

Public Safety

INTRODUCTION

Protecting public health and safety is a fundamental mission of the City of Corona. While most people are familiar with the police and fire personnel who respond to emergencies, Corona engages in many less visible functions to protect people from natural and human-caused disasters. Building codes, ordinances, transportation route planning, and hazardous materials management efforts are all critical programs that protect property, life, and safety. Indeed, the City's long-term vision cannot be fully achieved unless the public's health and safety can be assured.

Like most California cities, Corona has an array of natural and human-caused hazards. With the many waterways traversing the City, the risk of flooding is a concern. While the hillsides that surround the City offer scenic views, they are also subject to wildfires during summer weather or mudslides during storm events. Corona is also susceptible to earthquakes due to the fault zones crossing the city as well as geologic hazards associated with its topography and soil conditions. Activities associated with commerce and the City's transportation network all present safety hazards as well.

Consistent with its vision, the City of Corona's efforts to protect the health and safety of the public and business community is guided by the following statement:

Corona is committed to protecting residents, businesses, and visitors from natural and human-induced hazards. The City is also committed to rebuilding from emergencies or disasters in a manner that efficiently and safely returns quality of life to Corona. Residents and visitors will feel safe in their homes, neighborhoods, and public places. Community and regional resources—public, private, and nonprofit—will work together to ensure the safety of all residents and to minimize the disruption caused by emergencies and disasters. By implementing appropriate protocols and programs, the City will become safer, more resilient, and prosperous in return.

For Corona to continue as a desirable place to live and work, the City must continue to comprehensively address the public health and safety needs of its residents, businesses, institutions, and visitors. To achieve the vision of the general plan, this public safety element therefore sets forth proactive and coordinated programs to protect against foreseeable natural and human-caused hazards. As the policies and actions are progressively implemented, the City will be increasingly less impacted by hazards, and in the process, become more self-reliant, sustainable, and prosperous.

Scope of Element

California State law, specifically the Government Code § 65302(1), requires that each city prepare and adopt a safety element for the protection of the community from any unreasonable risks associated with a wide variety of natural and manmade hazards. This legislation encompasses a wide range of safety hazards commonly found in communities, including climate change hazards. This element addresses:

- » **Natural Hazards.** Natural hazards include a range of seismic and geologic hazards, flooding hazards, wildland and urban fire hazards, and severe weather, most of which are caused by inclement weather or natural events.
- » **Human-Caused Hazards.** These include air pollution, hazardous materials, and aviation hazards that are caused by human activities. Other transportation- and public safety hazards are addressed in other elements of the general plan.
- » **Emergency Response and Preparedness.** This refers to the range of procedures, methods, protocols, and staff the City of Corona uses to respond and prepare for emergencies and disasters, respond to them, and recover from them.

This public safety element is intended to: 1) recognize the local hazards associated with Corona's environment, and 2) identify methods to manage these risks and protect people, property, infrastructure, and structures from harm.

Related Plans

Corona's public safety element is implemented by various strategic plans that protect the community from individual hazards. Some of these plans are provided by the City; others are provided by other organizations.

- » **Police Department Strategic Plan.** The Corona Police Department prepares an annual police strategic plan that contains an assessment of safety in Corona, staffing and resource allocation, and sets short and long-range goals for the future. The plan is also used evaluate outcomes and progress to meet department goals.
- » **Fire Department Strategic Plan.** The Corona Fire Department prepares an annual fire department strategic plan that sets short and long-range goals for its operations, training, and other safety outcomes. These outcomes are based on best practice, periodic organizational reviews, and city needs.
- » **Emergency Operations Plan.** Corona's EOP is intended to address the City's planned response to extraordinary emergency situations associated with natural disasters, technological incidents, and national security emergencies. The plan addresses potential large-scale disasters requiring unusual emergency response.
- » **Hazard Mitigation Plan (LHMP).** Corona's LHMP identifies hazards and establishes a plan to prepare for emergencies and prevent or mitigate potential impacts. The City Council adopted its 2017 LHMP, and this general plan references and is consistent with the goals, policies, and programs specified therein.

The next sections provide context for each safety hazard presented, followed by goals and policies to achieve the general plan vision.

SEISMIC AND GEOLOGIC HAZARDS

Corona's location and underlying geology make it susceptible to seismic and geologic hazards. Corona is situated between two active fault zones—the Whittier-Elsinore Fault Zone and the San Jacinto Fault Zone. Other potentially active faults nearby include the San Jose, Cucamonga, Sierra Madre, Newport-Inglewood, and San Andreas. While the City has not experienced a major earthquake, it is prudent to plan for such to minimize potential damage to the community, injury, and loss of life. The primary seismic and geologic hazards in Corona are summarized below.

Seismic Hazards

Seismic activity has been known to cause ground displacement along a fault or within the general vicinity of a fault zone. Surface rupturing could damage or destroy infrastructure, pipelines, roads, and bridges. Much of the western portion of the city extending southeast through the SOI is within a fault zone. Two active surface faults—the Chino Fault and Glen Ivy segment of the Elsinore Fault—could produce earthquakes of 7M, causing surface ground ruptures. Areas with known surface rupture hazards are identified as Alquist Priolo Special Study Zones. Primary ground rupture can also be expected to spread out into secondary areas.

Ground shaking refers to the motion of the Earth's surface from an earthquake. Ground shaking is responsible for the majority of damage from earthquakes and can damage or destroy buildings, structures, pipelines, and infrastructure. The intensity of shaking depends on the type of fault, distance to the epicenter, magnitude of the earthquake, and subsurface geology. The Elsinore Fault is the dominant active fault and is capable of producing a 6.8 to 7.0 M earthquake. The greatest severity of ground shaking would occur in central Corona, Temescal Valley, and northern Corona.

Liquefaction happens when strong ground shaking causes soils that are saturated with groundwater to lose strength and behave more like a liquid than a solid. Where liquefaction occurs, the ground may give way, causing damage or destroying structures, foundations, and infrastructure. Susceptibility to liquefaction depends on the strength and duration of ground shaking, soil characteristics, and depth to the groundwater. Loose, granular materials at depths of less than 50 feet, with silt or clay contents below 30 percent, and saturated by groundwater are most susceptible. Areas at moderate-to-high risk run the entire length of Corona in areas north of SR-91.

Landslides can also be caused by seismic activity. Landslides are the downward movements of soil, debris, and rock in steep topography. Landslides can occur due to intense rainfall or following strong seismic shaking. Landslides are distinguished from debris flows because in a landslide, the majority of material moved is bedrock material; a minor debris flow is the surface slippage of soil. Landslides are most common in steep topography, such as steep canyon walls or hillsides. In the city, landslides have been occurred along the northeastern front of the Santa Ana Mountains, the Gavilan Hills, Eagle Valley, Sierra Del Oro area, northern Corona, and other areas.

Geologic Hazards

Expansive and collapsible soils are two widely distributed and costly geologic hazards. Expansive soils shrink as they dry and swell as they are wetted. Homes, foundations, infrastructure, and other structures built on these soils may experience shifting, cracking, and breaking damage as soils shrink or expand. In Corona, there is some potential for expansive soils as the city has clay mineral resources, alluvial soils, and weathered granitic and fine-grained sedimentary rocks. To protect against these hazards, soil engineering reports are required by the City, and developers are required to protect against such hazards, if present, prior to development.

Land subsidence (sinking) is generally related to substantial overdraft of groundwater or petroleum reserves from underground reservoirs. According to the Department of Water Resources, there are no known or reported locations of subsidence in Corona. The probability of subsidence is generally low in most of the developed portions of Corona north of Cajalco Road. A small part in the westernmost portion of Corona along SR-91 has a high potential for subsidence. While the City's northern section has a medium to high potential for subsidence, it is unlikely given the lack of active wells. As such, subsidence is considered to be a minor hazard in the City.

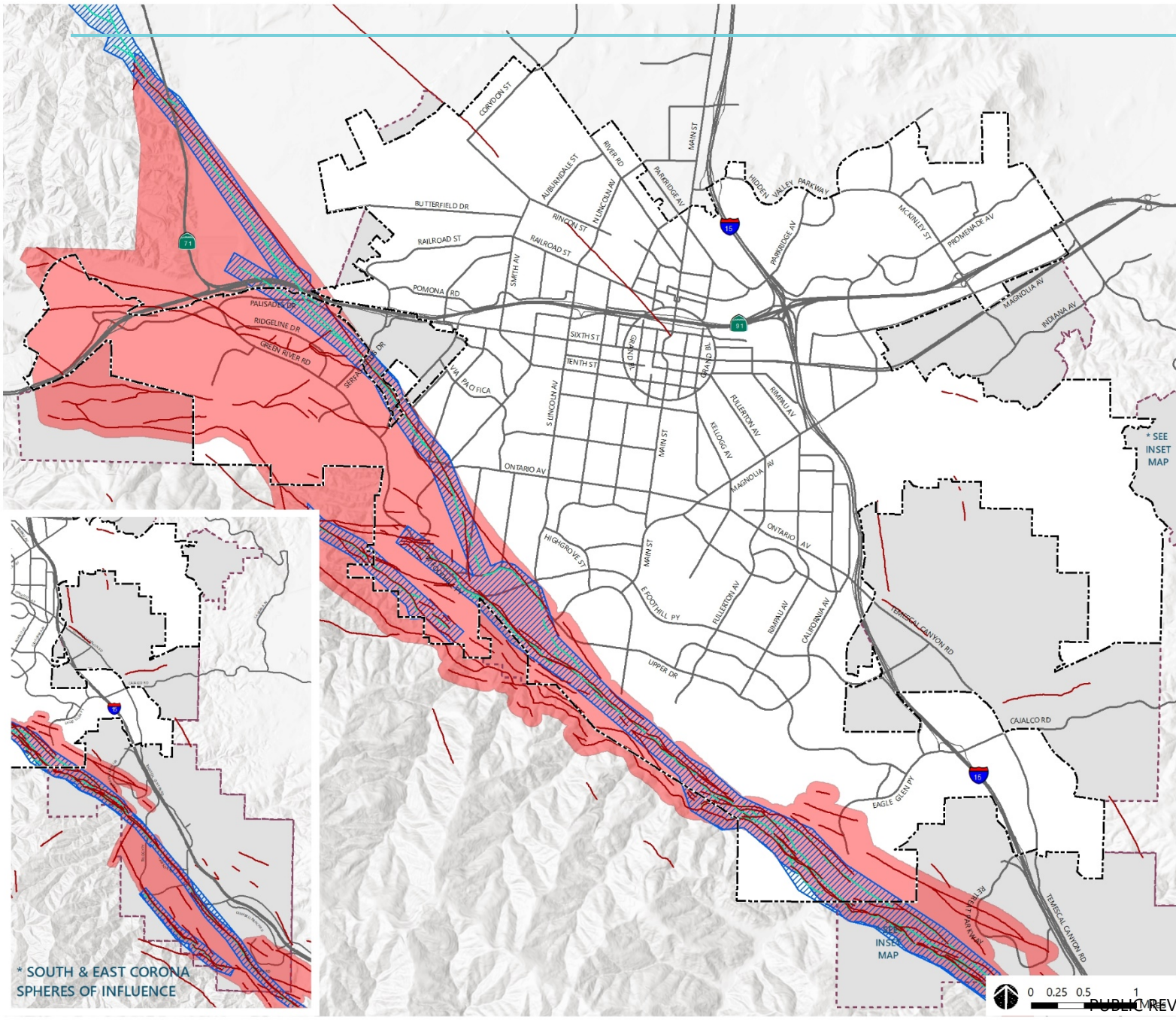
Seismic settlement is the lowering of the ground surface as a result of strong earthquake shaking and liquefaction. Seismic settlement and/or collapse is a potential hazard in areas where there are loose underlying alluvial soils and shallow groundwater. Settlement can cause damage to structures or improvements that were built on low-strength materials, such as artificial fills, if they are not adequately compacted. While Corona has areas susceptible to settlement, the building code requires site development practices (e.g., site-specific grading and compaction) to ensure foundational materials are strong and will protect structures.

Soil Hazards

Corrosive soils contain chemical constituents that may cause damage to construction materials such as concrete and ferrous metals. One such constituent is water-soluble sulfate, which, if in high enough concentrations, can react with and damage concrete. Electrical resistivity, chloride content, and pH level are all indicators of a soil's tendency to corrode ferrous metals. High chloride concentrations from saline minerals can corrode metals. Low pH and/or low resistivity soils could corrode buried or partially buried metal structures. Soils throughout the majority of Corona have been found to be highly corrosive to metals and moderately corrosive to concrete.

Figures PS-1 through PS-4 show the location of faults crossing Corona and the areas at greatest risk for liquefaction, landslide, and soil hazards in Corona.

**Figure PS-1
Fault Hazards**



Legend

Faults

- Identified by State (Alquist-Priolo)
- Identified by Riverside County

Elsinore Fault Zone

- Identified by State (Alquist-Priolo)
- Identified by Riverside County
- City Boundary
- Sphere of Influence Areas

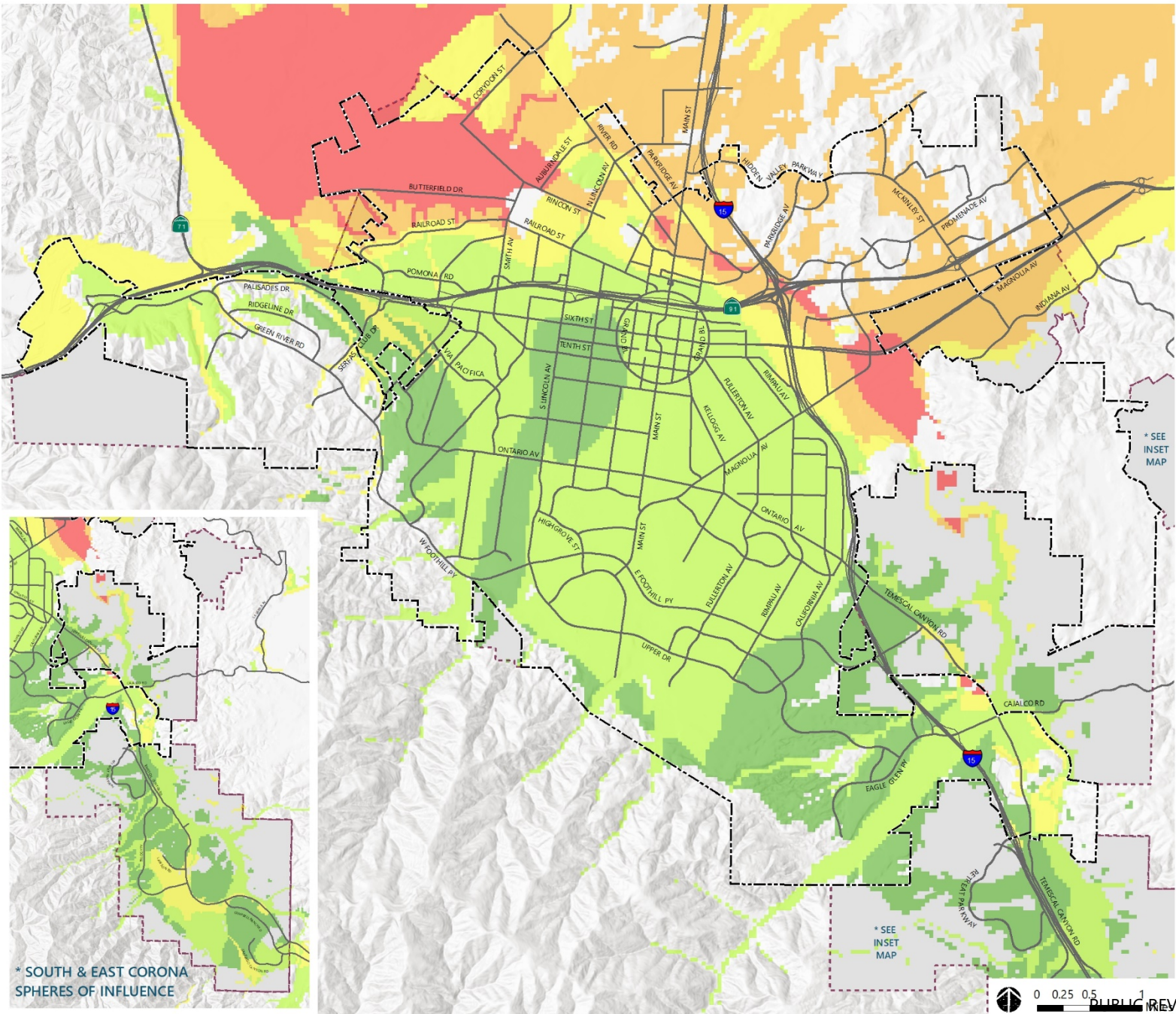
Source:
County of Riverside, 2013

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Figure PS-2
Liquefaction Hazards



- Legend**
- Susceptibility**
- Very High
 - High
 - Moderate
 - Low
 - Very low
- City Boundary
- Sphere of Influence Areas

Source:
 County of Riverside, 2017

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Figure PS-3
Landslide Hazards

Legend

- City Boundary
- Sphere of Influence Areas

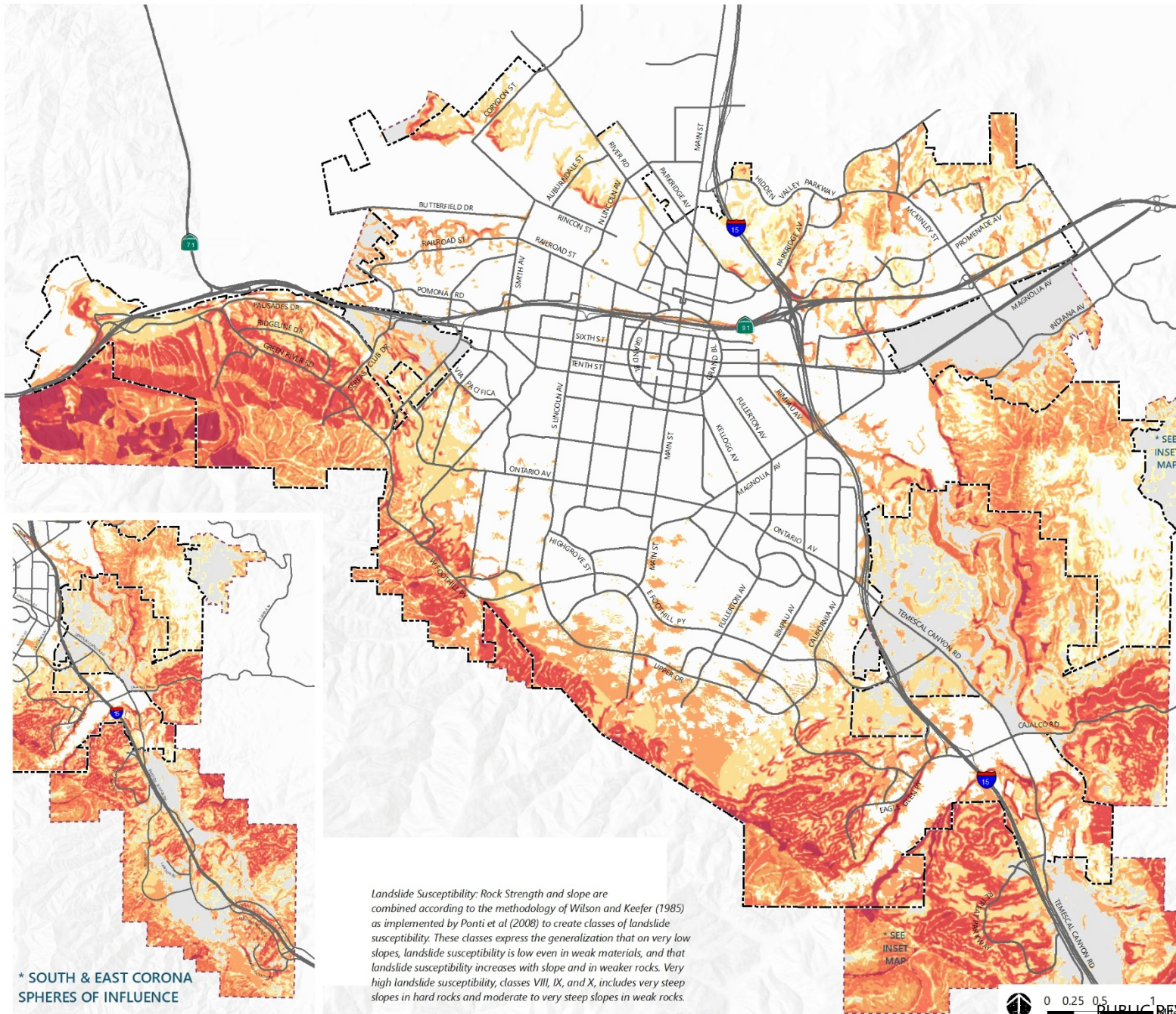
ROCK STRENGTH

1 2 3

SLOPE CLASS	ROCK STRENGTH		
	1	2	3
1	0	0	0
2	0	V	VII
3	0	V	VII
4	III	VIII	IX
5	VI	IX	X
6	VII	IX	X
7	VIII	IX	X
8	VIII	IX	X

LANDSLIDE SUSCEPTIBILITY CLASSES

(0 III V VI VII VIII IX X)
 ← increasing susceptibility →



Landslide Susceptibility: Rock Strength and slope are combined according to the methodology of Wilson and Keefer (1985) as implemented by Ponti et al (2008) to create classes of landslide susceptibility. These classes express the generalization that on very low slopes, landslide susceptibility is low even in weak materials, and that landslide susceptibility increases with slope and in weaker rocks. Very high landslide susceptibility, classes VIII, IX, and X, includes very steep slopes in hard rocks and moderate to very steep slopes in weak rocks.

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Source:
 Deep-Seated Landslide Susceptibility (CGS Map Sheet 58) C.J. Wills, F.G. Perez, C. I. Gutierrez-
 California Geological Survey, 2011

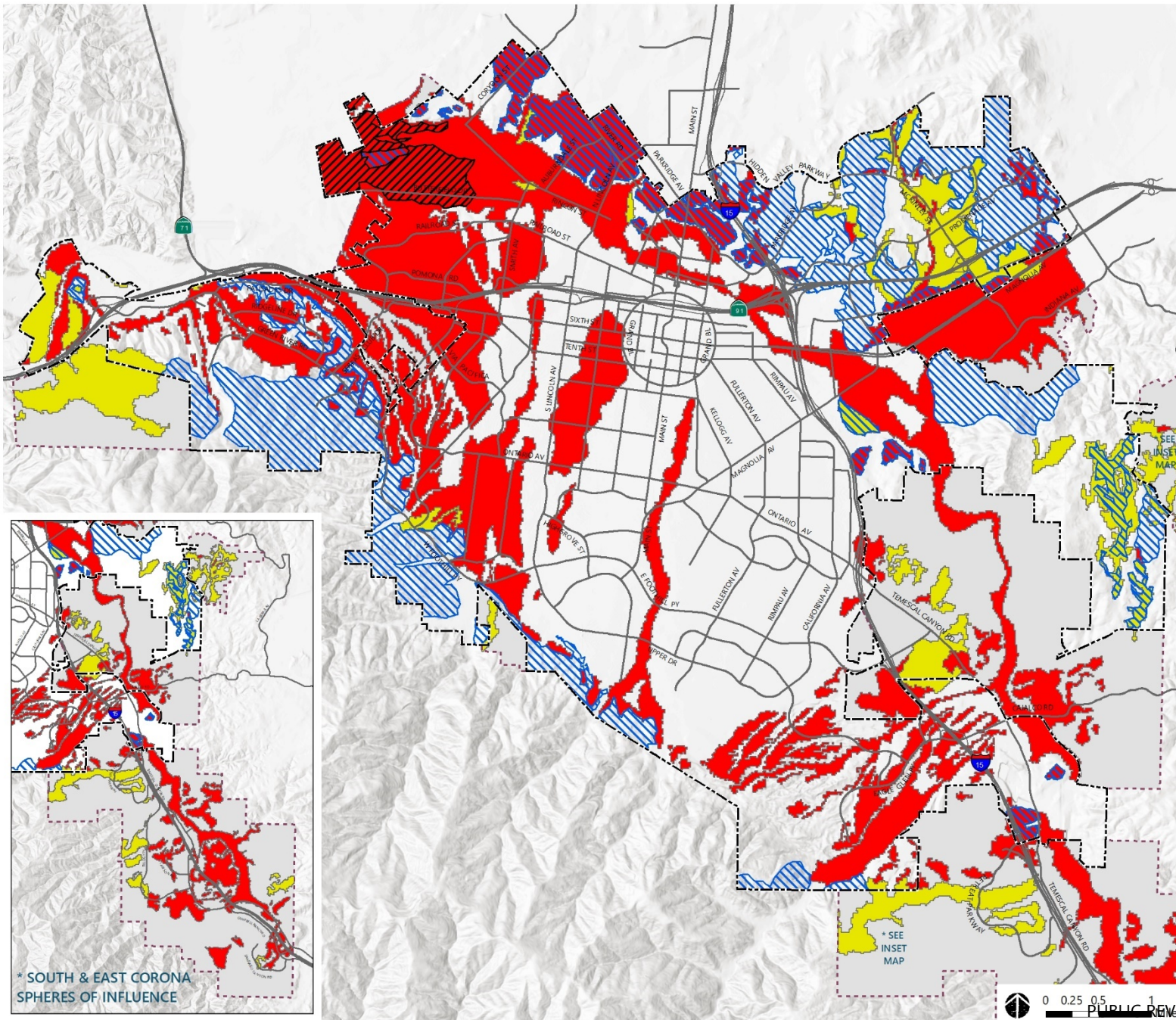
For more information please see:
<http://www.conservation.ca.gov/cgs/information/publications/ms/documents/ms58.pdf>

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Figure PS-4
Soil Hazards



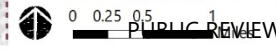
Legend

- Corrosive to Concrete**
 - Soil Highly Corrosive
 - Soil Moderately Corrosive
- Corrosive to Metal**
 - Soil Highly Corrosive
 - Soil Moderately Corrosive
- City Boundary
- Sphere of Influence Areas

Source:
 USDA, National Resource Conservation
 Service, 2018

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* SEE
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GOAL PS-1

Adequate protection of the health, safety, and welfare of the public, property and economic investments, and community social and service functions from seismic and geologic events.

Policies

- PS-1.1** Maintain accurate records, information, and mapping of seismic and geologic activity and hazards in Corona and the region from the California Geologic Survey; update records with information from local geotechnical studies.
- PS-1.2** In areas subject to seismic and geologic hazards, require development proposals to include a geotechnical hazard analysis and specific mitigations to reduce risks to acceptable levels as a condition of approval.
- PS-1.3** Enforce development requirements, such as seismic study analyses, project siting, setbacks, and project design features for proposed developments near the Elsinore Fault Zone and other active faults in accordance with the Alquist-Priolo Act.
- PS-1.4** Require adherence to the latest California Building Codes and associated regulations in the City's Municipal Code; update local codes and development requirements periodically for the latest best practices.
- PS-1.5** Locate new or existing buildings in the Elsinore earthquake fault zone or in other areas at risk from liquefaction, landslides, or other seismic and geologic hazards in the community and take corrective actions to minimize the risk of loss.
- PS-1.6** Identify vulnerable structures and encourage the retrofit or upgrade of vulnerable buildings (e.g., mobile homes) to minimize the damage to structures and reduce the risk of injury or death from seismic or geologic events.
- PS-1.7** Require geotechnical analysis for projects proposed in areas subject to corrosive soils. Where found, require appropriate cathodic protections and other best practices to minimize damage to buildings, structures, and infrastructure.
- PS-1.8** Limit grading for developments to the minimum needed to preserve natural topography, preserve vegetation, and maintain soil and slope stability. Require appropriate grading plans and slope stability to minimize soil instability.

FLOODING AND INUNDATION

Corona's landscape ranges from the alluvial fan at the Prado Dam Basin to abruptly rising terrain of the Santa Ana Mountains on the city's southwest. The general drainage pattern runs in a northwesterly direction toward the Santa Ana River. Substantial flows reach the mouths of the canyons and then spread out on the alluvial fan formed by several watercourses draining from the mountains. Seasonal rains can be intense, particularly in the foothills, making Corona susceptible to flooding.

Riverine Flood Hazards

Corona is bounded by the Santa Ana Mountains, Chino Hills, and lower-lying hills and the Gavilan Plateau to the east. Other major waterways generally flow southward through the city or downward from slopes, joining with Temescal Wash. The most recent flooding occurred in 1993, 1997, 2005, and 2010 along the Santa Ana River, Prado Dam area, and Corona Municipal Airport. While the City has been spared significant damages, Corona's location in a valley makes it susceptible.



Corona Municipal Airport flooding in 2010, retrieved from <http://160knots.com/>.

Corona's flood-prone areas are given two designations. Special Flood Hazard Areas (SFHAs), or the 100-year zone, have a 1 percent chance of flooding in any given year. Northwestern Corona, from Prado Dam to the Airport and westward through Santa Ana Canyon is covered by a SFHAs. Mabey Canyon Wash and Temescal Creek are also SFHAs. A large portion of central Corona is within a "moderate" or 500-year flood zone, with a 0.2 percent chance of flooding in any year. This includes areas around Temescal Wash, Mabey Canyon Wash, Main Street Wash, and the Arlington Channel.

Mudflow/Debris Flow

A mud/debris flow refers to a moving mass of loose mud, sand, soil, rock, and water that travels down a slope under the influence of gravity. A mud/debris flow can also flow down a stream, ravine, canyon, arroyo, or gulch. These flows develop when water rapidly accumulates in the ground during heavy rainfall or rapid snowmelt, changing loose earth into a flowing river of mud. Mud/debris flows can travel miles from the source, growing as they pick up trees, boulders, cars, and other materials. Generally, areas most susceptible to mud/debris flow include steep slopes, landforms subject to erosion, river channels, and hillsides that have been burned by wildfire.

Mud/debris flows are most susceptible in areas that front the steeper slopes on the west side of the city fronting the Santa Ana Mountains and Cleveland National Forest. Following the Santa Ana Canyon fires of 2017 and the Holy Fires of 2018, the city experienced mud/debris flows near homes at the base of the Cleveland National Forest, causing voluntary evacuations. Although damages to homes, personal property, and infrastructure were limited, they underscore a potential safety hazard. To reduce the potential damages from mud/debris flows, residents are forewarned regarding potential hazards that can result from rainfall on previously burned areas.



Mud flows from burned hillsides can carry mud and debris into neighborhoods.

Dam Inundation

Inundation hazards typically result from a partial or complete failure of a dam. Causes include flooding, earthquake, blockage, landslide, lack of maintenance, improper operation, poor construction, vandalism, and terrorism. While the probability of a dam failure is remote, it can cause significant damage, particularly within areas located directly below or downstream (an area called the dam inundation zone) from a dam. With respect to dam hazard rating, a dam is considered a "high" hazard potential if it stores more than 1,000 acre-feet of water, is higher than 150 feet, and could cause property damage and/or evacuation. Dams which are rated as an extremely high hazard could likely result in loss of human life in the event of a complete dam failure.

Table PS-1, *Reservoir Inundation Hazards*, lists each dam with a high hazard rating that would cause significant damage in Corona.

Table PS-1 Reservoir Inundation Hazards

National ID	Dam/Reservoir	Year Built	Storage Capacity (Acre-Feet)	Hazard Rating
CA01103	Mabey Canyon	1974	68 AF	High
CA10022	Prado Dam	1941	295,581 AF	High
CA00797	Harrison Street	1954	208 AF	High
CA00212	Lake Matthews	1938	182,000 AF	Ext. High
CA00305	Mockingbird Canyon	1914	1,250 AF	High
CA01179	Oak Street	1979	138 AF	High

Source: State of California, Department of Water Resources, 2017.

The primary inundation hazard to Corona is Lake Matthews, located seven miles southeast of Corona in the Gavilan Hills. Two dams contain Lake Matthews. Failure of either dam would cause flooding along the Temescal Wash in the eastern and northeastern parts of the city. Should either of the two dams fail, flood waters would reach Corona’s city limits in 40 minutes and the Prado Basin in 65 minutes.



Figures PS-5 through PS-7 show the areas in Corona that are most susceptible to riverine flood hazards, dam/reservoir inundation, and debris/mud flows.

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Figure PS-5 Flood Hazards

Legend

- 100-Year Flood Zone
- 500-Year Flood Zone
- DWR Awareness Floodplain
- City Boundary
- Sphere of Influence Areas

Notes:

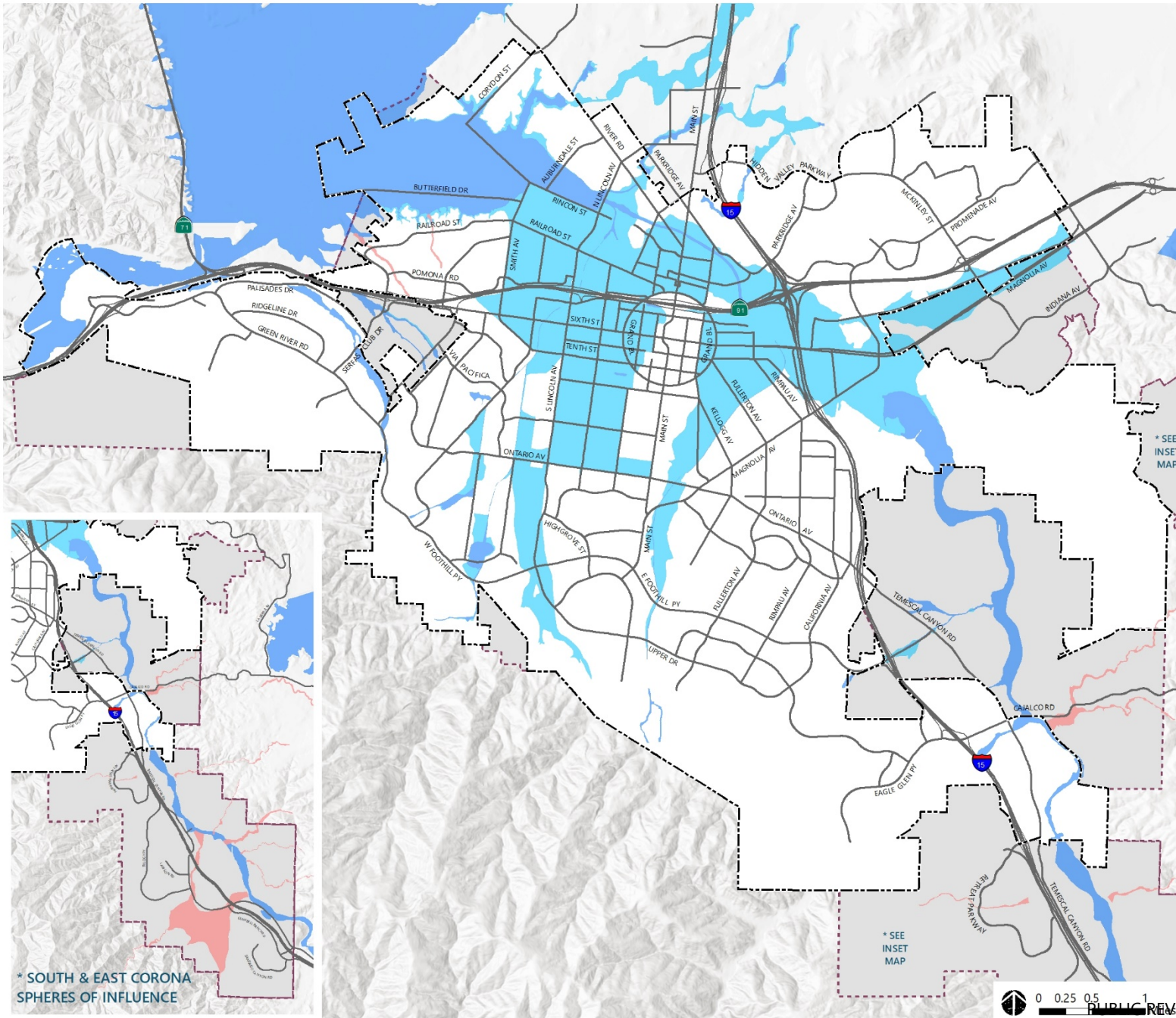
100-year flood zone: Includes areas subject to a 100-year flood as defined by FEMA. This area is also referred to as a special flood hazard area.

500-year flood zone: Includes areas between the limits of the 100-year floodplain and subject to a 500-year flood as defined by FEMA. This area is also referred to as a moderate flood hazard area.

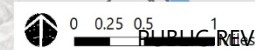
DWR Awareness flood zone: Includes areas defined by the California DWR with a potential for a 100-year flood that may warrant further study to assess the risk of flooding.

This map does not have the official status

Source:
Department of Water Resources (DWR, 2016)
Federal Emergency Management Agency (FEMA, 2016)



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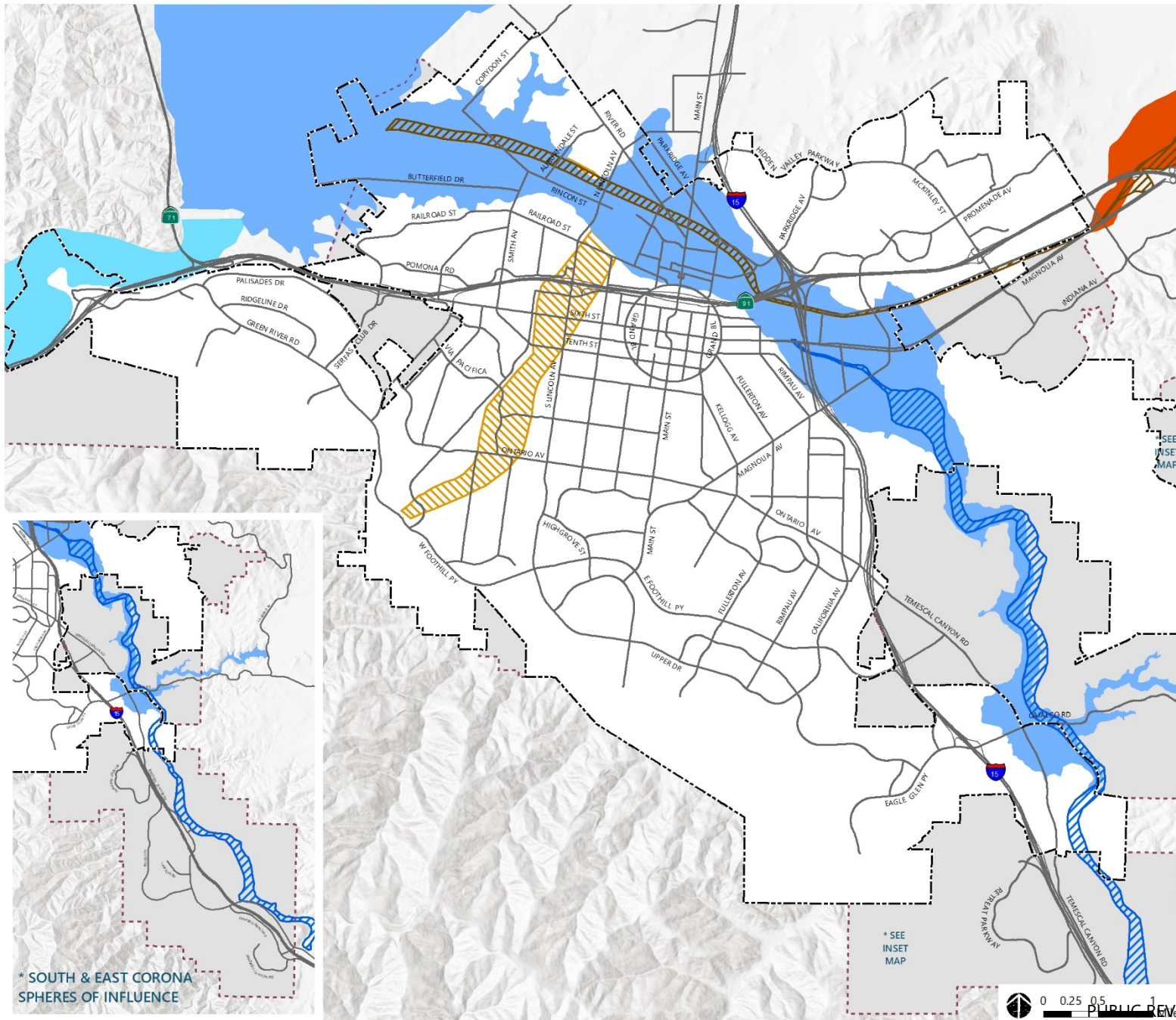
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Figure PS-6
Dam Inundation Hazards

Legend

-  Harrison St.
-  Lee Lake
-  Lake Mathews
-  Mabey Canyon
-  Mockingbird Canyon
-  Prado
-  City Boundary
-  Sphere of Influence Areas



Source:
 Department of Water Resources, 2015

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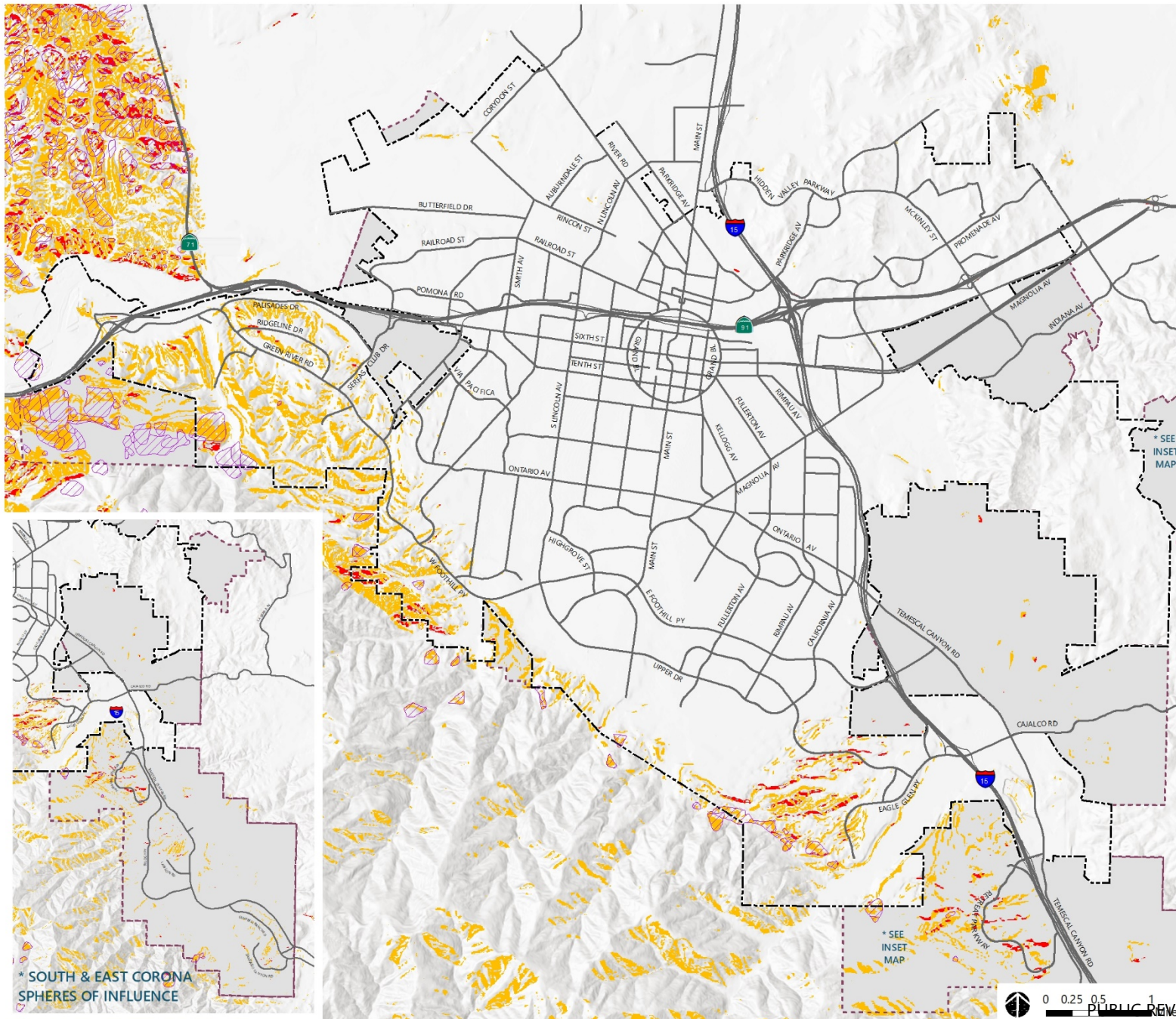
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Figure PS-7
Debris Flow Hazards

Legend

-  Landslide Deposits
- Soil Slip Susceptibility**
-  Moderate Susceptibility
-  High Susceptibility
-  City Boundary
-  Sphere of Influence Areas



Source:
 Morton, 2004. Preliminary Digital Geologic Map of the Santa Ana 30' X 60' Quadrangle, Southern California, Version 2.0; Morton, et al., 2003. Preliminary Soil-Slip Susceptibility Maps, South-western California

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GOAL PS-2

Adequate protection of the health, safety, and welfare of the public, property and economic losses, and community social and service functions from flooding and dam inundation events.

Policies

- PS-2.1** Maintain and continuously update the City's floodplain safety hazards maps and dam inundation maps in concert with FEMA map amendments, improvements to local drainage facilities, and updated flood studies from individual projects or the State of California.
- PS-2.2** Evaluate, on a project-by-project basis, whether new development should be located in a flood hazard zone and identify and require construction methods or other appropriate methods to minimize the risks of damage for projects located in flood zones.
- PS-2.3** Require adherence to the California Building Code, Municipal Codes, FEMA flood control guidelines, and Corona Floodplain Management Ordinance for the purposes of avoiding or minimizing the risk of damages to structures, injury, or loss of life.
- PS-2.4** Locate, when feasible, new essential public facilities outside of flood zones; for those that must remain or are built in flood hazard zones, harden structures to maintain the structural and operational integrity of such public facilities in case of flooding.
- PS-2.5** Identify vulnerable structures, infrastructure, and utilities in areas of special flood hazards and encourage the retrofit or upgrade of such structures and infrastructure to minimize damages and reduce the risk or injury or death from flooding.
- PS-2.6** Prohibit the alteration of natural floodplains or improved drainage areas or the allowance of encroachments by structures without determination by the Floodplain Administrator that such actions will not be detrimental to public health and safety.
- PS-2.7** Establish and maintain cooperative working relationships among public agencies with responsibility for flood protection, including Riverside County Flood Control District, County Public Works, neighboring jurisdictions, and other entities.

HAZARDOUS MATERIALS

Hazardous materials are toxic, ignitable, corrosive, or reactive substances that can harm people, animals, and the environment. The improper generation, use, and disposal of hazardous materials and wastes can contaminate soil and groundwater resources and compromise the health and quality of life of residents. Accidents that involve the release of hazardous materials can also cause explosions or spills that endanger lives, property, and the environment.

Types of Hazardous Materials

Hazardous materials include, but are not limited to, hazardous substances, hazardous wastes, and any material that a business or implementing agency has a reasonable basis for believing would be injurious to public health and safety or harmful to the environment if released into the workplace or the environment.

Toxic Air Pollutants

Facilities in certain industry sectors that manufacture, process, or otherwise use toxic chemicals in amounts above established levels must report how each chemical is managed through recycling, energy recovery, treatment, and permitted releases into the air or water or placed in some type of land disposal. Similar to communities across southern California, the City of Corona has numerous facilities that are required to report the level and disposition of toxic air pollutants they release.

Hazardous Waste Generators

Like many urban cities, Corona has hundreds of licensed commercial and industrial businesses and uses that generate some form of hazardous materials or waste. The EPA regulates generators of hazardous waste based on the amount of waste generated: 1) large quantity generator (more than 1,000 kilograms of hazardous waste per month or more than one kilogram/ month of acutely hazardous waste) or 2) small quantity generator (between 100 and 1,000 kilograms of hazardous waste per month).

Solid and Liquid Waste

Solid and liquid waste facilities include a wide variety of facilities—such as landfills, transfer stations, material recovery facilities, composting sites, transformation facilities, closed disposal sites, and used oil collection sites. Although Corona does not have a hazardous waste disposal site, there are several other types of solid waste facilities, including open and closed landfills, active transfer/processing sites, used oil collection sites, and waste tire collection sites that are located either in or near the City.

Medical Waste

Medical facilities generate a variety of hazardous waste. Large hospitals are the primary sources of medical wastes, but there are numerous other sources. Corona has several hospitals, clinics, professional offices, dentists, blood and plasma centers, and other facilities that produce medical waste. Hazardous materials stemming from these facilities include contaminated medical equipment or supplies, infectious biological matter, prescription medicines, and radioactive materials.

Contaminated Sites

Although the generation, use, transport, and disposal of hazardous materials is carefully regulated today, past activities have led to the contamination of several sites. With the City's proximity to the Santa Ana River, reliance on groundwater supplies, and location of industrial activities in a populated urban community, improper use and disposal of hazardous materials could pose health threats. Corona is currently home to large contaminated sites due to legacy industrial uses. Even historical agricultural activities have caused some groundwater contamination. For these sites, the City works with the California Department Toxic Substances Control, California Environmental Protection Agency, and federal agencies to develop and implement remedies. Sustained efforts have resulted in the cleanup of contaminated sites.

Natural Gas Transmission Pipelines

Rupture of gas lines due to a natural disaster or accidental breach could have very serious consequences in highly populated areas. Southern California Gas Company (SoCalGas) operates two high-pressure transmission lines for natural gas in Corona. The east-west transmission line begins west of SR-71 and extends eastward on the north side of SR-91 to the intersection of Promenade and McKinley, where it divides into two segments that extend to SR-91. The north-south line runs south along River Road to Main Street, jogs around the east side of the Circle, and continues south along Fullerton to Ontario Avenue, where it joins with Temescal Canyon Road.

Pipeline safety is critical, particularly within areas that are subject to earthquakes, flooding, and other hazards that can affect high-pressure transmission pipelines. In accordance with Public Utilities Code §§ 961 to 963, SoCalGas implements an integrated pipeline safety program that includes design, maintenance, and operation. SoCalGas safety plan addresses: (1) safety systems, (2) emergency response, (3) state and federal regulations, (4) continuing operations, and (5) emerging issues. Requirements for safety measures are heightened in highly populated areas such as Corona. These plans are shared annually with city fire department staff.

Hazardous Material Transport

Releases of explosive, highly flammable, or toxic materials can cause fatalities and injuries, necessitate evacuations, destroy property, or result in serious environmental effects if toxic materials seep into surface or groundwater supplies. In Corona, hazardous materials and wastes are transported on the SR-91 and I-15. The City has no direct authority to regulate the transport of hazardous materials on federal and state highways or rail lines. For transporting explosives, inhalation hazards or other potentially dangerous materials, and controlled quantities of radioactive materials, state and federal governmental agencies require transporters to include safeguards to reduce the risks of hazardous materials release.

The following goal and supporting policies are designed to establish strategies to minimize exposure to hazardous materials through the documentation, monitoring, cleanup, storage, transport, and disposal of hazardous materials.

GOAL PS-3

Ensure that the health, safety, and general welfare of residents and visitors of the City of Corona, including the overall health of the natural environment, is provided through good land use planning and strict adherence and enforcement of the City of Corona Hazardous Material Area Plan, Local Hazard Mitigation Plan, California Fire Code, Certified Unified Program Agency, and other pertinent sources and documents.

Policies

- PS-3.1** Enforce federal and state regulations and local ordinances in accordance with Certified Unified Program Agency requirements that require all users, producers and transporters of hazardous materials and waste to clearly identify materials that they store, use or transport, and make available emergency response plans, emergency release reports, hazardous material inventory reports, and toxic chemical release reports to reduce the risk from natural or other hazards and effectively protect the community.
- PS-3.2** Require projects to comply with applicable land use regulation, building and fire codes, and local ordinances; determine the need for buffer zones/setbacks, building modifications, site design, operational changes, or other measures to minimize risk from hazardous materials.
- PS-3.3** Review and update the City of Corona's Hazardous Material Area Plan every three years as required by the Health and Safety Code Chapter 6.95 and implement policies contained therein. Ensure newly developed and annexed areas of the City are included in the Plan and that the area plan policies are coordinated with those of adjacent municipalities.
- PS-3.4** Utilize local enforcement powers for land use regulation, code enforcement, and nuisance abatement to address the use and/or discharge of hazardous material to the air, ground, wastewater collection and storm drain systems, groundwater, or surface water bodies.
- PS-3.5** Actively work with federal, state, county, and responsible entities to ensure proper cleanup activities are undertaken in as a timely manner as possible and are effectively managed to clean up contaminated sites so as to protect the public's health and safety.
- PS-3.6** Continue to promote the safe disposal of hazardous and toxic substances that are used in private households through the support of the hazardous materials collection efforts and address the long-term need for a local facility working with the County.
- PS-3.7** Coordinate hazardous material planning and appropriate response efforts with other City departments, as well as local, county, and state agencies to maintain readiness to mitigate local impacts resulting from hazardous material-induced emergencies.

- PS-3.8** Require property owners of contaminated sites to develop and implement, at their own expense, a site remediation plan to the satisfaction of the Riverside County and the California Department of Toxic Substances Control.
- PS-3.9** Minimize the potential risk of contamination to surface water and groundwater resources and implement restoration efforts to resources adversely impacted by past urban and rural land use activities.

AIRPORT HAZARDS

Corona Municipal Airport is a general aviation airport in northwest Corona. The airport serves primarily recreational uses for aircraft, but also serves as a staging ground for disaster response for fires and other emergencies. As required by the California Aeronautics Act, the Riverside County Airport Land Use Commission (ALUC) has established an Airport Land Use Compatibility Plan (ALUCP) for the Airport with policies to address the influence areas of airports, aircraft noise standards and criteria, accident potential zones, and building heights near airports. Internally, airport operations are governed by an airport master plan that includes a comprehensive land use plan for the operation of an airport and the area surrounding the airport. The airport accommodates 50,000 operations annually, and is not anticipated to substantially increase due to environmental constraints in the surrounding environs.

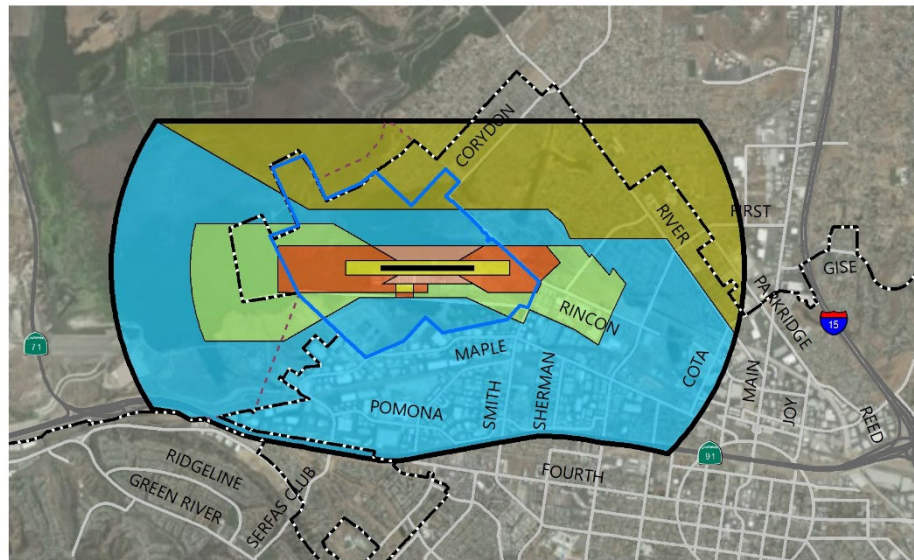


Corona Municipal Airport

Airport Hazard Zones

Riverside County ALUC has prepared a hazard map for Corona Municipal Airport that delineates safety zones based on the California Airport Land Use Planning Handbook. Taken together, these zones comprise the Airport Influence Area (AIA) defined by ALUC for the Corona Municipal Airport. These safety zones are defined and illustrated below.

- » **Zone A**, Runway Protection Zone. An area (“clear zone”) off the end of a runway to enhance the protection of people and property on the ground.
- » **Zone B1**, Inner Approach/Departure Zone. Where aircraft are typically 200 to 400 feet above runway elevation for straight-in arrivals or straight-out departures.
- » **Zone B2**, Adjacent to Runway. This area fills out gaps in Zone B1 and enhances protection for approach/departures that veer off the runway.
- » **Zone C**, Extended Approach/Departure Zone. This refers to an area where planes are flying around 800 feet to 1,000 feet from the ground.
- » **Zone D**, Primary Traffic Patterns and Runway Buffer Zone. This refers generally to an area that includes most of regular air traffic patterns and pattern entry routes.
- » **Zone E**, Other Environs. This refers to the influence area beyond the compatibility zones. Overflight annoyance is the primary impact. The risk of accident is very low.



Compatibility Zones

- | | |
|---|---|
| A - Runway Protection Zone | D - Primary Traffic Patterns and Runway Buffer Area |
| B1 - Inner Approach/Departure Zone | E - Other Airport Environs |
| B2 - Adjacent to Runway | Airport Property |
| C - Extended Approach/Departure Zone | |

Figure PS-8 Airport Land Use Compatibility Zones

GOAL PS-4

Implement land use restrictions and review procedures that encourage adequate protection of the community, its residents, and business from airport land use and flight-related hazards.

Policies

- PS-4.1** Protect flight paths from encroachment due to proposed development projects or redevelopment in Corona by using the Riverside County ALUCP and Corona Airport Master Plan to evaluate the consistency of proposed land uses and development projects.
- PS-4.2** Regulate building heights, land use intensities, and occupancies beneath airport approaches and departure paths consistent with the Riverside County ALUCP, the Corona Municipal Airport Master Plan, and all other applicable State and Federal regulations.
- PS-4.3** Ensure that review by the Riverside County Airport Land Use Commission for projects within the airport influence area occurs within the early stages of the development review process by the City and prior to project approval by the City.
- PS-4.4** Periodically review the Corona Municipal Airport Master Plan to update operational and safety procedures, reflect State and Federal mandates, improve the use of airport property, and recommend land use capability standards for land surrounding the airport.
- PS-4.5** Submit proposed projects to the ALUC for review if new development (including buildings, antennas, other structures) has a height exceeding:
- 35 feet in Compatibility Zone B1, B2, or a Height Review Overlay Zone
 - 70 feet within Compatibility Zone C
 - 150 feet within Compatibility Zone D or E
 - 200 feet or taller regardless of their location
- PS-4.6** Periodically monitor the potential for wildlife hazards to the flights and operations of the Corona Municipal Airport emanating from the Prado Basin, retention basins, golf courses, Santa Ana River, or other areas. Comply with federal wildfire strike hazards regulations if hazard exists.
- PS-4.7** Periodically consult with the Riverside County Airport Land Use Commission in matters affecting the operation of the Corona Municipal Airport and in regard to proposed development within the Influence Area that affect the safety and operations of the airport.

POLICE SERVICES

Corona Police Department (Corona PD) is a full-service organization providing 24-7 services. The mission of the Police Department is to achieve excellence in policing, security and safety through strong community partnerships, and investment in our people. Corona PD provides a diversified array of services for residents and business.



Corona Police Department Headquarters

Key functions of Corona PD include:

- » **Field Services.** Includes the City's patrol services, aviation unit, special response team, K9, explorers, HOPE program (Homeless Outreach and Psychological Evaluation), and mounted enforcement unit, among other programs.
- » **School Services.** Due to the large student population at high schools, there is a continued need for prevention and intervention by school officials, the community, and police. The City jointly funds school resource officers at high school.
- » **Traffic Control.** The traffic bureau facilitates the safe and orderly movement of traffic through patrol, law enforcement, education, and investigations. Additional services, such as child-seat installation, are also provided.
- » **Investigation Services.** This division investigates crimes against persons, property crimes, vice-narcotics, computer crimes, gang control, traffic accidents, and a variety of other incidents requiring investigation and followup.
- » **Aviation Services (contract)** Corona PD contracts with Riverside PD to provide helicopter patrols (Air One patrols) to Corona based on the type and priority, such as in-progress crimes, vehicle pursuits, area checks, and missing persons.

Crime prevention is an important part of the department's mission. Corona PD values its community partnerships as they help to protect lives, property, and the quality of life within neighborhoods and business districts. To that end, Corona PD participates in community outreach events that support a positive public presence. These include:

- » **Business Security Survey.** This survey is intended to evaluate current security measures. A Corona Police Officer or Crime Prevention Assistant will use the survey results to recommend actions to help prevent/deter future crime.
- » **Child Identification.** The Corona Police Department uses a digital fingerprint machine equipped with a camera to provide parents with a printout that includes the child's name, date of birth, photo, allergies and fingerprints.
- » **Community Outreach.** Outreach events typically include a police presence, car/motorcycle display, fingerprint machine, career opportunities, and crime prevention materials.
- » **Police Explorer Post.** Police Explorers receive training and exposure in career opportunities, life skills, citizenship, character education, and leadership experience.
- » **Neighborhood Watch.** Corona PD works with neighborhoods and residents to set up and implement neighborhood watch programs to learn how to report activities in order to keep neighborhoods safe.
- » **Personal Safety.** Crime prevention materials are made available to help residents reduce their chance of being victimized. Topics include vehicle and home security, robbery, burglary, domestic violence, gang avoidance, and senior safety.



Enjoying National Night Out with Corona PD

Corona PD Goals

The City of Corona's Police Strategic Plan guides its internal operations. The current 2017–2019 edition is the fifth update to the original 2012 strategic plan. The Police Department Strategic Plan contains the following 11 goals:

- » Goal 1: Prevent and Suppress Crime
- » Goal 2: Maintain Adequate Staffing Ratios
- » Goal 3: Maintain an Emergency Response Time within Five-Minutes
- » Goal 4: Robust Radio Interoperability
- » Goal 5: Maintain and Enhance Partnerships with the Community
- » Goal 6: Implement Department Wide "Succession and Success" Plan and Mentor
- » Goal 7: Enhance In-House Technology and Equipment
- » Goal 8: Enhance and Expand City-Wide Camera Systems
- » Goal 9: Animal Services & Enforcement
- » Goal 10: Fiscal Efficiency
- » Goal 11: Ongoing Department Review of Practices, Procedures, and Policies

Law Enforcement Response Zones

Law enforcement is divided between the City of Corona, Riverside County Sheriff, and the California Highway Patrol. The City of Corona operates four response zones to cover the incorporated area. Riverside County Sheriff provides patrol services in El Cerrito, Coronita, Home Gardens, and Temescal Valley. In addition to the Sheriff, the California Highway Patrol (CHP) is responsible for traffic enforcement in unincorporated areas. Mutual aid agreements are in place for jurisdictions to assist one another as requested. Figure PS-9 shows police and sheriff response zones in Corona and its SOI.

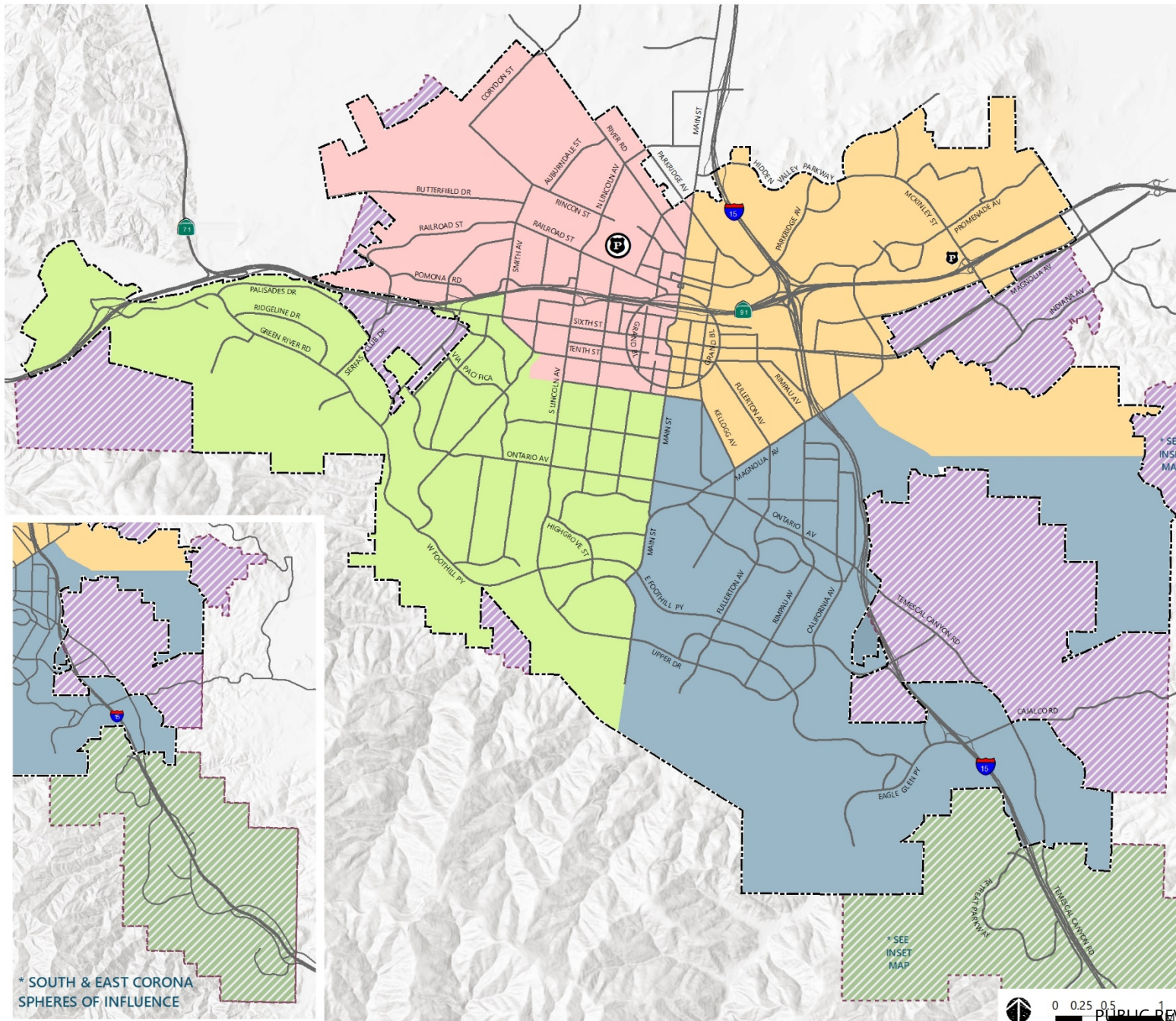
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Figure PS-9 Police and Sheriff Response Zones

Legend

- Main Police Station
- Sub-Station
- Corona Police Patrol Zones**
 - Zone 1
 - Zone 2
 - Zone 3
 - Zone 4
- County Sheriff Patrol Zones**
 - Jarupa Valley Station
 - Lake Elsinore Station
- City Boundary
- Sphere of Influence Areas

Notes:
The Coronita, El Cerrito, Home Gardens areas are serviced by the Jurupa Valley Sheriff's Office. Temescal Valley area is serviced by the Lake Elsinore Sheriff Station.



Source:
City of Corona, 2017
Riverside County, 2017

* SOUTH & EAST CORONA
SPHERES OF INFLUENCE



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GOAL PS-5

Ensure that there is an adequate service level of law enforcement services provided for all residents, visitors, and businesses throughout the City of Corona.

Policies

- PS-5.1** Ensure that police staffing, facilities, and equipment are expanded commensurably to serve the needs of the City's growing population, business community, and visitor population.
- PS-5.2** Identify and provide sites for police facility location(s) or substations in different locations based on community need, phasing, and timing; periodically assess the needs for establishing or relocating substations.
- PS-5.3** Assess the impacts of incremental increases in community development and resulting impacts on traffic congestion, municipal infrastructure capacity, and emergency response times. Ensure through the design review process that proposed projects provide mitigation to maintain law enforcement services at acceptable, safe levels.
- PS-5.4** Periodically evaluate population growth, development characteristics, level of service, and incidence of crime in the City of Corona to ensure that an adequate level of police service is maintained.
- PS-5.5** Require new and expanded development projects or those in which change operations to contribute an appropriate amount of impact fees based on their proportional impact and demand for police services.
- PS-5.6** Cooperate with with all Riverside County law enforcement agencies and other public safety providers to provide backup police assistance and mutual aid in emergency situations.
- PS-5.7** Conduct periodic police related emergency management exercises with City personnel and surrounding jurisdictions to maintain readiness for emergency situations should they arise.
- PS-5.8** Strive to meet police response times for Priority 1 calls throughout the community consistent with the departmental strategic plan and level of service objectives.
- PS-5.9** Continue to work the Corona-Norco Unified School District to provide services that make school environments safe and welcoming places for learning and personal enrichment and growth for students.

GOAL PS-6

Ensure that police services are provided in a manner that reflects and is sensitive to the characteristics and needs of resident population, visitors, and business community.

Policies

- PS-6.1** Continue to coordinate through a regularly updated City Service Delivery Plan, the provision of police and fire services with all other public safety and responsiveness programs in order to meet community needs.
- PS-6.2** Encourage, facilitate, and participate, where appropriate, in communications between police service providers and Corona residents to address issues of responsiveness and sensitivity that may arise.
- PS-6.3** Review with the public safety service provider's problems of responsiveness and sensitivity and discuss means of resolution if and when there are a high frequency and repetition of complaints.
- PS-6.4** Encourage, facilitate, and participate in the training of police personnel to be responsive and sensitive to the needs of all of the City of Corona's residents, while maintaining a high level of service and protection.
- PS-6.5** Aggressively pursue conformance with the City's nondiscriminatory hiring policies by all public safety providers.
- PS-6.6** Interact and extend police support to venues for youth activities of community-based groups, Parks and Recreation Department, and other groups to help reduce youth-generated crime in the City.

GOAL PS-7

Encourage the use of land use and development configuration and site design standards within residential and other developments to minimize crime and improve the safety for residents, visitors, and employees.

Policies

- PS-7.1** Require larger developments to incorporate site design features that help ensure maximum visibility and security for entrances, pathways, streets and sidewalks, corridors, public and private open space, and parking lots and structures.
- PS-7.2** Require the incorporation of appropriate lighting that provides adequate exterior illumination around commercial, business park, public spaces, parking lots, and multifamily structures.

- PS-7.3** Work with traffic engineers to develop methods through design, enforcement, and engineering to reduce the volume and severity of vehicle, pedestrian, and bicycling accidents citywide and around sensitive land uses such as schools, apartments, and other highly traveled uses.
- PS-7.4** Enhance public awareness and participation in crime prevention by encouraging changes to be made through crime prevention by design (vegetation selection and maintenance, motion sensors, lighting, etc.) and establishing and participating with police in neighborhood safety and crime prevention programs (e.g. neighborhood watch).
- PS-7.5** Require large-scale retail developments to incorporate video surveillance security systems within their facilities and grounds to monitor open public spaces and, where appropriate and feasible, provide office space for police facilities.
- PS-7.6** Provide opportunities for police department review and input regarding appropriate methods to mitigate the impacts of land use permits that have functions and characteristics that may impose a higher than normal level of security and police protection.
- PS-7.7** Provide appropriate security measures around sensitive essential public facilities, such as water, reclaimed water, radio towers, and other facilities required for use for public health and safety purposes.



FIRE HAZARDS

The City of Corona has a complex fire environment. Hundreds of businesses in Corona use, manufacture, or store hazardous materials. It has a housing stock of approximately 50,000 housing units, mostly two- to four-story structures and multistory commercial and industrial complexes. In addition, Corona is surrounded by extensive open space—including the Cleveland National Forest, Chino Hills, Corona Hills, Gavilan Hills, and Temescal Valley—all susceptible to wildfire. The juxtaposition of wildland, urban, and wildland-urban interface areas underscores Corona’s challenging fire environment. The general plan provides an overall framework to address this fire environment.

Planning Context

The context for fire planning and suppression in California has evolved over the years. City fire departments not only address structural fires, but have evolved into emergency medical service providers (accounting for at least two-thirds of all calls). Moreover, urban fires have become more dangerous due to the mix of hazardous materials and toxic substances used/stored in business operations. Cyclical drought in southern California followed by seasonally wet years have also resulted in a dramatic increase in vegetation growth and dying, resulting in an increasing frequency of wildfires. This has become more of a threat as urban development has encroached into open space areas in many communities, expanding the wildland-urban interface that must be protected.

Concurrent with the above changes, the legal context affecting fire operations has become more complex over time. State laws have required that communities increasingly focus on prevention—be it the provision and upgrade of water infrastructure, update of building and land development codes, planning and maintenance of evacuation routes, and a myriad of other issues. The wave of wildfires over the last decade has resulted in new state laws that require cities with very high fire hazard severity zones to submit safety elements to state agencies for review. And yet the funding mechanisms have remained essentially the same over time.

This safety element, including the supplemental Technical Background Report and the fire safety checklist provided to CAL FIRE, is intended to respond to these challenges.

Corona Fire Services

Established in 1896, Corona Fire Department has grown from a volunteer operation to a full-service organization. Corona Fire now provides 24-7 services to a 75-square-mile service area, which includes the sphere of influence. In addition, Corona Fire serves a vast area beyond the City’s “planning area” that extends into the county. Multiple agency efforts are coordinated with county, state, and federal agencies. Corona Fire’s mission is to prevent or minimize the loss of life, damage to the environment and loss of property from the adverse effects of fire, medical emergencies, and hazardous conditions. This is achieved by responding with properly staffed, well-equipped, expertly trained, and healthy firefighters within response time standards.

Corona Fire is referred to as an “all risk” fire department, responding to a wide range of fires, medical emergencies, and hazardous conditions in the community. Each year, Corona Fire responds to more than 13,000 calls for structural fires, freeway and roadway accidents, wildland fires, hazardous material incidents, search and rescue, and emergency medical services, among others. Key department functions include:

- » **Fire Prevention.** The division is responsible for reviewing development site plan and site construction, occupancy inspections, weed abatement, investigating complaints and suspicious fires, and hazardous materials coordination. The Division conducts youth firesetter intervention and fire safety education. In addition, staff assigned to fire stations conduct inspections on occupancy uses.
- » **Fire Operations.** The department responds to fires, medical emergencies, and hazardous conditions and provides advanced and basic life support. Specialized teams include search and rescue, hazardous materials response, technical rescue and tactical emergency medical support. The training division coordinates and provides continuous education and advanced training to operations personnel.
- » **Emergency Medical Services.** The division coordinates emergency medical response and EMS public education. The division is responsible for continuous program quality improvement, and skills and license maintenance of department EMT and paramedic personnel. It also coordinates with hospital emergency departments, health care providers, and the Riverside County EMS Agency.
- » **Emergency Management.** This function is charged with creating the framework within which communities reduce vulnerability to hazards and cope with disasters. It is responsible for coordinating emergency planning, preparedness, risk reduction, response, and recovery. Emergency communications, facilities, and apparatus are all handled by other departments within the City.



Fire Station 6, in south Corona, is one of its seven fire station locations

Corona Fire Response Zones

CAL FIRE is mandated by state law to identify fire hazard severity zones for all communities in California based on fuels, terrain, weather, and other relevant factors. CAL FIRE has mapped three hazard ranges—moderate, high, and very high—in the City of Corona. Based on historical frequency of wildfires and local knowledge, the City has accepted these determinations by adopting the fire hazard severity zones. Figure PS-10 shows the location of major wildfires that encroached into Corona’s planning area. Figure PS-11 illustrates the wildfire hazard zones and the agency with primary responsibility for fire prevention and suppression services.

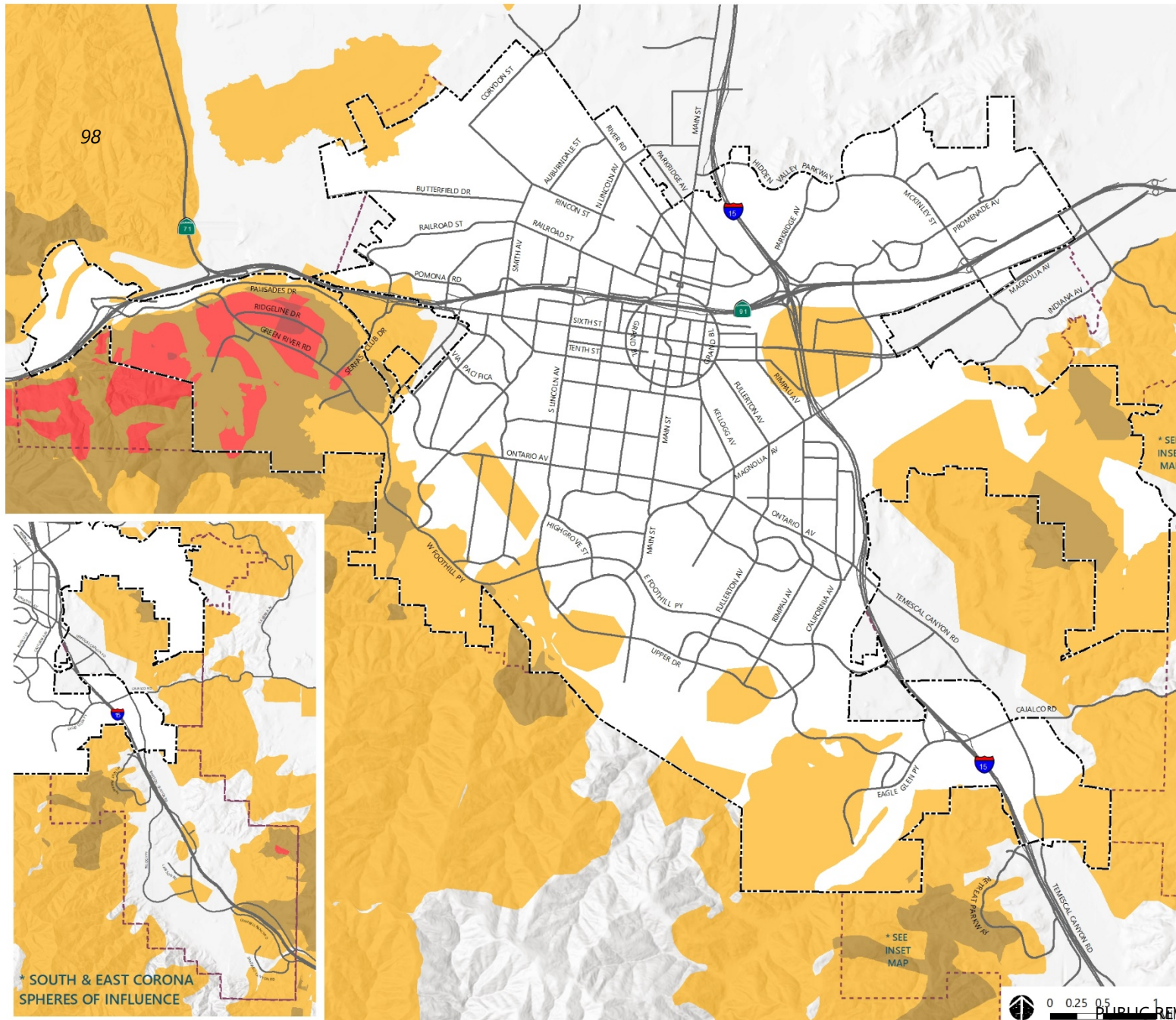
Corona deploys resources from seven fire stations in the community. Corona Fire also provides services, through a contract with Riverside County, to the unincorporated communities of Coronita, Home Gardens, El Cerrito, and Temescal Valley. Under this contract, Corona Fire provides backup services to Home Gardens, secondary to the services provided by County Station #13 in Home Gardens. The County, CAL FIRE, and US Forest Service collaborate to serve the local, state, and federal responsibility areas. Figure PS-12 shows the fire response zones in Corona and its sphere.



Canyon 1 Fire in Corona, September 2017

Corona Fire also maintains mutual aid agreements with almost a dozen public agencies (e.g., local, state, and federal) for mutual threat, fire suppression, active shooter tactical response, fire suppression, hazmat, and other emergencies. Corona Fire also participates in the SOLAR cooperative plan, which encompasses all agencies with fire protection responsibility where four counties join, roughly at the wildland-interface areas along state routes 91, 71, 55, 57, and 241. SOLAR is a common platform for mapping, communications, training, predesignation of facilities, and dispatch centers.

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Figure PS-10
Wildfire History



Legend

Number of Wildfires

- 1 - 2
- 3 - 4
- 5 - 6
- 7 - 8

- City Boundary
- Sphere of Influence Areas

Note:
 Perimeters of wildfires burned near or within Corona since 1900. Does not include controlled burns

Source:
 Fire Perimeters Version 16_1, CalFire, 2017

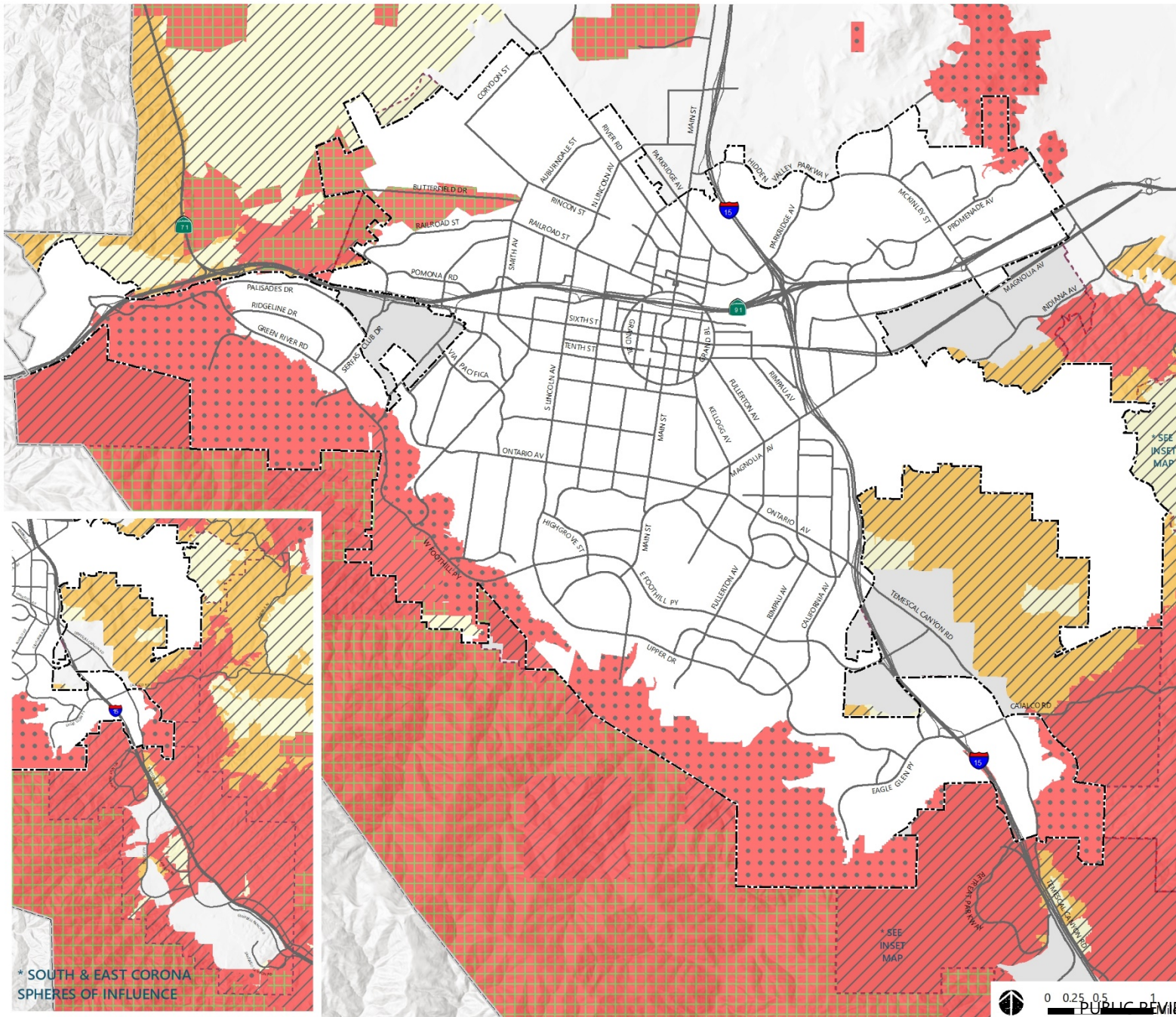
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Figure PS-11
Wildfire Hazard
Severity Zones



Legend

Fire Hazard Zone

- Moderate
- High
- Very High

Responsibility Areas

- Local Responsibility Area
- State Responsibility Area
- Federal Responsibility Area
- City Boundary
- Sphere of Influence Areas

Note:
 Zones based on factors such as fuel (material that can burn), slope and fire weather.

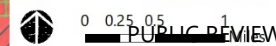
Local Responsibility Area (LRA):
 Local agencies have the primary financial responsibility for the prevention and suppression of wildland fires.

State Responsibility Area (SRA):
 The State of California has the primary financial responsibility for the prevention and suppression of wildland fires.

Federal Responsibility Area:
 Federal Government has the primary financial responsibility for the prevention and suppression of wildland fires.

Source:
 CalFire, 2017
http://www.fire.ca.gov/fire_prevention/fhsz_maps_riversidewest
 Downloaded: 9/26/17

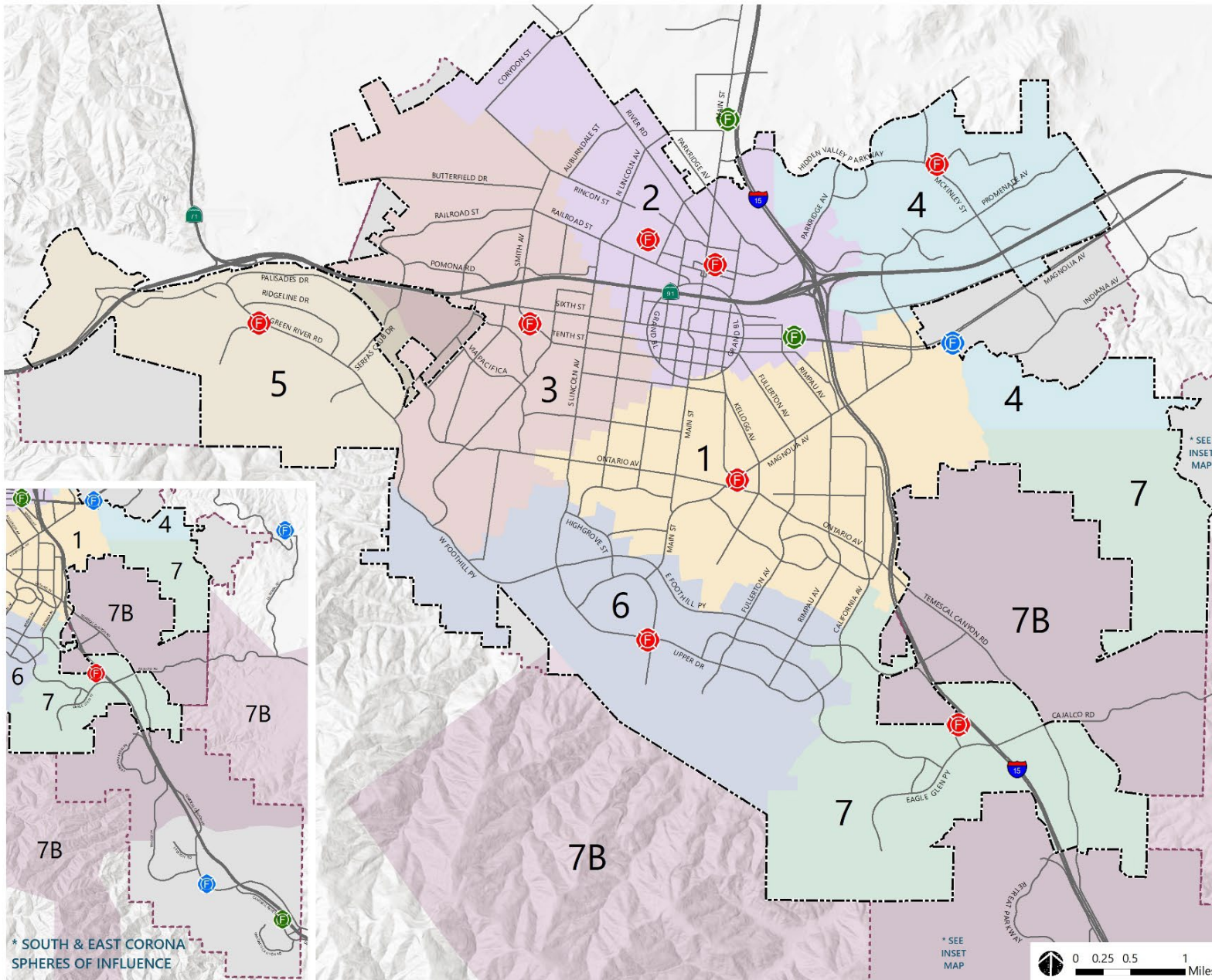
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**Figure PS-12
Fire Response Zones**



Legend

- Fire Station
- City of Corona
 - Riverside County (Sphere)
 - Other Agency (State & Federal)

Response Zones | Stations

- Fire Station # 1
540 Magnolia Ave
- Fire Station # 2
222 E Harrison St
- Fire Station # 3
790 S Smith Ave
- Fire Station # 4
915 N Mckinley St
- Fire Station # 5
1200 Canyon Crest Dr
- Fire Station # 6
110 W Upper St
- Fire Station # 7
3777 Bedford Canyon Rd
- 7B - Disadvantaged Unincorporated Community (DUC)

- City Boundary
- Sphere of Influence Areas

Notes:
Corona Fire provides secondary back-up to areas outside its response zones.

Source:
City of Corona Fire Department, 2017



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SPHERES OF INFLUENCE



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GOAL PS-8

Ensure that there is an adequate service level of fire protection and suppression services provided for all residents, visitors, and businesses throughout the City of Corona to meet community expectations and budgetary resources for safety.

Policies

- PS-8.1** Provide needed fire stations and maintain them in good condition to enable timely and effective response to emergencies in keeping with city standards, community service expectations, and city financial resources.
- PS-8.2** Ensure that fire staff at all levels are sufficient in number and appropriately trained to effectively plan and respond to all types of fire and related emergencies in the community.
- PS-8.3** Maintain mutual aid, automatic aid, and other multi-agency cooperative agreements to ensure that urban fire, wildfire, tactical response, hazmat, and other services are available at all times.
- PS-8.4** Regular maintain, upgrade, and replace fire apparatus and support vehicles and needed equipment to be prepared and effectively respond to fire, traffic, medical, and related emergencies.
- PS-8.5** Conduct periodic fire-related exercises with City public safety personnel and those of nearby jurisdictions, and the state to remain prepared for situations requiring multi-jurisdictional coordinated response.
- PS-8.6** Participate in and conduct regular training of all fire and related personnel to ensure that staff are prepared to address emergency medical, fire, and other related emergencies in the community.
- PS-8.7** Adhere to and periodically update fire department strategic plans, policies and procedures, and other internal standards to continuously meet service level requirements and priorities, including department response times.
- PS-8.8** Ensure that revenues are collected from new development, existing developments, and other land uses in an amount that is commensurate with their respective impact on overall city fire operations.
- PS-8.9** Continue to monitor and adhere to the latest changes in state legislation and guidelines with respect to fire planning, prevention, and suppression.

GOAL PS-9

Through fire prevention and educational efforts, promote participation, voluntary compliance and community awareness of fire safety issues in order to reduce the incidence and severity of fire and related emergencies and loss.

Policies

- PS-9.1** Continue to review and adopt the most recent edition of the California Building Standards Code (Title 24), including local amendments, to ensure the use of the latest technology and building standards in the city.
- PS-9.2** Continue to conduct all existing occupancy inspections, including those that are state mandated within the appropriate time frame for compliance with fire safety regulations and providing education to business owners.
- PS-9.3** Ensure that roadway, bridge and driveway standards are adequate and appropriately maintained to allow safe access to premises where emergencies take place and safe evacuations wherever needed.
- PS-9.4** Maintain safe and accessible evacuation routes throughout the community; take precautions and ensure backup or mitigations for routes crossing high hazard areas (e.g., flood, seismic, high fire, etc.).
- PS-9.5** Work cooperatively with city departments, community groups, and individual homeowners to ensure that vegetation management is being maintained in the designated fuel modification areas.
- PS-9.6** Work cooperatively with CAL FIRE, US Forest Service, Department of Corrections, and other agency stakeholder to advocate for the installation and maintenance of fire breaks in wildland areas surrounding Corona.
- PS-9.7** Encourage and provide fire safety education and support programs for residents of all ages to promote participation, fire prevention, voluntary compliance, and community awareness/preparedness.
- PS-9.8** Work with youth in the community and local school district to tailor programs that encourage safe practices and reduce the incidence of fire and associated damages to property and personal injury.
- PS-9.9** Conduct fire investigations as needed on residential, commercial, industrial structures and other land uses to provide protection to the community and gather information for possible trending issues.

GOAL PS-10

Reduce fire risk to life and property through effective land use planning and compliance with federal, state, local laws, ordinances, and standards.

Policies

- PS-10.1** Locate, when feasible, new essential public facilities outside of high fire risk areas; if not feasible, require construction and other methods to harden and minimize damage for existing/planned facilities in such areas.
- PS-10.2** Require all improved and new homes, structures, and facilities in the very high fire hazard severity zones to adhere to additional fire safe design standards consistent with state law and local practice.
- PS-10.3** Require all improved and new developments to be thoroughly reviewed for their impact on safety and the provision of fire protection services as part of the development review process.
- PS-10.4** Require new and rehabilitated homes and structures to meet or exceed City fire prevention standards and state law, including building access, construction design, sprinklers, and others as required by Corona Fire.
- PS-10.5** Require all new commercial, industrial, institutional, multiple-unit housing, mixed-use, and one- and two-family dwelling developments to install fire protection systems and encourage the use of automatic sprinkler systems where not required by local codes and ordinances.
- PS-10.6** Require fuel modification plans and vegetation clearance standards for development in VHFHSZs to protect structures from wildfire, protect wildlands from structure fires, and provide safe access routes for the community and firefighters.
- PS-10.7** Condition approval of parcel maps and tentative maps in VHFHSZs based on meeting or exceeding the SRA Fire Safe Regulations and the fire hazard reduction around buildings and structures regulations.
- PS-10.8** Coordinate with the Department of Water and Power to ensure that adequate water supply and flows are available for firefighting; where inadequate, ensure provision of off-site water supply and transport.
- PS-10.9** Continue to require visible premise identification and signage per Corona's Premise Identification Guideline that meet or exceed SRA and CFC requirements.

EMERGENCY MANAGEMENT

Emergency management is the function charged with creating the framework within which communities reduce vulnerability to hazards and cope with disasters. The California Emergency Services Act requires cities to manage and coordinate emergency response and recovery activities within their jurisdiction. Emergency management functions are coordinated through the Emergency Management Division under Corona Fire Department, and adhere to the Standardized Emergency Management System (SEMS) and the National Incident Management System (NIMS).

Defining SEMS and NIMS

The Standardized Emergency Management System (SEMS) is a statewide California system that police officers, firefighters, and other emergency and disaster responders use in disaster events. SEMS is the cornerstone of California's emergency response system and the fundamental structure for the response phase of emergency management. The system unifies all elements of California's emergency management community into a single integrated system and standardizes key elements. Under the California Emergency Services Act 2015, State agencies are required to use SEMS, and local governments must use SEMS to be eligible for reimbursement of response-related costs under the state's disaster assistance programs.

SEMS incorporates a number of interrelated protocols for communication and coordination to ensure the effective delivery of services. These include:

- » **Incident Command System (ICS).** A field-level emergency response system based on management by objectives.
- » **Multi/interagency coordination.** Affected agencies working together to coordinate allocations of resources and emergency response activities.
- » **Mutual aid.** A system for obtaining additional emergency resources from jurisdictions not affected by the immediate emergency.
- » **Operational Area Concept.** County and its subdivisions to coordinate damage information, resource requests, and emergency response.

As a complement, the National Incident Management System (NIMS) is a comprehensive nationwide systematic approach to incident management. It guides all levels of government, nongovernmental organizations, and the private sector to work together to prevent, protect against, mitigate, respond to, and recover from incidents. NIMS provides stakeholders across the whole community with the shared vocabulary, systems, and processes to successfully deliver the capabilities described in the National Preparedness System. NIMS defines operational systems, including the Incident Command System, Emergency Operations Center structures, and Multiagency Coordination Groups that guide how personnel work together during incidents. NIMS applies to all incidents, from traffic accidents to major community-wide disasters.

Emergency Management Functions

Emergency management functions protect communities by coordinating and integrating all activities necessary to build, sustain, and improve the capability to mitigate against, prepare for, respond to, and recover from threatened or actual natural disasters, acts of terrorism, or other man-made disasters. This is achieved by implementing the four phases of emergency management: prevention/mitigation, preparedness, response, and recovery as described below and shown in the graphic.



Four Phases of the City of Corona's Emergency Management System

- » **Mitigation** refers to varied preemptive measures designed to eliminate or reduce the probability of disaster occurrence or effects of unavoidable disasters. Mitigation measures include building codes, vulnerability analyses updates, zoning and land use management, building use regulations and safety codes, preventive health care, and public education. The City's Local Hazard Mitigation Plan contains the city's adopted mitigation measures.
- » **Preparedness** refers to readiness to respond to any emergency through programs that strengthen governments, organizations, and communities. Measures include preparedness plans, emergency exercises/training, warning systems, emergency communications systems, evacuations plans, resource inventories, emergency contact lists, mutual aid agreements, and public information/education. The City's Emergency Operations Plan contains the City's approved procedures.
- » **Response** refers to the provision of immediate assistance to maintain life, improve health, and support the morale of the affected population. The focus in the response phase is on meeting the basic needs of the people until more permanent and sustainable solutions can be found. Many activities essential during the response phase are conducted in tandem with standard emergency response procedures of the Corona Police and Fire Departments.
- » **Recovery** refers to the ability of an agency or community to undertake a growing number of activities aimed at restoring their lives and the infrastructure that supports them. Recovery measures, short and long term, include returning vital life-support systems to minimum operating standards, temporary housing, public information, health and safety education, reconstruction, counseling programs, and economic impact studies. Information resources and services include data collection related to rebuilding and documentation of lessons learned.

Emergency Operation Planning

The City of Corona has prepared an emergency operations plan to ensure the most effective allocation of resources for the maximum benefit and protection of the civilian population in time of emergency. The operational concepts reflected in the plan focus on the City's planned response to extraordinary emergency situations associated with natural disasters, technological incidents, and national security emergencies. In addition, the City's local hazard mitigation plan is designed to identify local hazards and provide mitigation measures to address these hazards.

The objective of the emergency operations plan is to incorporate and coordinate all available City resources into an efficient organization capable of responding to any emergency. While no plan can completely prevent death and destruction, good plans carried out by knowledgeable and well-trained personnel will minimize losses. This plan establishes the emergency organization and assigns tasks and general procedures. It provides for coordination of planning efforts of the various emergency staff and service elements using the Standardized Emergency Management System and National Incident Management System with all levels of government.

Title II of the Americans with Disabilities Act mandates that public entities, such as the City of Corona and all municipalities, conduct operations in a manner that its services, programs, and activities, when viewed in their entirety, are readily accessible to and usable by individuals with disabilities. The City intends to provide programs and services to all residents, regardless of their individual abilities, by integrating access into all aspects of emergency services, including alert and warning/public information, evacuation and transportation, care and shelter, and specialized resources.

The Corona Disaster Council, in accordance with § 2.52.050 of the Corona Municipal Code, is responsible for ensuring that the emergency operations plan remains current and effective. The Corona Fire Department Emergency Services Division is responsible for reviewing the entire emergency plan on an annual basis, coordinating revisions to the plan, and maintaining records of all revisions. The plan is available to the public for review. Corona Fire also prepares and implements the hazard mitigation plan and ensures submittal to the Federal Emergency Management Agency every five years.

To ensure the effectiveness of emergency planning and hazard mitigation, the Corona Fire Department works with an array of community partners. These include utility service providers (water, power, and sanitation), schools, community organizations, residents, and other local entities. Mutual and automatic aid agreements are also maintained with numerous surrounding local, state, and federal agencies to allow for appropriate backup services in case of an emergency, disaster, or other similar event.

The following presents goals and policies pertaining to emergency management within Corona and the planning area. By implementing the following goals and policies, the City intends to become more resilient to local emergencies and disasters.

GOAL PS-11

Effective emergency response to disasters that limits the loss of life, curtails property damage and social dislocation, enhances emergency preparedness through community education and self-help programs, and minimizes damages and injuries.

- PS-11.1** Adhere to the Standard Emergency Management System (SEMS) and the National Incident Management System (NIMS) to coordinate effective response to emergencies and disasters.
- PS-11.2** Maintain emergency and hazard mitigation plans; update and define roles of city departments and other partnering agencies in the event of an emergency or disaster, ensuring interagency coordination and collaboration with the Operational Area (SEMS).
- PS-11.3** Conduct periodic emergency management exercises with city personnel and nearby jurisdictions to remain prepared for situations requiring multi-jurisdictional coordinated response.
- PS-11.4** Maintain Structure Protection Plans and other pre-planning activities and plans to remain prepared for emergencies throughout the community.
- PS-11.5** Ensure that the Emergency Operations Plan and Standard Operating Procedures provide for efficient and orderly notification and evacuation on a citywide basis. Ensure they address accessibility issues and mass notification capabilities utilizing our city, county, state, and federal communication systems.
- PS-11.6** Improve continuity of operations capabilities to include the development of a City of Corona Continuity of Operations Plan, in addition to enhancing the Emergency Operation Center (EOC) readiness and the EOC responder training and exercises, and continuously testing and improving upon the effectiveness of the Emergency Operation Plan.
- PS-11.7** Sponsor and support the public education programs and outreach efforts referencing community hazards, emergency preparedness, and response protocols and procedures. Target and partner with community groups, schools, religious institutions, and business associations (NIMS).
- PS-11.8** Facilitate planning efforts to ensure expeditious and coordinated recovery processes following any serious emergency/disaster.
- PS-11.9** Ensure all local, state, and federal mandates are adhered to should the City proclaim a local emergency and request any state and/or federal funding.
- PS-11.10** Participate in the review and update of the Riverside County Operational Area Multi-Jurisdictional Local Hazard Mitigation Plan every five years in coordination with all participating jurisdictions and Riverside County Emergency Management Department; implement goals and objectives therein to reduce risks from hazards and guide decision-making.

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