

3.0 PUBLIC SAFETY AND WELFARE

3.1 Summary

The safety and welfare of a community and its residents are vital to its growth and quality of life. This chapter of the General Plan addresses public safety and welfare issues, including: air quality, fire and police/law enforcement, community facilities and services, hazards, and noise within the City and the Sphere of Influence (SOI). The City recognizes the importance of addressing seismic hazards and reduces their negative effects by adhering to or enforcing state design standards. The focus is on maintaining a healthy and safe physical environment and ensuring community welfare through access to effective and efficient high-quality public services.

3.2 Air Quality

3.2.1 Introduction

The major factors affecting local air pollution conditions in the Lake Elsinore planning area are the extent and types of both region-wide and local emissions, climate, topography, and meteorology. The combination of regional temperature inversions (the warm air mass that descends over the cool marine layer, thus preventing pollution from dispersing upward and creating smog), the Lake Elsinore Convergence Zone (a boundary created by coastal winds that allows for the accumulation of air pollutants within the Lake Elsinore area), and the contribution of any air pollutants from sources within the Lake Elsinore planning area has the potential to significantly contribute to cumulative air quality conditions.

Existing air quality conditions in Lake Elsinore can be characterized in terms of the ambient air quality standards that California and the federal government have established for several different pollutants. The pollutants of greatest concern in the Lake Elsinore area are carbon monoxide (CO), ozone, particulate matter smaller than or equal to 2.5 microns in diameter (PM_{2.5}), and particulate matter smaller than or equal to 10 microns in diameter (PM₁₀). Air quality in the area does not meet state and federal health standards for ozone, PM_{2.5}, and PM₁₀. The South Coast Air Quality Management District (SCAQMD) is responsible for monitoring air quality and preparing attainment plans aimed at achieving state and federal air pollution standards.

While emission control measures and alternative fuel vehicle purchasing requirements for public agencies and certain private entities have been implemented by the SCAQMD, increased development and segregated land use patterns that require motor vehicle trips threaten to offset these gains.

Air quality is a regional issue and Lake Elsinore has a role in improving the region’s air quality. The goals and policies in this section are designed to improve regional air quality.

3.2.2 Air Quality Baselines

Climate and Meteorology

Regional - Western Riverside County

Temperature inversions are the prime factor in the accumulation of contaminants in the Basin. The mild climatological pattern is interrupted infrequently by periods of extremely hot weather, winter storms, and Santa Ana winds. The topography and climate of Southern California combine to create an area of high air pollution potential in the Basin. During the summer months, a warm air mass frequently descends over the cool, moist marine layer produced by the interaction between the ocean’s surface and the lowest layer of the atmosphere. The warm upper layer forms a cup over the cool marine layer, which prevents pollution from dispersing upward. This inversion allows pollutants to accumulate within the lower layer. Light winds during the summer further limit ventilation from occurring.

Due to the low average wind speeds in the summer and a persistent daytime temperature inversion, emissions of hydrocarbons and oxides of nitrogen have an opportunity to combine with sunlight in a complex series of reactions. These reactions produce a photochemical oxidant commonly known as smog. Since the Basin experiences more days of sunlight than any other major urban area in the United States, except Phoenix, the smog potential in the region is higher than in most other areas of the nation.

Local - Lake Elsinore Planning Area

The major factors affecting local air pollution conditions in the Lake Elsinore planning area are the extent and types of both region-wide and local emissions, climate, and meteorology. The general climate of Lake Elsinore is characterized by sparse winter rainfall and hot summers tempered by cool ocean breezes. The climate in and around Lake Elsinore, as well as most of Southern California, is controlled largely by the strength and position of the subtropical high-pressure cell over the Pacific Ocean. This high-pressure cell produces a typical Mediterranean climate with warm summers, mild winters, and moderate rainfall. This pattern is infrequently interrupted by periods of extremely hot weather brought in by Santa Ana winds. Most of the area’s precipitation occurs intermittently between November and April; the area is still dominated by sunny or partly sunny conditions during these months. Cyclic land and sea breezes are the primary factors affecting the region’s mild climate. The daytime winds are normally sea breezes, predominantly from the west, that flow at relatively low velocities.

Just south of Lake Elsinore, the Lake Elsinore Convergence Zone acts as an invisible boundary that obstructs much of the inland basin air pollutants from continuing south beyond the Lake Elsinore area. Coastal winds within the Lake Elsinore Convergence Zone are a primary factor for the obstruction. They allow air pollutants to be dispersed just south of the convergence zone and

accumulate within the Lake Elsinore area, including surrounding communities to the north and east.

Air Quality

Regional - South Coast Air Basin, including Western Riverside County

As California’s largest metropolitan region, the Southern California Air Basin (SCAB) contains some of the highest air pollutant concentrations statewide. The SCAB includes the western portion of Riverside County, including Lake Elsinore. On-road motor vehicles in the SCAB are the largest contributors to CO, oxides of nitrogen (NO_x), and reactive organic gas (ROG) emissions; other on-road and off-road mobile emission sources are also significant contributors to CO and NO_x emissions. Area-wide and stationary sources contribute to the remainder of air pollutant emissions within the SCAB. While high growth rates are often associated with corresponding increases in emissions and pollutant concentrations, aggressive emission control programs in the SCAB have resulted in emission decreases and a continuing improvement in air quality.



Distant View of Smog
Obscuring Scenery

SCAQMD operates a network of thirty monitoring stations throughout the SCAB to effectively monitor twenty-seven source receptor areas (SRA) of the expansive region. The SCAB relies on one or more monitoring stations to document local air pollutant concentration levels within each SRA. Concentration levels vary widely at each SRA depending on location and time of year. The highest levels of ozone and particulate matter recorded in SRAs in the interior valleys generally occur during warm, stable periods in summer and autumn. Recorded CO concentrations are highest near heavy traffic on freeways or near large business districts.

3.2.3 Air Quality Goals, Policies and Implementation Programs

Goal 1 Continue to coordinate with the Air Quality Management District and the City’s Building Department to reduce the amount of fugitive dust that is emitted into the atmosphere from unpaved areas, parking lots, and construction sites.

Policy

- 1.1 Continue to implement requirements identified in the National Pollutant Discharge Elimination System (NPDES).

Implementation Program The City shall continue to condition projects to comply with the South Coast Air Quality Management District rules and regulations.

Agency/Department: Engineering and Community Development Departments

Goal 2 Work with regional and state governments to develop effective mitigation measures to improve air quality.

Policies

- 2.1 Support the SCAQMD in its development of improved ambient air quality monitoring capabilities and establishment of standards, thresholds, and rules to address, and where necessary mitigate, the air quality impacts of new development.
- 2.2 Support programs that educate the public about regional air quality issues, opportunities and solutions.
- 2.3 Evaluate the purchase of alternative fuel vehicles for official City vehicles.

Implementation Program The City shall coordinate with the South Coast Air Quality Management District regarding effective methods for improving local air quality.

Agency/Department Community Development Department

3.3 Hazards and Hazardous Materials

The City of Lake Elsinore has some businesses and activities that involve the transport, storage, or use of toxic or hazardous materials. Hazardous materials are defined as those that pose a potential threat to human health, having the capacity to cause serious illness or death. The term “hazardous materials” includes radioactive waste and explosives as well as substances such as gasoline, pesticides, and household cleaning products.

While the use of hazardous materials is carefully regulated, the City seeks to reduce the potential for injury or damage in the event of accidents or spills. There are currently no active enforcement actions or violations relating to hazardous materials in the City. The goals and policies in this section are intended to ensure that the



Hazardous Materials

appropriate agencies are adequately prepared to deal with a hazardous material emergency and that citizens are protected as much as possible from potential hazards.

3.3.1 Hazardous Sites

There are large numbers of businesses and other entities within the City and the SOI that generate, transport, store, treat, or dispose of hazardous waste as defined by the Resource Conservation and Recovery Action (RCRA). Since almost all fuels, lubricants, solvents, and paints are considered hazardous materials under RCRA, businesses and institutions that use substantial quantities of such materials are required to adhere to very strict requirements in handling, transporting, and storing hazardous materials.

There is a wide range and variety of entities that deal with hazardous materials in the course of their activities. As indicated above, these include but are not limited to:

- Automobile repair facilities
- Gas stations
- Automobile service facilities
- Construction firms
- Manufacturing firms
- Painting contractors and paint suppliers
- Dry cleaning firms
- Schools
- Hospitals and medical facilities
- Trucking firms.

The City of Lake Elsinore Fire Department provides oversight of hazardous materials and regulates permits for the handling, storage, and use of any explosive or other hazardous material. These permits note the location of the user as well as the type of material used. This enables the City to be aware of locations where such uses occur and thus note areas where high concentrations of such uses occur, such as in industrial and manufacturing areas. Hazardous materials also occur in individual locations such as gas stations and dry cleaners.

3.3.2 Inland Empire Brine Line (SARI)

The Inland Empire Brine Line, previously referred to as The Santa Ana Regional Interceptor (SARI) is a regional pipeline constructed to protect the Santa Ana River Watershed from desalter concentrate and various saline wastes. It extends into the City of Lake Elsinore as shown on Figure 3-1. The Brine Line removes 500,000 pounds of salt per day from the watershed by

transporting salty wastewater to a wastewater treatment plant operated by the Orange County Sanitation District. After treatment, the water is discharged into the Pacific Ocean. The purpose is to maintain the quality of water in the Santa Ana watershed by balancing the amount of salt in the basin. Increased salt in the watershed is caused mainly by industrial and agricultural uses and can affect all water users. Increased salinity in the water creates problems ranging from decreased effectiveness of laundry detergents to worn out plumbing fixtures and household appliances. It also affects the taste of the water.

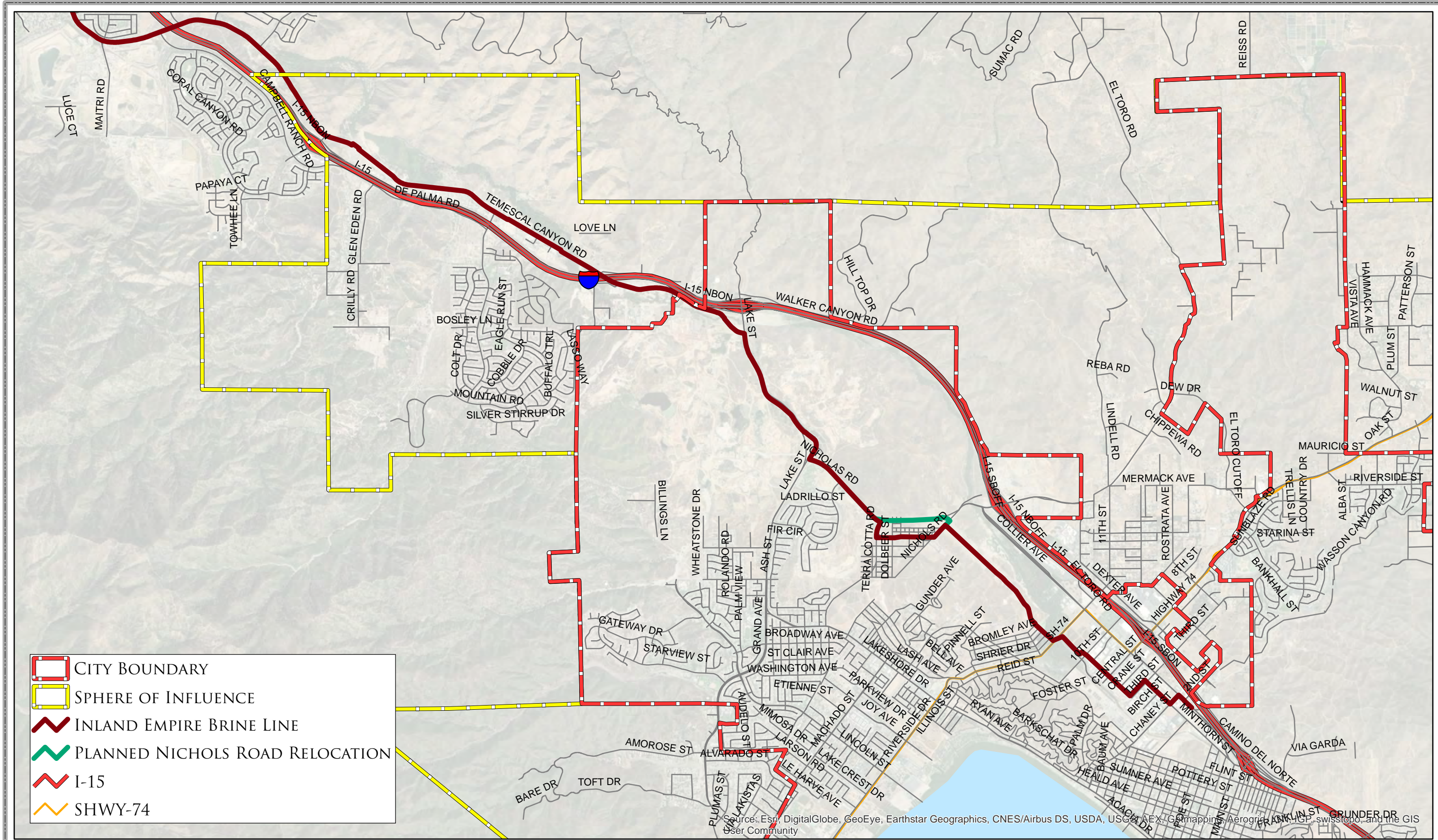
A brine line is necessary because industrial and commercial users are able to dispose only a limited amount of saline waste into wastewater plants due to the difficulty of removing salts and minerals from water. Users that produce a lot of saline waste can go through an application process to make a connection to the Brine Line; the Santa Ana Watershed Protection Authority (SAWPA) establishes connection fees and monthly rates for using the SARI line. Businesses that do not generate a substantial flow and are not close enough to make a direct connection can haul the waste by truck to a SARI truck collection station. SAWPA has permit fees and fees based upon volume for indirect connection users.

3.3.3 Hazards and Hazardous Materials Goal, Policies and Implementation Programs

Goal 3 Reduce the level of risk associated with the use, transport, treatment, and disposal of hazardous materials to protect the community's safety, health, and natural resources.

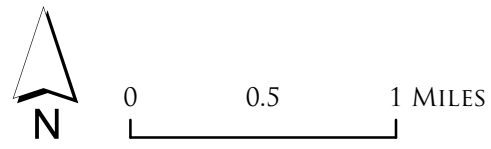
Policies

- 3.1 Continue to require hazardous waste generators to implement a waste reduction program per the Riverside County Hazardous Waste Management Plan with necessary inspections per the Riverside County Hazardous Materials Handlers Program.
- 3.2 Require any proposed development within close proximity to an active and/or inactive landfill to complete a technical analysis that focuses on public safety and hazard issues. The analysis shall be prepared by a professional consultant.
- 3.3 Encourage the safe disposal of hazardous materials with County agencies to protect the City against a hazardous materials incident.
- 3.4 Continue operating household hazardous waste education and collection programs in collaboration with the Riverside County Department of Environmental Health.
- 3.5 Evaluate new development on or adjacent to the Inland Empire Brine Line, requiring extensive subsurface components or containing sensitive land uses such as schools on a project-by-project basis to determine impacts if an accident occurs.



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, Swayze, and the GIS User Community

SOURCES: CITY OF LAKE ELSINORE, COUNTY OF RIVERSIDE, SAWPA



CITY OF LAKE ELSINORE
 INLAND EMPIRE BRINE LINE
 FIGURE 3.1

RPC 2(I)(ii)

- 3.6 Comply with the Riverside County Underground Storage Tank Program, and Health and Safety Code Sections 25280-25289 and ensure adequate leak detection, maintenance of records, and reporting of spills.
- 3.7 In the event of a petroleum or gas pipeline leak, the City shall ensure that all responsible parties comply with the standards set by the California Department of Fish & Wildlife Office of Spill Prevention and Response.

Implementation Program Through project review and the CEQA process the City shall assess new development and reuse applications for potential hazards, and shall require compliance with the County Hazardous Waste Management Plan and collaboration with its Department of Environmental Health.

Agency/Department Community Development Department

3.4 Wildfire Hazards

Much of the area to the southwest, west, and northwest within the SOI supports coastal shrub and chamise redshank chaparral. These are prime fuel sources for wildfire. As shown in Figure 3-3, Wildfire Susceptibility, the wildfire susceptibility in this area is defined as moderately high. The steep terrain in these areas also contributes to rapid spread of wildfire when one occurs.

The danger of damage to natural resources and structures from wildfire is high in California due to a generally dry climate and a preponderance of highly flammable vegetation over much of the state. From 2015 to 2019, wildfires within the jurisdiction of the California Department of Forestry and Fire (CAL FIRE), including government contracts, averaged 5,791 fires per year and burned an average of 398,313 acres per year. However, when all wildfire firefighting agencies are considered, there was an average 7,915 fires per year and 1,059,051 acres burned per year in California during the same five-year period. The number of structures damaged during that 5-year span averaged about 7,781 per year, ranging from a low of 703 structures in 2019 to a high of 22,868 structures in 2018. Average annual monetary damages are estimated to be about \$4 billion. However, the 2020 California wildfire season was characterized by a record-setting year of wildfires that burned across the state of California as measured during the modern era of wildfire management and record keeping. A summary of all 2020 incidents, including those managed by CAL FIRE and other partner agencies, shows that there were 9,917 incidents with an estimated 4,257,863 acres burned, 10,488 damaged or destroyed structures and 33 fatalities. Damage was estimated at about \$950 million.

There is a history of wildfires within the City and within the surround area. Table 3-1 contains a list of fires that have occurred within Lake Elsinore and its Sphere of Influence between 1950 and 2020. Figure 3-2 shows the areas burned by historical fires within this area.

Table 3-1, Fires in Lake Elsinore and its Sphere of Influence 1950 – 2020

Fire Name	Alarm Date	Containment Date	Cause	Acreage
Morrell	8/5/1950	N/A	Unidentified	5,118
Jameson	8/30/1954	N/A	Unidentified	7,881
Gilbert	7/27/1955	N/A	Unidentified	486
Cornwell	9/11/1956	N/A	Unidentified	3,173
Sandia	9/12/1956	N/A	Unidentified	2,053
Pederson	6/17/1957	N/A	Unidentified	1,979
Fiasco	6/18/1957	N/A	Unidentified	7,310
Morey	9/14/1958	N/A	Unidentified	2,662
Decker	8/8/1959	N/A	Unidentified	1,485
Cow	4/28/1968	N/A	Unidentified	536
Terrace Hill	5/2/1970	N/A	Unidentified	1,848
Boundary	9/6/1970	N/A	Miscellaneous	1,416
Robb	7/5/1976	N/A	Unidentified	172
Estelle	7/21/1978	N/A	Unidentified	3,080
Lemon	8/23/1978	N/A	Unidentified	2,943
Turner	11/16/1980	N/A	Unidentified	31,447
Lake #2	11/16/1980	N/A	Unidentified	1,216
Indian	11/24/1980	N/A	Miscellaneous	28,940
Cottenwood	6/15/1981	N/A	Unidentified	1,279
Dawson	6/17/1981	N/A	Miscellaneous	8,000
Wasson	7/22/1981	N/A	Unidentified	356
Dexter	8/21/1981	N/A	Unidentified	1,350
N/A	7/17/1982	N/A	Arson	295
Rail	9/3/1982	N/A	Unidentified	476
Canyon	6/16/1983	N/A	Unidentified	1,231
Horse	7/11/1985	N/A	Unidentified	761
N/A	9/1/1986	N/A	Miscellaneous	53
Riverside	2/7/1987	N/A	Playing with Fire	330
N/A	8/20/1987	N/A	Playing with Fire	259

Fire Name	Alarm Date	Containment Date	Cause	Acreage
State 1587	10/3/1987	N/A	Equipment Use	3,276
Corona State #983	6/2/1988	N/A	Equipment Use	913
Rosa	9/5/1988	N/A	Campfire	632
Horsethief II	10/11/1988	N/A	Equipment Use	135
State #2428	12/9/1988	N/A	Equipment Use	1,446
Ortega	6/27/1989	7/5/1989	Miscellaneous	7,880
Nichols	7/2/1995	N/A	Vehicle	1,264
Dawson	7/20/1995	N/A	Playing with Fire	4,718
Short	6/1/1996	N/A	Equipment Use	683
Walker	8/24/1996	N/A	Arson	137
Lewin Fire	8/25/1998	N/A	Equipment Use	109
Zeller	1/2/1999	1/2/1999	Miscellaneous	10
State Fire	3/14/1999	N/A	Arson	127
Olive	7/11/2001	N/A	Unidentified	283
Indian	3/31/2002	3/31/2002	Miscellaneous	50
Holland	9/30/2003	9/30/2003	Arson	106
Gafford	5/2/2004	5/3/2004	Unidentified	450
Cerrito	5/3/2004	5/7/2004	Playing with Fire	16,460
Lakeview	7/13/2004	7/13/2004	Unidentified	350
Lookout 2	11/12/2006	11/13/2006	Miscellaneous	290
Laguna	9/12/2007	9/12/2007	Unidentified	12
Wright	10/6/2007	10/6/2007	Miscellaneous	31
Lake	6/3/2008	6/3/2008	Unidentified	146
Cedar	5/25/2012	5/26/2012	Miscellaneous	72
Lindell	6/18/2012	6/18/2012	Unidentified	21
Falls	8/5/2013	8/14/2013	Miscellaneous	1,383
Gillette	6/15/2014	6/15/2014	Unidentified	10
Evergreen 1	7/16/2016	7/16/2016	Unidentified	2
Evergreen 2	8/28/2016	8/28/2016	Arson	43
Rose	7/31/2017	8/3/2017	Equipment Use	20
Holy	8/6/2018	10/17/2018	Miscellaneous	23,025

Fire Name	Alarm Date	Containment Date	Cause	Acreage
Toro	8/5/2019	8/6/2019	Unidentified	94
South Main	3/6/2020	N/A	Escaped Prescribed Burn	13

Source: CAL FIRE Fire and Resource Assessment Program (FRAP) accessed at <https://frap.fire.ca.gov/frap-projects/fire-perimeters/> on 6.14.2021.

In recognition of the risk proposed by fire, the City has adopted the High Fire Severity Zone Map (Figure 3-3). As shown on Figure 3-3, significant portions of the City and its Sphere of Influence are located within Very High Fire Severity Zone. Figure 3-4 and Figure 3-5 show the general distribution of existing land use (2019) and General Plan land use designations as they relate to the Very High Fire Severity Zone.

Wildfire susceptibility in the City of Lake Elsinore is defined as moderately high. The combination of Southern California’s Mediterranean climate, with its winter and spring rainfall and hot, dry summers, and the frequency of high wind velocity creates optimum conditions for wildfires. The annual rainfall pattern supports grasses, shrubs, and trees, and the hot arid summers result in dry vegetation. This readily combustible material can be easily ignited and will burn hot and fast, especially during high wind conditions. In fact, Southern California fires, which consumed more than 90% of the wildfire-burned acreage, were accompanied by high-velocity winds.

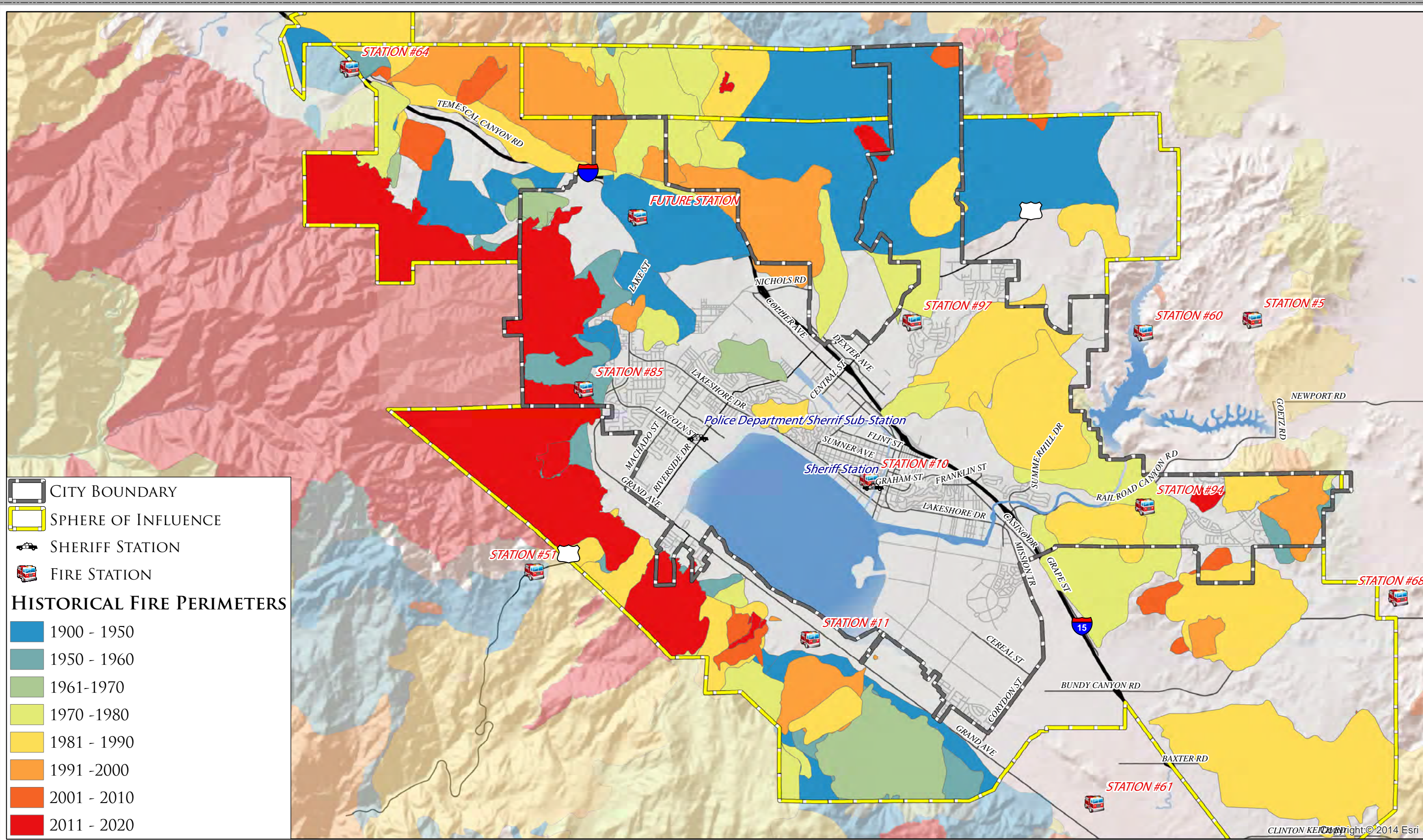
These factors contributed to the Holy Fire, which was reported on the west side of the Santa Ana Mountains in Orange County on August 6, 2018. Over 1,500 resources were dispatched to the fire, but due to high temperatures, steep rugged terrain, and very dry fuels aided it ultimately consumed 23,025 acres, including property in and adjacent to the City of Lake Elsinore or its Sphere of Influence, by the time it reached full containment. On October 17, 2018, the Holy Fire was declared 100% controlled.



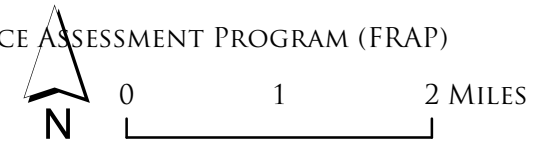
2018 Holy Fire

Photographer: Robyn Beck/AFP/Getty Images

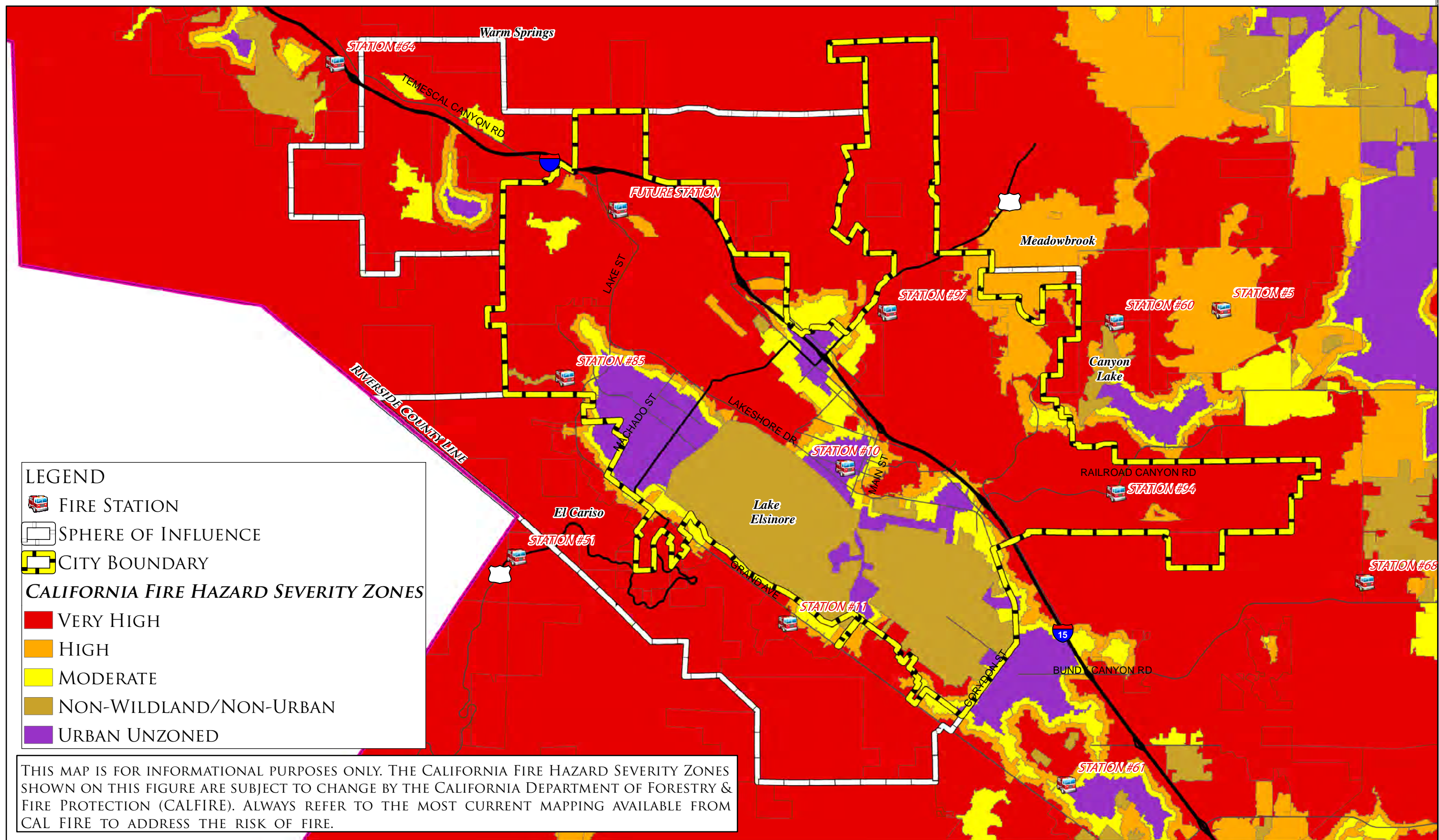
Assessments of the Holy Fire burned area revealed numerous hazards, including the high potential for debris flow, flooding, mud flows, erosion, and rock fall, all of which could impact roads, trails, recreation areas, and long-term natural recovery.



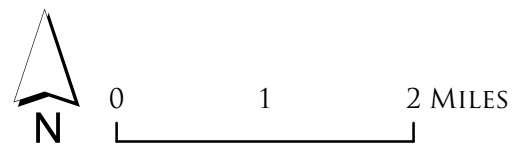
SOURCES: CITY OF LAKE ELSINORE GIS, COUNTY OF RIVERSIDE GIS
 CALIFORNIA DEPARTMENT OF FORESTRY AND FIRE PROTECTION'S FIRE AND RESOURCE ASSESSMENT PROGRAM (FRAP)



CITY OF LAKE ELSINORE
 HISTORICAL FIRE PERIMETERS
 FIGURE 3.2



SOURCES: CITY OF LAKE ELSINORE, COUNTY OF RIVERSIDE, CALIFORNIA DEPARTMENT OF FORESTRY & FIRE PROTECTION



CITY OF LAKE ELSINORE
WILDFIRE SUSCEPTIBILITY
FIGURE 3.3
RPC 2(l)(ii)

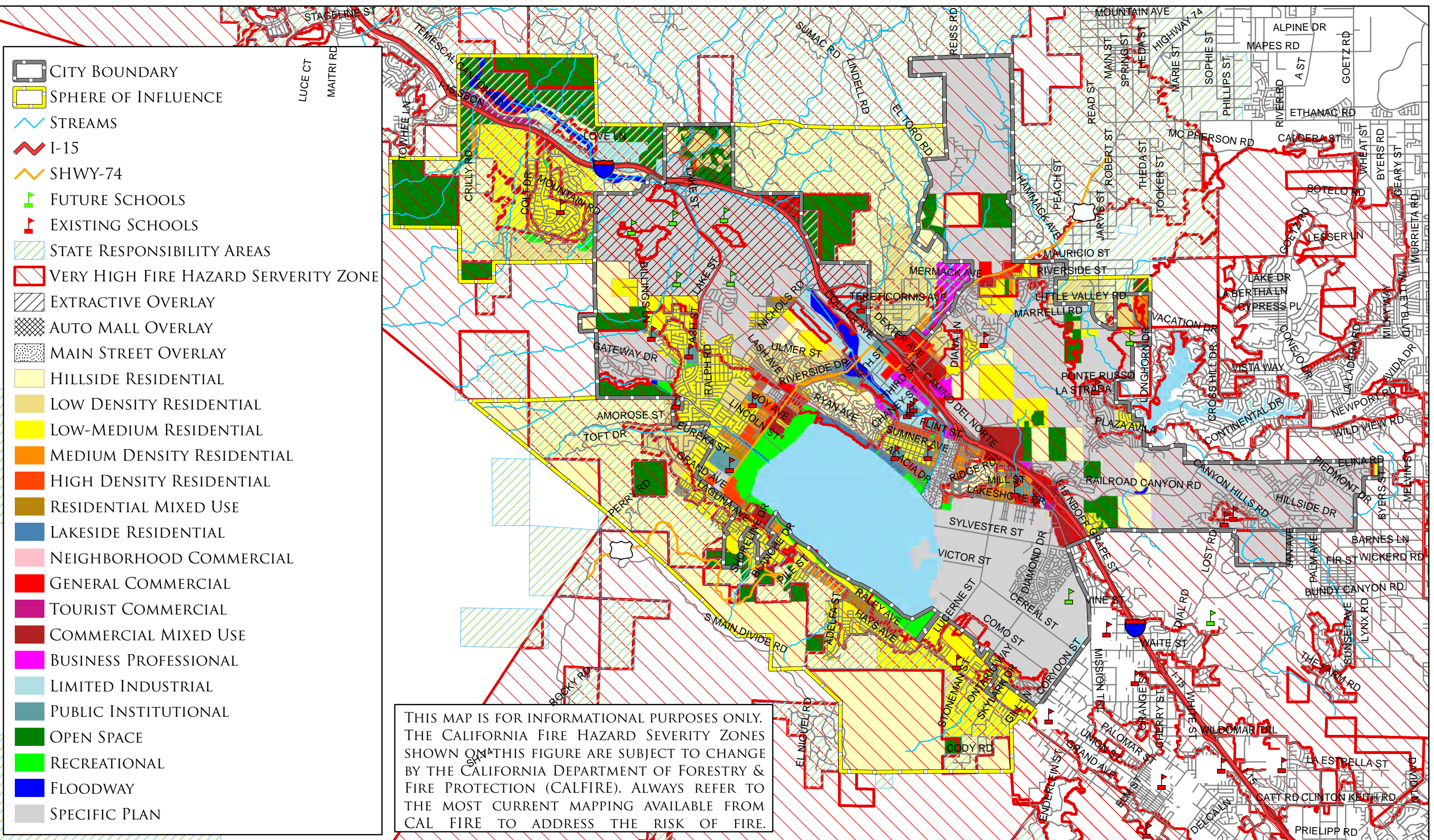
- LEGEND**
-  SPHERE OF INFLUENCE
 - CALIFORNIA FIRE HAZARD SEVERITY ZONES**
 -  VERY HIGH
 - SCAG EXISTING LAND USE (2019)**
 -  AGRICULTURE
 -  COMMERCIAL AND SERVICES
 -  EDUCATION
 -  FACILITIES
 -  GENERAL OFFICE
 -  INDUSTRIAL
 -  MOBILE HOMES AND TRAILER PARKS
 -  MULTI-FAMILY RESIDENTIAL
 -  NONE
 -  OPEN SPACE AND RECREATION
 -  RURAL RESIDENTIAL
 -  SINGLE FAMILY RESIDENTIAL
 -  TRANSPORTATION, COMMUNICATIONS, AND UTILITIES
 -  UNDER CONSTRUCTION
 -  VACANT
 -  WATER

THIS MAP IS FOR INFORMATIONAL PURPOSES ONLY. THE CALIFORNIA FIRE HAZARD SEVERITY ZONES SHOWN ON THIS FIGURE ARE SUBJECT TO CHANGE BY THE CALIFORNIA DEPARTMENT OF FORESTRY & FIRE PROTECTION (CALFIRE). ALWAYS REFER TO THE MOST CURRENT MAPPING AVAILABLE FROM CAL FIRE TO ADDRESS THE RISK OF FIRE.

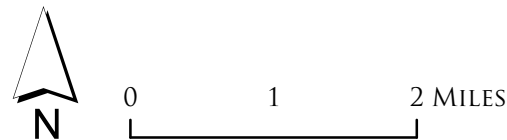
SOURCES: CITY OF LAKE ELSINORE, COUNTY OF RIVERSIDE, CALIFORNIA DEPARTMENT OF FORESTRY & FIRE PROTECTION, SCAG



CITY OF LAKE ELSINORE
 VERY HIGH FIRE SEVERITY ZONE AND EXISTING LAND USES (2019)
 FIGURE 3.4



SOURCES: CITY OF LAKE ELSINORE, COUNTY OF RIVERSIDE
 CALIFORNIA DEPARTMENT OF FORESTRY & FIRE PROTECTION



VERY HIGH FIRE HAZARD SEVERITY ZONES
 AND LAND USE PLAN
 FIGURE 3.5

The City of Lake Elsinore and the SOI are known for periodic high-velocity wind conditions through the Temescal Valley and the steep canyons to the northwest, west, and southwest portions of the SOI. Such winds are due mostly to the area's topography, which forms a natural wind tunnel along the valley and through the canyons. The area is also subject to occasional Santa Ana conditions.

Past fire management policy, mandated immediate fire suppression action for all fires, including those in wilderness areas, but also led to a long-term accumulation of vegetation (fuel) that can be easily ignited. Fire can spread quickly in high wind conditions, which poses a significant hazard in many areas, especially in forested and chaparral areas of rural Southern California. Much of the areas in the Cleveland National Forest and along the Ortega Highway (SR-74) contain large areas of chaparral and oak/pinyon plant communities that are highly flammable in the summer dry season and can promote the spread of wildfires over large distances, especially during high wind conditions. Chaparral in particular poses unique problems for fire prevention because its components (tough shrubs such as chemise, manzanita, and sage) are genetically predisposed to burn. Many of the plants in this community need fire to sprout their seeds; chaparral burns naturally every 30 to 100 years. Much of the area within the SOI supports this type of vegetation.

The heavy use of the Ortega Highway and the residences in the mountains pose additional fire risks. Traffic provides a potential ignition source because of tossed cigarettes and vehicle fires; residences provide other potential ignition sources, such as power equipment, barbecues, and residential fires.

3.4.1 Wildfire Hazards Goal, Policies and Implementation Program

Goal 4 Adhere to an integrated approach to minimizing the threat of wildland fires to protect life and property using pre-fire management, suppression, and post-fire management.

Policies

- 4.1 Require on-going brush clearance and establish low fuel landscaping policies to reduce combustible vegetation along the urban/wildland interface boundary.
- 4.2 Create fuel modification zones around development within high hazard areas by thinning or clearing combustible vegetation within 100 feet of buildings and structures. The size of the fuel modification zone may be altered with the addition of fuel resistant building techniques. The fuel modification zone may be replanted with fire-resistant material for aesthetics and erosion control.
- 4.3 Establish fire resistant building techniques for new development such as non-combustible wall surfacing materials, fire-retardant treated wood, heavy timber construction, glazing,

enclosed materials and features, insulation without paper-facing, and automatic fire sprinklers.

- 4.4 Encourage programs that educate citizens about the threat of human wildfire origination from residential practices such as outdoor barbeques and from highway use such as cigarette littering.
- 4.5 Create emergency water supply procedures that identifies and maps existing and future reservoirs, tanks, and water wells for fire suppression and that allows for immediate access to those facilities when needed for fire suppression purposes.
- 4.6 Identify and map the most current Fire Hazard Severity Zones, as described and mapped by CAL FIRE, on an ongoing and as-needed basis.
- 4.7 Identify existing developed areas within the City that have reduced or limited circulation access and develop an evacuation plan, and recommended improvements to ensure adequate evacuation capabilities.
- 4.7 Coordinate with fire protection and emergency service providers and the Elsinore Valley Municipal Water District to reassess fire hazards and future availability of water supplies, after wildfire events to adjust fire prevention and suppression needs, as necessary, for both short- and long-term fire prevention needs.
- 4.9 To the extent feasible and appropriate, locate new essential public facilities (e.g., health care facilities, emergency shelters, fire stations, emergency command centers, and emergency communications facilities) outside of Very High Fire Hazard Severity Zones. If new essential public facilities are located in a State Responsibility Area or Very High Fire Hazard Zone, the facilities shall be constructed to meet or exceed the most current version of the California Building Codes and California Fire Code requirements, as adopted by the City, to allow them to continue to serve community needs during and after disaster events.

Implementation Program The City will coordinate with the California Department of Forestry and the County Fire Department supporting public fire education and prevention programs.

Agency/Department Community Development and Public Works Departments

Implementation Program The City will work with developers to establish a Road and Bridge Benefit District (RBBDD) or other funding mechanism to construct extensions of Summerhill Drive, and La Strada to provide secondary/emergency access to existing development.

Agency/Department City Manager, Engineering and Community Development Departments

Implementation Program The City will work with the Elsinore Valley Municipal Water District to maintain adequate water supply and fire flow, and identify areas lacking adequate water service for firefighting, including capacity for peak load under a reasonable worst-case wildland fire scenario, to be determined by CAL FIRE.

Agency/Department City Manager, City Fire Marshal and Public Works Department

Goal 5 Minimize injury, loss of life property damage resulting from wildland fires.

Policies

- 5.1 Require development to contribute its fair share towards funding the provision of appropriate Law Enforcement, Fire and Paramedic Services necessary to address the fiscal impacts of the project on public safety operations and maintenance issues in the City.
- 5.2 Require that all new development located in a Very High Fire Hazard Severity Zone (VHFHSZ) or a State Responsibility Area (SRA), as most recently mapped by CAL FIRE, comply with the most current version of the California Building Codes and California Fire Code, as adopted by the City of Lake Elsinore.
- 5.3 Require all new development to have at least two access roads in order to provide for concurrent safe access of emergency equipment and civilian evacuation.
- 5.4 If new development is located in a State Responsibility Area or in a Very High Fire Hazard Severity Zone, require adequate infrastructure, including safe access for emergency response vehicles, visible street signs, and water supplies for fire suppression.
- 5.5 Require new development in VHFHSZs to prepare a Fire Protection Plan that minimizes risks by:
 - Assessing site-specific characteristics such as topography, slope, vegetation type, wind patterns etc.;
 - Siting and designing development to avoid hazardous locations (e.g. through fire breaks) to the extent feasible;
 - Incorporating fuel modification and brush clearance techniques in accordance with applicable fire safety requirements and carried out in a manner which reduces impacts to environmentally sensitive habitat to the maximum feasible extent;
 - Using fire-safe building materials and design features, consistent with the adopted Municipal Code and Fire and Building Code standards;

- Using fire-retardant, native plant species in landscaping; and
 - Complying with established standards and specifications for fuel modification, defensible space, access, and water facilities.
- 5.6 Require new development within VHFHSZs to enter into a long-term maintenance agreement for vegetation management in defensible space, fuel breaks, and roadside fuel reduction. The agreement shall specify who is responsible for maintenance of these areas and the fire safe standards that will be implemented. As a project condition of approval, a copy of the executed agreement shall be provided to the City Fire Marshal and the Building and Safety Department.
- 5.7 Require that all redevelopment of properties damaged or destroyed by a major wildfire comply with the most current version of the California Building Codes and California Fire Code, as adopted by the City of Lake Elsinore.
- 5.8 Perform an evaluation of fire-related development standards should a major wildfire require portions of the City be rebuilt to ensure that redevelopment standards are as fire-safe as reasonably possible.

Implementation Program The City shall condition projects to comply with Fire Department requirements.

Agency/Department Community Development Department

3.5 Flooding and Floodplains

Development in the 100-year floodplain can increase flooding hazards by raising water levels upstream and adding flow, velocity, and debris downstream. Floodplains are the low, flat, periodically flooded lands adjacent to rivers, lakes, and oceans inundated by the 100-year flood and composed of the floodway and the floodway fringe. The floodway is the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the 100-year flood without cumulatively increasing the water surface elevation more than one foot. The floodway fringe is that portion of the floodplain between the floodway and the limits of the existing 100-year floodplain.



Flooding in Lake Elsinore 1988

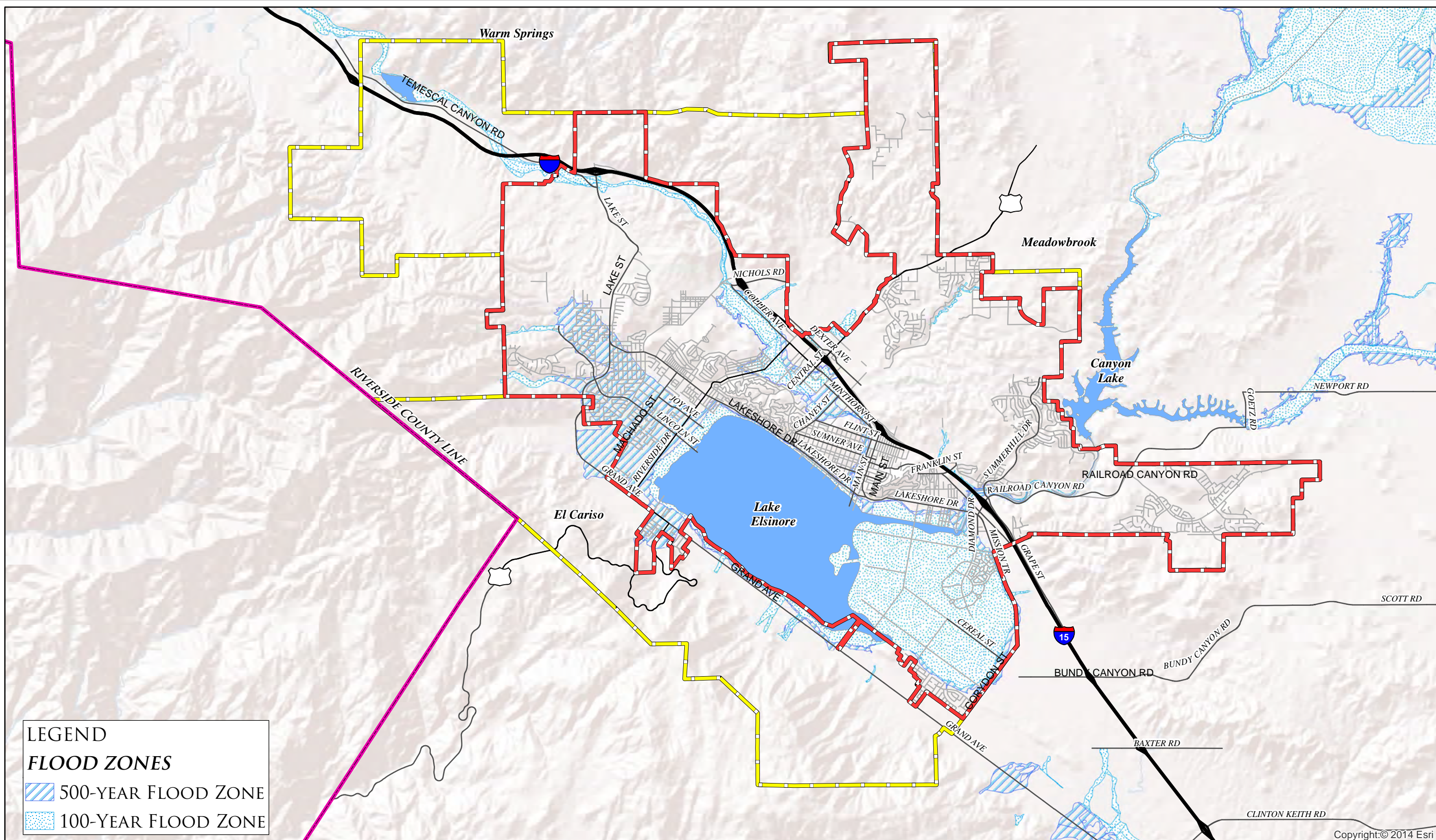
As shown in Figure 3-6, significant portions of the City and the SOI are located within the 100-year

floodplain. The City of Lake Elsinore has identified flooding sources within the City that include Arroyo del Toro, Channel H, Elsinore Spillway Channel, Lake Elsinore, Leach Canyon Channel, Lime Street Channel, McVicker Canyon, Ortega Wash, Ortega Channel, Rice Canyon, San Jacinto River, Stovepipe Canyon Creek, Temescal Wash, Wash G, Wash I, Murrieta Creek, Wasson Canyon Creek, and potentially Railroad Canyon Dam if the incidence of failure occurs.

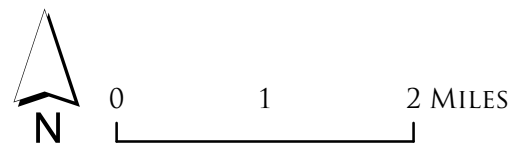
The City places a high priority on preventing flood damage and requires new projects to consider flooding and storm drainage effects. Limited encroachment into the 100-year floodplain fringe is allowed in order to permit development of properties within this area. However, encroachment shall maintain a focus on public facilities such as roads, parks, sewer and water improvements, and pedestrian routes. No development of the floodway is allowed. The City will review development projects within the floodplain to ensure compliance with City, state, and federal floodplain development projects. The U.S. Army Corps of Engineers (USACE) and the California Department of Fish and Wildlife (CDFW) often have jurisdiction over areas that are located within floodplains.

USACE, through the authority of Section 404 of the Clean Water Act, is the primary agency involved in wetland regulation. The Environmental Protection Agency (EPA) has the authority to veto any decision by the USACE on Section 404-permit issuance because the EPA has the ultimate authority over enforcement of wetland regulations. Prior to the issuance of a Section 404 permit by the USACE, the Regional Water Quality Control Board (RWQCB) must issue a Section 401 water quality certification or waiver. In this way, the RWQCB regulates actions permitted by the USACE under Section 404 of the Clean Water Act (CWA). In addition, the U.S. Fish and Wildlife Service (USFWS) must be consulted and may take jurisdiction if any wetland impacts could affect federally endangered species.

The USACE has jurisdiction over “waters of the U.S.,” including wetlands as defined by Section 404 of the Clean Water Act. Not all waters of the U.S. are wetlands and not all wetlands are under USACE jurisdiction. The term “waters of the U.S.” covers many types of waters, including waters currently or historically used in interstate or foreign commerce (including all waters subject to the ebb and flow of tides); all interstate waters (including interstate wetlands); all other waters, such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, etc., the use, degradation, or destruction of which could affect interstate or foreign commerce; all impoundments of waters otherwise defined as waters of the U.S.; tributaries of waters of the U.S.; territorial seas; and wetlands adjacent to waters of the U.S. Regulated waters of the U.S. do not include isolated waters. However, isolated waters may be regulated by the RWQCB and the CDFW under the Porter-Cologne Act and the California Fish and Game Code, respectively.



SOURCES: CITY OF LAKE ELSINORE, COUNTY OF RIVERSIDE, SCAG



CITY OF LAKE ELSINORE
 FLOODPLAINS
 FIGURE 3.6

The CDFW has jurisdiction covering lakes, rivers, and streams. Jurisdiction extends across the bed, banks, and channel of these features and includes areas beneath a riparian canopy, even if the canopy areas are well away from the stream channel (such as in oak riparian areas). More typically, the jurisdiction over streambeds is applied from the top of one channel bank to the top of the opposite bank.

Regional flood control planning and facilities construction are within the jurisdiction of the Riverside County Flood Control District. The district is also responsible for the maintenance and operation of flood control facilities, including debris dams, storm channels, and storm drains. The City of Lake Elsinore owns and maintains certain flood control facilities in the City that are constructed generally as part of the drainage plans for individual projects.

3.5.1 Flooding and Floodplains Goal, Policies and Implementation Program

Goal 6 Minimize risk of injury to residents and visitors, and property damage due to flooding.

Policies

- 6.1 Continue to ensure that new construction in floodways and floodplains conforms to all applicable provisions of the National Flood Insurance Program in order to protect buildings and property from flooding.
- 6.2 Continue to encourage floodway setbacks for greenways, trails, and recreation opportunities.
- 6.3 Reduce the risk of flooding by creating floodway setbacks for greenways, trails, and recreation areas and by prohibiting development within the floodways.
- 6.4 Encourage that new developments within the floodplain fringe shall preserve and enhance existing native riparian habitat.
- 6.5 Continue to require the construction of channel improvements to allow conveyance of the 100-year flow without extensive flooding.
- 6.6 Use FEMA regulations and mapping to ensure that flooding hazards are evaluated during the environmental review process, including placement of restrictions on development within designated floodplain areas.



- 6.7 Promote drainage improvements that maintain a natural or semi-natural floodplain.
- 6.8 Utilize the Capital Improvement Program for storm drainage projects and maintenance and improvement of local storm drain systems including channels, pipes, and inlets to ensure capacity for maximum runoff flows.

Implementation Program Through the project review and the CEQA processes the City shall assess new development and reuse applications for potential flood hazards, and shall require compliance with FEMA Special Flood Hazard Areas where appropriate.

Agency/Department Public Works Department

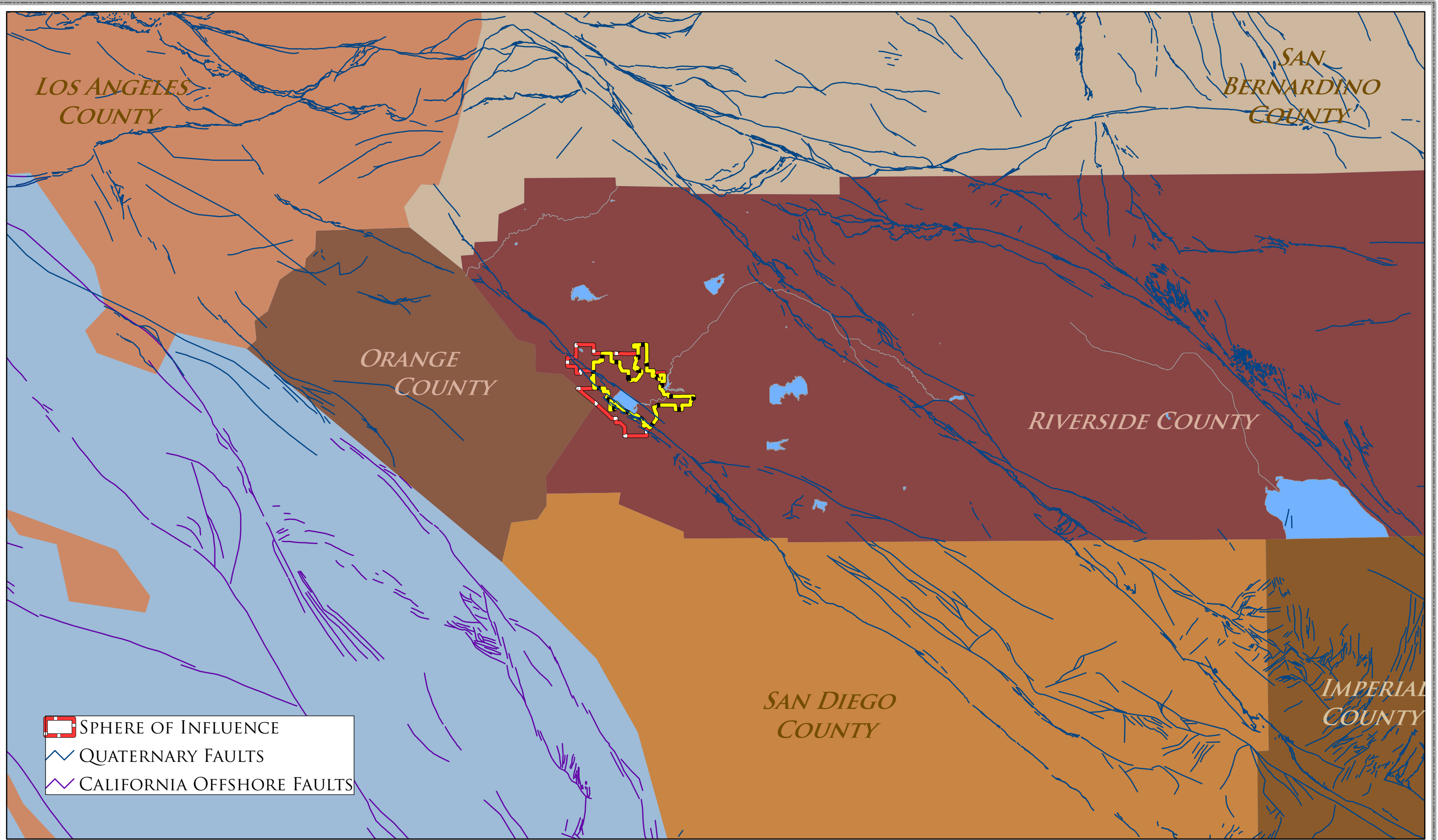
3.6 Geologic and Seismic Hazards

3.6.1 Geologic Setting

The City of Lake Elsinore and its SOI are located in the northern part of the Peninsular Ranges Province and includes parts of two structural blocks, or structural subdivisions of the province. The Peninsular Ranges province extends from the Santa Monica Mountains approximately 900 miles south to the tip of Baja California. It is located on the Pacific (tectonic or crustal) Plate, which is moving to the northwest relative to the adjacent North American Plate. The well-known San Andreas Fault forms the boundary between the Pacific and the North American Plates. As a result, the Southern California area contains numerous regional and local faults, and experiences substantial ground movement during frequent seismic events. The Elsinore fault zone is part of the same right-lateral crustal plate strain system as the San Andreas. In the City of Lake Elsinore, the majority of the Elsinore fault zone is located under the Lake.

The Elsinore fault consists of multiple strands, a number of which are recognized as active and zoned by the State of California under the Alquist-Priolo Act. Risk of surface rupture along these zoned active traces is substantial. Although the County has zoned additional faults as active, none of the County-zoned traces is in the immediate vicinity of the City or SOI.

The Uniform Building Code recognizes the northern portion of the Elsinore fault as a Type B seismic source (International Council of Building Officials 1997). The Elsinore fault is believed to be capable of generating earthquakes with moment magnitudes in the range of 6.5–7.5, with a recurrence interval of approximately 250 years between major events. Smaller events may occur more frequently. Thus, the City and the SOI are likely to experience repeated moderate to strong ground shaking generated by the Elsinore fault in the foreseeable future. The City and surroundings also have the potential to experience significant ground shaking as a result of seismic activity on a number of the Peninsular Ranges' other active faults, shown in Figure 3-7, Approximate Traces of Principal Active Faults of the Peninsular Ranges and Mojave Desert Near Lake Elsinore, and Figure 3-8, Seismic Hazards.

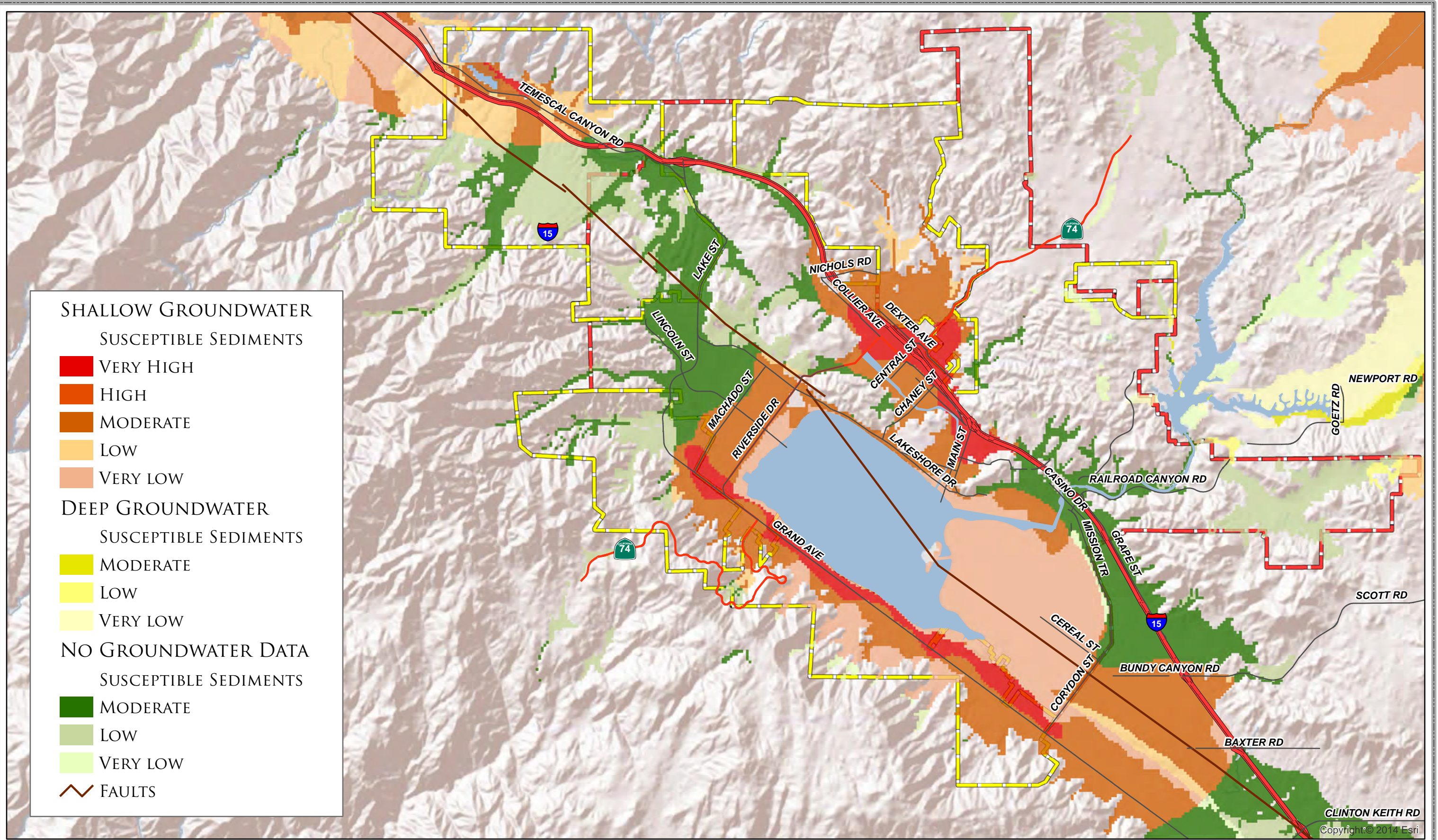


SOURCES: CITY OF LAKE ELSINORE, COUNTY OF RIVERSIDE, USGS

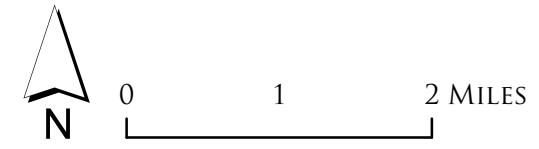


APPROXIMATE TRACES OF PRINCIPAL ACTIVE FAULTS OF THE PENINSULAR RANGES AND MOJAVE DESERT NEAR LAKE ELSINORE

FIGURE 3.7



SOURCES: CITY OF LAKE ELSINORE, COUNTY OF RIVERSIDE



CITY OF LAKE ELSINORE
SEISMIC HAZARDS
FIGURE 3.8

Although the State of California has not yet issued seismic hazards maps for the Lake Elsinore area, when completed, these maps will be required to delineate areas at risk from secondary seismic hazards. Both the County General Plan and the Elsinore Area Plan delineate areas susceptible to secondary seismic hazards. The City has high potential for damage due to liquefaction and slope failure in some areas.

3.6.2 Regulatory Setting

Alquist-Priolo Earthquake Fault Zoning Act (1972).

The Alquist-Priolo Earthquake Fault Zoning Act (California Public Resources Code Section 2621 et seq.) was passed in 1972 to mitigate the hazard of surface faulting to structures for human occupancy. The Act requires the State Geologist to establish regulatory zones, known as “Earthquake Fault Zones,” around the surface traces of active faults and to issue appropriate maps. Earthquake Fault Zones were called “Special Studies Zones” prior to January 1, 1994. Local agencies must regulate most development projects within these zones. Before a project can be permitted, cities and counties must require a geologic investigation to demonstrate that proposed buildings would not be constructed across active faults. A licensed geologist must prepare an evaluation and written report of the specific site. If an active fault is found, a structure for human occupancy cannot be placed over the trace of the fault and must be set back from the fault (typically 50 feet set backs are required).

Seismic Hazards Mapping Act (1990)

The Seismic Hazards Mapping Act (SHMA) of 1990 (Public Resources Code Section 2690 et seq.) directs the Department of Conservation, California Geological Survey to identify and map areas prone to liquefaction, earthquake-induced landslides and amplified ground shaking. The purpose of the SHMA is to minimize loss of life and property through the identification, evaluation and mitigation of seismic hazards. The State requires: (1) local governments to incorporate site-specific geotechnical hazard investigations and associated hazard mitigation, as part of the local construction permit approval process; and (2) the agent for a property seller or the seller if acting without an agent, must disclose to any prospective buyer if the property is located within a Seismic Hazard Zone.

3.6.3 Local Plans

Local Hazard Mitigation Plan.

Public safety planning generally focuses on how an agency or community members will prepare for, respond to, and/or recover from a disaster. Hazard mitigation planning focuses on how the impact of a disaster might be lessened. On September 11, 2018, the Lake Elsinore City Council adopted the Lake Elsinore Local Hazard Mitigation Plan Annex (LHMP) to the Riverside County Operational Area Multi-Jurisdictional Local Hazard Mitigation Plan.

The purpose of the Riverside County Operational Area Multi-Jurisdictional Local Hazard Mitigation Plan is to identify the County’s hazards, review and assess past disaster occurrences, estimate the probability of future occurrences and set goals to mitigate potential risks to reduce or eliminate long-term risk to people and property from natural and man-made hazards. The Lake Elsinore Local Hazard Mitigation Plan Annex is to focus on these topics as they relate specifically to the City.

The plan was prepared pursuant to the requirements of the Disaster Mitigation Act of 2000 to achieve eligibility and potentially secure mitigation funding through Federal Emergency Management Agency (FEMA) Flood Mitigation Assistance, Pre-Disaster Mitigation, and Hazard Mitigation Grant Programs.

The LHMP includes an assessment of the City’s risk related to natural hazard impacts such as seismic events, drought, wildfire, extreme heat, hazardous materials, and flooding. The LHMP also includes a comprehensive set of actions the City will complete to mitigate, or reduce, the impacts of those hazards. The mitigation actions in the LHMP are included in the General Plan as a subset of the Plan’s overall implementation program. The current LHMP is incorporated into this Chapter by reference.

Emergency Operations Plan

The City of Lake Elsinore Emergency Operations Plan (EOP), approved on March 27, 2007, addresses the planned response to extraordinary emergency situations associated with natural disasters, technological incidents, and national security emergencies in or affecting the City of Lake Elsinore. The EOP describes the operations of the City’s Emergency Operations Center (EOC), which is the central location responsible for directing and coordinating the various City of Lake Elsinore Departments and other agencies in their emergency response activities.

Resilient IE

Resilient IE was developed by the Western Riverside Council of Governments (WRCOG) in collaboration with the San Bernardino County Transportation Authority (SBCTA) with funding from Caltrans. Resilient IE works to support regional and local efforts to prepare for and mitigate risks associated with climate adaptation on the region’s transportation infrastructure with five primary project components. These components include community vulnerability assessments and city-level, climate-related transportation hazards and evacuation maps.

The following is a list of climate-related hazards that were identified as impacting the city of Lake Elsinore:

- Air Quality – The city of Lake Elsinore may experience more frequent days of unsafe levels of atmospheric ozone by 2050, creating or exacerbating health risks for some individuals.

- Drought – Water sources will likely experience more frequent and intense droughts, which can cause water shortages.
- Extreme Heat – Extreme heat incidents can strain the city’s power delivery networks and can increase rates of heat-related illnesses, particularly in at-risk populations.
- Flooding – More intense flooding is expected to occur along the to the north and south of Lake Elsinore reservoir and along the Temescal Wash and San Jacinto River in the City of Lake Elsinore.
- Human Health Hazards – More frequent and severe wildfires near the city of Lake Elsinore could worsen air quality, causing health impacts. Warmer conditions are also expected to increase the spread of vector-borne diseases carried by organisms like mosquitoes.
- Landslides – More frequent and intense rainfall could increase the chance that a landslide will likely occur in the city of Lake Elsinore. Deep-seated landslides could occur on steeper slopes throughout the city, especially near the mountains on the southern edge of the City.
- Severe Weather – Strong winds and heavy rains are expected to become more intense around the city of Lake Elsinore.
- Wildfire – Drought conditions, extreme heat, and extreme wind events can increase the frequency and intensity of wildfires in the WRCOG region, including the wildland-urban interface. The city of Lake Elsinore could experience more wildfires throughout the City, due to its location in the wildland-urban interface.

Critical Assets

Table 3-2 is a list of critical assets that are vulnerable to any of the key climate-related hazards that are present in the region:

Table 3-2 List of the City of Lake Elsinore’s Critical Assets by Type and Name

Asset Type	Asset Name
Local and Regional Infrastructure	I-15, SR-74, major roadways, Lake Elsinore Reservoir, Skylark Field Airport, Lake Elsinore City Hall, Lakeside Library, Lake Elsinore Library, Lakeland Village Community Center, Lake Elsinore Community Center, Victor Community Support, Elsinore Valley Municipal Water District, electrical transmission lines, Police stations, Fire stations
Major Commercial/Economic Hubs	Lake Elsinore Outlets, Pacific Aggregates, Lake Elsinore Square, Lakeside Center, Lake Elsinore Diamond Stadium, Lake Elsinore Town Center, Lake Elsinore Valley Center
Medical	Lake Elsinore Family Care Center, Total Care Family Medical Center, Vista Community Clinic, Lake Elsinore Primary Care Clinic, Lake Elsinore Dialysis
Parks	Lakepoint Park, Machado Park, Summerlake Park, Oak Tree Park, McVicker Canyon Park and Skate Park, Creekside Park, City Park, Swick and Matich Park, Yarborough Park, Tuscany Hills Parks, Summerhill Park, Sunshine Park, Spirit Park, Linear Park, Lincoln Street Park, Alberhill Sports Park
Schools	Canyon Lake Middle, Cottonwood Canyon Elementary, Earl Warren Elementary, Keith McCarthy Academy, Temescal Canyon High, Valley Adult School, Tuscany Hills Elementary, Heald Academy, Herk Bouris Elementary, Elsinore Elementary, Elsinore Middle, Lakeland Village, Lakeside High, Machado Elementary, Ortega High, Railroad Canyon Elementary, Rice Canyon Elementary, Terra Cotta Middle, Withrow Elementary, Jeanette Ellis Center.

Source: Resilient IE, Community Vulnerability Profiles, February 2020, Page 34 (Accessed 6.4.2021 at <https://wrcog.us/285/Resilient-IE>)

Key Vulnerabilities

Table 3-3 shows which hazards in the city of Lake Elsinore may pose the greatest harm to vulnerable groups or assets in the city.

Table 3-3 Key Vulnerabilities in City of Lake Elsinore by Applicable Hazard

Vulnerability	Hazards							
	Air Quality	Drought	Extreme	Flooding	Human Health Hazards	Landslides	Severe Weather	Wildfire
Households in poverty	✓	✓	✓	✓	✓		✓	✓
Persons experiencing homelessness	✓		✓	✓	✓		✓	✓
Chronically ill individuals	✓		✓		✓		✓	✓
Residential structures				✓		✓		✓
Energy delivery systems			✓				✓	✓
Water delivery systems		✓						✓

Source: Resilient IE, Community Vulnerability Profiles, February 2020, Page 35 (Accessed 6.4.2021 at <https://wrcog.us/285/Resilient-IE>)

Evacuation Routes

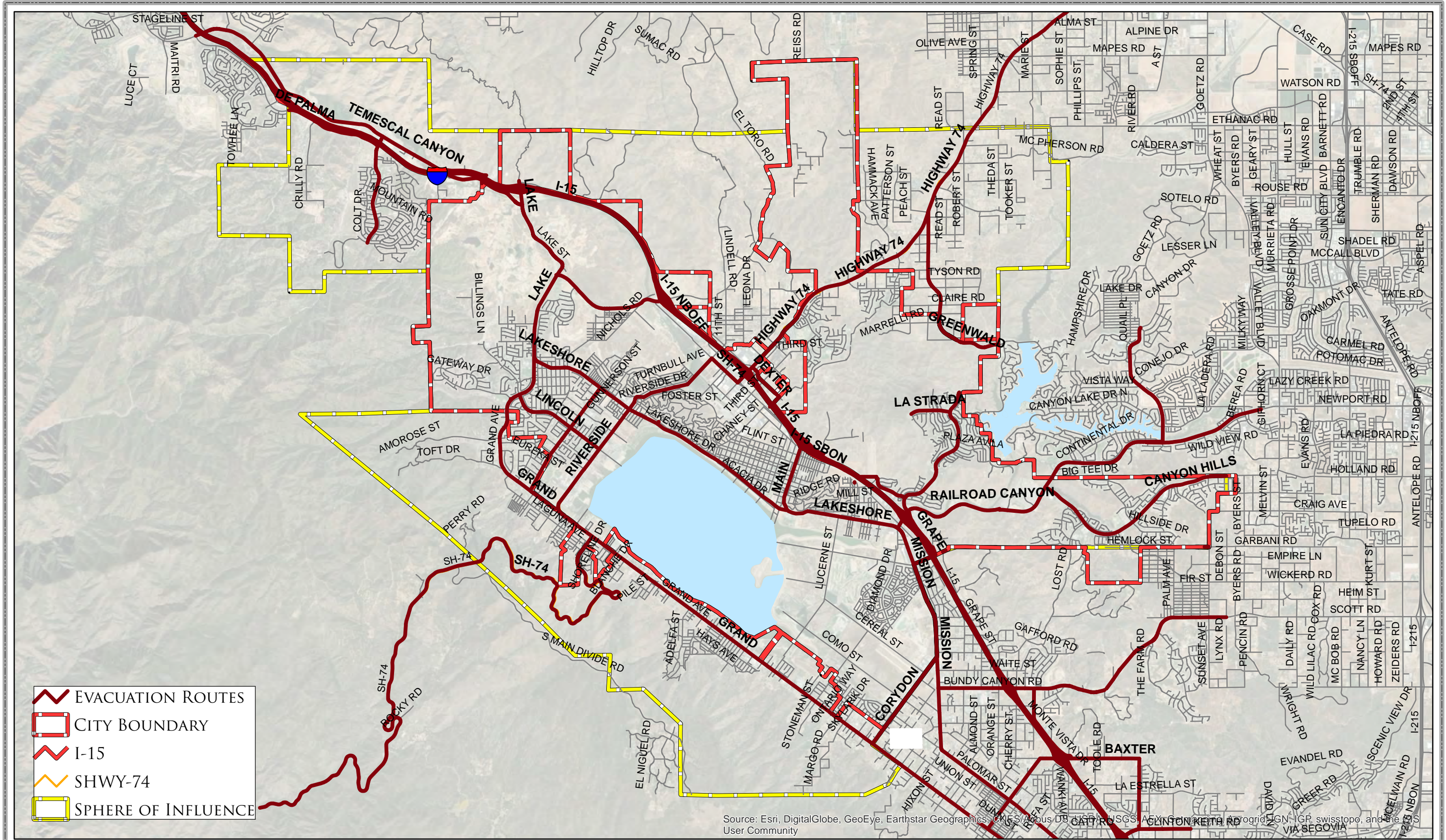
Figure 3-9 shows the evacuation network for Lake Elsinore and the surrounding area. However, as listed in Table 3-4 significant portions of Lake Elsinore’s evacuation network pass through hazard-prone areas, and over bridges and water crossings.

Table 3-4 Hazard Impacts, Bridges, and Water Crossings for Lake Elsinore’s Evacuation Route Network

	Miles and Quantity	Percent of City’s Network	
Evacuation Route Miles in Fire Hazard Zones	35	59%	
Evacuation Route Miles in Flood Hazard Zones	21	36%	
Evacuation Route Miles in Landslide Hazard Zones	45	77%	
City of Lake Elsinore’s Total Evacuation Network Miles	59	100%	3.1%*
Bridge Crossings in Lake Elsinore’s Evacuation Network	31		
Water Crossings in Lake Elsinore’s Evacuation Network	38		

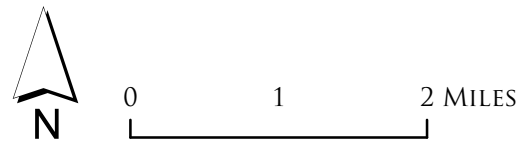
*Indicates the percentage of city of Lake Elsinore’s total network as part of the larger Western Riverside County network.

Source: Resilient IE, Community Vulnerability Profiles, February 2020, Page 35 (Accessed 6.4.2021 at <https://wrcog.us/285/Resilient-IE>)



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, IGN, IGR, swisstopo, and the U.S. User Community

SOURCES: CITY OF LAKE ELSINORE, COUNTY OF RIVERSIDE



CITY OF LAKE ELSINORE
EVACUATION ROUTES
FIGURE 3.9

RPC 2(I)(ii)

3.6.4 Secondary Seismic Hazards – Liquefaction and Ground Failure

The State of California has not yet issued seismic hazards maps for the Lake Elsinore area under the mapping program mandated by the Seismic Hazards Mapping Act. However, mapping has been completed for the adjacent Murrieta and Temecula quadrangles to the south and maps are planned for the Lake Elsinore and Wildomar quadrangles within the next decade.

The City recognizes the importance of addressing secondary seismic hazards, and has delineated areas of known and suspected liquefaction hazard. In general, liquefaction susceptibility ranges from very low in the former lake footprint to moderate on much of the remainder of the valley floor and very high in the valley floor corridor formerly occupied by the axial riverine drainage. Liquefaction potential is also very high along the area’s principal tributary drainages and on portions of the alluvial fans on the valley’s eastern margin. Figure 3-10, Liquefaction Susceptibility in Lake Elsinore Area, presents a generalized map of liquefaction potential based on data on file with the City.

3.6.5 Landslide and Other Slope Stability Hazards

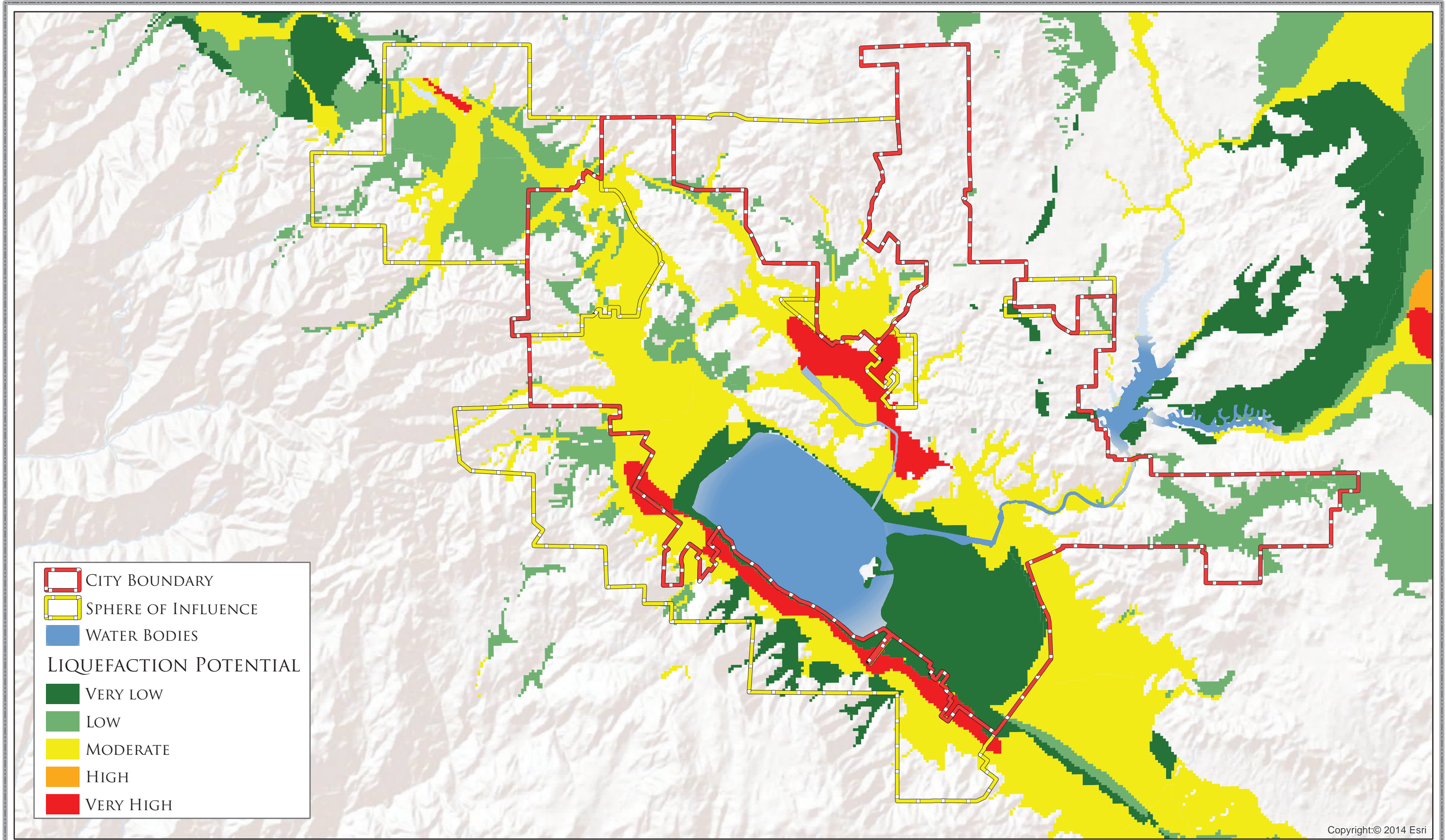
As discussed in the previous section, the State of California has not yet issued seismic hazards maps for the Lake Elsinore Area; when completed, these maps will be required to delineate areas at risk from seismically induced landslides. In the meantime, as shown in Figure 3-11, Percent Slope, a substantial proportion of the City, SOI, and surrounding area are located on slopes of 25%–35% or steeper, and much of the area is at substantial risk of seismically induced slope failure. Non-seismically induced slope failure is also a hazard in these areas, as evidenced by numerous existing landslides.

3.6.6 Geologic and Seismic Hazard Goal, Policies and Implementation Program

Goal 7 Minimize the rise of loss of life, injury, property damage, and economic and social displacement due to seismic and geological hazards resulting from earthquakes and geological constraints.

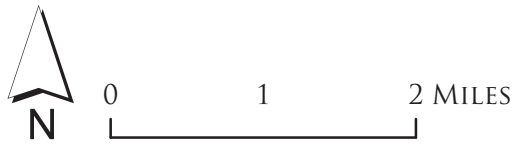
Policies

- 7.1 Continue to make every effort to reduce earthquake-induced fire as a threat.
- 7.2 Encourage the pursuit of federal and state programs that assist in the seismic upgrading of buildings to meet building and safety codes.



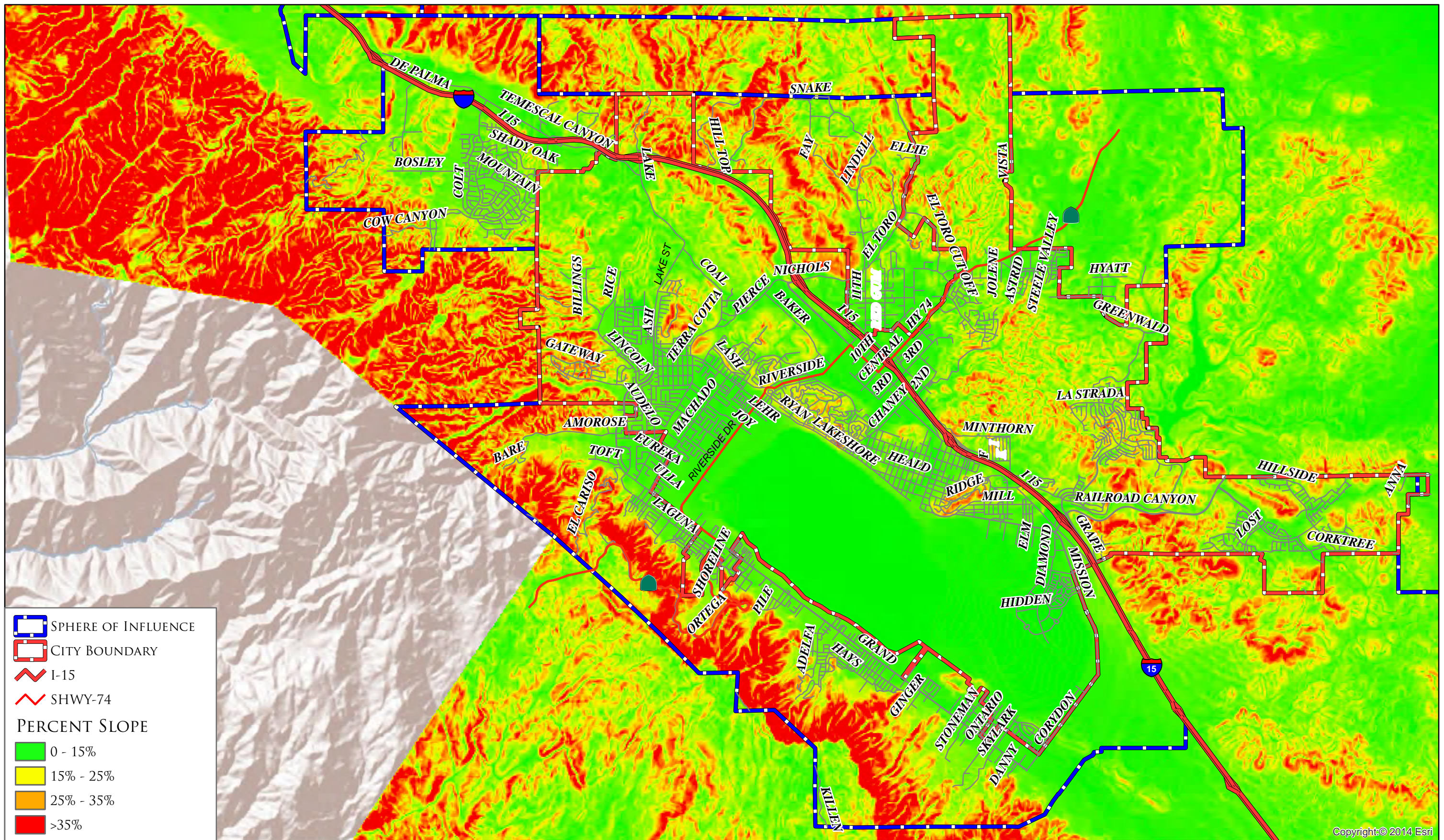
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SOURCES: CITY OF LAKE ELSINORE, COUNTY OF RIVERSIDE

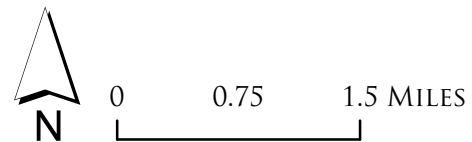


CITY OF LAKE ELSINORE
 LIQUEFACTION SUSCEPTIBILITY
 FIGURE 3.10

RPC 2(I)(ii)



SOURCES: CITY OF LAKE ELSINORE, COUNTY OF RIVERSIDE



CITY OF LAKE ELSINORE
 PERCENT SLOPE
 FIGURE 3.11

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RPC 2(l)(ii)

7.3 Continue to require Alquist-Priolo and other seismic analyses be conducted for new development to identify the potential for ground shaking, liquefaction, slope failure, seismically induced landslides, expansion and settlement of soils, and other related geologic hazards for areas of new development in accordance with the Fault Rupture Hazard Overlay District adopted by the City of Lake Elsinore Zoning Code. The City may require site-specific remediation measures during permit review that may be implemented to minimize impacts in these areas.

Implementation Program Through project review and the CEQA processes the City shall assess new development and reuse applications for potential hazards, and shall require compliance with Alquist-Priolo and other guidelines where appropriate.

Agency/Department Public Works Department

3.7 Noise

3.7.1 Introduction

Noise is defined as unwanted sound. It is part of everyday life in an urban community, resulting from on- and off-road vehicle traffic, railroads, aircraft, construction vehicles and other heavy equipment, other commercial activities, and loud music. The existing background or “ambient” noise level in the community is the product of the cumulative effects of a variety of noise sources that accumulate over a period of time. Exposure to excessive noise has often been cited as a health hazard.



Activities at Lake Elsinore

Roadway traffic is a major source of noise within the City. Some other reported noise sources in Lake Elsinore include industrial and manufacturing facilities, Skylark Airport, schools, construction activities, and recreational activities associated with the lake, the motocross park, and Diamond Stadium.

The goals and policies in this section are designed to locate new development in areas with compatible noise levels and minimize intrusive noise from existing and new development.

3.7.2 Noise Baselines

Land uses in the Lake Elsinore planning area include varying densities of both clustered and non-contiguous residential development, different densities and types of businesses and commercial

developments, open space, and recreation. The locations and densities of these land uses, in conjunction with major transportation routes and other significant activities within the Lake Elsinore area, such as construction, contribute to the ambient noise conditions, or setting, of the area.

Sensitive land uses are generally defined as locations where people reside or where the presence of noise could adversely affect the use of the land. These land uses include uses such as schools, hospitals, residences, libraries, and recreation areas. The City has designated noise-sensitive zones for land uses that require exceptional quiet. Table 3-5 and Table 3-6 provide regulations to ensure noise and land use compatibility and recommend noise standards.

Table 3-5, Noise and Land Use Compatibility Matrix

Land Use Categories		Day-Night Noise Level (LDN)						
		≤55	60	65	70	75	80≥	
Categories	Uses							
Residential	Single, Family, Duplex, Multiple Family	A	A	B	B	C	D	D
Residential	Mobile Homes	A	A	B	C	C	D	D
Commercial Regional District	Hotel, Motel, Transient Lodging	A	A	B	B	C	C	D
Commercial Regional Village, District Special	Commercial, Retail, Bank, Restaurant, Movie Theatre	A	A	A	A	B	B	C
Commercial Industrial Institutional	Office Building, Research and Development, Professional Offices, City Office Building	A	A	A	B	B	C	D
Commercial Regional Institutional Civic Center	Amphitheatre, Concert Hall Auditorium, Meeting Hall	B	B	C	C	D	D	D
Commercial Recreation	Children’s Amusement Park, Miniature Golf Course, Go-cart Track, Equestrian Center, Sports Club	A	A	A	B	B	D	D
Commercial General, Special Industrial Institutional	Automobile Service Station, Auto Dealership, Manufacturing, Warehousing, Wholesale, Utilities	A	A	A	A	B	B	B
Institutional General	Hospital, Church, Library, Schools, Classroom	A	A	B	C	C	D	D

CHAPTER 3.0



Land Use Categories		Day-Night Noise Level (LDN)						
		≤55	60	65	70	75	80≥	
Open Space	Parks	A	A	A	B	C	D	D
Open Space	Golf Course, Cemeteries, Nature Centers, Wildlife Reserves, Wildlife Habitat	A	A	A	A	B	C	C
Agriculture	Agriculture	A	A	A	A	A	A	A

Interpretation	
Zone A Clearly Compatible	Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements.
Zone B Normally Compatible	New construction or development should be undertaken only after detailed analysis of the noise reduction requirements are made and needed noise insulation features in the design are determined. Conventional construction, with closed windows and fresh air supply systems or air conditioning, will normally suffice.
Zone C Normally Incompatible	New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of noise reduction requirements must be made and needed noise insulation features included in the design.
Zone D Clearly Incompatible	New construction or development should generally not be undertaken.

Table 3-6, Interior and Exterior Noise Standards

Categories	Land Use Categories		Energy Average LDN	
	Uses	Interior	Exterior	
Residential	Single Family, Duplex, Multiple Family	45 ^{3,5}	60	
	Mobile Homes	-	60 ⁴	
Commercial, Institutional	Hotel, Motel, Transient Lodging	45 ⁵	-	
	Hospital, School's classroom	45	-	
	Church, Library	45	-	

Interpretation

1. Indoor environment excluding: Bathrooms, toilets, closets, corridors.
2. Outdoor environment limited to: Private yard of single family, multi-family private patio or balcony which is served by a means of exit from inside, Mobile Home Park.
3. Noise level requirement with closed windows. Mechanical ventilating system or other means of natural ventilation shall be provided as of Chapter 12, Section 1205 of UBC.
4. Exterior noise level should be such that interior noise level will not exceed 45 CNEL.
5. As per California Administrative Code, Title 24, Part 6, Division T25, Chapter 1, Subchapter 1, Article 4, Section T25-28.

Topography and Climate

Noise amplitude and attenuation characteristics are key factors in the establishment of noise conditions and vary considerably according to natural climate and topographical features. Meteorological factors affecting noise characteristics within the Lake Elsinore planning area include temperature changes, Santa Ana winds, and the amount and duration of rainfall. Topographical features in the planning area include the steep Santa Ana Mountains and Elsinore Mountains to the south and west; the large centrally located, low-lying Lake Elsinore and surrounding local valley; and the rolling hills throughout much of the area. Man-made features within the planning area, such as buildings and structures, agricultural fields, and roadways, also affect noise amplitude and attenuation.

Vehicular Traffic

Because two highly utilized transportation corridors, I-15 and SR 74, traverse the City, roadway traffic is one of the more prevalent sources of noise within the area. Traffic noise varies in how it affects land uses depending upon the type of roadway, distance of the land use from that roadway, topographical setting, and other physical land features such as landscaping, walls,

buildings, and other structures. Some variables that affect the amount of noise emitted from a road are speed of traffic, flow of traffic, and type of traffic (e.g., tractor trailers versus cars). Another variable affecting the overall measure of noise is a perceived increase in sensitivity to vehicular noise at night.

Industry

Industrial and manufacturing facilities are stationary noise producers that may affect sensitive land uses. Industrial land uses have the potential to exert a relatively high level of noise impact within their immediate operating environments. The scope and degree of noise impacts generated by industrial uses is dependent upon various critical factors, including the type of industrial activity, hours of operation, and the site's location relative to other land uses.



Lake Elsinore Motocross Track

Noise-related complaints are often aimed at facilities such as Elsinore Ready-Mix, a concrete manufacturer located in Country Club Heights. Other noise complaints usually come from neighbors who live next to land that is under-developed.

Airports

Skylark Airport is a privately owned airport that occupies approximately 150 acres of land located at the southern city limits on Corydon Road. In 2010, the airport housed 21 single-engine aircraft, five multi-engine aircraft, and four gliders. This airport provides glider and skydiving opportunities for the community and surrounding region. The runway surface at Skylark Airport consists of gravel and sand; as such, this surface generally does not permit optimal conditions for frequent and convenient airport operations. Skylark Airport is a private use airport with runways that are 2800 feet in length and fall under the category of Short General Aviation Runways.

Schools

Schools can be a source of nuisance noise for neighboring residential uses. Noise-generating activities include children at play, bells, and public address systems. High schools may include stadiums used for day and evening athletic events, and the use of public address/loudspeaker systems can also generate substantial noise levels during the day and/or evening.

Other Noise Sources

Other sources of noise include recreational boating and personal watercraft on Lake Elsinore, the Motocross Park, Diamond Stadium, and construction activities.

Vibration

As with noise, vibration can be described by both its amplitude and frequency. Amplitude may be characterized by displacement, velocity, and/or acceleration. Typically, particle velocity (measured in inches or millimeters per second) and/or acceleration (measured in gravities) are used to describe vibration. Vibration can be felt outdoors, but the perceived intensity of vibration impacts are much greater indoors due to the shaking of the structure.

The most common sources of vibration in the Lake Elsinore planning area are transit vehicles, construction equipment, and large vehicles. Several land uses are especially sensitive to vibration and therefore have a lower vibration threshold. These uses include but are not limited to concert halls, hospitals, libraries, vibration-sensitive research operations, residential areas, schools, and offices.

3.7.3 Noise Goal, Policies and Implementation Program

Goal 8 Maintain an environment for all City residents and visitors free of unhealthy, obtrusive, or otherwise excessive noise.

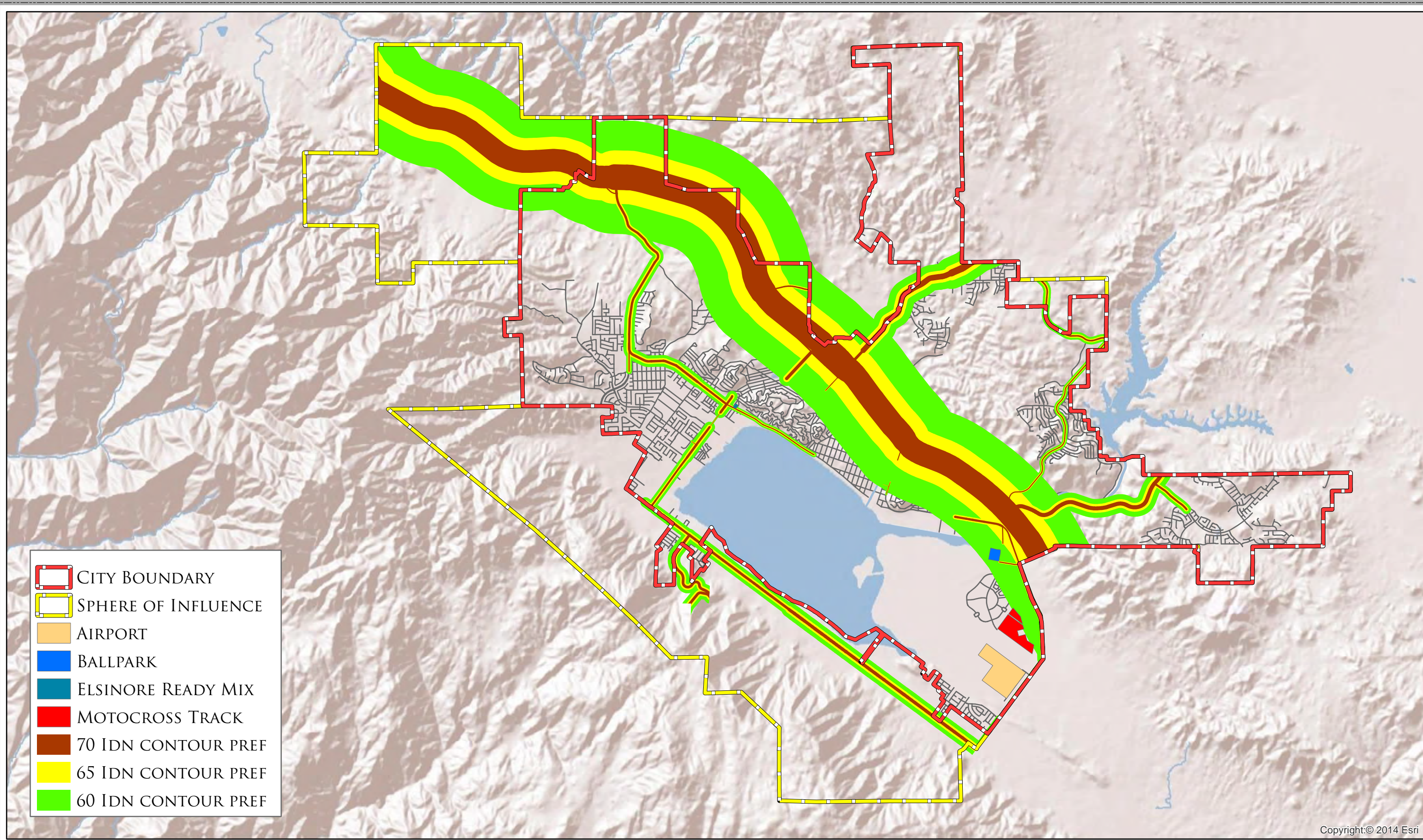
Policies

- 8.1 Apply the noise standards set forth in the Lake Elsinore Noise and Land Use Compatibility Matrix (see Table 3-5) and Interior and Exterior Noise Standards (see Table 3-6) when considering all new development and redevelopment proposed within the City.
- 8.2 Require that mixed-use structures and areas be designed to prevent transfer of noise and vibration from commercial areas to residential areas.
- 8.3 Strive to reduce the effect of transportation noise on the I-15.
- 8.4 Consider estimated roadway noise contours based upon Figure 3-12, Noise Contours, when making land use design decisions along busy roadways throughout the City.
- 8.5 Participate and cooperate with other agencies and jurisdictions in the development of noise abatement plans for highways.

Implementation Program Through project review and the CEQA processes, the City shall assess new development and reuse applications for potential hazards, and shall require compliance with noise standards and compatibility criteria where appropriate.

Agency/Department

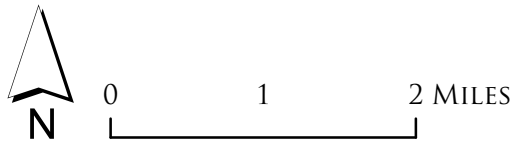
Community Development and Engineering Departments



-  CITY BOUNDARY
-  SPHERE OF INFLUENCE
-  AIRPORT
-  BALLPARK
-  ELSINORE READY MIX
-  MOTOCROSS TRACK
-  70 IDN CONTOUR PEF
-  65 IDN CONTOUR PEF
-  60 IDN CONTOUR PEF

SOURCES: CITY OF LAKE ELSINORE, COUNTY OF RIVERSIDE

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CITY OF LAKE ELSINORE
NOISE CONTOURS
FIGURE 3.12

RPC 2(I)(ii)

3.8 Community Facilities and Protection Services

City development and community welfare are dependent on a network of public facilities, infrastructure and services. These availability services provide the necessary components for quality life in the community. Quality services and facilities are critical to retaining existing households and businesses and attracting future residents and new businesses. The City seeks to ensure excellent services regardless of the provider.

The goals and policies in this section are designed to promote community welfare and to enhance the overall well being of the City’s residents and visitors through responsive city government, efficient and timely emergency response, academic excellence that includes access to quality school and library facilities for all residents, and effective and efficient delivery of services and utilities.

3.8.1 Fire and Police Protection Services

Fire and Police/Law Enforcement Baselines

Effective fire protection and law enforcement services are essential to the welfare of a community. Without adequate provision of these invaluable services, the safety of the community could be jeopardized with the rise in crime and risk of fire damage. Long-term effects could result in a decrease in immigration of new residents and a low quality of life for current residents. The following goals and policies are intended to ensure that the community that the City remains safe and protected by fire and police services.

Fire Protection

Through a Cooperative Agreement, the City of Lake Elsinore contracts with the Riverside County Fire Department (RCFD) through its Cooperative Fire Programs Fire Protection Reimbursement Agreement with the California Department of Forestry and Fire Protection (CAL FIRE), to provide the City with fire protection, hazardous materials mitigation, technical rescue response, fire marshal, medical emergency services, and public service assists. CAL FIRE and RCFD have primary responsibility for fire protection in the City. The City itself does not have agreements for fire protection with any other agencies. Portions of the SOI are designated State Responsibility Areas (SRA), where the State of California is financially responsible for the prevention and suppression of wildfires, while the Lake Elsinore Fire Department, which is operated jointly by RCFD and CAL FIRE, has primary responsibility for Local Responsibility Areas (LRA) within the City limit.



The RCFD operates 93 fire stations in 17 battalions, providing fire suppression, emergency medical, rescue, and fire prevention services. Equipment used by the department has the ability to respond to both urban and wildland emergency conditions. Battalion 2 in the Southwest Division of RCFD services the City of Lake Elsinore.

The following stations are located within city limits:

- Fire Station No. 10 (Elsinore), servicing the central area of the city, located on the northeast side of the lake at 410 W. Graham Ave. (Not funded as of July 1, 2017.)
- Fire Station No. 85, (McVicker Park), located to the north at McVicker Park, slightly east of the lake at 29405 Grand Avenue;
- Fire Station No. 94 (Canyon Hills), located in the southeast section of the City, at 21775 Railroad Canyon Road, east of the I-15.
- Fire Station No. 97 (Rosetta Canyon), located in the north section of the City on Rosetta Canyon Drive.

The following stations are located outside city limits:

- Quail Valley Station No. 5
- Lakeland Village Station No. 11.
- El Cariso Station No. 51.
- Canyon Lake Station No. 60.
- Wildomar Station No. 61.
- Sycamore Canyon Station No. 64
- Menifee Station No. 68
- Rancho Capistrano Station No. 74.

Although the fire stations are operated by RCFD, CAL FIRE staffs firefighters and stores firefighting equipment at stations throughout the City, particularly during peak fire season. Both agencies respond to all types of emergencies, depending on the need and equipment available. Emergencies range from wildland fires, residential/commercial structure fires, automobile accidents, medical aid of all types, search and rescue missions, hazardous material spills, floods, earthquakes, and more. Standard response times are established by RCFD guidelines. The response time goal is to arrive at any location within the City to be seven minutes, with the intent to reduce that time to five minutes.

Since October 2003, fire paramedics are required at each station. These specially trained firefighters are equipped to respond to medical emergencies and ride on all calls. Their arrival on the scene can ensure the timely start of emergency medical treatment until an ambulance arrives

for patient transport. Each fire engine carries nearly \$35,000 worth of state-of-the-art emergency medic equipment.

Police Protection

The City of Lake Elsinore contracts for police protection from the Riverside County Sheriff’s Department. The Sheriff’s Department operates in Lake Elsinore as the Lake Elsinore Police Department. The Sheriff’s Department has mutual aid agreements with all of the local law enforcement agencies within Riverside County. In addition, the Department coordinates with the State Office of Emergency Services to provide and receive statewide mutual aid when necessary. The Lake Elsinore Sheriff’s Station is located at 333 Limited Avenue, adjacent to the western boundary of the Project Site. The Lake Elsinore Sheriff’s Station serves an area of 241 square miles,

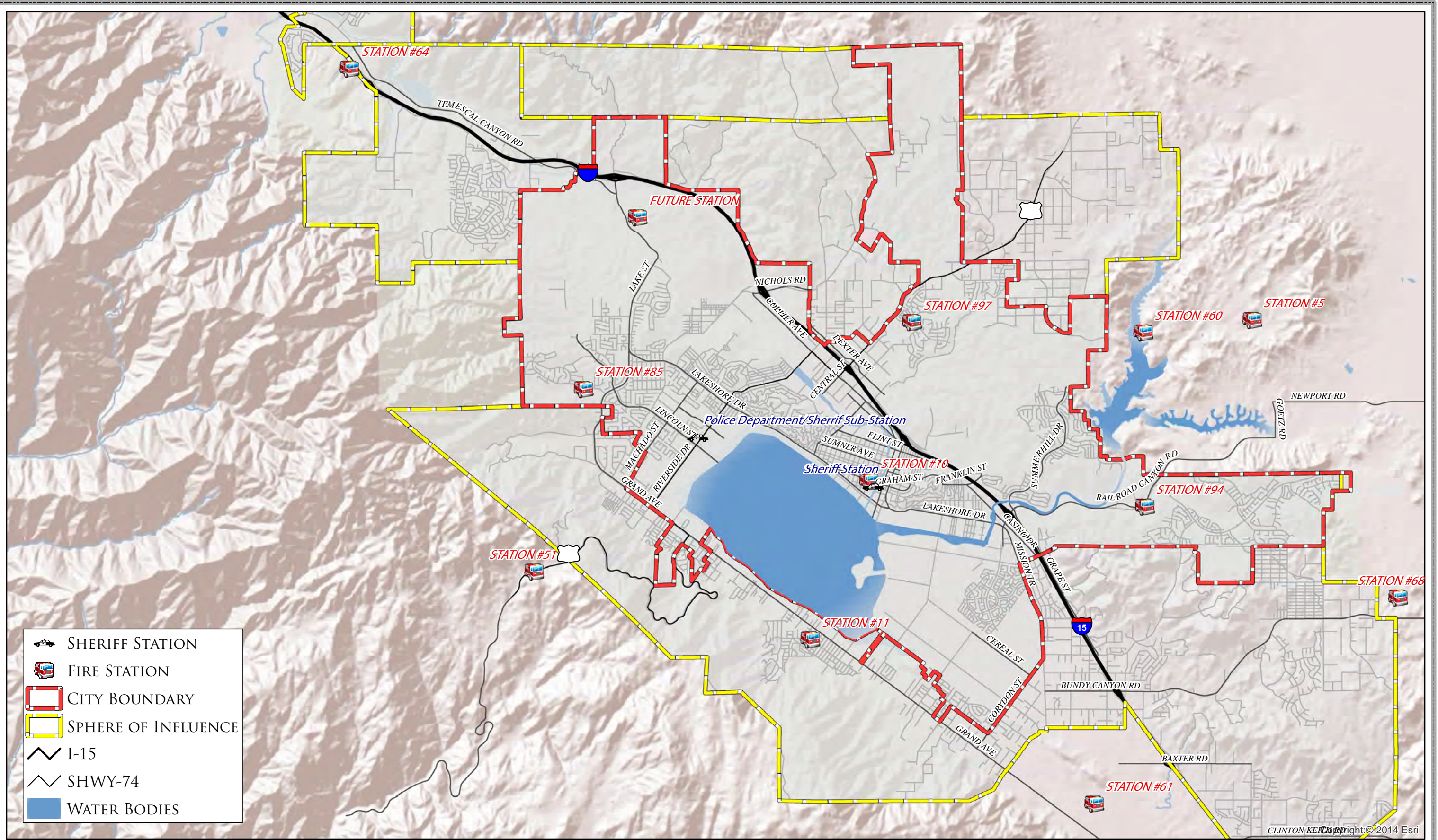


including the City of Lake Elsinore, the City of Wildomar, and the unincorporated communities of Alberhill, El Cariso, Glen Eden Hot Springs, Glen Ivy Hot Springs, Good Hope, Lakeland Village, Quail Valley, and Sedco Hills. The police department has various programs in place to deter crime, such as neighborhood watch, Crime-Free Multi-Housing program, and community-oriented policing. The police and fire stations are depicted in Figure 3-13, Police and Fire Stations.

For Fiscal Year (FY) 2020/2021, the total number of sworn officers serving the City was 53, which equates to a ratio of 0.76 sworn officer per 1,000 residents. Average response times for City police protection vary due to the differing priorities of each call received by 911 and dispatched to officers. During 2020, the average response times for priority one calls was 7.28 minutes, for priority two calls, 22.42 minutes, for priority three calls, 42.08 minutes, and for priority four calls, 60.83 minutes.



The Lake Elsinore Police Department manages the Lake Patrol with Marine Safety trained police officers who patrol the lake, beaches and lake-adjacent parks. Officers enforce boating rules and regulations on the lake and assist stranded boaters. The Lake Patrol is augmented by a special group of volunteers known as Lake Elsinore Marine Search and Rescue (LEMSAR) who also patrol the lake and assist with boating collisions and stranded vessels. LEMSAR volunteers are trained in first aid and CPR and must complete a U.S. Coast Guard auxiliary boating and safety course. The Police Department also utilizes Reserve Police Officers. These volunteers are fully trained as police officers and offer an additional level of service and cost savings to the city of Lake Elsinore.



SOURCES: CITY OF LAKE ELSINORE GIS, COUNTY OF RIVERSIDE GIS



CITY OF LAKE ELSINORE
POLICE AND FIRE STATIONS
FIGURE 3.13

3.8.2 Fire and Police/Law Enforcement Goal, Policies and Implementation Program

Goal 9 Provide efficient and effective public safety services for the community.

Policies

- 9.1 Continue to follow Riverside County Fire Department most current guidelines to achieve standard response times and staffing levels.
- 9.2 Coordinate with the County of Riverside to provide adequate police service and staffing levels.
- 9.3 Continue to provide Lake Patrol personnel who enforce boating rules and regulations, and perform rescue tactics.
- 9.4 Promote the establishment of programs such as Neighborhood Watch and Crime-Free Multi-Housing in conjunction with law enforcement agencies to encourage community participation in the surveillance of neighborhoods.

Implementation Program The City shall annually evaluate fire and police services and staff ratios.

Agency/Department City Manager

Goal 10 Maintain an emergency response program consistent with State law, and coordinate with surrounding cities, Riverside County and other emergency response providers.

Policies

- 10.1 Maintain participation in local, regional, state, and national mutual aid systems to ensure that appropriate resources are available for response and recovery during and following a disaster.
- 10.2 Periodically review and test the City's Emergency Operations Plan to address the City's growth in population and built environment, as well as, to note any deficiencies and to incorporate new emergency response techniques.
- 10.3 Coordinate all emergency preparedness and response plans with neighboring cities, the County of Riverside, local health care providers and utility purveyors, and the California

Emergency Management Agency (CalEMA).

- 10.4 Maintain a safe and secure, technologically advanced Emergency Operations Center allowing for room to expand as the City grows.
- 10.5 Continue to train Emergency Operations Center and general city staff in our Emergency Operations Plan and the California Standardized Emergency Management System (SEMS), the National Incident Management System (NIMS), and the Incident Command System (ICS).
- 10.6 Continue coordinated training for City Emergency Response Team members, Community Emergency Response Team (CERT) volunteers, and related response agency personnel.
- 10.7 Conduct public outreach to provide education programs and literature to Lake Elsinore's residents, business people and property owners on earthquake preparedness, fire safety, flooding hazards, other emergencies and identified emergency access routes.
- 10.8 Incorporate the current Lake Elsinore Local Hazard Mitigation Plan Annex (LHMP) and the Riverside County Operational Area Multi-Jurisdictional Local Hazard Mitigation Plan into this Chapter by reference.

Implementation Program The Emergency Services Division will maintain emergency preparedness information and handouts at City Hall, the Senior Center and the Library, and will distributed the information at community events. Additionally, the City's website and other media resources shall be utilized to inform and educate residents and business owners on emergency preparedness matters and emergency evacuation routes.

Implementation Program The Emergency Services Division will continue to coordinate training for city staff and Community Emergency Response Team (CERT) volunteers, and publicize training sessions to the City's residents and business owners.

Implementation Program The Emergency Services Division will review and update the Lake Elsinore Local Hazard Mitigation Plan (LHMP) and the Emergency Operations Plan (EOP) a minimum of every 5 years to update emergency response, evaluation plans and evacuation routes to reflect current conditions and community needs.

Agency/Department City Manager, Public Works Department

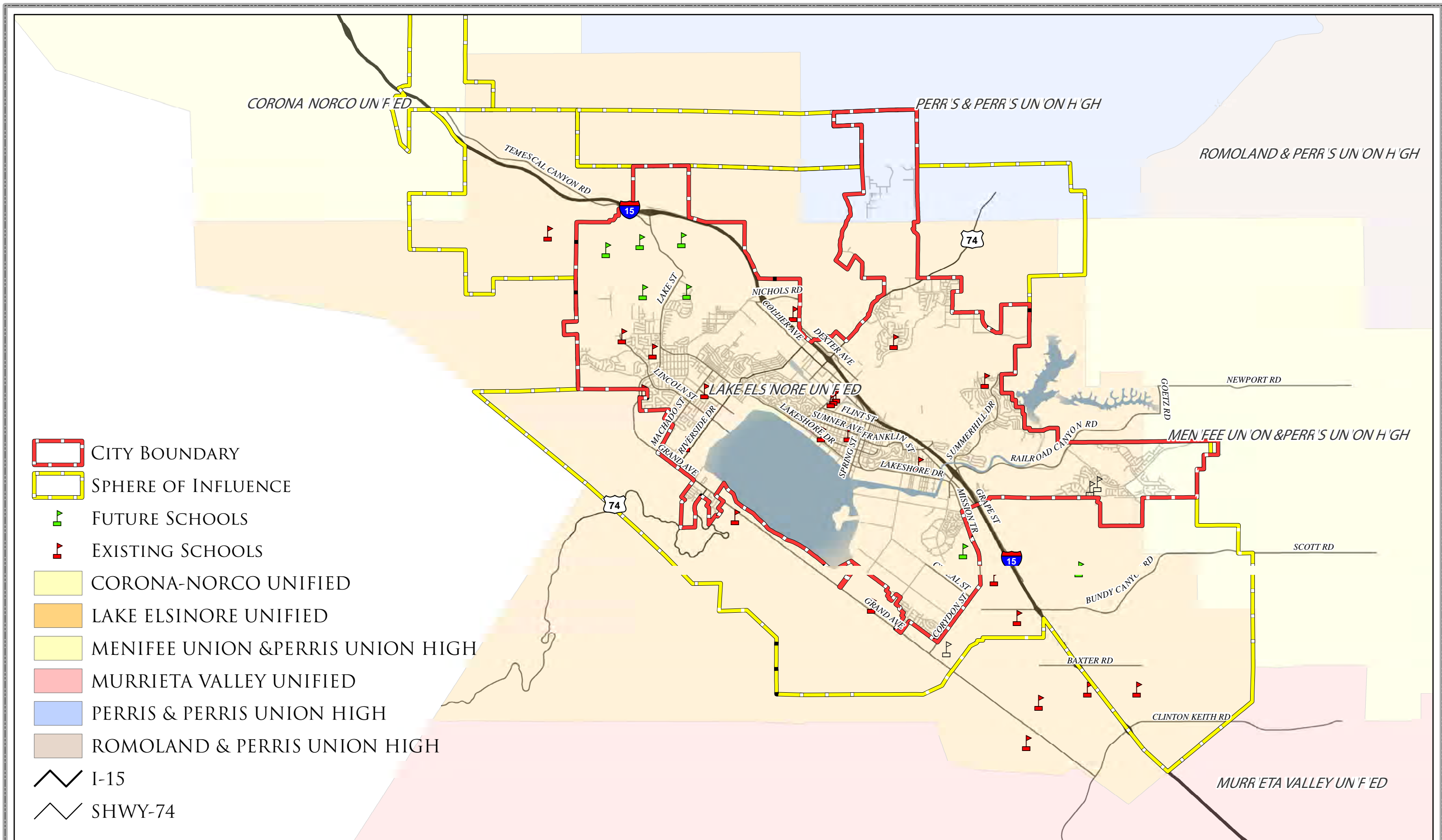
3.8.3 Schools Baseline

The Lake Elsinore Unified School District (LEUSD) serves most of the City of Lake Elsinore, all of the City of Canyon Lake, all of the City of Wildomar and a portion of the unincorporated County of Riverside. The district covers a 140-square-mile area with a population of approximately 70,000. It is the largest employer in the Lake Elsinore Valley, with more than 1,955 full- and part-time employees. District boundaries are identified on Figure 3.8, Schools and District Boundaries. Menifee Union School District serves a portion of Canyon Hills Specific Plan area.

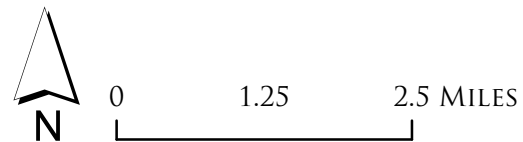
The LEUSD is composed of 25 schools, including 12 elementary, two K-8 schools, four middle, three comprehensive high schools, a continuation school, and two alternative education schools. The district also has a K-12 virtual school and an adult education program. The district also provides Head Start programs at four school sites.

The District is in the process of updating its Facilities Master Plan. The District has experienced a slight growth in enrollment since 2005. The enrollment for 2010/2011 is 20,658 K-12 students. The District has recently closed two elementary schools and converted an elementary and middle school into K-8 programs. The decline in the economy and the loss of new housing construction has slowed down the need for new schools. However, there continues to be a need to expand and modernize current facilities to accommodate changing technology and additional enrollment. According to the 2011 enrollment projections and current housing market conditions the District expects only a slight increase in enrollment district wide over the next ten years. However, it is difficult to predict the future housing market, so the assumptions are made that minimal housing development will occur over the next ten years. When the housing market picks up again, the District will be ready for the surge of growth. The District currently owns property in the Wasson Canyon area and has several school sites in various planning stages in the Alberhill and Summerly Developments.

There are two portions of the City of Lake Elsinore that are not within the LEUSD. In the center of the northern part of the City, a small section falls within the Perris Elementary and Union High School District; on the eastern edge of the City, a small section falls within the Menifee Union School District. There is one portion within the northwest corner of the City's SOI that is not in the LEUSD. This small portion of the SOI falls within the Corona-Norco Unified School District. Figure 3-14 shows the location of the school districts within the City and SOI.



SOURCES: CITY OF LAKE ELSINORE, COUNTY OF RIVERSIDE



CITY OF LAKE ELSINORE
SCHOOLS AND DISTRICT BOUNDARIES
FIGURE 3.14

3.8.4 Schools Goal, Policies and Implementation Program

Goal 11 Encourage all school districts serving Lake Elsinore to provide school facilities that are adequate to serve all students.

Policies

- 11.1 Encourage the establishment and development of a trade school, junior college, and/or four-year college campus within the City boundaries.
- 11.2 Continue cooperation between school districts and the City to provide joint use of recreational facilities.

Implementation Program The City shall utilize the development review and CEQA processes to inform school districts serving Lake Elsinore of new development.

Agency/Department Community Development Department

3.8.5 Libraries Baseline

The City of Lake Elsinore is part of the Riverside County Library System. Residents have access to all 29 libraries and two bookmobiles. There are two libraries within city boundaries, including the Lake Elsinore Library, located on West Graham Avenue northeast of the lake, and Lakeside Library on Riverside Drive, northwest of the lake. The Canyon Lake Library is just outside the city boundary on Railroad Canyon Drive.

3.8.6 Libraries Goal and Implementation Program

Goal 12 Encourage the County of Riverside's County/City Public Library System to provide adequate library facilities for City residents.

Implementation Program The City shall utilize the development review and CEQA processes to assess impacts and mitigation to the library system serving Lake Elsinore to ensure adequate facilities are provided.

Agency/Department Community Development Department

3.8.7 Animal Services Baseline

The City contracts with a private company called Animal Friends of the Valley (AFV) for all animal control services. AFV also provides animal services to the cities of Murrieta and Temecula. AFV humane and animal services officers respond to calls from 8 a.m. to 5 p.m. Monday through Saturday, and respond to all emergencies to the above cities 24 hours per day. AFV is located at

33751 Mission Trail in Wildomar, and open to the public from 10 a.m. until 4 p.m. Monday through Saturday, with evening extended hours on Wednesdays until 7 p.m.

The organization is dedicated to promoting humane care of animals through education and a proactive animal services program. The organization works to prevent animal suffering and ending pet overpopulation.

3.8.8 Animal Services Goal, Policies and Implementation Program

Goal 13 Provide high quality animal control services to ensure timely response and effective control that protect both citizens and animals.

Policies

- 13.1 Continue to foster and participate in the operation of a regional animal control facility through participation in the South Western Communities Financing Authority.
- 13.2 Continue to develop an educational program in conjunction with Animal Friends of the Valley regarding animal control services, including spay and neuter programs.

Implementation Program The City shall coordinate efforts with the County of Riverside Office of Animal Control, the Sheriff’s Office, and the Animal Friends of the Valley to ensure effective and timely animal control in Lake Elsinore

Agency/Department City Manager

3.8.9 Utilities Baseline

Water, Wastewater, and Reclaimed Water

The Elsinore Valley Municipal Water District (EVMWD) is a public nonprofit agency. It was created on December 23, 1950, under the Municipal Water District Act of 1911. EVMWD provides water, wastewater, and reclaimed water service to the City of Lake Elsinore, the City of Canyon Lake, the City of Wildomar, portions of the City of Murrieta, and unincorporated portions of the County of Riverside. EVMWD is a special district with powers that include provision of public water service, water supply development and planning, wastewater treatment and disposal, and recycling. Currently, the district has more than 35,000 water, wastewater, and agricultural service connections. EVMWD is a subagency of the Western Municipal Water District, a member agency of the Metropolitan Water District of Southern California.

EVMWD obtains its potable water supplies from imported water from Metropolitan, local surface water from Canyon Lake, and local groundwater from the Elsinore Basin. It has access to groundwater from Elsinore Basin, Coldwater Basin, San Bernardino Bunker Hill Basin, Rialto-Colton and Riverside-North Basin. Almost all of the groundwater production that is used for

potable use occurs in the Elsinore Basin. Imported water supply is purchased from the Metropolitan via Eastern Municipal Water District and Western Municipal Water District.

EVMWD's service area is broken into two divisions, the Elsinore Division and the Temescal Division (also known as Temescal Domestic Service Area). The division between the two valleys is approximately two miles north of Lake Elsinore, near the intersection of Love Lane and Temescal Canyon Road (where the Temescal Wash flows north). The water system currently includes 33 pressure zones. Within these zones, there are approximately 3,063,000 feet (580 miles) of pipelines ranging in diameter from 3 inches to 42 inches, 67 storage reservoirs with an approximate total storage capacity of 83 million gallons (MG) and 46 booster pump stations. The District currently obtains its water from 13 groundwater wells, the Canyon Lake Water Treatment Plant (WTP), and imported water from Metropolitan through the Auld Valley and Temescal Valley Pipelines.

EVMWD's existing recycled water demands are supplied by tertiary-treated wastewater from the Regional WRF, Railroad Canyon WRF, and Horsethief WRF. In the effort to minimize the need for imported water, EVMWD plans to expand its recycled water system to provide recycled water for irrigation users and to maintain water levels in Lake Elsinore during normal and dry years.

The EVMWD Water Distribution Master Plan from February 2008 has a projected need assessment based on future growth projections. Water demands for future scenarios are determined based on water duty factor (WDF) and future projected growth. If growth occurs at a different pace than expected, it is acknowledged that improvements may need to be implemented so that water will be continuously available.

To meet rising future demands additional water source capacities are also required. The district is currently planning two groundwater wells in the Lake Elsinore Back Basin. Improvements to fix existing system deficiencies and accommodate future growth are being funded by three different categories, including ratepayers for existing services, future Capital Improvement Programs (CIP), and developers for future development projects.

The EVMWD Sewer District provides service for the City of Lake Elsinore, the City of Canyon Lake, the City of Wildomar, portions of the City of Murrieta, and unincorporated portions of the County of Riverside. The "backbone" of the system consists of trunk sewers, generally 10 inches in diameter and larger, that convey the collected wastewater to EVMWD's Water Reclamation Facilities (WRFs). EVMWD's existing wastewater collection systems consist of approximately 358 miles of sewer mains up to 54 inches in diameter, 33 lift stations and three WRFs.

EVMWD's current service area is delineated into four separate collection systems. These are the Regional, Canyon Lake, Horsethief, and Southern collection systems. The flows conveyed in the Regional, Canyon Lake, and Horsethief collection systems are treated by EVMWD's Regional, Railroad Canyon, and Horsethief WRFs, respectively. Whereas wastewater discharged into the Southern collection system is conveyed through the Rancho California Water District's (RCWD's) wastewater collection system to the RCWD operated Santa Rosa WRF for treatment. It should be

noted that future wastewater flows generated within the Horsethief collection system will be routed to the planned Alberhill WRF for treatment.

EVMWD also produces recycled water. Recycled water is used to irrigate parks, street medians, golf courses, and wildlife habitat and facilitate lake stabilization. It is the goal of EVMWD to build additional lines and expand recycled water services in order to free up additional water for residents.



Prior to July 2011, the Elsinore Water District (EWD) provided water services for a limited area in Country Club Heights and parts of Lakeland Village. The EWD did not provide wastewater services. Water resources for the EWD included several local wells as well as purchases from EVMWD. EWD supplied water to more than 1,800 customers. However, a consolidation of EWD into EVMWD was finalized by the Riverside Local Agency Formation Commission (LAFCO) and took effect July 1, 2011. Additional water lines will have to be constructed if additional development is anticipated within the area formerly served by EWD.

Electrical and Natural Gas

Southern California Edison (SCE), a subsidiary of Edison International, provides electricity to the City of Lake Elsinore. SCE is a provider for 13 million customers, 5,000 large businesses, and 280,000 small businesses in 430 cities. SCE provides a significant amount of energy from alternate and renewable energy and from a variety of other sources. There are 16 utility interconnections, 4,990 transmission and distribution circuits, and 425 transmission and distribution crews.

The City of Lake Elsinore receives its natural gas through the Southern California Gas Company (The Gas Company). The Gas Company is a regulated subsidiary of Sempra Energy and is the nation's largest natural gas distribution utility, serving 19.5 million consumers through 5.5 million meters. The company's service territory encompasses 23,000 square miles in most of central and Southern California.

Both Southern California Edison and The Gas Company anticipate the ability to accommodate future growth within the City of Lake Elsinore; development proposals will be required to formally request "will serve" letters on an individual basis.

3.8.10 Utilities Goal, Policies and Implementation Program

Goal 14 Ensure that adequate electrical, natural gas and telecommunications systems are provided to meet the demand of new and existing development.

Policies

- 14.1 Coordinate with the utility agencies to provide for the continued maintenance, development and expansion of electricity, natural gas, and telecommunications systems to serve residents and businesses.
- 14.2 Encourage developers to contact Southern California Edison early in their planning process, especially for large-scale residential and non-residential development or specific plans, to ensure the projected electric loads for these projects are factored into SCE's load forecasts for the community.
- 14.3 Encourage developers to incorporate energy efficient design measures into their projects and pursue available energy efficiency assistance programs from SCE and other utility agencies.

Implementation Program Through the development review and CEQA processes, inform developers of utility agency assistance programs and encourage their early contact with such agencies.

Agency/Department Engineering and Community Development Departments

3.8.11 Trash and Recycling Baseline

CR&R is responsible for trash disposal in the City of Lake Elsinore as well as Temecula, Canyon Lake, and unincorporated parts of the County of Riverside. Residents are provided three separate 60-gallon containers for garbage, green waste, and recycling. Trash is taken to either a landfill within Riverside County or the Materials Recovery Facility (MRF). There are no landfills within the City. Riverside County Waste Management (RCWM) manages the landfills used by the City of Lake Elsinore. According to RCWM, capacity levels of landfills within the jurisdiction of RCWM are calculated on a system wide capacity level. That is to say that landfills within its jurisdiction adhere to state guidelines, which specify that a minimum of 15 years of system wide landfill capacity shall be provided.

RCWM facilitates waste management services for Riverside County. These services are provided on a countywide basis, and each private or public entity determines which landfill or transfer station to use. Typically, this determination is made according to geographic proximity. The landfills typically used by the City of Lake Elsinore are the El Sobrante, Badlands, and Lamb Canyon Landfills.

The El Sobrante Landfill is located east of Interstate 15 and Temescal Canyon Road to the south of the City of Corona. The El Sobrante Landfill is currently permitted to receive a maximum of 70,000 tons of refuse per 7-day week, with a daily tonnage that shall not exceed 16,054 tons of refuse per day (tpd), of which up to 5,000 tpd is reserved for refuse generated within Riverside County. The landfill has a total capacity of approximately 184 million tons, or 209.91 million cubic yards. As of end of 2010, the landfill had a remaining in-county disposal capacity of approximately 44.313 million tons. The landfill is expected to reach capacity by approximately 2045.

The Badlands Landfill is located northeast of the City of Moreno Valley at 31125 Ironwood Avenue, which is accessed from State Highway 60 at Theodore Avenue. The landfill is currently permitted to receive 4,000 tpd; it had an overall remaining disposal capacity of approximately 8,987,467 tons at the end of 2010. The Badlands Landfill is projected to reach capacity in approximately 2024. Further landfill expansion potential exists at the Badlands Landfill site.

The Lamb Canyon Landfill is located between the City of Beaumont and the City of San Jacinto. The landfill is currently permitted to receive 5,000 tpd; it had a remaining disposal capacity of approximately 6,647,603 tons at the end of 2010. The current remaining disposal capacity is estimated to last until approximately 2021. Landfill expansion potential exists at the Lamb Canyon Landfill site.

As mandated by the State of California, 50% of Lake Elsinore's trash had to be recycled by December 31, 2005. Due to the extensive amount of new homebuilding in the area leading to excessive construction waste, the City of Lake Elsinore has been granted an extension to comply with the law.

3.8.12 Trash and Recycling Goal, Policies and Implementation Program

Goal 15 Encourage the City's franchise trash hauler(s) to provide and expand service for the collection, storage, transportation, recovery, and disposal of solid waste to meet the needs of the City.

Policies

- 15.1 Request the City's franchise trash hauler(s) to establish long-term solid waste management plans that include goals for recycling and source reduction programs.
- 15.2 Request that the City's franchise trash hauler(s) provide a public education program in recycling and source reduction techniques for homes, businesses, and construction.

Implementation Program Through the project review and CEQA processes, the City shall condition projects to provide adequate disposal of solid waste generated by the project.

Implementation Program Through the franchise renewal process, the City shall request cooperation in meeting recycling and source reduction goals.

Agency/Department Public Works Department

3.8.13 Telecommunications Baseline

Verizon provides the local “land line” telephone service, although long distance services may also be obtained from a number of other providers. In addition, a number of companies provide wireless or cell phone services. Comcast of Los Angeles provides cable television and high-speed Internet. Many newer subdivisions are fully wired for telecommuting purposes.

3.8.14 Telecommunications Goal, Policies and Implementation Program

Goal 16 Encourage the pursuit of state of the art Information Technology.

Policies

- 16.1 Encourage the use of information technology as a communication tool to improve personal convenience, reduce dependency on nonrenewable resources, take advantage of ecological and financial efficiencies of new technologies.
- 16.2 Maintain and update the City’s website with information about current events and issues, key leadership figures, community involvement opportunities, and educational tools such as solid waste management techniques and emergency preparedness programs.

Implementation Program The City shall consider opportunities to utilize state-of-the-art information technology

Agency/Department City Manager