



## 12.1 INTRODUCTION

The Safety Element describes hazards that exist in Murrieta and the measures that the City is taking to address them. Some naturally occurring hazards may be unavoidable, but their impacts on communities can be reduced through planning and preparation. Thus, the Safety Element addresses geologic, seismic, flood, and fire hazards. This Element also addresses hazards created by human activity: hazardous materials and waste, aircraft hazards, and incidents that call for police protection. Expecting that emergencies will occur even when precautions are taken against hazards, the Safety Element describes the City's efforts to prepare for and respond to emergencies.

This Element supports the following Community Priorities:

- Protect and foster a strong sense of community and safety, as well as the “home town” feeling.
- Improve health care within the City, and continue to provide excellent school, police, fire, library, and recreation services.

## 12.2 AUTHORITY FOR ELEMENT

California *Government Code* Section 65302(g) requires that a General Plan include:

*“...A safety element for the protection of the community from any unreasonable risks associated with the effects of seismically induced surface rupture, ground shaking, ground failure, tsunami, seiche, and dam failure; slope instability leading to mudslides and landslides; subsidence, liquefaction, and other seismic hazards identified pursuant to Chapter 7.8 (commencing with §2690) of Division 2 of the Public Resources Code, and other geologic hazards known to the legislative body; flooding; and wildland and urban fires...”*

## 12.3 SETTING THE CONTEXT: KEY ISSUES AND CHALLENGES

### GEOLOGIC HAZARDS

#### Geological Setting

The City and Sphere of Influence are located within the northern portion of the Peninsular Range geomorphic province, which is characterized by steep, elongated valleys and ranges that generally trend northwestward from the tip of Baja California to the Los Angeles Basin. Features around Murrieta include the Santa Ana Mountains and the Santa Rosa Plateau directly to the west, the Santa Margarita and Agua Tibia ranges approximately 12 to 14 miles to the south, and the San Jacinto ranges approximately 35 miles to the east.

Murrieta is situated within two structural blocks or subdivisions of the Peninsular Range province that are separated by the active Elsinore fault zone, which forms a complex pull-apart basin known as the Temecula Valley that is filled with sedimentary deposits. Major deposits and bedrock formations are shown in *Exhibit 12-1, Regional Geology Map*.

#### Soils

Expansive soils and collapsible soils present potential hazards in Murrieta. Expansive soils are surface deposits rich in clays that expand when wet and shrink when dried. The change in volume can exert detrimental stresses on buildings and cause structural damage. The collapsible soils process, or hydro-consolidation, typically occurs in soils deposited less than 10,000 years ago that contain a high percentage of voids and possess low relative density. Damage to structures and ground cracking due to collapse of recent alluvial deposits occurred in the California Oaks area of Murrieta when ground water levels rose due to a rise in groundwater or irrigation.

#### Loading Settlement

Loading settlement can be immediate or occur gradually over a long period of time. Immediate settlement is normally associated with loose granular soils when they are subjected to loads. These soils are generally found in young alluvium or loosely deposited materials.

#### Subsidence

Subsidence is the ground settlement that results over time from the extraction of oil or groundwater. This process usually extends over a large area and occurs on a gradual basis so the settlement effects on a single site, relative to its immediate neighbors, may be negligible as the neighboring properties are also subsiding.



Although there are no reports of significant subsidence due to groundwater withdrawal in the City, alluvial valley areas are considered susceptible; refer to *Exhibit 12-2, Subsidence Susceptibility Map*.

### Radon Gas

According to the California Department of Public Health Services website, rocks containing the minerals that release radon gas exist in the Murrieta area. Radon gas is a naturally occurring radioactive gas that is tasteless, odorless, and invisible. It becomes hazardous when confined in buildings and the long term exposure levels in the air exceed the United States Environmental Protection Agency's concentration of 4 picocuries per liter (4pCi/L).

### SEISMIC HAZARDS

The City of Murrieta, like the rest of southern California, is located within a seismically active region. Faults and earthquakes present direct hazards from fault rupture and ground shaking as well as indirect hazards, described below.

#### Faults

The most significant known active fault zones that are capable of seismic ground shaking and can impact Murrieta are the Elsinore Fault Zone, San Jacinto Fault Zone, Newport-Inglewood Fault Zone, and the San Andreas Fault Zone.

- **Elsinore Fault Zone.** The Elsinore Fault Zone, which includes the local Elsinore-Temecula fault, passes through Murrieta to the west of Interstate I-15; refer to *Exhibit 12-3, Alquist-Priolo Earthquake Fault Zone Map*, and *Exhibit 12-4, Riverside County Fault Hazard Map*. The Elsinore-Temecula Fault Zone is capable of generating a Maximum Earthquake Magnitude (Mw) of 6.8 per the Richter scale.
- **San Jacinto Fault Zone.** The San Jacinto Fault Zone is located at its nearest point to the city approximately 21 miles northeast of the City and is capable of generating earthquakes in excess of 7.2 Mw.
- **Newport-Inglewood Fault Zone (Offshore).** The Newport-Inglewood Fault Zone is located at its nearest point to the city approximately 28 miles southwest of the City and is capable of generating earthquakes in excess of 6.9 Mw.
- **San Andreas Fault Zone (Southern Section).** The San Andreas Fault Zone is located approximately 38 miles northeast of the City and is considered the dominant active fault in California. This fault zone is capable of generating earthquakes in excess of 7.4 Mw.

#### FAULT RUPTURE

To assist cities and counties in avoiding the hazard of surface fault rupture, the Alquist-Priolo Earthquake Fault Zoning Act requires the State Geologist to establish Earthquake Fault Zones



around the surface traces of active faults. The State has identified two Alquist-Priolo Earthquake Fault Zones within Murrieta, shown in [Exhibit 12-3](#). The Temecula Segment of the Elsinore Fault Zone traverses the City, and the Murrieta Creek Fault is located at the extreme southwest corner of the City.

Before a project can be permitted within a fault zone, a site-specific geologic investigation must demonstrate that proposed buildings will not be constructed across an Alquist-Priolo Earthquake Fault Zone, County Fault Zone, or any other active or potentially active fault. Structures are required to be set back from active faults. The earthquake fault zones extend approximately 500 feet in width on either side of a major active fault trace and approximately 200 to 300 feet in width on either side of a well defined minor active fault, as designated by the State. Development of a building designated for human occupancy is generally restricted within 50 feet of an identified fault.

In addition, the Natural Hazards Disclosure Act requires that sellers of real property and their agents provide prospective buyers with a “Natural Hazard Disclosure Statement” when the property that is being sold lies within an Earthquake Fault Zone.

## SEISMIC SHAKING

The effect of seismic shaking on future structures and land development projects within the City may be mitigated by adhering to adopted building codes. The *California Building Standards Code* regulates the design and construction of foundations, building frames, retaining walls, excavations, and other building elements to mitigate the effects of seismic shaking and adverse soil conditions.

## Secondary Seismic Hazards

Ground shaking can induce secondary seismic hazards such as liquefaction, lateral spreading, subsidence, ground fissuring, and landslides. Liquefaction of saturated cohesionless soils can be caused by strong ground motion resulting from earthquakes. A majority of the alluvial deposits along the Murrieta Creek lie within a liquefaction hazard zone per the County of Riverside; refer to [Exhibit 12-5, Liquefaction Susceptibility Map](#). The process of liquefaction may also produce lateral spreading of soils on properties adjacent to creeks and drainages, such as Murrieta Creek and Warm Springs Creek.

The active Elsinore-Temecula Fault and the Murrieta Creek Fault may develop fissuring along the fault trace during a significant seismic event or groundwater elevation change, which could lead to differential subsidence. If commercial water wells are installed within or near the subsidence zone, the potential for ground fissuring and differential settlement could be substantially increased.

Earthquake-related landslide potential within the City limits can be understood based on known conditions and published geologic maps. Several old landslides have been mapped in areas along the Santa Ana Mountains eastern slopes and the hills along the northern side of the City. The State Seismic Hazard Zones map provides locations of previous known landsliding or where local conditions indicate a potential for ground displacements.



The potential for rock fall due to a seismic event or natural weathering and instability is present in properties at the base of hillsides where rocks and boulders exist.

### FLOOD HAZARDS

#### Creeks

The City and most of the Sphere of Influence (SOI) lie within the inland portion of the Santa Margarita River Basin. Murrieta Creek and Temecula Creek are the main tributaries of the Santa Margarita River. Murrieta Creek drains approximately 220 square miles of the upper watershed. It runs through the Murrieta Valley and flows southeasterly through the portion of the City that lies between Interstate 15 and the base of the Santa Rosa Plateau. A network of washes and intermittent stream courses occur throughout Murrieta, collecting the seasonal runoff from slopes and valley floors and bringing it towards the creek. Stream flows for Murrieta Creek have been highly variable, and flooding frequently occurs in Historic Murrieta. Warm Springs Creek is a tributary to Murrieta Creek that drains extensive valley and upland areas; it flows southwesterly through the Murrieta Hot Springs area, entering Murrieta Creek in the southern part of the City.

#### FLOOD HISTORY

The largest known flood in the Santa Margarita Watershed was in January 1862, and the second greatest was in February 1884. Other major floods occurred in years 1916, 1938, 1943, 1969, 1978, 1980, 1991, 1992, 1993, 1995, and 1998. In both January and February 1993, Riverside County was hit by severe storms resulting in a Presidential Disaster Proclamation. These large flood events deposited two to six feet of sediment in the Murrieta Creek streambed from Winchester Road south into Old Town Temecula. Breakouts of floodwaters were caused largely by the magnitude of the event, vegetation density, and the sediment accumulations within the channel that severely reduced flow-carrying capacity. Damage to flood control and other public facilities resulted.

Much of Murrieta Creek and sections along Warm Springs Creek lack formal flood control systems, and as a result drainage is haphazard in the less developed areas of the City, even with moderate rain. This results in frequent overtopping of the Murrieta Creek channel by floodwaters in a number of channel reaches, flood inundation of structures with attendant damages, and other water-related problems caused by these events including emergency costs, traffic disruption, and automobile damage.

The Riverside County Multi-Jurisdictional Local Hazard Mitigation Plan assigned Murrieta a flood severity rating of 3 and a probability rating of 3 on a scale of 0-4, with 4 being the most severe or most likely to occur.

#### 100-YEAR FLOODS



One-hundred-year floods are those that have a 1/100 or one percent chance of occurring in any given year. A total of 1,021.2 acres in the City of Murrieta are within the 100-year flood zone, as shown in [Exhibit 12-6, FEMA Flood Zones](#). The 100-year flood is a regulatory standard used by Federal agencies and most states to administer floodplain management programs, and is also used by the National Flood Insurance Program (NFIP) as the basis for insurance requirements nationwide. Flood insurance rates are based on FEMA designations of flood zones. The practice is to avoid or restrict construction within 100-year flood zones, or to engage in flood-proofing techniques such as elevating building pads or constructing walls and levees.

## Dam Inundation

Portions of the City of Murrieta are subject to potential flooding in the event of dam failure at Lake Skinner or Diamond Valley Lake. Potential dam inundation zones are shown in [Exhibit 12-7, Dam Inundation](#). Dam failure is considered an extremely remote possibility as dams are designed to be much stronger than necessary to survive the largest magnitude possible earthquake without affecting the dam structure; however, it must be considered and recognized in the planning process.

## Preventive Measures

### CITY REGULATIONS

The City of Murrieta's regulations with respect to flood damage prevention are included in *Municipal Code* Chapter 15.56, Flood Damage Prevention Regulations. The purpose of this chapter is to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas.

### MASTER DRAINAGE PLAN

The City of Murrieta is located within Flood Control District Zone 7 of the Riverside County Flood Control and Water Conservation District. A Master Drainage Plan prepared for the Murrieta Creek area by the District evaluates drainage needs and proposes an economical drainage plan to provide flood protection for both existing and future development in Murrieta. Improvements proposed for Murrieta Creek consist of the channelization of the creek and its major tributaries, and include several concrete-lined open channels and a small network of underground storm drains. The Plan states that certain flood and drainage facilities are critically needed for an orderly and economical development of the Murrieta Creek area.

### MURRIETA CREEK FLOOD CONTROL, ENVIRONMENTAL RESTORATION AND RECREATION PROJECT

Besides causing damage to structures and other problems for Murrieta inhabitants, flooding of Murrieta Creek has degraded habitat in one of the last high quality minimally disturbed riverine environments in southern California. In 1997, the U.S. Army Corps of Engineers initiated studies on Murrieta Creek that resulted in the Congressional authorization in 2000 of a \$90 million, multi-faceted project known as the Murrieta Creek Flood Control, Environmental



Restoration and Recreation Project. However, limited funding has been appropriated for construction to date. This project has four phases:

- **Phase One.** Channel improvements through the City of Temecula, completed in 2004. This phase included an earthen channel flanked by a habitat corridor and multi-purpose trails.
- **Phase Two.** Channel improvements through the City of Temecula to address the possible collapse of the bridge at Main Street with a major rainfall event.



The Murrieta Creek Flood Control, Environmental Restoration and Recreation Project would address flooding in Historic Murrieta while providing habitat and recreational

- **Phase Three.** Construction of a 250-acre detention basin which would attenuate tributary flows to reduce the peak discharge of flood waters downstream, and remove the floodplain designation from Phases One and Two of the Project. Bounded by Warm Springs Creek to the north and Santa Gertrudis Creek to the south, the basin is designed as a natural riverine system with ponds that would improve groundwater recharge, establish approximately 160 acres of new environmental habitat, and create over 50 acres of recreational facilities within the City of Murrieta. The multi-purpose basin is critical to the overall design of the Project. Until it is completed, improvements constructed in Phase One remain at risk of damages from floods.
- **Phase Four.** Channel improvements through the City of Murrieta that address risk to the treatment plant adjacent to the creek from moderate storms. A spill of untreated water could contaminate downstream waters including the Santa Margarita River and the Ecological Preserve. This phase provides for the largest expansion of “Waters of the U.S.” with the development and establishment of a 150-foot wide riparian habitat corridor. The City of Murrieta continues to be actively engaged in both the design and funding issues related to the Project and has initiated engineering design on both the Guava Street and Ivy Street Bridges.

## FIRE HAZARDS

### Wildland Fires

A wildland fire is an uncontrolled fire spreading through vegetative fuels that may expose or consume structures. Although not located in a wilderness area, the threat of a wildland fire in or near Murrieta is high due to the wildland urban areas in and around the City, where structures and other human development meet or intermingle with wildland or vegetative fuels. The threat of wildfire is particularly significant during dry summer months and when there are strong Santa



Ana winds. The fire season extends approximately five to six months, from late spring through fall. The aftermath of wildland fire produces new areas of potential landslide as burned and defoliated areas are exposed to winter rains.

The undeveloped hillside areas in and adjacent to the City present a potentially serious hazard due to the high potential for large scale wildland fires, as shown in *Exhibit 12-8, Very High Fire Hazard Zones*. The escarpments along the western boundary of the City are notorious for their threat of wildland fires that move quickly through the area. Similar wildland areas exist in northern Murrieta, in the Greer Ranch and Los Alamos areas. Within the City, wildland fires are assigned a severity rating of 3 and a probability rating of 2 in the Riverside County Multi-Jurisdictional Local Hazard Mitigation Plan.

There are a number of building criteria and site maintenance techniques available for Murrieta Fire & Rescue and property owners to use for areas within a Very High Fire Hazard Zone or areas described as Wildland Urban Interface areas, which are areas where structures and other human development meet and intermingle with undeveloped wildland or vegetative fuels. These techniques are detailed in the California Building Standards Code *California Code of Regulations Title 24*, Public Resources Code sections 4290 & 4291, and Government Code sections 51175-51189 and address topics such noncombustible siding for buildings and 100-foot fuel modification (buffer) zones. In addition, community planning, awareness, and involvement are proven elements of effectively reducing the occurrence of wildland fires and damage associated with them.



A vegetation fire near I-15 on a windy day in October 2009 was contained without damage to structures.

## Urban Fires

No significant unusual urban fire hazards have been identified in Murrieta. Local very high fire hazard zones are located in the wildland/urban interface areas, as described above.

Management of hazardous materials that can cause fires is described in the Hazardous Materials Hazards section. Protection from urban fire hazards includes fire prevention and suppression, described in Fire Protection below.





### Fire Protection

Murrieta Fire & Rescue is the primary provider of fire suppression and fire prevention services in the City of Murrieta, while the Sphere of Influence is served by the Riverside County Fire Department. However, Murrieta Fire & Rescue participates in an Automatic Aid Agreement with the County Fire Department to expedite service delivery to the eastern portion of the City. Murrieta Fire & Rescue (MFR) may also provide service to the Sphere by means of this Automatic Aid Agreement.



The Murrieta Fire & Rescue is prepared to respond to a variety of emergencies.

MFR participates in the California Master Mutual Aid Agreement. In the event of a major fire, outside resources can be brought into the City as needed.

MFR has five stations located to optimize response times throughout the City of Murrieta, listed in Table 12-1, Murrieta Fire & Rescue Stations, with a proposed sixth station in the eastern Sphere of Influence area (refer to Exhibit 12-9, Fire Station Service Areas). Additionally, exhibit 12-10 illustrates MFR stations, recent and historic fires in the area, and the City’s very high fire severity zones.

**Table 12-1  
Murrieta Fire & Rescue Stations**

Station	Location
Fire Station No. 1	41825 Juniper Street
Fire Station No. 2	40060 California Oaks Road
Fire Station No. 3	39985 Whitewood Road
Fire Station No. 4	28155 Baxter Road
Fire Station No. 5	38391 Vineyard Parkway
Fire Station No. 6	Specific Location TBD

### RESPONSE TIME AND ISO RATING

MFR has a total response time goal within the City of 6:04 minutes for medical emergencies and an effective response force (all resources dispatched to arrive at scene) for fire incidents of 10:24 minutes as measured by the National Fire Protection Association (NFPA) 1710 Standards and the Community Risk Assessment - Standards of Cover. Stations in the outlying regions experience longer average response times, such as the eastern portion of the City along



Winchester Road and in the area between Winchester and the I-215 north of Clinton Keith. A sixth fire station in this area is contemplated to help achieve the target response time.

Insurance Services Office (ISO) rates fire department staffing and equipment, communications centers and water systems. The numeral classification rating is utilized to establish the community's residential, commercial and industrial insurance rates. For every decrease in one rating point, these insurance costs may decrease by approximately 10 percent. MFR's ISO rating is 4 in areas with fire hydrants and 9 in outlying areas that do not have water supply.

### PROTECTION FOR HIGH-RISE BUILDINGS

As Murrieta develops with more Class A high-rise office buildings, further investments in MFR equipment and personnel are needed. An aerial truck company with a ladder extension of 100 feet or greater will be able to access and provide fire suppression for buildings such as Loma Linda University Medical Center-Murrieta.

### FIRE PREVENTION

MFR in activities that are aimed at preventing fires and compliance with California Building Standards Code, Title 24, and the California Fire Code (*California Code of Regulations, Title 24*). MFR provides fire protection engineering, building inspections for code compliance, and hazardous materials inspections. As described later in this Element, MFR also provides education and training in public safety and emergency preparedness.

### HAZARDOUS MATERIALS AND WASTE

A hazardous material is any substance that may be explosive, flammable, poisonous, corrosive, radioactive, reactive, or any combination thereof, because of its quantity, concentration, or characteristics. Hazardous materials require special care in handling due to the hazards they pose to public health, safety, and the environment. Potential hazards associated with hazardous materials include fires, explosions, and leaks. Releases of hazardous materials can be damaging when they occur in highly populated areas or along transportation routes.

Hazardous materials are transported through the City, and businesses within the City handle, transport, use, and/or store hazardous materials. Other sources of hazardous materials include agricultural operations, illegal drug manufacturing, and clandestine dumping. Within the City, hazardous materials accidents are assigned a severity rating of 3 and a probability rating of 3 in the Riverside County Multi-Jurisdictional Local Hazard Mitigation Plan.

Existing Federal, State, and local laws regulate the use, transport, disposal, and storage of hazardous materials within the City.

### Transport of Hazardous Materials

Hazardous substance incidents are likely to occur within the City of Murrieta due to the presence of highways. Transportation of hazardous materials/wastes is regulated by *California Code of Regulations* Title 26. The Federal Department of Transportation (DOT) is the primary



regulatory authority for the interstate transport of hazardous materials, and establishes regulations for safe handling procedures (i.e., packaging, marking, labeling, and routing). The California Highway Patrol and the California Department of Transportation enforce Federal and State regulations and respond to hazardous materials transportation emergencies. Emergency responses are coordinated as necessary between Federal, State and local governmental authorities and private persons through the Murrieta Emergency Operations Plan.

### Hazardous Materials Sites

Certain businesses in the City of Murrieta incorporate hazardous materials into their production or service processes, and some generate hazardous waste. These businesses include automotive services, dry cleaners, photo processing, printing, lithography, and medical services.

Hazardous materials disclosure allows for the inspection of businesses that generate, store, and use hazardous materials. Through regular inspections, MFR can identify hazardous conditions and can obtain compliance through the fire code to provide for the safety of citizens and fire fighters in the event of a hazardous materials fire or release. Riverside County Environmental Health acts as the city's designated branch for the Certified Unified Program Agency (CUPA) by the California Environmental Protection Agency related to hazardous materials.

Monitoring of sites which have contamination associated with underground tanks used to store petroleum products is the primary responsibility of the California Department of Health Services and the Regional Water Quality Control Board. The Existing Conditions report provides information on known leaking underground fuel tank (LUFT) sites in Murrieta.

At least one property in Murrieta is subject to regulation under the Site Mitigation and Brownfields Reuse Program of the California Department of Toxic Substances Control. Further information is provided in the Existing Conditions Background Report.

### Hazardous Materials Incidents

MFR responds to hazardous materials incidents, with further assistance provided by the County Fire Department Hazardous Materials Response Team and the County Health Department. All MFR personnel receive first responder operations training and are trained in hazardous materials decontamination procedures, so that they can determine that a problem exists, isolate the problem, and assist an advanced team when it arrives.

### Hazardous Waste

Hazardous waste is waste with properties that make it dangerous or potentially harmful to human health or the environment. Through its membership in the Southern California Hazardous Waste Management Authority, the County of Riverside has agreed to work on a regional level to solve problems involving hazardous waste. The County of Riverside does not presently have any hazardous waste management facilities within its jurisdiction and therefore must rely on intergovernmental agreements to fulfill its fair share responsibility. The Riverside



County Hazardous Waste Management Plan is the County's primary planning document for the management of hazardous materials and waste.

Riverside County landfills do not accept hazardous waste. However, households may bring hazardous waste to collection centers and collection events, while businesses contract with registered hazardous waste transporters.

## AIRCRAFT HAZARDS

The French Valley Airport is a County-owned public-use airport located on SR-79 (Winchester Road) in unincorporated Riverside County east of Murrieta, adjacent to Temecula and Winchester. The airport is primarily used for single engine fixed-wing general aviation aircraft. Airport activity is anticipated to increase from approximately 84,000 annual operations in 2002 to 185,000 in about 20 years.

The Riverside County Airport Land Use Commission (RCALUC) adopts plans to protect and promote the safety and welfare of airport users and residents in the airport vicinity. The *Riverside County Airport Land Use Compatibility Plan* establishes policies applicable to land use compatibility planning in the vicinity of airports throughout Riverside County. Compatibility plans serve as a tool for use by airport land use commissions in fulfilling their duty to review proposed development plans for airports and surrounding land uses. Additionally, compatibility plans set compatibility criteria applicable to local agencies in their preparation or amendment of land use plans and ordinances and to landowners (including special district and other local government entities as well as private parties) in their design of new development. State law requires each local agency having jurisdiction over land uses within an ALUC's planning area to modify its general plan and any affected specific plans to be consistent with the compatibility plan.

As adopted by the RCALUC, the *Riverside County Airport Land Use Compatibility Plan Policy Document* establishes policies applicable to land use compatibility planning in the vicinity of airports throughout Riverside County, including French Valley Airport. Included in the *Policy Document* are Compatibility Criteria and Airport Influence Area maps for each individual airport. The *Compatibility Plan* details the procedural requirements associated with the compatibility review of development proposals. An "Airport Influence Area" is an area in which current or future airport-related noise, overflight, safety, or airspace protection factors may significantly affect land uses or necessitate restrictions on those uses.

The basic function of airport land use compatibility plans is to promote compatibility between airports and the land uses that surround them. Compatibility plans set compatibility criteria applicable to local agencies in their preparation or amendment of land use plans and ordinances and to landowners in their design of new development. The principal compatibility concerns involve impacts related to:

- Exposure to aircraft noise;
- Land use safety with respect both to people on the ground and the occupants of aircraft;
- Protection of airport airspace; and
- General concerns related to aircraft overflights.



The basic criteria for assessing whether a land use plan, ordinance, or development proposal is deemed compatible with a nearby airport are set forth in Table 2A of ALUC’s Policy Document, *Basic Compatibility Criteria Matrix*.<sup>1</sup> These criteria are used in conjunction with the compatibility map and policies for each airport. The Compatibility Criteria matrix represents a compilation of compatibility criteria associated with each of the four airport impacts identified above. The Compatibility Criteria are presented according to the following Compatibility Zones, which are set forth for the purposes of assessing land use compatibility within the airport influence area:

- **Zone A, Runway Protection Zone and Within Building Restriction Line:** Noise impact is very high; and risk level is very high.
- **Zone B1, Inner Approach/Departure Zone:** Noise impact is high; risk level is high.
- **Zone B2, Adjacent to Runway Zone:** Noise impact is moderate to high; risk level is low to moderate.
- **Zone C, Extended Approach/Departure Zone:** Noise impact is moderate; risk level is moderate.
- **Zone D, Primary Traffic Patterns and Runway Buffer Area Zone:** Noise impact is moderate; risk level is low.
- **Zone E, Other Airport Environs Zone:** Noise impact is low; risk level is low.
- **“\*” , Height Review Overlay:** Noise impact is low; risk level is moderate.

The Compatibility Criteria in Table 2A specify the maximum residential densities and non-residential intensities, required open land, prohibited land uses, and other development conditions (i.e., aviation easement dedication, structure locations, minimum Noise Level Reductions (NLR), airspace review, and deed notice requirement). The Compatibility Criteria are discussed in detail in Chapter 2 of the ALUC’s Policy Document, *Compatibility Criteria for Land Use Actions*.

The Compatibility Plan identifies the following prohibited uses within each of the zones:

- Zones B1 and B2 prohibit children’s schools, day care centers, libraries, hospitals, nursing homes, places of worship, buildings with more than two above ground habitable floors, highly noise-sensitive outdoor non-residential uses, aboveground bulk storage of hazardous materials, critical community infrastructure facilities, and hazards to flight which can include physical (e.g., tall objects), visual, and electronic forms of interference with the safety of aircraft operations.
- Zone C prohibits children’s schools, day care centers, libraries, hospitals, nursing homes, buildings with greater than three aboveground habitable floors, highly noise-sensitive outdoor non-residential uses, and hazards to flight.

<sup>1</sup> <http://www.rcaluc.org/filemanager/plan/new//04-%20Vol.%201%20County%20wide%20Policies.pdf>, Accessed June 18, 2010.



- Zone D prohibits highly noise-sensitive outdoor non-residential uses and hazards to flight.
- Zone E prohibits hazards to flight.

The Compatibility Plan identifies additional compatibility policies for specific zones that pertain to building heights, residential densities, non-residential intensities, and calculations regarding the concentration of people.

The Compatibility Plan contains land use restrictions for the French Valley Airport that affect land use densities and building heights within the City of Murrieta. As addressed in the Noise Element, aircraft from French Valley Airport do not contribute a significant amount of noise heard in the City. Refer to the Land Use Element for goals and policies related to the French Valley Airport.

## POLICE PROTECTION

The Murrieta Police Department provides police protection services within the City of Murrieta. Besides responding to incidents involving safety and law enforcement, the Police Department actively promotes safety through education programs, community partnerships, and providing advice on incorporating Crime Prevention Through Environmental Design principles into development projects.



The Murrieta Police Department seeks to improve safety in partnership with the community.

## Crimes and Police Activity

In 2009, The *Los Angeles Times* ranked Murrieta as the second safest city in the nation for cities with populations over 100,000, based on 2008 preliminary FBI statistics that showed a violent crime rate of 8.4 per 10,000 residents.<sup>2</sup>

*Table 12-2, Police Activity (2006 to 2009)*, shows crimes and other events that generated Police Department activity from 2006 through 2009.

<sup>2</sup> City of Murrieta news release, "Murrieta 2<sup>nd</sup> Safest City in the Nation," July 8, 2009.



**Table 12-2  
Police Activity (2006 to 2009)**

Type of Activity	2009	2008	2007	2006
Total Reports Taken	7,777	8,461	8,273	8,556
Officer Initiated Activities	40,511	40,867	33,365	29,990
Police Responses	43,021	45,272	43,804	41,509
Fire Responses	6,699	6,447	6,666	6,108
<b>Total Activities Processed</b>	<b>90,231</b>	<b>92,586</b>	<b>83,835</b>	<b>77,607</b>
<b>Part 1 Crimes</b>				
Homicide	0	1	3	2
Rape	17	12	9	9
Robbery	34	23	46	31
Assault	199	357	393	388
Burglary	427	442	483	560
Larceny	881	898	1195	1184
Auto Theft	156	166	277	225
Arson	4	10	2	4
<b>Total</b>	<b>1,718</b>	<b>1,909</b>	<b>2,408</b>	<b>2,403</b>
<b>Traffic Collisions</b>				
Traffic Collision Responses	1,292	1,225	1,371	1,497
Damage Reports	541	477	464	458
Injury Reports	238	216	258	263
Fatal Reports	0	0	1	1
<b>Total Collision Reports</b>	<b>779</b>	<b>693</b>	<b>723</b>	<b>722</b>
<b>Citations Issued</b>				
Parkers	943	1,203	1,225	542
Others (including red light camera)	13,018	13,292	11,077	10,750
<b>Total Citations</b>	<b>13,961</b>	<b>14,495</b>	<b>12,302</b>	<b>11,292</b>
<b>Arrest</b>				
Misdemeanor Adult Arrests	1,667	2,024	1,540	1,435
Felony Adult Arrest	564	548	639	642
Misdemeanor Juvenile Arrests	169	308	307	266
Felony Juvenile Arrest	138	147	101	120
<b>Total Arrested</b>	<b>2,538</b>	<b>3,027</b>	<b>2,587</b>	<b>2,463</b>
Source: City of Murrieta Police Department, "Police Activity Report," December 2007, December 2008, December 2009.				



## Staffing and Response Times

The Department’s goals will be to reach and maintain police officer and civilian support employee staffing levels to effectively and efficiently address public safety needs. Established response times are as shown in *Table 12-3, Target Response Times.* The average response times for Priority 1 and Priority 3 calls are longer than the targets while average response time for Priority 2 calls is shorter than the target.

**Table 12-3  
Target Response Times**

Call Type	Target Response Time
Priority 1	6 minutes
Priority 2	15 minutes
Priority 3	35 minutes

## Mutual Aid Agreements

The Department has an automatic aid agreement with the Hemet Police Department S.W.A.T. Team and participates in mutual aid agreements with other S.W.A.T. Teams in Riverside County. The Department also follows the State of California Law Enforcement Mutual Aid Plan. Resources shared through these agreements include Murrieta’s bloodhound—used for investigations—and the Riverside County Sheriff’s helicopter.

## Community Education and Participation

A safe, crime-free environment is created by the community as a whole. Thus, the Police Department has several programs to engage community members, including youth, as partners in promoting safety.

### YOUTH PROGRAMS

The Police Department has several educational programs for children in 1st grade through 12th grade: 9-1-1 For Kids, D.A.R.E. and Red Ribbon Week, Every-15-Minutes, and Kid Print/Safety Fairs.

The School Resource Officer Program assigns officers full-time to middle and high schools. School Resource Officers interact with students and serve as positive role models, while providing law enforcement for the campuses.





Police Activities League (PAL) coordinates recreational, educational, and athletic activities for disadvantaged or at-risk youth between the ages of 5 and 17. Police officers volunteer their time to attend PAL events with the intention of providing mentorship and to serve as positive role models. PAL activities create an environment where youth and law enforcement are able to communicate with each other in a neutral environment to foster positive attitudes and mutual respect.

The Department has two programs for youth rehabilitation. The Youth Accountability Team assesses the situations and arrests of delinquent youth aged 12 to 17 and implements a program aimed at rehabilitation, including service referrals and visits. The Southwest Valley Youth Court provides an alternative approach to juvenile justice in which juvenile respondents are sentenced by a jury of their peers for infractions and non-violent misdemeanor crimes.

### **VOLUNTEER PROGRAMS**

Community members are involved in many of the Department's programs. For instance, in Home to School Safety Patrols, parents and community members monitor designated locations around schools to ensure the safety of children on their way to and from school. The Special Enforcement Team manages Murrieta's Neighborhood Watch program.

The Department expands its capacity with the Reserve Officer program, as well as with the Volunteer Program in which participants volunteer at least 16 hours per month. Volunteers assist in Neighborhood Watch, youth programs, Crime Free Multi-Housing, parades, citizen patrols, front counter and receptionist responsibilities, school patrols, and special events.

### **Crime Prevention Through Environmental Design (CPTED)**

The built environment can present opportunities for crimes to occur, or discourage crimes. For instance, design can influence the amount of surveillance provided by residents or passersby, and whether there is an easy escape for someone who commits a crime. Design of public spaces and the relationships between buildings and public space are important considerations in Crime Prevention Through Environmental Design (CPTED). CPTED is a set of approaches to the design of the built environment that seek to minimize opportunities for crime.

### **CRIME FREE MULTI-HOUSING PROGRAM**

New multi-family housing developments going through the development review process in Murrieta must participate in the Crime Free Multi-Housing Program. Through this program, the Department provides recommendations for improving the safety of the developments using CPTED strategies. Tenants also sign a lease addendum form, which lists criminal acts that result in immediate termination of the lease. Communication between rental property managers and the Department helps both parties to deal with problem tenants.



## EMERGENCY RESPONSE

### Emergency Services

#### EMERGENCY DISPATCH

Emergency 911 services are provided by the Murrieta Police Department as a joint police/fire dispatch center, dispatching Murrieta fire, police, paramedics, and ambulance services. The dispatch center is inter-connected to the AMR Ambulance dispatch and has a goal to inter-connect with neighboring law and fire dispatch centers, the County Operational Area, School District, and utility companies. It is also a goal to inter-connect to fire apparatus via systems that allow for backup forms of communication between the dispatch center, vehicles, and personnel.

#### MEDICAL SERVICES

Firefighters are cross-trained to provide services for medical emergencies. All MFR personnel are trained to the level of Emergency Medical Technician (EMT) or are trained as Paramedics. MFR's engine companies are equipped for paramedic service.

#### URBAN SEARCH AND RESCUE (USAR) TASK FORCE

MFR maintains an Urban Search and Rescue (USAR) team of professional firefighters that are certified by the Federal Emergency Management Agency. They serve the larger community as part of California Task Force 6, supervised by the Riverside City Fire Department and composed of representatives from several Inland Empire fire agencies. The USAR team members regularly train with other agencies for rapid deployment to local, regional, and national incidents.

#### S.W.A.T. TEAM

The purpose of the Special Weapons and Tactics (S.W.A.T.) Team is to perform special tactical missions in response to unusual occurrences or highly dangerous, life threatening police situations where special skills, tactics, training, and/or equipment are required to protect life and property.

### Emergency Preparedness

#### EVACUATION ROUTES

Currently, the City of Murrieta has no defined evacuation routes in this plan. The Western Riverside Council of Governments (WRCOG) as part of Resilient IE, has prepared Transportation Hazards and Evacuation Maps that define evacuation routes in the city. Under WRCOGs regional evacuation routes, Interstate 15 (I-15) and Interstate 215 (I-215) are considered evacuation routes as they traverse the City granting access from many of the main thoroughfares. Various other streets in the city also may serve as evacuation routes, including, but not limited to Clinton Keith Road, Los Alamos Road, California Oaks Road, Nutmeg Street, Murrieta Hot Springs Road, Washington Ave., Guava Street, Jefferson Ave., and Winchester Road.



### EMERGENCY INCIDENT INFORMATION

In the event of a major emergency such as fire, hazardous materials spill, police activity or other situation which may directly impact the City of Murrieta or its residents, the City and MFR website pages, Facebook, Instagram and twitter social media accounts will contain updated information on the nature of the incident, potential impacts to traffic circulation, possible evacuations and/or other pertinent information. The City also has an emergency radio station at AM 1640. Residents who wish to be notified of emergency events and disasters in their area can sign up for the Riverside County's Early Warning Notification System, Alert RivCo and part of RivCo Ready.

### COMMUNITY EMERGENCY RESPONSE TEAM (CERT)

The Community Emergency Response Team (CERT) is a nationally recognized program designed to train citizens in the skills needed to survive an earthquake or other disaster should emergency services be interrupted for an extended period of time because of the size of the areas affected, lost communications, and impassable roads. CERT training consists of basic understanding of disaster preparation, disaster teamwork, fire suppression, light search and rescue, medial triage and disaster psychology. Murrieta firefighters provide the training to residents and stakeholders.

### EMERGENCY PREPAREDNESS INFORMATION

The City's website provides information from MFR to assist community members in preparing for emergencies, such as a list of supplies and a preparedness checklist. As in CERT training, residents are urged to prepare for at least a week of self-sufficiency.

## Emergency Operations Plan

The City of Murrieta Emergency Operations Plan (EOP) addresses the planned response to extraordinary emergency situations associated with natural disasters, national security emergencies, and technological incidents affecting the City of Murrieta. The objective of the EOP is to coordinate and incorporate all the facilities and personnel of the City into an efficient organization capable of responding effectively to all disasters and emergencies. It also facilitates multi-agency and multi-jurisdictional coordination, particularly between the City of Murrieta and Riverside County, special districts, and State agencies, in emergency operations.

The EOP describes the operations of the City of Murrieta Emergency Operations Center (EOC), which is the central management entity responsible for directing and coordinating the various City departments and other agencies in their emergency response activities. The EOC centralizes the collection and dissemination of information about the emergency and makes policy-level decisions about response priorities and the allocation of resources. The Police Department has been designated at the primary EOC. As part of the City's Emergency Management Program, the EOC Manager is responsible for ensuring the readiness of the EOC.



## Mutual Aid Agreements

Incidents frequently require responses that exceed the resource capabilities of the affected response agencies and jurisdictions. When this occurs, mutual aid is provided by other agencies, local governments, and the State. Mutual aid is voluntary aid and assistance by the provision of facilities and services, including fire, police, medical and health, transportation, communications, utilities, and other assistance.

The California Master Mutual Aid Agreement is designed to ensure that adequate facilities, resources, and other support are provided to jurisdictions whenever their own resources prove to be inadequate to cope with a given situation. The City of Murrieta is part of Mutual Aid Region VI. Inter-agency, multi-agency, and discipline-specific mutual aid system coordination is used by the City of Murrieta and other member jurisdictions of the Riverside County for coordinating mutual aid. MFR is also part of the standard Countywide and Statewide mutual aid systems.

Volunteer and private agencies are part of the City of Murrieta's mutual aid system. The American Red Cross and Salvation Army are significant elements of response to meet the care and shelter needs of disaster victims. Private sector medical/health resources are also an essential part of the medical response. Volunteer and private agencies mobilize volunteers and other resources through their own systems. They may also identify resource needs that are not met within their own systems that would be requested through the mutual aid system.

## 12.4 SETTING THE VISION: KEY CONCEPTS AND VISION FOR GENERAL PLAN

Community members describe Murrieta as safe, and place importance on keeping it that way. Residents feel that Murrieta is good for families and want it to be a safe, healthy environment for children in the future. Youth also recognize and value the safety and sense of community they feel in Murrieta. This sense of safety in Murrieta comes from the trust between community members, upkeep of the physical environment, and the provision of effective fire and police services.

The City promotes safety through education, engineering, enforcement, evaluation, community design, and planning for hazards. Fire and Police Departments are involved in these preventive activities and respond to emergencies. These Departments also recognize that safety is in the hands of the people who live and work in Murrieta. Through outreach and education, the City can help community members to create a safe environment.

## GEOLOGIC AND SEISMIC HAZARDS

Site-specific geologic review is used to evaluate geologic and seismic hazards that may affect a particular development, and identify appropriate corrective measures. The City requires



geotechnical engineering reports for any development within areas with known geologic or seismic hazards, for grading permits, for hillside development, and for proposed critical uses such as hospitals and utilities. The City may also designate land as open space where hazards such as fault lines preclude development.

### FLOOD HAZARDS

The Murrieta Creek Flood Control, Environmental Restoration and Recreation Project is designed to reduce flooding as well as to provide other benefits including groundwater recharge, improved habitat, wildlife corridors, and recreation. Key entities involved in this project are the U.S. Army Corps of Engineers, Riverside County Flood Control and Water Conservation District, City of Murrieta, and City of Temecula. These partners should make it a priority to secure funding for construction of this project.

The Master Drainage Plan provides another guide to the flood control improvements that are needed in Murrieta. Where possible, natural drainage will be preserved in conjunction with open space. The City will also seek opportunities to construct recreational trails along waterways, balancing demands for recreation with considerations for safety and habitat.

Flood hazards within floodplain and dam inundation areas will continue to be addressed through land use regulations and project review.

### FIRE PROTECTION

Development in the eastern part of the City will create additional demand for a sixth fire station to serve this area, where response times are longer than the target time. Providing fire protection for high-rise office buildings will require investment in new equipment as well as staffing for four-person engine companies. In both cases, new development will need to pay its fair share of the costs associated with fire protection.

Between the time of dispatch and arriving on the scene of an emergency, the majority of MFR response time is spent driving. Circulation improvements planned for Murrieta should positively affect MFR response times.

Preventive measures will continue to be an important part of fire protection in Murrieta, including conditions of development and vegetation clearance to deter the spread of wildland/urban interface fires, MFR review of site plans, and community education, engineering, and enforcement.

### HAZARDOUS MATERIALS AND WASTE

MFR oversight and inspection of sites handling hazardous materials is the City's primary tool for reducing risks related to these materials.

Given the City's dependence on groundwater, remediation of leaking underground fuel tanks should be taken seriously. Although regional and state authorities are responsible for monitoring these sites, the City should facilitate their efforts when possible.



Household hazardous waste collection events raise community awareness that items such as cleaning products, batteries, and paint should not be disposed of in the trash. The City and its waste services contractor should promote these events to divert household hazardous waste from landfills.

## AIRCRAFT HAZARDS

To reduce risk from aircraft in the eastern part of Murrieta, the City will continue to ensure that land use policies are consistent with the French Valley Airport Land Use Compatibility Plan.

## POLICE PROTECTION

Demand for Police Department services will continue to grow with the population, while the Department seeks to reach and maintain police officer and civilian support employee staffing levels to effectively and efficiently address the public safety needs of the community. Expansion of the Police Department facility is needed to accommodate additional staff. Target response times for calls is another measure that the City will strive to meet.

## Community Design

Police Department input into the design of the built environment can promote a safer community, whether by incorporating Crime Prevention through Environmental Design strategies into housing developments, or designing streets to minimize traffic conflicts that can cause accidents. Coordination between departments should provide opportunities for this kind of input during project review or City project design.

## Code Enforcement

Well-kept properties convey the sense of a watchful community that will notice criminal behavior. Code Enforcement is an important strategy for addressing health and safety issues at the property level while maintaining order in the community overall. Residents value the cleanliness of Murrieta and contribute their own time for cleanup efforts such as maintaining the yards of foreclosed properties. This volunteerism should be encouraged and expanded.

In addition to individual property owner commitment to well-kept properties, the City has a comprehensive code enforcement program that helps to protect property owner investment, promote general health and welfare, and enhance the quality of neighborhoods. This program will continue to be an important part of the City's commitment to neighborhood and business safety, preservation, and improvement, and ensuring that Murrieta maintains and enhances its overall community appearance.

## Community Participation



Developing partnerships and trust in the community are essential for effective law enforcement. When residents and businesses are engaged as partners, they can provide information about criminal activity, supplement Police Department resources by volunteering, and promote a safe, law-abiding environment.

Residents become leaders in creating a safer community by participating in programs such as Home to School Safety Patrols, Neighborhood Watch, and Business Group Meetings with Law Enforcement. Property owners are key to the success of the Crime Free Multi-Housing Program, which relies on their vigilance to identify tenants engaging in criminal activity, communicate with the Police Department about problem tenants, and enforce the lease addendum. Reserve Officers and volunteers expand the capacity of the Police Department. Incorporating community participation into Police Department programs requires investments of staff time in outreach, supervision, and volunteer recognition.

### Youth

Police Department outreach programs for youth offer education about safe behavior, police presence at schools, mentoring, and rehabilitation. These programs supplement other activities available for youth in Murrieta and are a form of proactive law enforcement, promoting safe behavior and providing positive interaction with police. Mentoring and rehabilitation programs are targeted toward youth who may otherwise stray into anti-social and illegal behavior. The Southwest Valley Youth Court also provides an opportunity for youth volunteers to participate in the legal system. Because Murrieta is a community that prioritizes youth and safety, it will continue to support youth programs.

## EMERGENCY RESPONSE

### Emergency Services

The emergency dispatch system in Murrieta provides quick access to the range of services provided by the Police and MFR. Cross-training of fire personnel in life-saving medical procedures provides an extra measure of safety for people who are critically injured or ill. Incorporating Emergency Medical Dispatch into the dispatching system would provide emergency medical assistance to 911 callers even before an engine company can arrive, through properly trained dispatchers. MFR is evaluating the feasibility of using this program.

Cross-training of MFR personnel in Urban Search and Rescue, swift water rescue, and hazardous materials decontamination allows Murrieta to respond to incidents involving a number of hazards discussed in this Element.



MFR and Police Department responses to emergencies are discussed further in Fire Protection and Police Protection.

## Emergency Preparedness

The Emergency Operations Plan (EOP) is the master document that organizes emergency preparedness and response efforts in Murrieta, and that provides a framework for coordination with other agencies at the regional and state levels. Each department involved in implementation of the EOP has the responsibility to internalize the plan in its own operations, as well as keep the plan up-to-date. Dedicated staff support for maintenance and implementation of the EOP would make this effort more likely to succeed. Staff training at all levels would also promote readiness to implement the plan.

Public awareness and education is a critical part of emergency preparedness addressed in the EOP. An educated public will know how to prevent injury and property damage during and after emergency events, and also know how to find and offer help to their neighbors. Community members should be prepared to be self-sufficient for as long as a week in the event of a major emergency.

The City will work to educate residents and businesses about appropriate actions to safeguard life and property during and after emergencies. The CERT program offered by the Fire Department provides a higher level of emergency preparedness training for more interested residents, while basic emergency preparation information should be disseminated throughout the population. Education aimed at children has the potential to shift the expectations of an entire generation while also raising awareness among parents. The City will continue education about emergency preparedness through such avenues as presentations to residents, instruction in local schools, and the City's website.





## 12.5 GOALS AND POLICIES

### CITYWIDE SAFETY

**GOAL SAF-1** People and properties are provided with protection from natural and man-made hazards.

### **POLICIES**

- SAF-1.1 Encourage that areas be dedicated as open space when necessary and appropriate to protect property, minimize impacts to public health, and to provide safety from hazards such as wildland fires, earthquake fault zones or flood plains.
- SAF-1.2 Coordinate emergency responses and planning for hazards with agencies at the County, regional, state, and federal levels.
- SAF-1.3 Collect and maintain current information on local hazards, and make it available for public use.
- SAF-1.4 Review public safety infrastructure and staff resources as new development is planned or proposed in Murrieta and the Sphere of Influence.
- SAF-1.5 Promote coordination among City departments to provide for safety in new development and/or annexation areas.
- SAF-1.6 Investigate and pursue additional funding mechanisms available to fund City safety services, facilities, and equipment.
- SAF-1.7 Prioritize community education as an essential part of creating a safe community.

### GEOLOGIC AND SEISMIC HAZARDS

**GOAL SAF-2** Damage from geologic and seismic hazards is minimized by identifying and addressing these hazards during the planning and engineering of built improvements.

### **POLICIES**

- SAF-2.1 Prior to site development, projects located in areas where liquefaction, subsidence, landslide and fissuring are considered hazards shall be required to



prepare geologic reports addressing site conditions, potential risk, and mitigation, to the satisfaction of the City Engineer.

- SAF-2.2 Require that all new development comply with the Alquist-Priolo Earthquake Fault Zoning Act.
- SAF-2.3 Seek to maintain emergency access in the event of an earthquake by engineering roadways to reduce damage to them.

## **FLOOD HAZARDS**

**GOAL SAF-3** Damage from flood and inundation hazards is minimized by improving flood control systems and providing adequate safety protections in areas of the City subject to inundation.

## **POLICIES**

- SAF-3.1 Cooperate with the Riverside County Flood Control and Water Conservation District to evaluate the effectiveness of existing flood control systems and improve these systems as necessary to meet capacity demands.
- SAF-3.2 Actively participate in and strongly promote timely completion of regional drainage plans and improvement projects which affect the City.
- SAF-3.3 Identify natural drainage courses and designate drainage easements to allow for their preservation, or for the construction of drainage facilities if needed to protect the health, safety, and welfare of the community.
- SAF-3.4 Require new construction within the 100 year floodplain to meet National Flood Insurance Program standards.
- SAF-3.5 Develop and maintain floodplain inundation evacuation plans in cooperation with the Riverside County Flood Control and Water Conservation District and MFR.
- SAF-3.6 Maintain an active swift water rescue program and response in MFR.
- SAF-3.7 The City shall continue to participate in the National Flood Insurance Program's (NFIP) Community Rating System (CRS) which provides a voluntary incentive program that recognizes and encourages community floodplain management activities that exceed minimum NFIP requirements.
- SAF-3.8 The City will continue to update and implement the City's local Hazard Mitigation Plan and Climate Action Plan.
- SAF-3.9 The City will improve flood warning and information dissemination and develop robust multi-lingual educational and outreach materials accessible across multiple media forms (e.g., radio, text messaging) to publicize the potential flood



risk day-to-day, emergency supplies, pet protection, key terminology, electrical safety, and evacuation routes in the case of flooding.

### **DAM INUNDATION**

**GOAL SAF-4 Land use regulations and emergency response plans reduce potential damage resulting from dam failure.**

#### **POLICIES**

- SAF-4.1 Maintain and update mapping of dam inundation areas within the City as new studies and projects are completed.
- SAF-4.2 Develop dam failure evacuation plans in cooperation with the Riverside County Flood Control and Water Conservation District and MFR.
- SAF-4.3 Discourage critical and essential uses as well as high-occupant-load building uses within designated dam inundation areas.

### **FIRE SAFETY**

**GOAL SAF-5 Damage from fire hazards is minimized through preventive measures, education, and fire protection services.**

#### **POLICIES**

- SAF-5.1 Continue efforts to reduce fire hazards associated with older buildings, multi-family housing, and fire-prone industrial facilities throughout the City.
- SAF-5.2 Provide public safety education programs through MFR to reduce accidents, injuries and fires, as well as to train members of the public to respond to emergencies.
- SAF-5.3 Continue to coordinate emergency services with Riverside County, CAL FIRE, and all other agencies and districts with fire protection powers through automatic and mutual aid agreements.
- SAF-5.4 Ensure that outlying areas in the City can be adequately served by the fire communication systems as new development occurs.
- SAF-5.5 Require that all dedicated open space or undeveloped areas meet specifications for wildland fire safety.



- SAF-5.6 Require that all structures and facilities in the City adhere to City, State and National regulatory standards such as the International Building and Fire Codes and other applicable fire safety standards.
- SAF-5.7 Involve MFR in the early design stage of all projects requiring review to ensure MFR input and appropriate modifications and fire safe design is incorporated in future development.

## FIRE RESPONSE

**GOAL SAF-6 Murrieta Fire & Rescue provides a timely response to fire and other emergencies.**

## **POLICIES**

- SAF-6.1 Provide a total response time within the city of 6:04 minutes for medical emergencies and an effective response force (all resources dispatched to arrive at scene) for fire incidents of 10:24 minutes as measured by NFPA 1710 Standards and the Community Risk Assessment - Standards of Cover.
- SAF-6.2 Ensure that each Paramedic Engine Company provides the capability to treat moderate or greater injuries, advance a hose line for fire control, and to effect a rescue of trapped occupants among other emergency operation tasks.
- SAF-6.3 Provide adequate levels of emergency response personnel for all areas of the City.
- SAF-6.4 Ensure sufficient personnel and appropriate apparatus to provide emergency operations and fire suppression for mid and high rise buildings and large warehouses pursuant to the Community Risk Assessment - Standards of Cover.
- SAF-6.5 Locate, staff, and equip MFR apparatus to provide service to all areas within the City within a maximum of 10:24 minutes total response time for 90 percent of all large scale emergency incidents which include structure fires, mass casualty, hazardous materials or natural or man-made disasters.
- SAF-6.6 Continue to incorporate Emergency Medical Dispatch into the dispatching system to provide emergency medical assistance to callers.
- SAF-6.7 Strategically cross-train MFR personnel in special operations including Urban Search and Rescue, swift water rescue, and hazardous materials decontamination, wildland fire and disaster management.
- SAF-6.8 Maintain and monitor a MFR Strategic Plan to address staffing and facility needs, service goals, deployment strategies, and other department goals.



- SAF-6.9 Strive to achieve an Insurance Services Office (ISO) Public Protection Classification of 3 in areas with fire hydrants and 9 in areas that are not connected to an existing water district distribution system.
- SAF-6.10 Review the adequacy and accessibility of the fire protection infrastructure annually relative to growth and development.
- SAF-6.11 Coordinate with CAL FIRE, California's Office of Emergency Services and other local fire districts to identify strategies that ensure the capacity and resilience of escape routes potentially compromised by wildfire, including emergency evacuation and supply transportation routes.
- SAF-6.12 Monitor and evaluate evacuation routes when new roads are constructed, improved or connected through the region in coordination with other agencies, such as adjacent cities and WRCOG.
- SAF-6.13 Expedite reviews for building permits for the reconstruction of fire damaged structures.

### **FIRE HAZARDS**

**GOAL SAF-7 Reduced incidence of damage to life and property from wildland fires.**

### **POLICIES**

- SAF-7.1 Continue to require development in very high fire hazard areas to use fire-resistant building materials and landscaping, and to meet the required codes, standards and specifications for fuel modification, access, and water facilities.
- SAF-7.2 Require all new development to be located in or adjacent to wildland areas to assess its vulnerability to fire and its potential as a source of fire through a Fire Protection Plan analysis.
- SAF-7.3 Encourage the use of development features such as roads and irrigated/landscaped open space to buffer homes from wildland fire.
- SAF-7.4 Promote community education about preventing wildfire ignition, using fire-resistant building features, creating defensible space around homes, evacuation routes, and legal brush clearance requirements.
- SAF-7.5 Continue to implement a proactive vegetation management program to reduce fire hazards on existing private properties and where applicable, require new development to enter into a long-term maintenance agreement for vegetation management in defensible space, fuel breaks and roadside fuel reduction within the Very High Fire Zones.



- SAF-7.6 MFR will consider different forms of mitigation for new residential development in Very High Fire Zones to minimize potential fire hazards through feasible project design, including but not limited to designing development to meet or exceed compliance with current Public Resources Code 4290 & Government Code 51175-51189.
- SAF-7.7 Locate essential public facilities outside Very High Fire Zones when feasible with consideration that the local surrounding cities are also growing and development may fill in between and essential public facilities may be necessary in these areas.
- SAF-7.8 Update General Plan Exhibit 12-8, Very High Fire Hazard Severity Zones, to maintain consistency with CAL FIRE's recommendations.

## HAZARDOUS MATERIALS AND WASTE

**GOAL SAF-8 A community that is protected from the harmful effects of hazardous materials, hazardous waste, and environmental contamination.**

### POLICIES

- SAF-8.1 Require geologic investigations for sites of proposed uses that manufacture, handle, or store hazardous or explosive materials.
- SAF-8.2 Ensure that land uses involved in the production, storage, transportation, handling, or disposal of hazardous materials are located and operated to reduce risk to other land uses.
- SAF-8.3 Designate appropriate routes for transportation of hazardous materials that are used or produced by facilities in the City.
- SAF-8.4 Require that new pipelines and other channels carrying hazardous materials avoid residential areas and other sensitive land uses to the greatest extent possible.
- SAF-8.5 Raise public awareness of appropriate disposal for household hazardous waste, and publicize collection events and locations.
- SAF-8.6 Promote the use of integrated pest management techniques to keep City properties free of herbicides and pesticides.



- SAF-8.7 Encourage and educate residents and businesses to implement integrated pest management principles and reduce or discontinue the use of pesticides and herbicides on their property.
- SAF-8.8 Comply with the Riverside County Hazardous Waste Management Plan.
- SAF-8.9 Support Caltrans and California Highway Patrol efforts to ensure safe transportation of hazardous materials on freeways.
- SAF-8.10 Ensure that all MFR personnel are trained and ready to operate at the level of Hazardous Materials First Responder.
- SAF-8.11 Coordinate with other agencies to improve the containment and clean up of hazardous material spills.
- SAF-8.12 Ensure that MFR personnel receiving training to achieve the Hazardous Materials Technician level.
- SAF-8.13 When approving new development, ensure that the site:
  - Is sufficiently surveyed for contamination and remediation, particularly for sensitive uses near existing or former toxic or industrial sites.
  - Is adequately remediated to meet all applicable laws and regulations, if necessary.
  - Is suitable for human habitation.
  - Is protected from known hazardous and toxic materials.
  - Does not pose higher than average health risks from exposure to hazardous materials.
- SAF-8.14 Work with the appropriate Federal, State, regional, and local agencies to identify previously unidentified contaminated sites in the City, particularly on sites with a high likelihood of past contamination, such as old gas stations or industrial sites, and work with the property owners and applicable agencies to remediate them.

**POLICE PROTECTION**

**GOAL SAF-9 High-quality and timely police services are provided to all residents and businesses in Murrieta.**

**POLICIES**

- SAF-9.1 Seek to reach and maintain police officer and civilian support employee staffing levels to effectively and efficiently address the public safety needs, measured through established response times (as shown in *Table 12-3, Target Response Times*), crime statistics, crime clearance rates, and community quality of life issues.



- SAF-9.2 Endeavor to respond within six minutes for all Priority 1 calls, 15 minutes for Priority 2 calls, and 35 minutes for Priority 3 calls.
- SAF-9.3 Consider options for locating field stations throughout the City to improve response times for Priority 1 calls and foster relationships with local residents.
- SAF-9.4 Maintain and implement a Police Department Strategic Plan to address staffing and facility needs, service goals, deployment strategies, and other department goals.
- SAF-9.5 Explore options for funding needed facilities, staff, and equipment.
- SAF-9.6 Ensure that new development can be served by police communication systems and provide for the construction of radio towers (repeater sites) in outlying areas.
- SAF-9.7 Evaluate the feasibility of adding cellular services for police communication to accommodate Mobile Data Browsers (MDB) technology.
- SAF-9.8 Maintain a S.W.A.T. team that can respond to barricades and other tactical response needs.

**GOAL SAF-10 The Police Department coordinates with neighborhoods and community members to enhance safety and continually improve services.**

**POLICIES**

- SAF-10.1 Collaborate with school districts, businesses, nonprofit organizations, and community members, including neighborhood watch groups, to maintain safety throughout the City.
- SAF-10.2 Provide educational programs that deter unsafe and criminal behavior among youth, including the Youth Accountability Team, Youth Court, and School Resource Officers.
- SAF-10.3 Maintain positive relationships with the community through communication and responsiveness to concerns.
- SAF-10.4 Promote participation in the Crime Free Multi-Housing Program among existing multi-family communities.

**GOAL SAF-11 Design of the physical environment promotes community safety and reduces opportunities for criminal activity.**





### POLICIES

- SAF-11.1 Involve the Police Department in the development review process to address safety concerns, access issues, and potential traffic conflicts, and identify opportunities to apply CPTED principles.
- SAF-11.2 Continue to require new apartment communities to participate in the Crime Free Multi-Housing Program.
- SAF-11.3 Coordinate efforts between the Police Department and Planning Department to develop guidelines for implementation of CPTED principles.
- SAF-11.4 Continue to ensure that each development or neighborhood in the City has adequate emergency ingress and egress.

### EMERGENCY PREPAREDNESS

**GOAL SAF-12 Murrieta is prepared to coordinate effective response and recovery efforts for major emergencies.**

### POLICIES

- SAF-12.1 Maintain an effective, coordinated and up-to-date Emergency Operations Plan in partnership with the Riverside County and other agencies.
- SAF-12.2 Support a safe, secure, and technologically advanced Emergency Operations Center (EOC) to coordinate the City's response to disasters, and maintain training of City personnel in the operations of the EOC.
- SAF-12.3 Review and test the City's Emergency Operations Plan periodically to note any deficiencies or practices requiring modification.
- SAF-12.4 Provide training to maintain City staff proficiency in implementation of the Emergency Operations Plan, for all staffing levels.
- SAF-12.5 Provide public outreach, presentations, and information that prepares residents and businesses to safeguard life and property during and immediately after emergencies.
- SAF-12.6 Participate in regularly scheduled disaster exercises to better prepare Police, Fire, Public Works and other City employees with disaster responsibilities.



SAF-12.7 Continue to participate in maintaining the Riverside County Multi-Jurisdictional Local Hazard Mitigation Plan, and incorporate it into City planning efforts as appropriate.

## 12.6 IMPLEMENTATION OF THE ELEMENT

Ensuring safety in Murrieta begins with understanding the hazards that are present. Maintaining current information and maps of hazards provides a basis for Citywide planning, while site-specific analysis is often needed to evaluate geologic and seismic hazards.

Land use policy in the General Plan and Municipal Code will guide efforts to limit damage from known hazards. Project review provides another opportunity to prevent harm to new developments and their inhabitants. Inspections and code enforcement promote compliance with City codes for building and fire safety, as well as hazardous materials handling. Engineering can mitigate geologic and seismic hazards.

Multiple levels of government are involved in safety. The City must follow State and Federal laws and abide by County plans. The City coordinates with agencies from the County to Federal level in planning, enforcement, and emergency response.

The Emergency Operations Plan is intended to coordinate the City response to major emergencies. Under the EOP, emergency response is managed by the Emergency Operations Center and multiple City departments have implementation responsibility for the EOP.

Responses to smaller-scale emergencies are handled every day by MFR and the Police Department, which have the combined capacity to handle emergencies caused by any of the hazards described in the Safety Element — or at least to initiate a response, as in the case of hazardous materials accidents.

Members of the public and business community are important partners in maintaining safety, whether they are helping to prevent crime or preparing to respond appropriately in the event of an emergency. The Police Department and MFR offer many opportunities for community members to become directly involved in public safety with programs such as the Youth Accountability Board and CERT.

Exhibit 12-1, Regional Geology Map

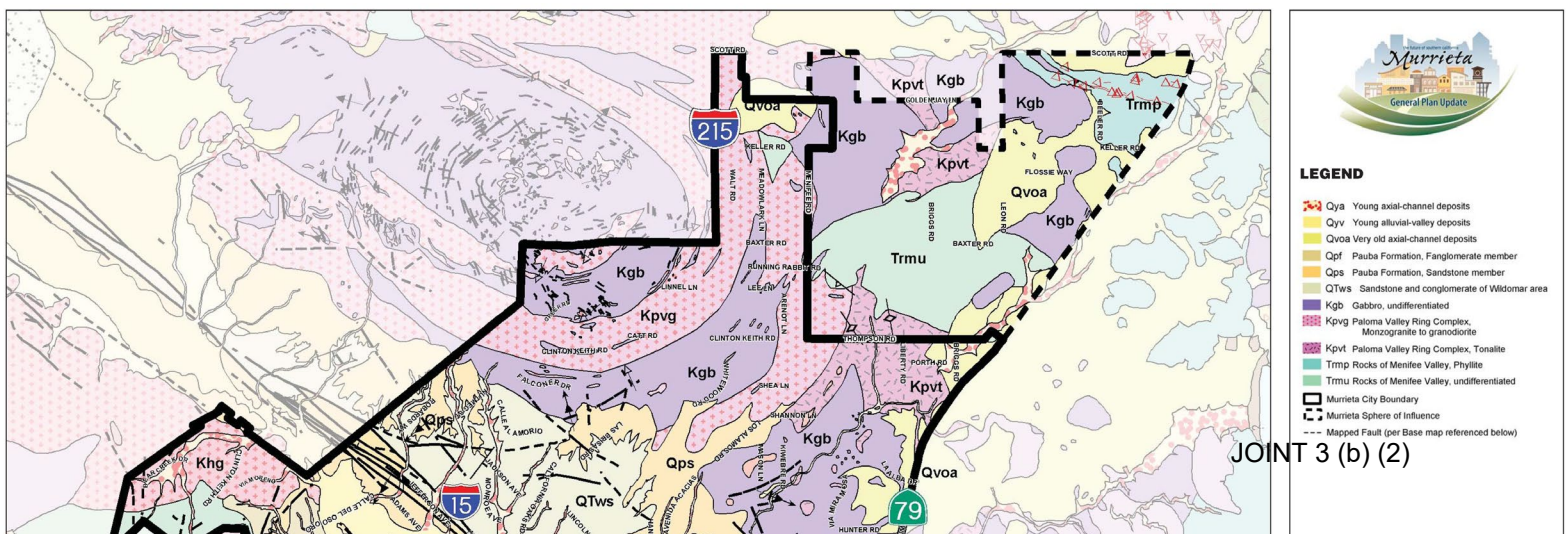
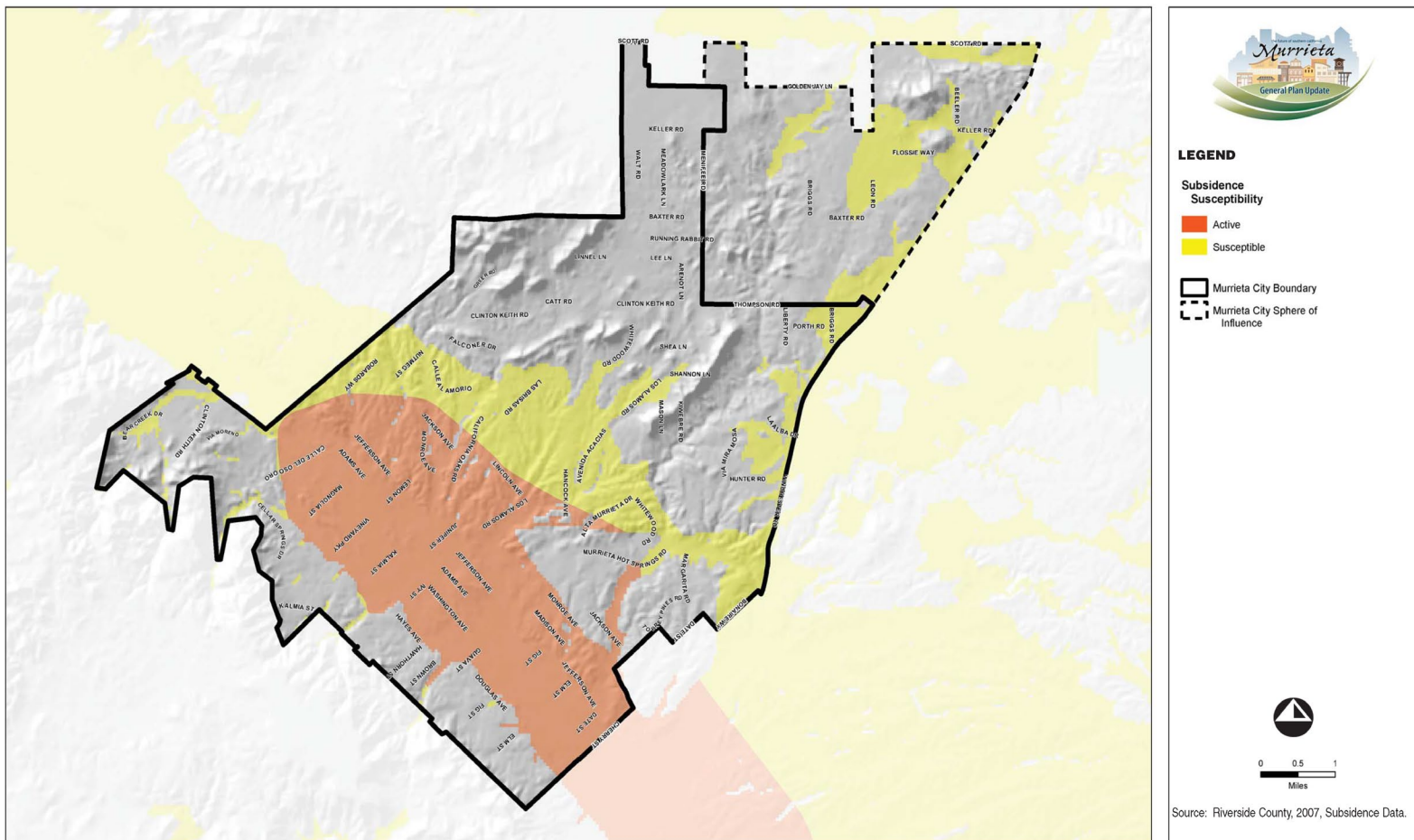




Exhibit 12-2, Subsidence Susceptibility Map



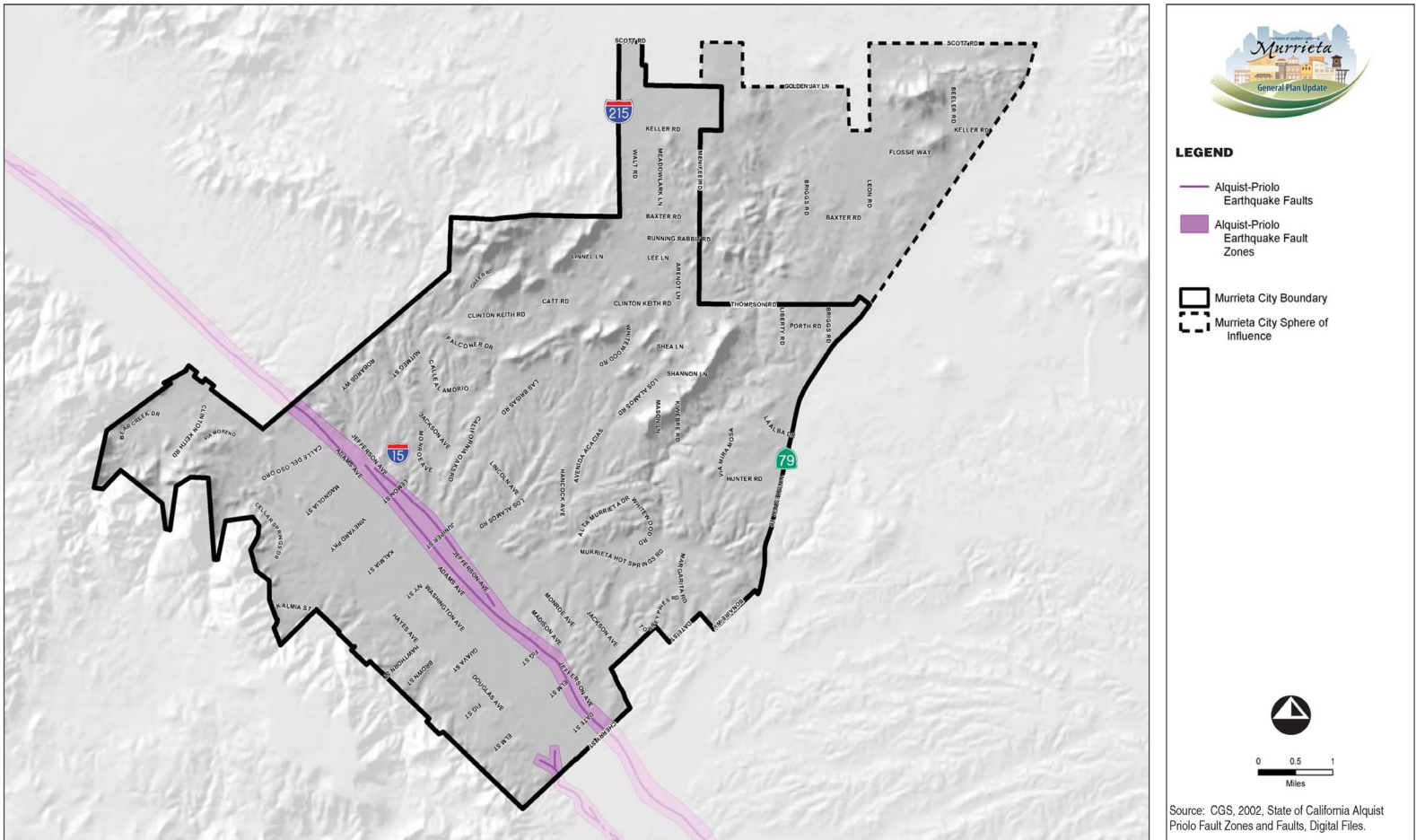
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**Subsidence Susceptibility Map**

Exhibit 12-2



Exhibit 12-3, Alquist-Priolo Earthquake Fault Zone Map



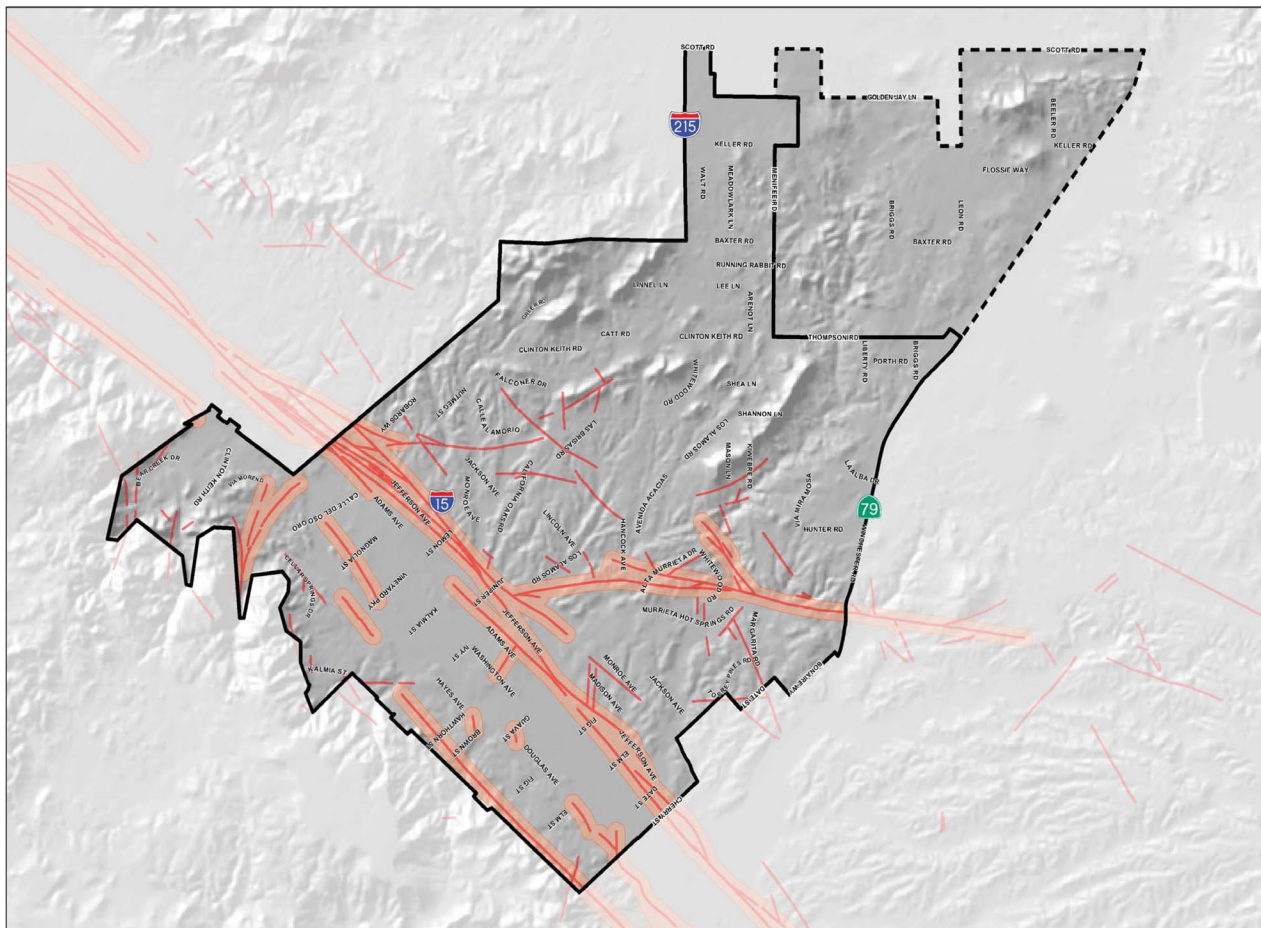
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**Alquist-Priolo Earthquake Fault Zone Map**

Exhibit 12-3

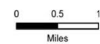


Exhibit 12-4, Riverside County Fault Hazard Map



**LEGEND**

- Riverside County Earthquake Faults
- Riverside County Earthquake Fault Zones
- Murrieta City Boundary
- Murrieta City Sphere of Influence



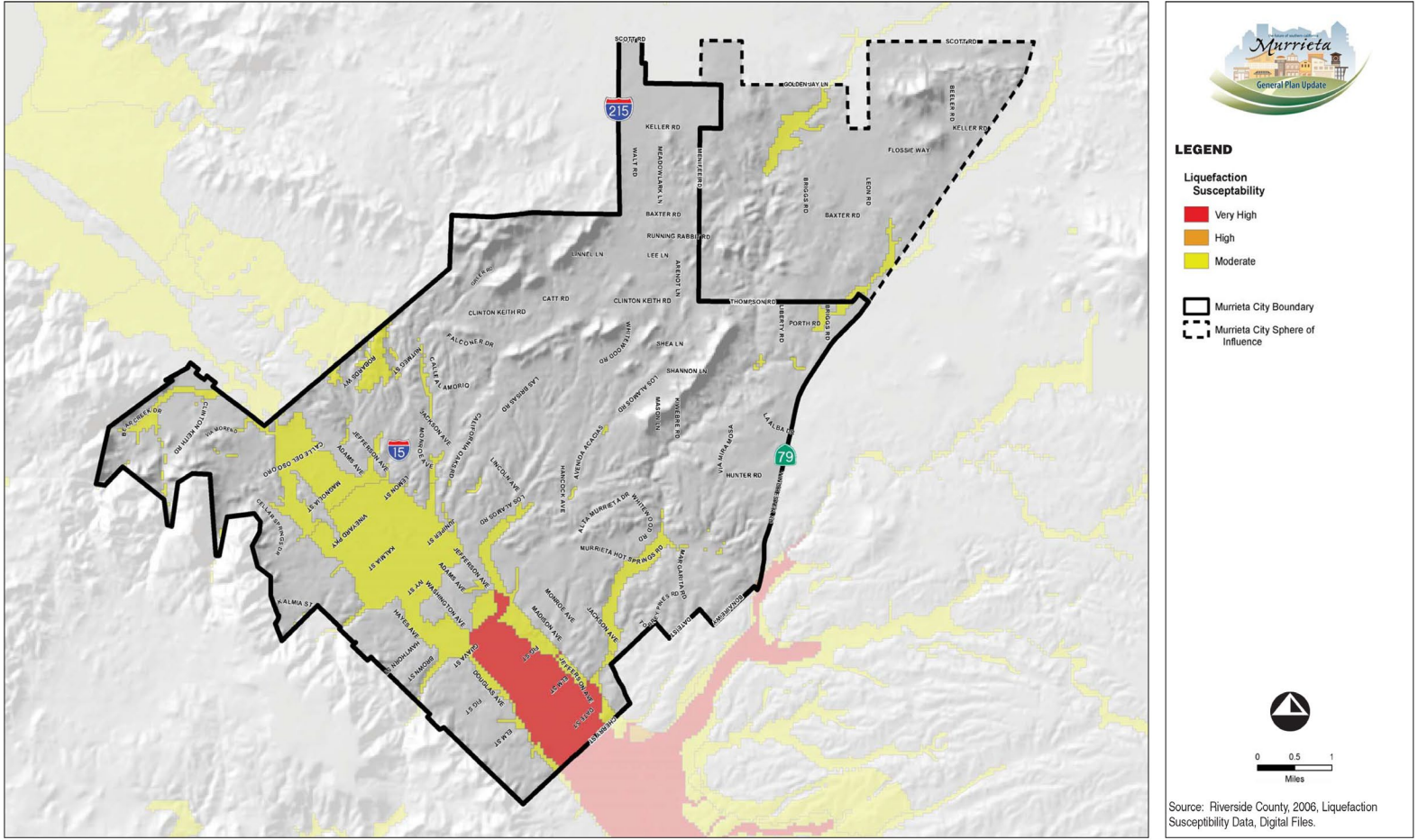
Source: Riverside County Earthquake Fault Zones and Faults, Digital Files.



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Exhibit 12-5, Liquefaction Susceptibility Map



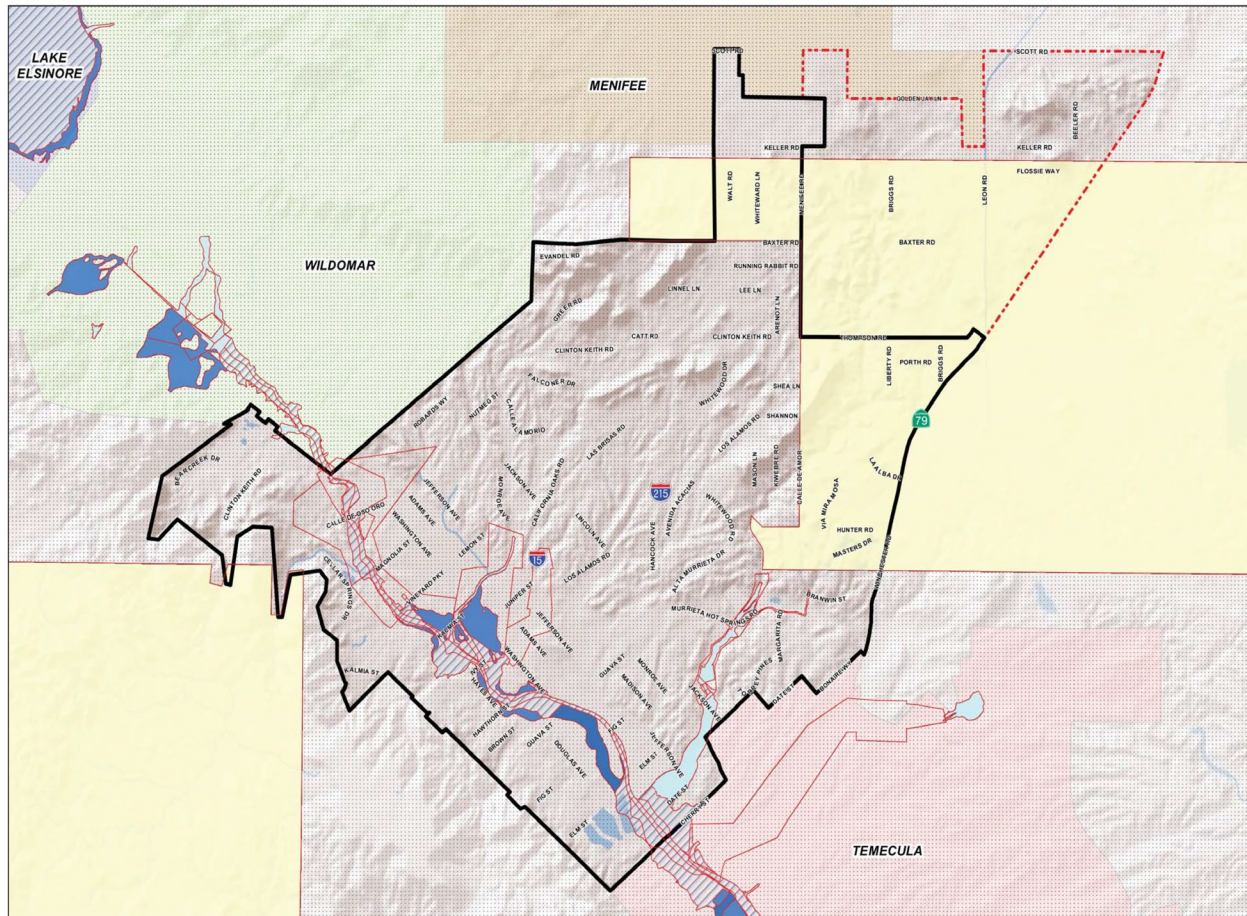

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**Liquefaction Susceptibility Map**

Exhibit 12-5





Exhibit 12-6, FEMA Flood Zones

**LEGEND**

- 0.2 PCT ANNUAL CHANCE FLOOD HAZARD
- A - 100 yr; No base flood elevations determined.
- AE - 100 yr; base flood elevations determined.
- AH - Flood depths of 1 to 3 feet (usually areas of ponding); base flood elevations determined.
- D - Areas in which flood hazards are undetermined.
- X - Areas of 500-yr flood; areas of 100-yr flood with average depths of less than 1 foot or with drainage areas less than 1 square mile, and areas protected by levees from 100-yr flood.
- Sphere of Influence
- City Boundary

Source: County of Riverside; City of Murrieta; FEMA DFIRM database; and ESRI - World Shaded Relief.





# Chapter 12 Safety Element

Exhibit 12-7, Dam Inundation

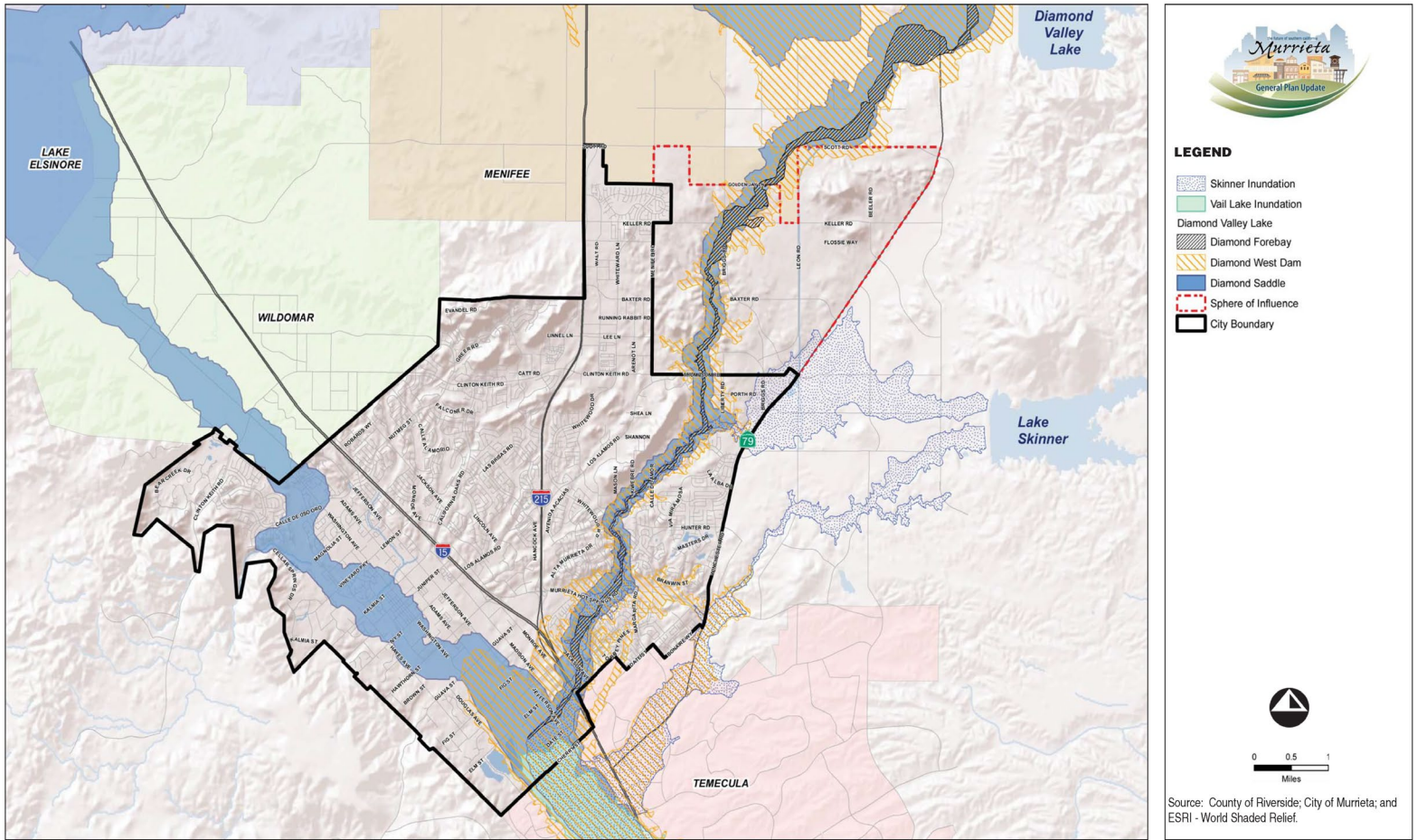
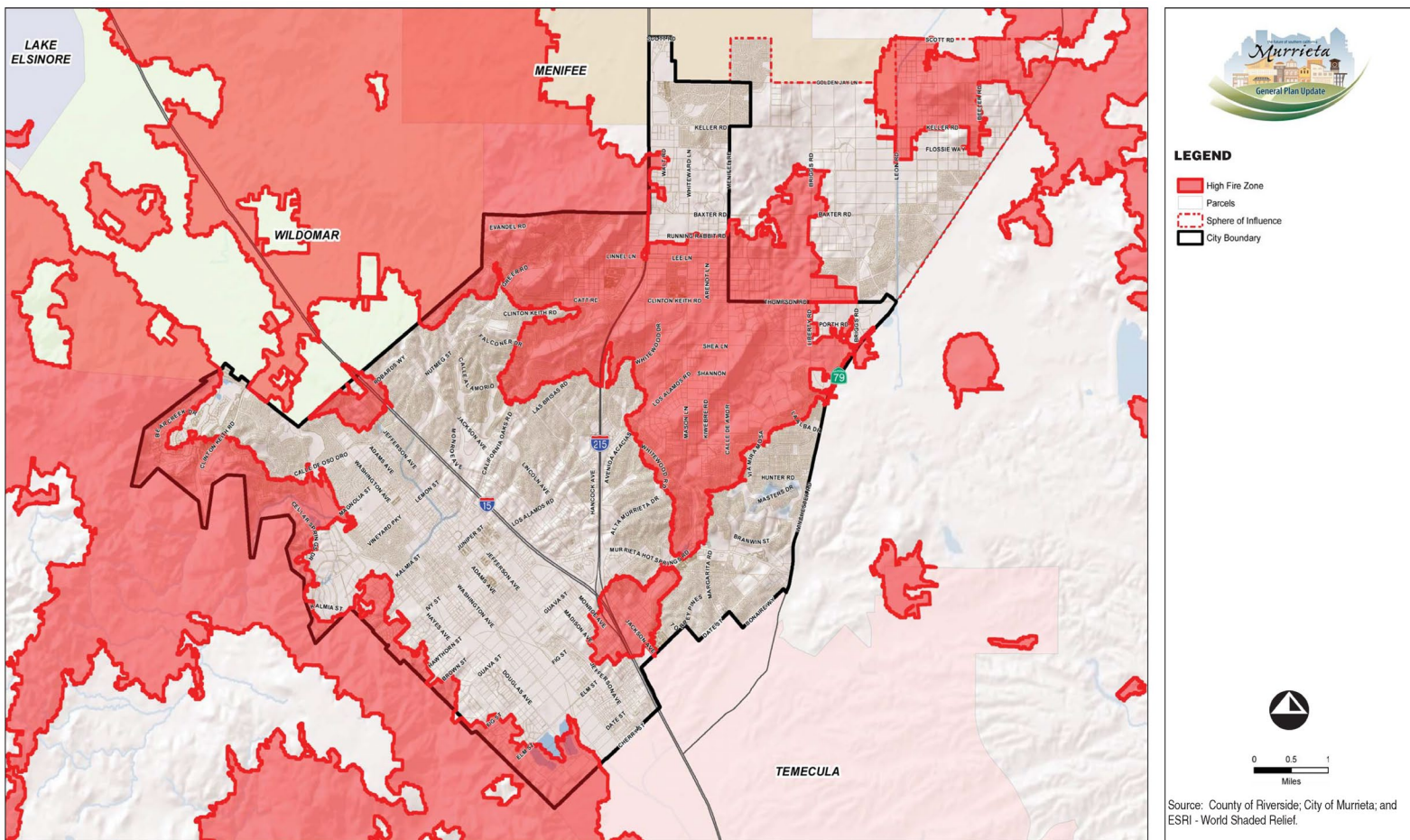


Exhibit 12-8, Very High Fire Hazard Zones



# Chapter 12 Safety Element

## Exhibit 12-9, Fire Station Service Areas

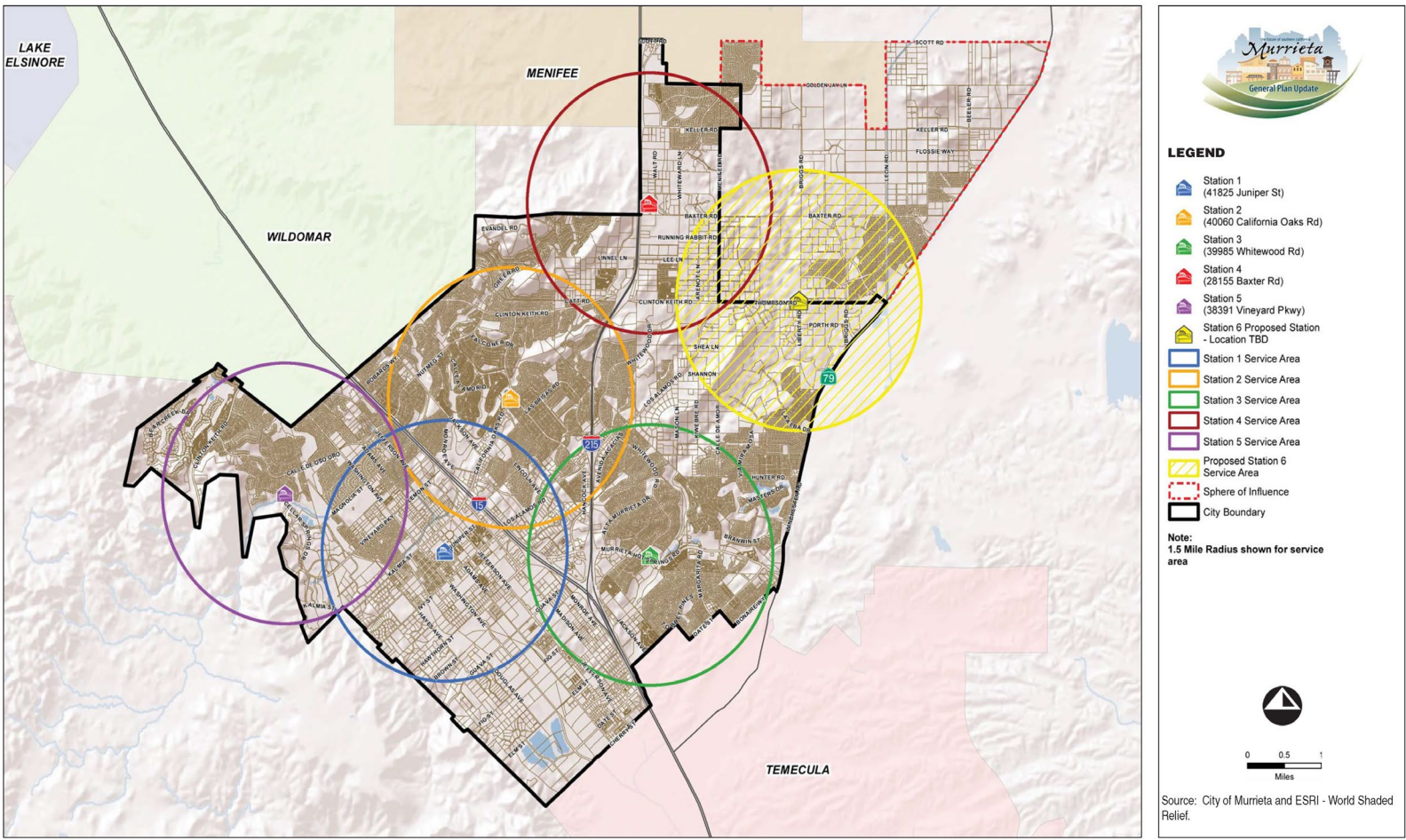
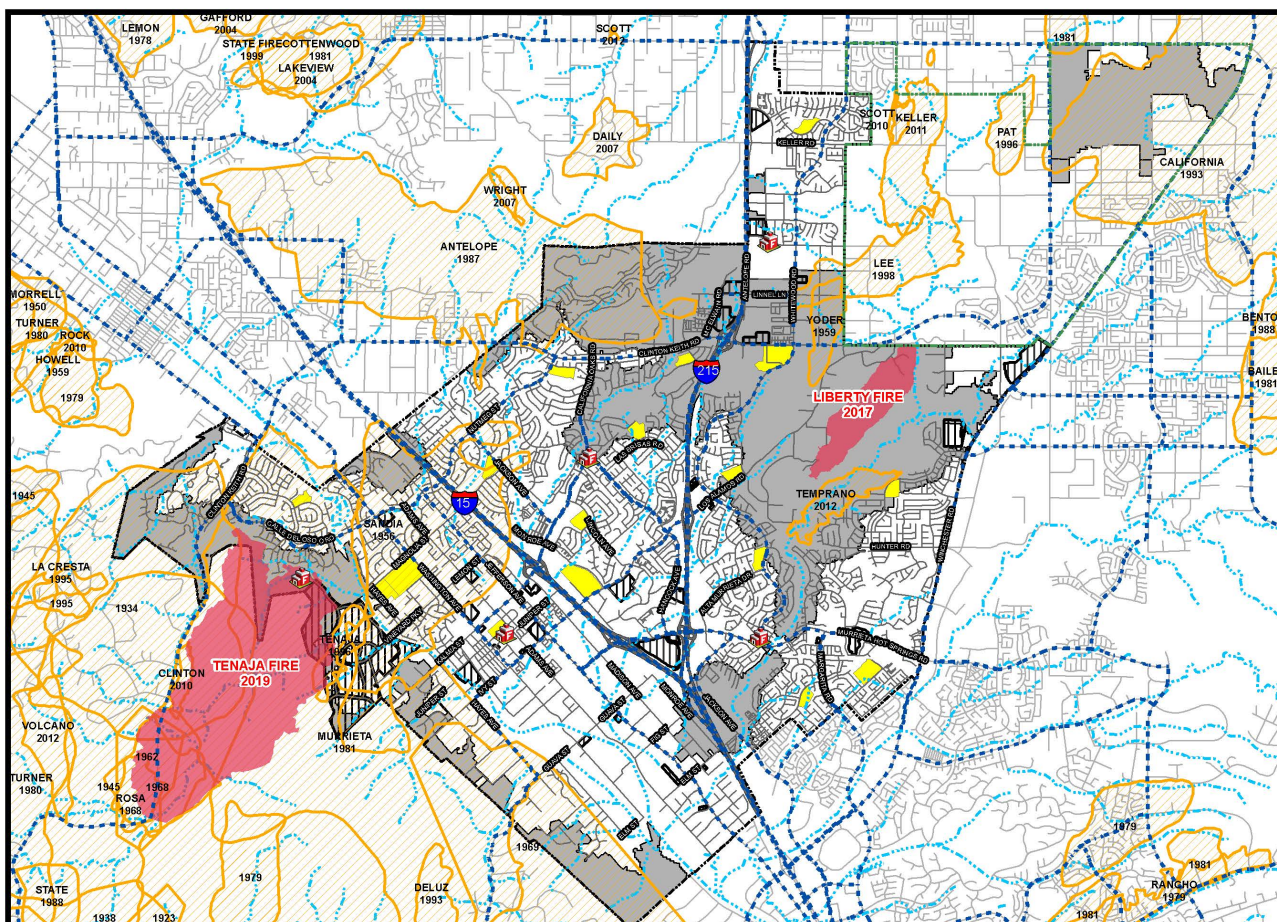


Exhibit 12-10, Recent and Historic Fires



**Legend**

- City of Murrieta Fire Stations
- City's Sphere of Influence
- Evacuation Routes - WRCOG
- Recent Fires within City
- Historic Fires - CAL FIRE Version 19-1
- Municipal Boundary
- CDFW Stream Data - WRCOG
- Surrounding Streets
- City Streets
- School Campus Locations
- Development Activity as of 2020
- Very High Fire Zones within City & Sphere

Exhibit 12-10, Recent and Historic Fires

This map is a public resource of general information. The City of Murrieta makes no warranty, representation or guarantee as to the content, accuracy, or completeness of the map information provided herein. The City of Murrieta is not responsible for any claims, losses or damages resulting from the use of this map.

Sources: CAL FIRE, WRCOG, Riverside County, City of Murrieta

**CITY OF MURRIETA  
GENERAL PLAN UPDATE  
FIRE SAFETY ELEMENT**

