and maintain flood management facilities.
  - Conservation Policy 19.** Protect natural resources.
  - Conservation Policy 20.** Protect and improve air quality through coordinated efforts with other public agencies and jurisdictions.
  - Conservation Policy 21.** Protect archaeological, historical and paleontological resources

**Conservation Action Programs:**

The Conservation Action Plan for Bradbury establishes standards to ensure the protection of natural and cultural resources. These include water conservation measures, biological resource protection, cultural resource preservation, and energy conservation practices.

- Conservation Action 1.** Maintain a contract with a waste hauler to provide services to residences for trash and recycling collection.
- Conservation Action 2.** Continue to provide opportunities for the disposal of large household items.
- Conservation Action 3.** Require the waste collection purveyor to provide recycling containers to all customers.
- Conservation Action 4.** Continue to implement the Collection, Disposal and Recycling program.
- Conservation Action 5.** Purchase and use post-consumer and recycled products as much as possible.
- Conservation Action 6.** Promote green waste and recycling programs such as “green and clean” which increases the usage of green waste for compost and reduces the amount of green waste exported.
- Conservation Action 7.** Continue to partner with the County of Los Angeles on hazardous waste pick-up at least once a year.
- Conservation Action 8.** Continue to provide information to community members regarding various options for safe hazardous waste disposal.

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- |                                |   |
|--------------------------------|---|
| <b>Conservation Action 9.</b>  | Continue with regular street sweeping.  |
| <b>Conservation Action 10.</b> | Create and maintain renewable energy guidelines for residents   |
| <b>Conservation Action 11.</b> | Plan and schedule implementation for additional TMDL's.   |
| <b>Conservation Action 12.</b> | Plan for measures to control pollutants in surface run off.   |
| <b>Conservation Action 13.</b> | Develop public education and outreach programs with regard to surface runoff, catch basin and storm drainage system maintenance.      |
| <b>Conservation Action 14.</b> | Implement procedures to detect and eliminate illegal discharges and illicit disposal practices.                                       |
| <b>Conservation Action 15.</b> | Promote, publicize and facilitate public reporting of illegal dumping activities.   |
| <b>Conservation Action 16.</b> | Continue city-wide catch basin stenciling program.  |
| <b>Conservation Action 17.</b> | Provide community residents with information as to how to peacefully coexist with the natural wildlife inhabiting the area.           |
| <b>Conservation Action 18</b>  | Adopt ordinances that require new development to utilize techniques and equipment that reduce consumption of non-renewable resources. |

# **General Plan 2012-2030 Update**

## **Health and Safety Element**

(Noise and Safety Elements Combined)

### **Table of Contents**

<b>Topic</b>	<b>Pg. No.</b>
<b><u>Noise Chapter</u></b>	
Purpose	1
Noise Chapter Objective	2
Relationship to Other General Plan Elements	2
Overview of Noise Element Issues	2
Characteristics of Traffic Noise	4
Existing Noise Environment	4
Future Noise Environment	6
Noise Sensitive Land Uses	7
Noise Mitigation Plan	7
Key Noise Goals, Objectives, Policies and Action Programs	11
<b><u>Safety Chapter</u></b>	
Purpose	14
Safety Chapter Objective	14
Relationship to Other General Plan Elements	15
Related Agencies, Laws and Plans	15
Overview of Safety Chapter Issues	15
Fire Hazards	15
Historic Wildfires in the City of Bradbury	17
Flood Hazards	18
Geologic Hazards	19
Landslides	19
Erosion Hazard	20
Seismic Hazards	20
Ground Rupture	22
Ground Shaking	22
Liquefaction	22
Seiches	23
Safety and Emergency Preparedness Plan	25
Police Services	26
Fire Services	26
Medical Services	26
Peakload Water Supply	26
Natural Hazard Mitigation Plan	27
Hazardous Waste and Materials Management Program	28
Emergency Preparedness	28
Disaster Area Management	29

Alert LA County	29
Specific Needs Disaster Voluntary Registry (SNAP)	30
Evacuation Routes and Reception Centers	31
Key Safety Goals, Objectives, Policies and Action Programs	33

**Tables**

Table H-S Noise No. 1 (Existing Noise Measurements)	6
Table H-S Noise No. 2 (Existing and Future Roadway Noise Levels (CNEL))	7

**Exhibits**

Exhibit H-S Noise No. 1 (Acoustical Scale)	3
Exhibit H-S Noise No. 2 (Noise Contour Map)	10
Exhibit H-S Safety No. 1 (Fire Hazard Severity Zones)	17
Exhibit H-S Safety No. 2 (Regional Fault Segments)	21
Exhibit H-S Safety No. 3 (City Seismic Hazard Zone Map)	24
Exhibit H-S Safety No. 4 (Emergency Access and Evacuation Plan)	32

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# **Health and Safety Element**

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The City of Bradbury Health and Safety General Plan Element consists of the combination of the State required Noise Element and Safety Element. The required General Plan Elements have been combined for clarity and to eliminate redundancy.

## **Noise Chapter**

### **Purpose**

The Noise Chapter of the Bradbury General Plan Health and Safety Element establishes guidelines for controlling noise in the City. The Noise Chapter examines the characteristics and effects of noise. It describes State and Federal guidelines relating to noise control. An evaluation of the existing noise environment is included. This portion of the Health and Safety Element contains a discussion of the anticipated future noise environment. The Chapter identifies sensitive land uses and potential noise sources that may cause impacts.

As mandated by the California Government Code Section 65302(f), the Noise Chapter follows the guidelines established by the State Office of Planning and Research. Local governments must “analyze and quantify” noise levels and the extent of noise exposure through actual measurement or the use of noise modeling. Technical data relating to mobile and point sources must be collected and synthesized into a set of noise control policies and programs that “minimizes the exposure of community residents to excessive noise”. Noise level contours must be mapped and the conclusions of the element used as a basis for land use decisions.

The Noise Chapter must include implementation measures and possible solutions to existing and foreseeable noise problems. Furthermore, the policies and standards must be sufficient to serve as a guideline for compliance with sound transmission control requirements. The Noise Chapter directly correlates to the Land Use, Circulation, Housing and Community Resources Elements. Pursuant to State requirements, the Noise Chapter must indicate noise levels from traffic along major roads and highways. Noise contours are used to illustrate noise levels in areas adjacent to major roadways. The noise contour map identifies existing noise levels in the City and noise levels anticipated from projected traffic volumes.

This Chapter provides a framework within which future planning and noise-related decisions will be made and implemented. Development and traffic have a direct bearing on noise in the local environment. The community survey conducted as part of General Plan Update found that most residents view the relatively quiet and noise free environment of the City as an important amenity that must be preserved.

The Noise Chapter of the Health and Safety Element includes goals, policies and objectives that will aid in the creation and maintenance of an acceptable noise environment for the City's residents. The single-family nature of the community is the use of land that creates the least noise impacts. Although single-family dwellings create minimal noise generators it is important

to review the surrounding uses of land that may cause concern to the community. In residential areas such as Bradbury major contributors to noise are transportation, construction, garden equipment, as well as human and animal services. Additionally, sensitive noise receptors have been identified and goals and policies have been created to protect these uses from excessive noise impacts.

## **Noise Chapter Objective**

The objective of the Noise Chapter is to maintain and preserve the existing quiet and relative noise free environment in the City. The effects of noise can be eliminated or reduced through regulatory noise controls and responsible land use planning. Noise and land use guidelines have been developed by State and Federal agencies including the Federal Highway Administration, the Environmental Protection Agency, the Department of Housing and Urban Development, the American National Standards Institute, and the State of California.

## **Relationship to Other General Plan Elements**

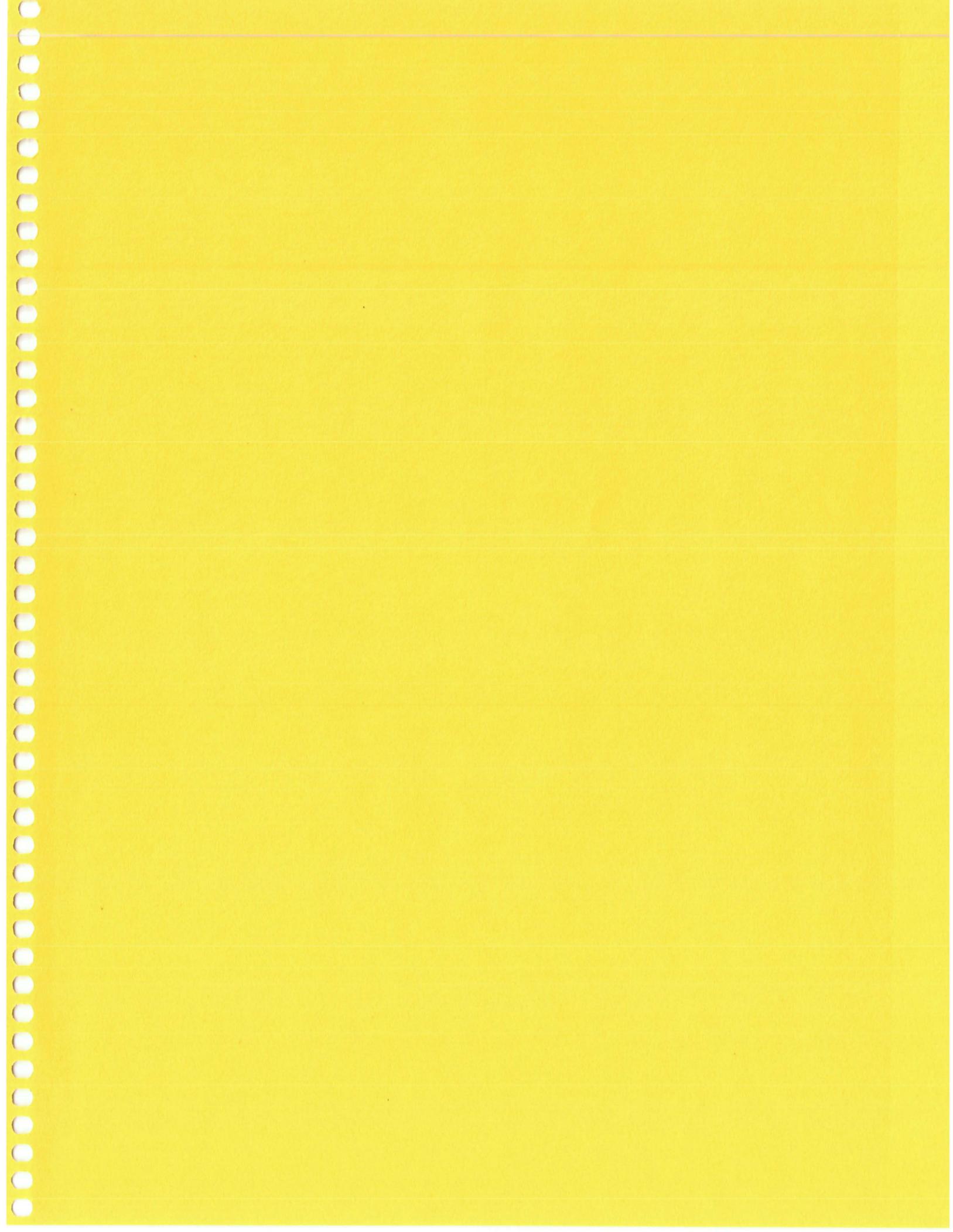
California Planning Law requires that all elements of the General Plan be consistent. While each of the General Plan elements could be characterized as independent documents, they are also interrelated in the common goal of providing a long-range integrated plan for the ongoing development of the City. The Noise Chapter of the Health and Safety Element is most directly related to the Land Use, Circulation, Housing and Community Resources Elements.

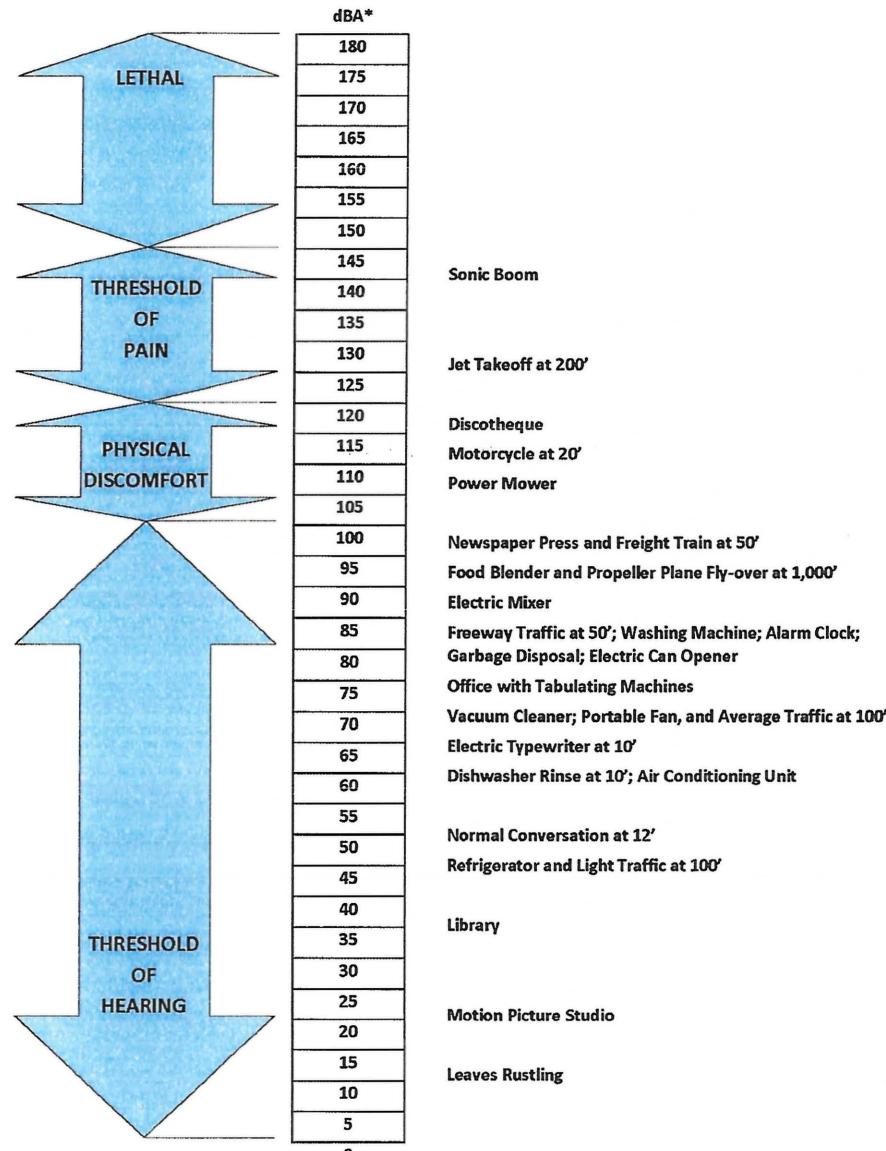
Goals, objectives and policies set forth in all of the General Plan elements have been reviewed and assessed for internal consistency.

## **Overview of Noise Element Issues**

Noise is defined as any unwanted sound. Sound is defined in terms of loudness (amplitude) and frequency (pitch). The standard unit of measurement for loudness is the decibel (dB). Since the human ear is not equally sensitive to sound at all frequencies, a frequency-dependent rating scale rates the level of noise to the sensitivity of the human ear. The A-weighted decibel scale (dBA) discriminates against frequencies in a manner approximating to the sensitivity of the human ear. Decibels are based on the logarithmic scale, in terms of human response to noise. Everyday sounds normally range from 20 dB (very quiet) to 100 dB (very loud).

The Single Event Noise Exposure Level (SENEL) is the most appropriate noise level-duration rating scale for a single noise event. The SENEL is given in decibels. The noise exposure level of a single event measured over the time interval between the initial sounds to the final sound for which it exceeds the threshold of acceptable noise level. A single event is a solitary occurrence such as a train passing by or an aircraft flying overhead (overflight). Examples of various sound levels due to varying activities are shown in Exhibit H-S Noise No. 1.





\*The unit of sound is the decibel (dB). The loudness of sound is typically measured using a sound meter, the A-Scale of which corresponds closely to the way the human ear perceives sound. Thus the sound level for noise evaluations is frequently expressed in dBA.

### **Exhibit H-S Noise No. 1 Acoustical Scale**

Cumulative noise measurements have been developed to assess community response to noise. These scales attempt to include the loudness of each event, the duration of these events, the total number of events, and the time of day that these events occur, into one single number rating scale. The cumulative noise measurement includes the Equivalent Noise Level (Leq) and the Community Noise Equivalent Level (CNEL). The Leq represents the average sound level energy for a one-hour period and employs an A-weighted decibel correction, which corresponds to the optimal frequency response of the human ear. CNEL is a 24-hour, time-weighted annual noise level and is a measure of the overall noise exposure for a 24-hour period. So that, noise levels during the evening (7 p.m. to 10 p.m.) are penalized by 5 dB and noise levels at night (10 p.m. to 7 a.m.) are penalized by 10 dB.

Environmental factors that impact noise levels include: wind direction and speed; temperature and humidity; characteristics of the ground surface; and the presence of turf, shrubbery, and trees. This is particularly true where the view of the target roadway is interrupted by isolated buildings, bushes, scattered trees, or if the intervening ground is soft or covered with vegetation. Another important factor is the location of the source or the receiver. If either the source or the receiver is located more than three meters above the ground, the level of the intruding noise will be affected. In an area which is relatively flat and free of barriers or impediments, the sound resulting from a single source spreads in a spherical manner away from the source (similar to the way waves are formed after a rock is thrown into a pond). The sound level decreases by six decibels for each doubling of distance or 20-decibels for each factor of ten in distance. This applies to fixed noise sources and mobile noise sources which are temporarily stationary, such as an idling truck or other heavy equipment operating within a confined area (such as industrial processes).

## **Characteristics of Traffic Noise**

Generally, it can be shown that a 26 percent increase in traffic volume will cause a 1.0- dBA increase in CNEL. Doubling the number of vehicles on a given route increases the adjacent noise levels by 3.0-dBA, but changing the vehicle speed has an even more dramatic effect. Increasing the vehicle speed from 35 to 45 mph raises the adjacent noise levels approximately 3.2- dBA. Reducing vehicle speeds from 35 to 30 mph decreases adjacent noise levels by 1.5- dBA on major roadways. A speed decrease from 40 mph to 35 mph also reduces adjacent noise levels by 1.6- dBA. Consequently, lowering motor vehicle speeds can have a significant positive impact in terms of reducing adjacent noise levels.

## **Existing Noise Environment**

Bradbury is exclusively zoned and developed with single-family residential detached dwelling units. Outdoor noises generated from single-family residences are associated with yard and agricultural grove maintenance, barking dogs, children playing, and other typical sounds emanating from low density residential communities. Indoor noise includes appliances, music, television as well as people and animals. Noise levels acceptable for commercial and industrial uses in other communities are not acceptable for this residential community. The large parcels have significant setbacks and they generally contain dense landscaping. The result is that noises emanating from adjacent uses of land are adequately buffered for the most part. The Irwindale Raceway located south of the City of Bradbury has been identified as a noise source that has on occasion caused distress to some residents. The City of Irwindale and the Raceway officials are aware of the noise impacts created by activities at the Raceway. Efforts have been

made to reduce the offending noise. Dwelling units constructed within the past several decades are well insulated and they use double and triple pane windows. These construction techniques substantially reduce the level of sound within the interior of a dwelling unit.

The highest noise levels within the community can be found adjacent to major arterial roadways located beyond the City's boundary. Local collector streets such as Lemon Avenue, Royal Oaks Drive North, Lemon Avenue and Mount Olive Drive are used by City and area residents during the morning and evening peak traffic periods. Huntington Drive, a major arterial street, and the I-210 and I-605 freeways are the significant sources of noise that have an impact on the community. Both freeways are located to the south and beyond the City's boundary. Since noise travels upwards, the impact may be greater on those properties located close to the major arterial roads and freeways and to dwellings located on the south-facing slopes.

Two types of noise sources have been considered: 1) stationary sources; and 2) mobile sources. Stationary noise is attributed to air conditioning units, pool equipment, audio or television usage. Non-Stationary or mobile noises are usually of short duration such as motor vehicles, aircraft, railroads, lawnmowers and power tools. Air conditioning and pool equipment noises can be reduced through design measures (placement and screening). The most prevalent mobile noise source is vehicular traffic. The major sources of noise within the City are associated with transportation-related activities: such as motor vehicles, aircraft, and railroads. All of these significant mobile noise generators are located beyond the Bradbury City limits. These sources include the Interstate I-210 and I-605 freeways and a railroad that is located south of and parallel to the I-210 freeway. Aircraft arriving and departing the City of Los Angeles Airport (LAX) are generally high enough and short enough duration so as to not create a noise impact for the residents.

The major traffic noise includes vehicles operating on major arterials that serve the City including Royal Oaks Drive (bordering the City) and Huntington Drive, Buena Vista Street, Highland Avenue, and Duarte Road. Interstate I-210 freeway generates significant noise levels since it is a constant and consistent noise especially during peak traffic periods. The railroads generate higher levels of noise but only for a short duration of time.

There are no industrial uses in close proximity to the residents of Bradbury. Noise measurements taken along Mount Olive Drive and Royal Oaks Drive (City of Duarte General Plan 2007) indicated that there was no noise level greater than 65 CNEL.

Controlled gate-guarded neighborhoods within the City restrict undesirable traffic and thus reduce or eliminate significant traffic-related noise. Traffic related noise is minimal within the community of Bradbury due to the lack of major arterial roadways. The Bradbury public street system is comprised of local and collector streets only. Most dwellings located near the internal collector streets and the exterior arterial highways are buffered from intruding noise through the use of walls.

The average residential lot in the City of Bradbury is substantially larger than single-family residential lots in adjacent communities. The larger parcels allow for landscape buffering and significant separation between dwelling units and setbacks from local streets. The highest ambient noise level in the community (64- dBA) is generated by traffic using Royal Oaks Drive (located in the City of Duarte). Noise in this area is attributed to traffic south of the old Pacific Electric Railroad right-of-way, which is also outside the Bradbury City limits.

To assess the existing noise environment, field measurements were taken at six locations in the City (refer to Exhibit H-S Noise No.2). Two readings were taken at each location, one 10-minute reading and one 1-minute reading. The results of the noise survey are summarized below in Table HS Noise No.1. The highest noise levels are expected in the southern area of the City. This is due to the higher density of development and the presence of through traffic in that area. Development in these areas should be subject to detailed noise analysis when there is a potential to exceed acceptable noise levels identified in the January 2014 analysis.

## **Future Noise Environment**

The Land Use Plan for the City of Bradbury shows that the City will remain exclusively single-family residential. This land use is not expected to result in any significant increases in local traffic. Thus, future development under the provisions of the Land Use Plan is not likely to result in any significant changes in the ambient noise levels of the community.

Residential development is a noise-sensitive use. Any development along major roadways in the City shall be subject to noise evaluation to determine the need for specific noise control measures, in order to achieve an acceptable noise environment. Land uses and activities which may generate excessive noise shall also be regulated to prevent any adverse effect on the City's future noise environment.

**TABLE H-S Noise No.-1  
Existing Noise Measurements**

<b>EXISTING NOISE MEASUREMENTS</b>						
<b>Site</b>	<b>Location</b>	$L_{max}$	$L_{10}$	$L_{33}$	$L_{50}$	$L_{90}$
1	Lemon Ave. west of Winston Ave	55	50	50	50	54
2	Deodar Ln. near Sycamore Ln.	52	50	50	50	54
3	Sycamore Ln. near Oak Mtn. Rd.	55	52	50	50	45
4	Royal Oaks Dr. west of Winston Ave.	64	54	50	45	40
5	Mount Olive Dr. @ north City boundary	61	58	50	50	50
6	Mount Olive Dr. at Gardi St.	62	60	55	50	50

Lmax = The Maximum sound level recorded during the noise measurement period.  
L10 = The sound level exceeded 10 percent of the noise measurement period.  
L33 = The sound level exceeded 33 percent of the noise measurement period.  
L50 = The sound level exceeded 50 percent of the noise measurement period.  
L90 = The sound level exceeded 90 percent of the noise measurement period, (also considered as the Background Noise Level).

The main source of noise in the City is traffic on roadways. Traffic noise affects noise-sensitive land uses that may be located along and near these routes. Because of the primarily low density residential nature of the City and the presence of many private roads, future development in Bradbury is not expected to result in major increases in traffic volumes and noise along City streets. Increases in traffic volumes on major roadways are expected to be generated by development located outside the City. This will result in increased noise levels along selected roadways. Table H-S Noise No.-2 presents the results of a noise modeling analysis based on

future traffic volumes. It indicates the distance from the roadway centerline to the 65, 60 and 55 CNEL noise contours.

**TABLE H-S Noise No. 2**

<b>EXISTING AND FUTURE ROADWAY NOISE LEVELS (CNEL)</b>					
<b>Roadway Segment</b>	<b>Distance (in feet) from Roadway Centerline to CNEL (Db)</b>				
	<b>65 CNEL</b>	<b>60 CNEL</b>	<b>55 CNEL</b>	<b>CNEL @ 50 feet</b>	<b>Change in CNEL <sup>(1)</sup></b>
Mount Olive Dr. North of Royal Oaks Ln.	0	40	90	55	0
Royal Oaks Dr. west of Woodlyn Ln.	20	45	80	54	0
Deodar Ln. north of Woodlyn Ln.	0	0	40	48	0

Note: 1 Changes in CNEL compared noise levels from existing traffic to projected traffic 50 feet from the roadway centerline.

## Noise Sensitive Land Uses

Land uses in Bradbury and the immediate area considered noise sensitive by the State of California include: schools, hospitals, rest homes, and long-term care and mental care facilities. There are no hospitals rest-homes or long-term medical or mental care facilities within the City of Bradbury. The Royal Oaks Elementary School is located in the southeastern corner of the City. The Be Royal Oaks (formally Royal Oaks Manor) retirement/assisted living care facility is located on Royal Oaks Drive North, east of Braewood Drive. This facility is located adjacent to the City of Bradbury in an unincorporated portion of Los Angeles County.

## Noise Mitigation Plan

Transportation noise is the prevalent noise issued faced by Bradbury residents. Traffic using arterial highways and freeways located beyond the City's jurisdiction poses the most significant noise generator that can impact the City's tranquil and peaceful environment. Peak a.m. and p.m. traffic periods generate the most noise. Local governments have little direct control of transportation noise at the source. State and Federal agencies have the responsibility to control vehicle noise emission levels. The most effective methods cities have to mitigate transportation noise on their communities are by use of effective site planning and the construction of noise barriers.

Noise impacts can be mitigated in three basic ways: 1) reduce the sound level of the noise generator; 2) increase the distance between the source and the receiver; and 3) insulate the receiver. People must be protected from excessive noise from non-transportation sources. These impacts are most effectively controlled through the application of the City's Noise Ordinance and the City's development design guidelines.

**Existing Noise Regulations.** The primary objective of the City of Bradbury Noise Element is to maintain and preserve the existing noise free environment. As indicated previously, the effects of noise can be eliminated or reduced through regulatory noise controls and responsible land use planning. Noise and land use guidelines have been developed by State and Federal agencies including the Federal Highway Administration, the Environmental Protection Agency, the Department of Housing and Urban Development, the American National Standards Institute, and the State of California.

**Noise Control Act** In 1972, the Noise Control Act authorized the US Environmental Protection Agency (EPA) to publish descriptive data on the effects of noise and establish levels of sound "requisite to protect the public welfare with an adequate margin of safety." These levels are separated into health (hearing loss levels) and welfare (annoyance levels) with an adequate margin of safety. In March 1974, the EPA published information on Levels of Environmental Noise Required to Protect Public Health and Welfare with an Adequate Margin of Safety (EPA 550/9-74.004). According to this publication, 55- dB Ldn is described as the required maximum noise level to provide an adequate margin of safety for areas with outdoor uses including residences and recreational areas. The EPA report does not establish standards, specifications or regulations, but identifies safe levels of environmental noise exposure without consideration for the costs to achieve these levels.

**Federal Highway Administration (FHWA)** The FHWA adopted and published noise abatement criteria for Federally-funded highway construction projects. The FHWA noise abatement criteria, basically, establishes an exterior noise goal of 67- dBA Leq for residential land uses and an interior goal of 52- dBA Leq for dwellings.

**Department of Housing and Urban Development (HUD)** The Department of Housing and Urban Development (HUD) has adopted environmental criteria and standards for determining project acceptability and necessary mitigation measures to ensure that projects assisted by HUD provide a suitable living environment. The standards include noise limits of 65- dB Ldn for residential areas.

**California Streets and Highways Code** Division 1, Chapter 1, Article 6 of this Code requires State funded noise abatement programs for freeway construction or use which will result in noise levels exceeding 55- dBA Leq or 52- dBA Leq at existing classrooms, libraries, multi-purpose rooms, and pupil personnel services of public and private elementary and secondary schools. The noise abatement program may include acoustical treatment, elimination of windows, air conditioning, sound buffer structures and other mitigation measures.

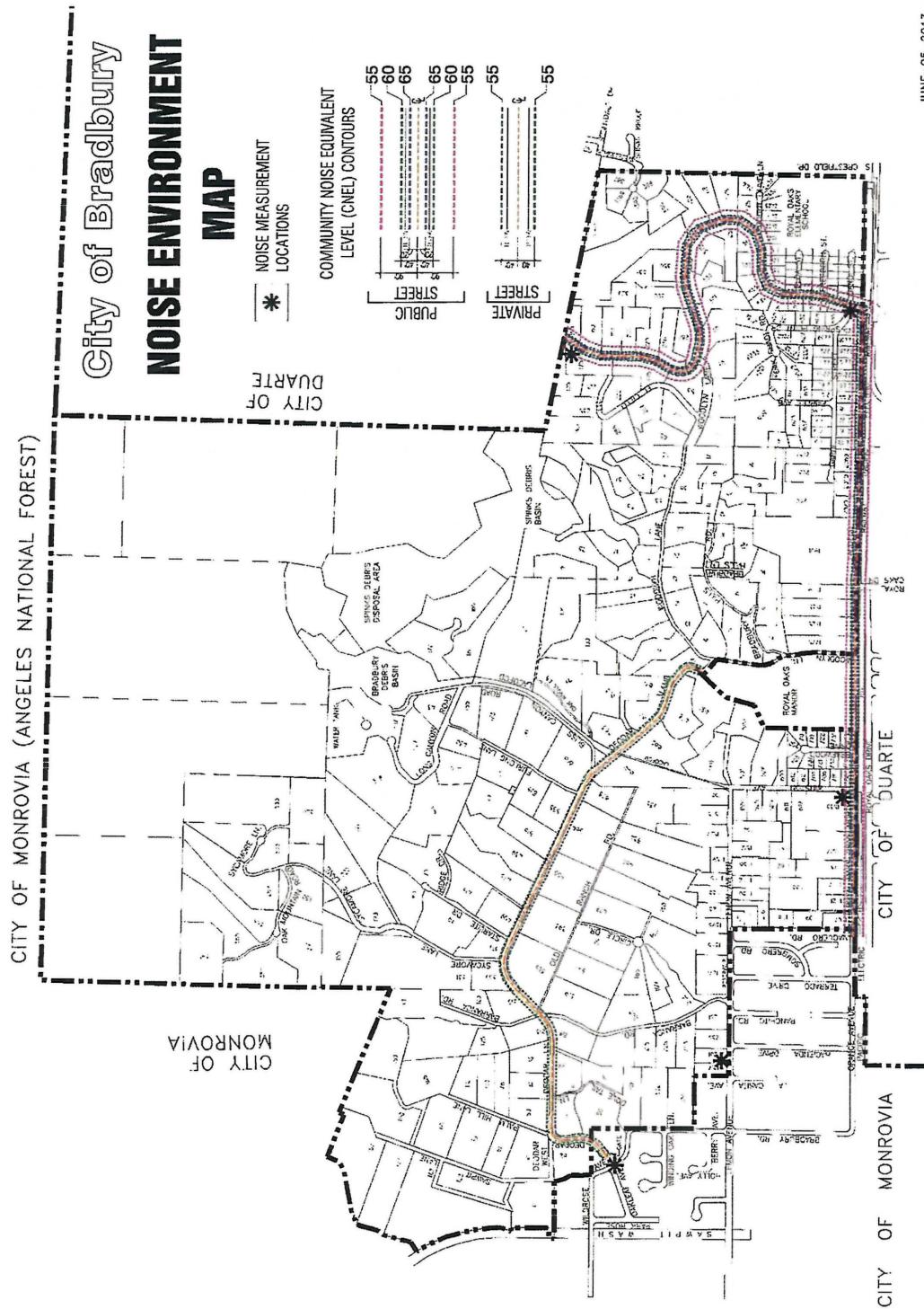
**Sound Transmission Control Standards** in the California Code of Regulations, Title 24, Part 2 commonly referred to as the California Building Code and the California Green Building Standards Code (California Code of Regulations Title 24, Part 11) establish the minimum standards for construction to include remodeling for a variety of dwelling occupancies to include single-family detached residential buildings.

**California Motor Vehicle Code** The State of California has adopted noise standards for areas not regulated by the federal government. State standards regulate noise levels of motor vehicles and motor boats, establish noise impact boundaries around airports, regulate freeway noise affecting classrooms, sound transmission control, occupational noise control, and identify noise

insulation standards. The California Motor Vehicle Code sets operational noise limits according to the type of vehicle and date of manufacture.

**City Noise Ordinance** The City of Bradbury adopted a Noise Ordinance to establish acceptable noise levels generated on private property in residential neighborhoods. It is designed to control unnecessary, excessive and annoying sounds generated from stationary sources that may impact adjacent property. It differentiates between environmental and nuisance noise. Environmental noise is measured under a time average period while nuisance noise cannot exceed the established Noise Ordinance levels at any time. Chapter 9.06.110 of the Bradbury Development Code establishes controls regarding unnecessary, excessive and annoying noise. No person shall create or allow the creation of noise on any residential property which causes the noise level to exceed the actual measured median ambient noise level, or the following presumed ambient noise level, whichever is greater.

<b>Time</b>	<b>Allowable Noise Level - dBA</b>
7:00 a.m. to 10:00 p.m.	55
10:00 p.m. to 7:00 a.m.	50



JUNE-05-2013

**Exhibit H-S Noise No. 2**  
**NOISE CONTOUR MAP**

## **Key Noise Goals, Objectives, Policies and Action Programs**

The City's Noise Control Ordinance provides a means to enforce the existing quiet, noise free environment. The City will continue to:

- Incorporate measures into future residential projects which attenuate exterior noise levels in outdoor activity areas to a maximum of 65 CNEL and interior noise levels to a maximum CNEL of 45 dB.
- Establish through the design review process that schools are located and designed so that they comply with the acoustical criteria promulgated by the California Collaborative for High Performance Schools (CHPS).
- Enforce State vehicle noise regulations (Section 23130, 23130.5, 27150, 27151 and 38275 of the California Vehicle Code) to curtail the use of vehicles equipped with illegal or faulty exhaust systems and "hot rods" exhibiting tire squeal or excessive exhaust noise.
- Enforce the California Noise Insulation Standards (Title 24 California Building Code) for dwellings to ensure an acceptable maximum interior noise level of 45 CNEL in habitable rooms, and maintain adequate noise insulation.
- Strictly enforce acoustical privacy, consistent with the California Noise Insulation Standards and all existing and future requirements outlined in the State Housing Code, for residential construction.
- Prohibit roosters and peacocks in the City.

### **Noise Goals:**

- Noise Goal 1.** Reduce noise impacts from transportation sources.
- Noise Goal 2.** Develop measures to address non-transportation noise impacts such as those that are generated from surrounding commercial and recreational activities (racetracks, etc.).
- Noise Goal 3.** Establish land uses which are compatible with existing noise levels within the community.
- Noise Goal 4.** Prevent and mitigate the adverse impacts of noise on City residents.

### **Noise Objectives:**

- Noise Objective 1.** Maintain and reduce where feasible background noise levels emanating from citywide transportation sources.

- Noise Objective 2.** Identify and mitigate construction activity and other sources of noise that may impact the community.
- Noise Objective 3.** Careful consideration of noise impacts should be a part of all land use decisions.
- Noise Objective 4.** Maintain the quiet residential character of the City free from excessive noise from mobile and fixed source generators both Citywide and region-wide.

**Noise Policies:**

- Noise Policy 1.** Ensure noise mitigation measures are included in the design of new developments.
- Noise Policy 2.** Encourage the State Department of Transportation (Caltrans) to continue programs that lead to the reduction of noise levels on the Interstate I-210 and I-605 freeways.
- Noise Policy 3.** Continue the City's street improvement program to help reduce noise levels.
- Noise Policy 4.** Encourage the use of acoustical materials in all new residential developments.
- Noise Policy 5.** Limit delivery, and truck traffic to designated routes.
- Noise Policy 6.** Ensure residential developments are designed and mitigated to achieve a maximum exterior CNEL of 65 dB and a maximum interior CNEL of 45 dB.
- Noise Policy 7.** Encourage, support, and enforce all State and Federal legislation designed to abate and control noise pollution.
- Noise Policy 8.** Encourage the use of rubberized asphalt for resurfacing streets.
- Noise Policy 9.** Continuously review the Noise Ordinance to ensure noise-generating uses are adequately addressed.
- Noise Policy 10.** Strive to resolve existing and potential conflicts between noise-generating uses and human activities.
- Noise Policy 11.** Prohibit significant long-term noise-generating activities on land located near sensitive noise receptors.
- Noise Policy 12.** Evaluate the noise impacts generated by existing and future projects located in surrounding communities that impact or may impact the Bradbury ambient noise level.

**Noise Policy 13.** Enforce limits set by the State to control noise levels, particularly those governing motor vehicles.

**Noise Policy 14.** Ensure that to the greatest extent possible construction noise does not cause an adverse impact to the residents of the City.

**Noise Implementation Action Programs:**

The City of Bradbury intends to complete the following items which address the objectives and policies of the Noise Element of the General Plan:

**Noise Action 1:** Review current policies regarding the use of gas-powered maintenance equipment and consider restricting the type of equipment used and duration of operation.

**Noise Action 2:** The City will continue to enforce the noise ordinance to protect residents from undue disturbance.

## **Safety Chapter**

### **Purpose**

The Bradbury General Plan Health and Safety Element is comprised of two State mandated general plan elements (Noise and Safety). The Safety Chapter of the Health and Safety Element focuses on those elements of risk to the residents that should be considered in current and future development planning.

The purpose of the Safety Chapter is to protect the community from any unreasonable risks associated with the effects of seismically induced surface rupture, ground shaking, ground failure, tsunami, seiche, and dam failure; slope instability leading to mudslides and landslides; subsidence, liquefaction, and other seismic hazards identified pursuant to Chapter 7.8 (commencing with Section 2690) of Division 2 of the Public Resources Code, and other hazards known to the legislative body; including flooding; and wildland and urban fires.

The Safety Chapter of the Health and Safety Element includes mapping of known seismic and other geologic hazards. It also address evacuation routes, peakload water supply requirements, and minimum road widths and clearances around structures, as those items relate to identified fire and geologic hazards.

This Safety Chapter is the primary vehicle for relating local safety planning with the City's land use decisions. The City has established land use policies, standards, and designations based on among other things the criteria set forth in this Safety Chapter. Additionally, local decisions related to zoning, subdivisions, and entitlement permits, for example, will be tied to the Safety Chapter's identification of hazards and hazard abatement provisions. The City of Bradbury Safety Chapter examines those issues related to protecting the community from any unreasonable risks associated with earthquakes, slope instability, flooding, and fire. The Chapter also indicates design standards, such as peakload water supply requirements; minimum road widths; and clearances around structures. Finally, the Safety Chapter indentifies evacuation routes and emergency reception centers.

### **Safety Chapter Objective**

Hazards affecting the City of Bradbury can be divided into two major categories: 1) naturally occurring hazards; and 2) manmade hazards. Naturally occurring hazards include earthquakes, wildland fires, floods, and slope failure. Chemical contamination, structural fires, transportation accidents and air and water pollution are examples of manmade hazards.

The objective of the Safety Chapter is to enable the City to be sensitive to those natural and manmade hazards in future decision making and to be able to respond in a timely manner in the event of an emergency. As a result, the following principle serves as the framework for the City of Bradbury Safety Chapter: Public safety is the focus of the emergency preparedness plan which emphasizes the risks associated with earthquakes, wildfire, flooding, and other manmade and natural hazards. In response to the principle, the Safety Chapter provides the foundation for a detailed inventory of those risks that need to be considered. This Chapter also establishes standards related to public safety.

## **Relationship to Other General Plan Elements**

California Planning Law requires that all elements of the General Plan be consistent. While all of the General Plan Elements are independent, they are also interrelated. Certain goals and policies of one element may also address items that are issues of other elements. This integration of issues throughout the General Plan creates a strong basis for the implementation of plans, programs and achievement of community goals. The Safety Chapter is most directly related to Land Use and Circulation Elements and the Conservation and Open Space Chapters.

## **Related Agencies, Laws and Plans**

The following State mandates impact planning and development:

**Colbey-Alquist Floodplain Management Act.** The Colbey-Alquist Floodplain Management Act encourages local governments to plan, adopt and enforce land use regulations for floodplain management, in order to protect people and property from flooding hazards. This Act also identifies requirements which jurisdictions must meet in order to receive State financial assistance for flood control.

**Alquist-Priolo Earthquake Fault Zoning Act.** The Alquist-Priolo Earthquake Fault Zoning Act requires the state Geologist to identify earthquake fault zones along traces of both recently and potentially active major faults. Cities and counties that contain such zones must inform the public regarding zone location.

**Seismic Hazards Mapping Act.** Pursuant to the Seismic Hazards Mapping Act, the state Geologist compiles maps identifying seismic hazard zones. Development in seismic hazard areas is subject to policies and criteria established by the State Mining and Geology Board. Additionally, approval of development on a site within a seismic hazard area mandates the preparation of a geotechnical report and local agency consideration of compliance with applicable state requirements.

**Landslide Hazard Identification Program.** The Landslide Hazard Identification Program requires the state Geologist to prepare maps of potential landslide zones within urbanizing areas.

**Fire Hazards.** The threat of wildfires in foothill areas in Southern California has been of concern for many years. Recognizing that this concern throughout the State, in 2012 the Legislature adopted SB 1241 which requires communities to protect themselves against wildland and urban fires by addressing the fire risk in areas of State responsibility and areas designated very high fire hazard severity zones.

## **Overview of Safety Chapter Issues**

The City of Bradbury has attempted to identify and analyze natural and manmade hazards and the associated risks that residents may be subjected to.

**Fire Hazards.** The threat of wildfires in foothill areas in Southern California has been of concern for many years. Very high risk for wildfire is evident in areas having steep slopes that

are covered with chaparral vegetation and where there is limited access for fire control equipment. Low risk areas are developed urban areas where fire access is readily available and the terrain is relatively flat. Industrial areas, hazardous material users, structures with substandard electrical wiring, overhead high voltage power lines, and high pressure gas lines are examples of urban fire hazards.

In order to facilitate immediate firefighting response, the City should have the following standards for areas that are located in high or very high fire hazard severity zones:

- There should be sufficient access routes and roads for emergency vehicles and for the evacuation of residents from all areas.
- Adequate access should be provided for all developed areas. All roadways to hazard areas should be of sufficient width to accommodate fire-fighting equipment. Streets should be marked and addresses should be posted in plain view. Adequate water supply should be available and adequate for fire suppression activity.

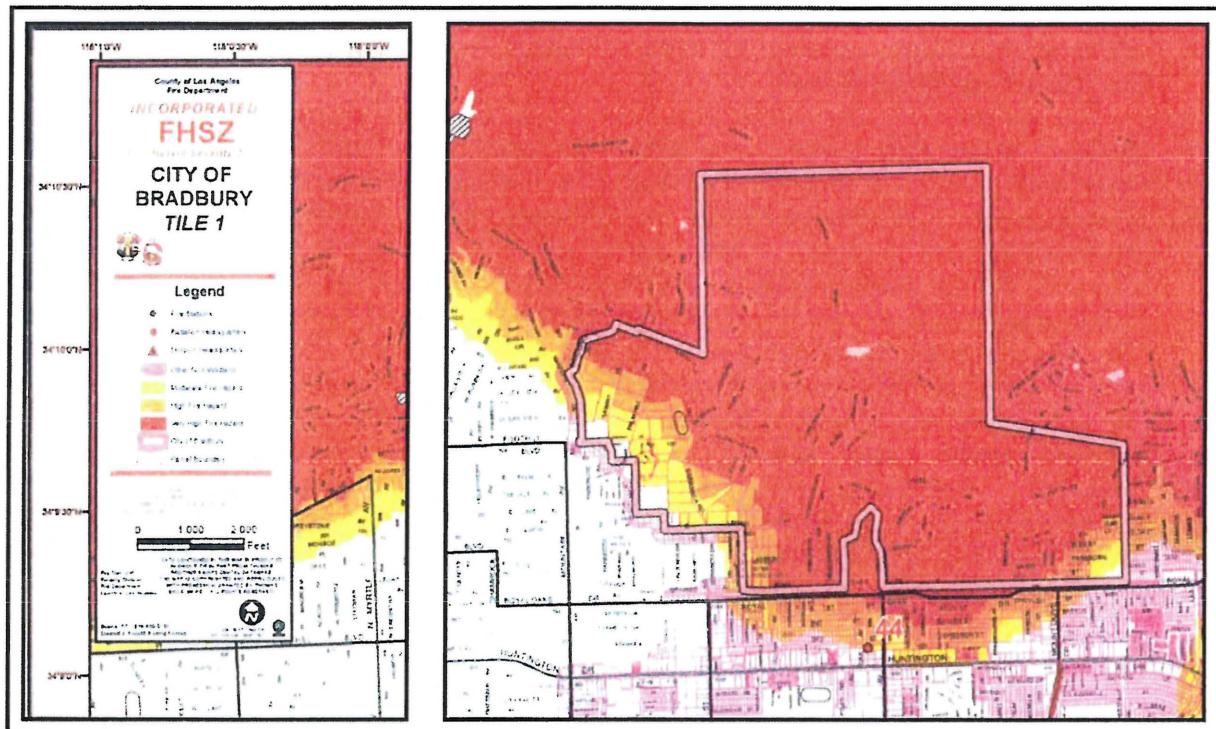
The County of Los Angeles Fire Department has identified virtually all of the City of Bradbury as a Very High Fire Hazard Severity Zone. All development within this zone should comply with the standards set forth in the Fire Department's Fuel Modification Plan. The three primary components needed to reduce fire losses are:

1. Implementing building construction methods that reduce building fire hazards,
2. Providing adequate defensible space around structures to reduce fuel; and
3. Identifying areas where there is a significant risk and a history of significant losses.

Good defensible space around structures allows adequate area for firefighters to fight a fire and avoid injury to personnel and equipment. Terrain, climate conditions, and vegetation interact to affect fire behavior.

Government Code Sections 51175 through 51189 direct the California Department of Forestry and Fire Protection (CDF) to map areas of significant fire hazards based on fuels, terrain, weather, and other relevant factors. These zones, referred to as Fire Hazard Severity Zones (FHSZ), define strategies to reduce the risk associated with wildland fires. As part of this mapping effort, areas designated for management by CDF are identified as State Responsibility Areas (SRA). Areas managed by local fire departments are identified as Local Responsibility Areas (LRA).

The majority of the City of Bradbury is located within a Very High Fire Hazard Severity Zone established by the County of Los Angeles Fire Department and reflected on Exhibit H-S Safety No. 1. The entire City lies within a Local Responsibility Area (LRA). Public Resource Code (PRC) section 4291 requires that homeowners provide fuel modification to 100 feet around their buildings to create a defensible space for firefighters and to protect their homes from wildfires. Residents must reduce dry fuel around the perimeter of any structure and comply with the adopted codes that provide standards for mitigating fire hazards.



### **Exhibit H-S Safety No. 1 FIRE HAZARD SEVERITY ZONES**

Bradbury's location at the base of the San Gabriel Mountains creates an urban/wildland interface that makes Bradbury more susceptible to wildfires than cities that do not border the foothills. During community workshops many residents expressed their concern that safety and preparedness were the highest priority for the community.

#### **Historic Wildfires in the City of Bradbury**

**1953 Duarte Fire** This fire originated between Spinks Canyon and Maddock Canyon in wildland area. A total of 561 acres burned in this fire.

**1958 Norum Fire** This fire burned in the foothills north of Monrovia, Duarte, Bradbury and Azusa. A total of 6,440 acres burned in the Norum Fire.

**1980 Stable Fire** On November, 16, 1980 a fire storm that had been fanned by Santa Ana Wind conditions swept down from the foothills and destroyed 35 homes in the City of Duarte and 14 homes in the City of Bradbury. Reports indicated that the fire had moved from the City of Azusa, east of the San Gabriel River to the Duarte and Bradbury homes in 8 to 10 minutes, due to a strong shift in winds. Immediately after the fire, city and county personnel began taking measures

to deal with the devastation. A Disaster Assistance Center was established at Duarte City Hall and Federal and State agencies were contacted for help. The Los Angeles County Fire District set up a mobile command center and the City of Duarte set up an emergency shelter. In the weeks that followed the fire, the City established several programs to deal with possible floods and mudslides that could occur due to the bare slopes where all vegetation had been burned off. Mud diversion structures were constructed, sandbags were distributed, and parking was restricted on streets with potential slides.

**2009 Station Fire** Since the Stable Fire other large wildland fires have occurred in the surrounding communities near Bradbury. The largest being the Station Fire of 2009. The Station Fire was the 10th largest wildfire in California history, burning 160,577 acres and killing two firefighters since it began in late August. The fire started in the Angeles National Forest near the U.S. Forest Service ranger station on the Angeles Crest Highway (State Highway 2). The blaze threatened 12,000 structures in the National Forest and the nearby communities of La Cañada Flintridge, Glendale, Acton, La Crescenta, Littlerock, Pasadena and Altadena, as well as the Sunland and Tujunga neighborhoods of the City of Los Angeles. The fire was predicted to burn for months and travel miles to the City of Azusa behind the City of Bradbury. The Station Fire burned on the slopes of Mount Wilson, threatening numerous television, radio and cellular telephone antennas on the summit, as well as the Mount Wilson Observatory, which includes several historically significant telescopes and multi-million-dollar astronomical facilities operated by UCLA, USC, UC Berkeley and Georgia State University. In October 2009, the fire went out due to a fall rainstorm.

**Flood Hazards** The potential for flooding is generally described in terms of a statistically projected frequency. For example, a 100-year flood has a 1.0 percent chance of occurring in a given year, while a 500-year flood is one which has a 0.2 percent chance of happening in any given year. A 500-year flood would be slightly deeper and cover a greater area than a 100-year flood. The San Gabriel River lies east of the City of Bradbury, and it is designed to contain a 100-year flood. The river is fully operational and is maintained by the U.S. Army Corps of Engineers and the Los Angeles County Flood Control District. The construction of San Gabriel River improvements in 1947 reduced the local area's risk of flooding. Los Angeles County Drainage Area studies performed by the Army Corps of Engineers have shown no deficiencies along the San Gabriel River. The elevated nature of the City removes Bradbury from flood danger from the San Gabriel River.

The San Gabriel River is the central backbone of the San Gabriel River Watershed. The watershed for the San Gabriel River is one of several coastal watersheds in Southern California that drain hundreds of square miles of mountainous and urban lands to the Pacific Ocean. The character of the river changes dramatically along its 58-mile journey from Cogswell Dam (near the headwaters in San Gabriel Mountains) to its mouth at the Pacific Ocean. On its run to the sea, the San Gabriel River passes through 19 different cities. A network of dams and flood control measures controls the San Gabriel River. The natural water cycle and flow are significantly altered to protect adjacent communities from flood damage and to better use local water resources for urban and agricultural water supplies.

Serious flooding has not been a problem in Bradbury because the low density residential development has permitted the retention of natural ground cover which retards serious floods. In addition to the natural ground cover, the Bradbury Debris Basin and the Spinks Debris Basin and check dams, maintained by the Los Angeles County Flood Control District, also provide the