City of Rancho Santa Margarita

Emergency Operations Plan

February 2016

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I. City of Rancho Santa Margarita Resolution

II. Record of Changes

CHANGE NUMBER	DATE OF CHANGE	NAME OF EDITOR	SUMMARY OF CHANGE
1		Sarah Barker	Updated entire plan to new format.

III. Record of Distribution

NAME AND TITLE	AGENCY	DELIVERY DATE	NUMBER OF COPIES
Mayor	City of Rancho Santa Margarita		
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City Manager	City of Rancho Santa Margarita		
City Clerk	City of Rancho Santa Margarita		
City Attorney	City of Rancho Santa Margarita		
Chief of Police Services	Orange County Sheriff's Department/City of Rancho Santa Margarita		
Finance Director	City of Rancho Santa Margarita		
Public Works Director	City of Rancho Santa Margarita		
Community Services Supervisor	City of Rancho Santa Margarita		
Development Services Director	City of Rancho Santa Margarita		
Division Chief	Orange County Fire Authority		
Director	Orange County Sheriff's Department/Emergency Management Division		
Administrative Sergeant	Orange County Sheriff's Department/City of Rancho Santa Margarita		
Emergency Management Coordinator	Orange County Sheriff's Department/City of Rancho Santa Margarita		
	California Office of Emergency Services		
Disaster Program Manager	American Red Cross - Dessert to the Sea Region		
	Southern California Edison		
	SoCal Gas		
	Santa Margarita Water District		
	Trabuco Canyon Water District		

IV. Table of Contents

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Chapter One: Introduction

1.1 EOP Purpose

This Emergency Operations Plan (EOP) addresses the City of Rancho Santa Margarita's planned response to extraordinary situations associated with natural disasters and/or technological incidents including both peacetime and national security operations. Although its primary focus is the provision of coordinated mutual aid within the City of Rancho Santa Margarita and fulfilling reporting requirements to the Orange County Operational Area, the EOP also provides an overview of the operational concepts relating to various emergency situations. The EOP identifies components of the City of Rancho Santa Margarita's emergency response organization and describes the overall responsibilities of the City in protecting life and property and assuring the overall well-being of the population.

The Rancho Santa Margarita EOP is designed to provide the framework for Rancho Santa Margarita Emergency Operations Center (EOC) operations during incidents requiring the activation and use of the Rancho Santa Margarita EOC. As part of this strategy, this plan will:

- Establish the City of Rancho Santa Margarita policies and procedures for response to emergencies
- Identify authorities and assign responsibilities for response and recovery activities
- Establish the City of Rancho Santa Margarita emergency response organization which will manage City of Rancho Santa Margarita responsibilities
- Describe the functionality of the City of Rancho Santa Margarita EOC
- Outline the process of disseminating emergency information and instructions to the public and media
- Describe the resources available and means to acquire additional resources to support emergency response activities in the City of Rancho Santa Margarita
- Provide the basis for initial training and subsequent retraining of emergency workers

1.2 Intended Audience

This plan is specifically designed for personnel from departments of the City of Rancho Santa Margarita, other Rancho Santa Margarita jurisdictions (special districts, school districts, etc.), the Orange County Operational Area, the California Office of Emergency Services (Cal OES), and organizational representatives responsible for staffing positions within the City of Rancho Santa Margarita EOC. Personnel assigned responsibilities in this plan are expected to have a working knowledge of functions and actions described herein.

1.3 How to use the City of Rancho Santa Margarita EOP/Plan Organization

By using this EOP appropriately, response and recovery organization representatives supporting the City of Rancho Santa Margarita EOC:

- Understand organizational responsibilities;
- Demonstrate functional capability;
- Avoid inefficiencies, duplications, and oversights in performing functions; and
- Are able to effectively coordinate response and recovery operations across organizations and jurisdictions.

1.4 Preparing and Responding with the Whole Community Strategy

The City of Rancho Santa Margarita, in conjunction with the County of Orange and the Orange County Operational Area, strives to incorporate the Whole Community strategy in its emergency planning. By planning for the Whole Community, the complexities in the diversity of Orange County, and specifically the City of Rancho Santa Margarita, are assimilated into the City, County, and the Operational Area planning strategy.

Orange County's definition of disabilities and access and functional needs is as follows:

Populations whose members may have additional needs before, during, and after an incident in functional areas, including but not limited to: maintaining independence and the ability to perform the activities of daily living, communication, transportation, supervision, and medical care. Individuals in need of additional response assistance may include those who have disabilities; who live in institutionalized settings; who are elderly; who are children; who are from diverse cultures; who have limited English proficiency or are non-English speaking; or who are transportation disadvantaged.

Having recognized the need to be inclusive in its emergency planning, the Orange County Operational Area (OA) formed the Orange County Disabilities and Access and Functional Needs Working Group in 2011 to strengthen partnerships with the disability community and others with access and functional needs. This team includes representatives from county agencies, local jurisdictions and nonprofit organizations serving people with disabilities and access and functional needs in Orange County. This group's instrumental efforts have turned the OA towards more inclusive emergency planning for the Whole Community. This group reviewed the Orange County Operational Area Emergency Operations Plan in May and June 2014 and provided valuable feedback. The City of Rancho Santa Margarita has been an active participant in this working group through attendance at meetings and assistance in the review of multiple Orange County Operational Area Plans including the OA EOP and the OA Evacuation Annex.

In order to meet the unique needs of children in disasters, the OA formed the Kids in Disasters (KIDs) Working Group as a sub-committee of the Disabilities and Access and Functional Needs Working Group. The mission of the working group is to engage public and private community, government and healthcare organizations and individuals to promote coordinated efforts and partnerships to ensure that infants' and children's needs are met before, during, and after disasters. Integrating children (0-18) into disaster planning requires special emergency preparedness and planning. Disasters have proven that children are vulnerable and require additional support during emergency situations, especially when separated from their parents or guardians. The physical and psychological damage sustained by children, including children with disabilities and access and functional needs, can far exceed the same impacts inflicted on adult members of society. The KIDs Working Group will assist in identifying and supporting community programs that help meet the physical, medical, and mental health needs of children in disasters.

Furthermore, the County of Orange, Orange County Operational Area and the City of Rancho Santa Margarita are committed to maximizing compliance with the Americans with Disabilities Act and providing the best service to residents and visitors. As such, the County of Orange, the Orange County Operational Area, and the City of Rancho Santa Margarita adhere to the guidelines outlined below:

- Disability will not prevent accessibility to services or facilities provided by the County of Orange, the Orange County Operational Area, and the City of Rancho Santa Margarita.
- The County of Orange, the Orange County Operational Area, and the City of Rancho Santa Margarita will not exclude or deny benefits of any sort based on a disability, access or functional need.

- The County of Orange, the Orange County Operational Area, and the City of Rancho Santa Margarita will work to accommodate people with disabilities and access and functional needs in the most integrated setting possible.
- During all phases of disaster response, the County of Orange, the Orange County Operational Area, and the City of Rancho Santa Margarita will make reasonable modifications to policies, practices and procedures, as necessary, to ensure programmatic and architectural access to all.
- The County of Orange, the Orange County Operational Area, and the City of Rancho Santa Margarita will shelter people with disabilities and access and functional needs with their families, friends and/or neighbors as feasible in the most integrated setting possible.

1.5 Planning Assumptions

This Plan has been developed on the following general assumptions:

- Standardized Emergency Management System (SEMS) requires the County Board of Supervisors to establish an OA to include all political subdivisions in the geographic area of the County, which consists of the County, cities, special districts, and school districts. The OA is an intermediate level of the State emergency organization and provides coordination between and communication with the political subdivisions and the State. SEMS also assigns the County responsibility for OA lead.
- The City of Rancho Santa Margarita is an OA jurisdiction and a separate entity from the OA. In those instances where both the OA and the City of Rancho Santa Margarita EOPs are activated, both plans are not mutually exclusive and thereby complement each other.
- For the sake of emergency planning and coordination at the OA jurisdiction-level, the City of Rancho Santa Margarita may consider the OA and County EOC one and the same.
- The City of Rancho Santa Margarita, an OA jurisdiction, has developed emergency plans and/or operating procedures in accordance with the OA EOP and will train appropriate staff in the contents and use.
- The Sheriff's Department Emergency Management Division (EMD) will ensure that all County Department/Agency plans and procedures that support the OA EOP are reviewed for compliance with the OA EOP, including the City of Rancho Santa Margarita's EOP.
- The City of Rancho Santa Margarita uses the precepts of the Incident Command System (ICS) as adopted in the Standardized Emergency Management System (SEMS) and the National Incident Management System (NIMS) in emergency response operations.
- The City of Rancho Santa Margarita will utilize SEMS and NIMS, as identified in this plan, during response and recovery operations.
- The Director of Emergency Services (DES) will coordinate the City of Rancho Santa Margarita's response in conformance with all applicable ordinances and laws.
- The resources of the City of Rancho Santa Margarita will be made available to the city to help mitigate the effects of disasters and emergencies in the area.
- Mutual Aid Agreements and Systems exist to support the emergency response agencies of Rancho Santa Margarita. These agreements are reviewed and updated on a regular basis by the OA.
- The City of Rancho Santa Margarita will commit its resources to a reasonable degree before requesting mutual aid assistance.
- The City of Rancho Santa Margarita Emergency Operations Plan is not designed to address the recovery and subsequent resumption of the delivery of agency and department program services. Therefore, each

department/agency within the City of Rancho Santa Margarita is expected to develop, publish, and maintain an agency and department continuity plan that addresses response, recovery, and resumption of agency and department functions.

1.6 Disclosure Exemptions

Portions of this document contain sensitive information pertaining to the deployment, mobilization, and tactical operations of the City of Rancho Santa Margarita and the Orange County OA in response to emergencies. Although the vast majority of this Plan is available for public review, certain sensitive portions that include personal privacy information or information with significant implications on city, regional, state, or national security have been placed in attachments that are exempt from public disclosure under the provisions of the California Public Records Act §6254.

1.7 Approval

Pursuant to ordinance 03-04, § 9, *Sec. 6.05.080. – Emergency Plan* of the Rancho Santa Margarita Municipal Code (RSMMC), the City of Rancho Santa Margarita Disaster Council shall be responsible for the development of the City's Emergency Plan, which shall provide for the effective mobilization of all of the resources of the City, both public and private, to meet any condition constituting a local emergency, state of emergency, or state of war emergency, and shall provide for the organization, powers and duties, services, and staff of the emergency organization. Such Plan shall take effect upon adoption by resolution of the City Council.

Pursuant to ordinance 03-04, § 4, *Sec. 6.05.030. - Disaster council membership* in the City of Rancho Santa Margarita Disaster Council is hereby created and shall consist of the following:

(1) The Director of Emergency Services, who shall be Chairman.
(2) The assistant Director of Emergency Services, who shall be Vice Chairman.
(3) Such chiefs of emergency services are as provided for in a current emergency plan of the City adopted pursuant to this chapter.
(4) Such representatives of civic, business, labor, veterans, professional, or other organizations having an official emergency responsibility, as may be appointed by the Director with the advice and consent of the City Council.

Pursuant to ordinance 03-04, § 5, *Sec. 6.05.040.* - It shall be the duty of the City of Rancho Santa Margarita Disaster Council, and it is hereby empowered, to develop and recommend for adoption by the City Council, emergency and mutual aid plans and agreements and such ordinances, resolutions, rules, and regulations as are necessary to implement such plans and agreements. The Disaster Council shall meet upon call of the Chairman or upon call of the Vice Chairman (in the absence of the Chairman).

This Rancho Santa Margarita EOP will be reviewed by Orange County Emergency Managers Organization members, the OA, City Council, and all departments and organizations assigned a primary function in the City's emergency operations organization as defined in this EOP. The reviewers will provide feedback on the content of the City's EOP. Each department/organization is responsible for ensuring its willingness and preparedness to perform the functions assigned to it in this Plan.

Upon completion of preliminary review and City Council approval, the Plan will be officially adopted and promulgated by the Mayor. A letter of promulgation is located in the Preface of this Plan, which validates the concepts, roles and responsibilities, and emergency management system for the City of Rancho Santa Margarita.

Chapter Two: Rancho Santa Margarita Profile and Hazard Assessment

2.1 City of Rancho Santa Margarita Profile

Where schools, shopping centers and residential neighborhoods now stand, Native Americans once lived. On July 23, 1769, they were visited by a Spanish expedition under Captain Gaspar de Portola, who camped near the site of Tijeras Creek Golf Course in Rancho Santa Margarita.

On July 24th, the expedition headed inland to avoid the many streams and swamps in the area. They found a large plateau area and camped that night on its western edge by a canyon, which the Franciscans named San Francisco Solano. This was on the eastern side of Trabuco Creek about three miles downstream from the present site of Trabuco Oaks.

While camped here, one of the soldiers lost his trabuco, or musket, a most valuable possession to any soldier. To mark this loss, the stream was named Trabuco. The name has been associated with the mesa, the canyon, and the entire area ever since. The Spaniards founded Mission San Juan Capistrano in 1776, and ruled the region until 1821, when California became part of Mexico.

The Mexican governors carved the area around the mission into three large ranchos: Rancho Trabuco, Rancho Mission Viejo, and Rancho Santa Margarita. James L. Flood and his partner, Jerome O'Neill, purchased the combined ranchos in 1882. The huge estate was run as a working ranch into the 1920s. In 1940, the ranch was divided, with the Flood family taking the lower portion, in today's San Diego County, and the upper portion being retained by the O'Neill family. In 1942, the Navy annexed the Flood family's portion of the ranch for use as Camp Joseph H. Pendleton.

In 1948, the O'Neill family donated 278 acres of canyon bottom land to the County of Orange for park purposes. The O'Neill family donated an additional 120 acres of parkland in 1963, the same year they founded the Mission Viejo Company and drew up plans for a master-planned community of the same name.

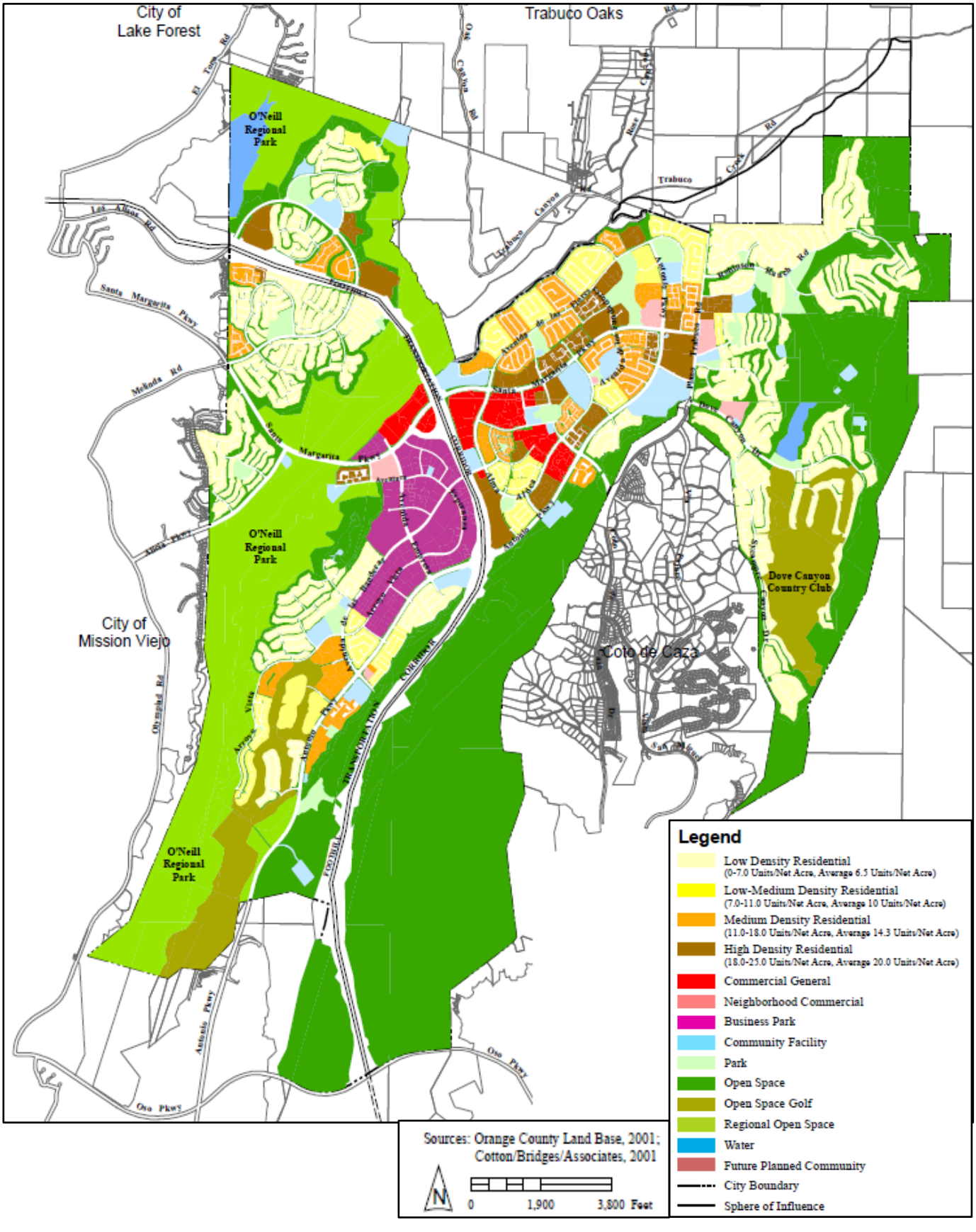
By the 1960s, a rural cluster of homes had been present in Trabuco Canyon for decades. The area's first tract developed homes didn't arrive until late in the decade in what would become Coto de Caza, which started out as a hunting and fishing resort. The area remained fairly remote until 1986, when the first homes in the new master planned community of Rancho Santa Margarita were sold. The economic boom of the 1980s also fueled home construction in nearby Dove Canyon, Robinson Ranch, Wagon Wheel and a handful of smaller developments. The area became better linked to the rest of the county in 1992, when extensions of Oso, Antonio and Alicia Parkways were completed.

In 1989, the people of the community of Rancho Santa Margarita established a Community Civic Association (CCA) for the purpose of providing a political voice for the community. The CCA, later known as the Rancho Margarita Civic Association (and still later as the Civic Council), briefly explored self-governance, but it was in 1995 that the RSM Cityhood Committee, a separate community organization, began the official drive for cityhood. Rancho Santa Margarita was planned to be an "Urban Village", offering the best of two worlds: all of the elements and advantages of a small city plus the quality of life of a small village.

In November 1999, area voters opted to incorporate the Rancho Santa Margarita Planned Community and the neighboring Robinson Ranch, Dove Canyon, Rancho Cielo, Trabuco Highlands and Walden Communities. The newly formed City of Rancho Santa Margarita incorporated on January 1, 2000, and became the 33rd city in the County of Orange.

The City is a general law city and operates under the council-manager form of government. Rancho Santa Margarita is a contract city. Police services are provided through contract with the Orange County Sheriff. Fire Protection services are provided through the Orange County Fire Authority.

Map of Rancho Santa Margarita



2.1.2 Geography and Geology

Rancho Santa Margarita occupies 13.1 square miles (approximately 8,400 acres) in southern Orange County and is the easternmost city in the county. It is bordered on the west by the City of Mission Viejo, on the north by O'Neill Regional County Park and unincorporated Trabuco Canyon, to the east by the Cleveland National Forest and to the south by the unincorporated communities of Las Flores, Wagon Wheel and Coto de Caza.

Rancho Santa Margarita is located at the southern edge of the Los Angeles Basin, within the Peninsular Ranges of southern California. No active faults are known to pass through Rancho Santa Margarita. The closest active faults are the Elsinore-Glen Ivy Fault (10.1 miles away), the Chino fault (11.1 miles away), and the Newport-Inglewood fault (14.4 miles away). Two known local faults, Cristianitos and Aliso, are believed to be inactive.

Topographically, the City consists of a series of low hills along the western drainages, rising to ridges of moderate to steep relief in the northern part of the City and areas east of the City. The City lies up against the Saddleback Mountains (in the Santa Ana Mountain Range), and elevation ranges from about 350 feet above mean sea level in the valleys to approximately 2,400 feet at the highest ridgeline north of the City. Three main north-to-south draining stream systems drain the area. Trabuco Creek and Tijeras Canyon drain the northern and western areas of the City while Dove Canyon drains the southeastern side. The City lies between 6 and 11 miles northeast of the Pacific Ocean coastline.

2.1.3 Climate

Temperatures in the City of Rancho Santa Margarita range from 45 degrees in the winter months to 93 degrees in the summer months. However, the temperatures can vary over a wider range, especially when the Santa Ana winds blow, bringing higher temperatures and very low humidity. Temperatures rarely exceed 100 degrees in the summer months (June – September) and rarely drop below 40 degrees in the winter months (November – March).

Rainfall in the City averages 12 inches of rain per year, but recorded history of rainfall in Orange County shows amounts ranging from no rain at all in some years to higher than 14 inches of rain per year. Further, rain in Rancho Santa Margarita tends to fall in large amounts during irregular and often heavy storms, as opposed to a regular pattern of rainfall.

2.1.4 Population and Demographics

Rancho Santa Margarita is a mid-sized city of homes, parks, retail shopping centers and business office parks in a natural setting of foothills, valleys, canyons and mountains. The City is a master planned community and is consistently recognized, year after year, as one of the safest cities in California with recognition at the Federal level, based on Federal Bureau of Investigation Uniform Crime Report data. The majority of Rancho Santa Margarita is fully developed with limited vacant land available for future new development. Any future growth of the City would likely result from annexation of unincorporated areas north or south of the City.

Rancho Santa Margarita has an estimated population of 49,359 according to the 2014 US Census data.

US Census Data: http://quickfacts.census.gov/qfd/states/06/0659587.html

2.1.5 City Government and Services

The City of Rancho Santa Margarita maintains a Council-Manager form of government, which provides policy and leadership direction by elected officials in the form of a City Council and managerial administration in the form of a City Manager.

The City Council consists of five members elected at large by the voters of the City. Council Members then select a Mayor and Mayor Pro Tem from their ranks to serve on an annual basis. The City Council is the community's legislative body, which sets policy, provides policy direction, adopts the City budget, and hires and oversees the City Manager. The City Manager serves as a full-time executive and acts as the City Council's chief advisor, oversees City Staff, prepares the budget, and implements the policies and programs of the City Council.

Rancho Santa Margarita is a contract city, with most public or government services provided by contracting or partnering with other governmental agencies or with private vendors. Additionally, many services in Rancho Santa Margarita are provided by private community or homeowner associations.

Direct City Services – Services provided directly by Rancho Santa Margarita staff include city management and administration, oversight of contracted services, administration of elections and the local legislative process, planning and development services, public records management, public works, public information, finance and accounting, and some community events and recreation programs.

Private Vendor Services – The City contracts with vendors to provide maintenance of public streets and traffic signals, building and safety inspections and permits, information technology, water quality and environmental programs, solid waste (trash removal) and recycling, and animal control.

Services Provided by Partnering Government Agencies – Partnering agencies are other government agencies or jurisdictions which provide services within the City of Rancho Santa Margarita, either directly under their own authority or by contract or agreement with the City. These services include police services, provided by the Orange County Sheriff's Department; fire, rescue and emergency medical services, provided by the Orange County Fire Authority; operation, maintenance and traffic control for the SR241 Toll Road, provided by Caltrans, the Transportation Corridor Agencies and the California Highway Patrol; and mass transit, provided by the Orange County Transportation Authority. Additionally, the County of Orange may also provide services or assistance, through agencies such as OC Public Works (flood control, highways, engineering, facilities and planning), OC Community Resources (parks, libraries, animal care, housing and aging services), OC Health Care Agency (public health, behavioral health, environmental health, institutional health and emergency medical services) and OC Social Services Agency (protective services and benefits programs).

2.1.6 Public Safety

Police Services - The City of Rancho Santa Margarita contracts with Orange County Sheriff's Department (OCSD) for all law enforcement services. This includes 911 response, patrol, criminal investigations and arrests, traffic enforcement, traffic accident analysis and investigation, parking enforcement and crime prevention. Emergency management is also provided by OCSD.

Fire Services - The City of Rancho Santa Margarita contracts with the Orange County Fire Authority (OCFA) for all fire services including firefighting, emergency medical services, rescue, and hazardous materials response. The Fire

Authority also provides fire inspections, enforcement of fire safety laws and fire prevention. The City, in conjunction with the Fire Authority, contracts with private ambulance companies for emergency medical transport.

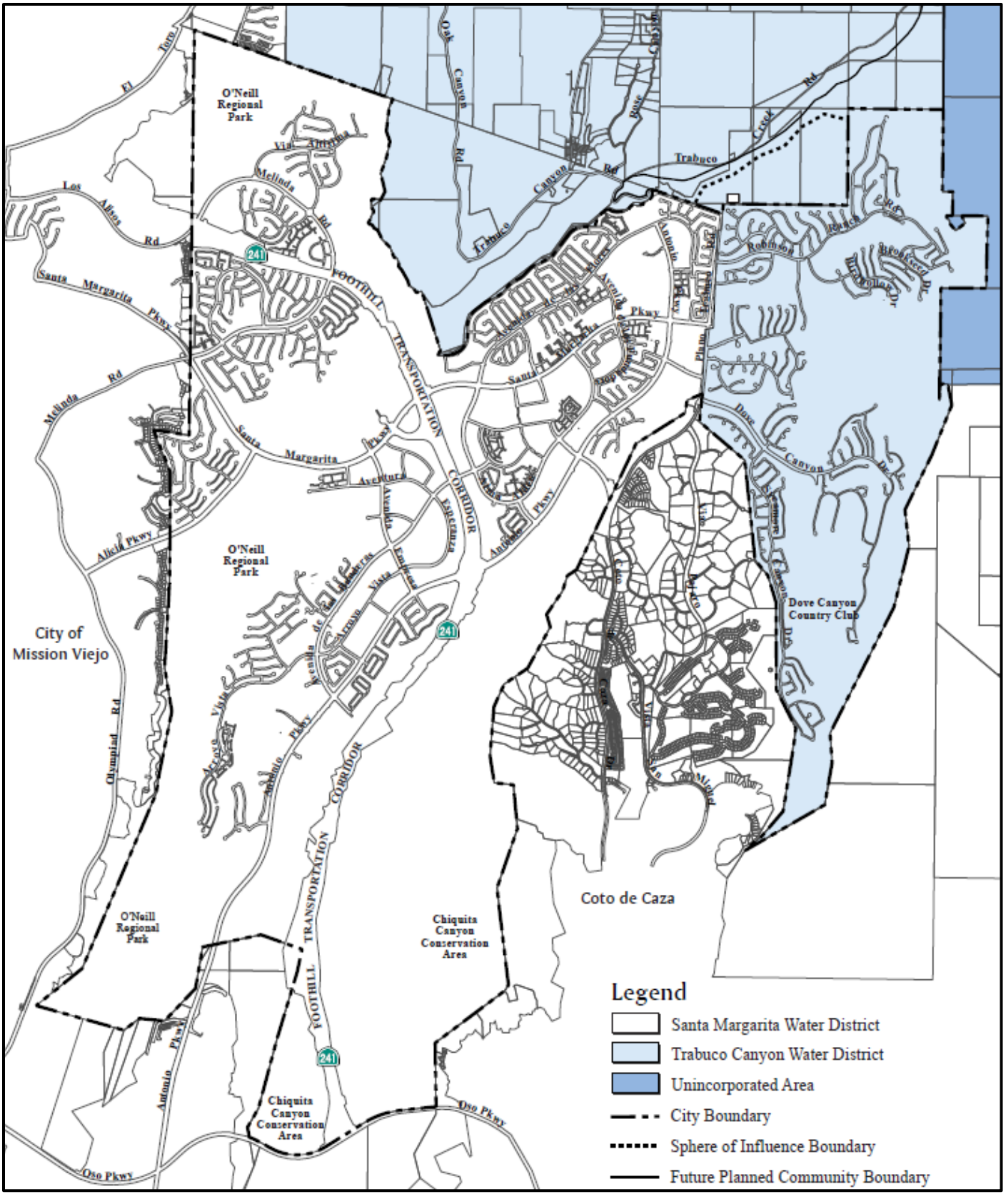
2.1.7 Utilities

Water and Wastewater - Two water districts (which are independent political subdivisions) provide the City's water supply and wastewater collection and treatment: Santa Margarita Water District (SMWD) and Trabuco Canyon Water District (TCWD). SMWD serves the majority of the City as well as areas west and south of the City, while TCWD serves the portion of the City east of Plano Trabuco Road as well as areas north of the City.

Santa Margarita Water District - Almost all SMWD drinking water is purchased from the Metropolitan Water District of Southern California (MWD) and comes from the Colorado River Project or the State Water Project. Due to sparse rainfall and limited potential for groundwater development, reliance on imported water is a necessity. SMWD operates a dual water distribution system providing both potable water and non-potable water. The Chiquita Wastewater Reclamation System provides up to 16-18 million gallons per day of reclaimed irrigation water to the area. The Chiquita System presently serves Rancho Santa Margarita, Coto de Caza, and portions of the Trabuco Canyon and Irvine Ranch Water Districts.

Trabuco Canyon Water District - TCWD has a variety of water sources, including ground water, imported water, local surface water, and recycled water. The local surface water is a small amount of urban runoff/return flow co-mingled with storm runoff captured in Dove Lake that the District pumps back to its reclaimed water seasonal storage reservoir for distribution to irrigation users. Wastewater is collected and reclaimed at the Robinson Ranch Wastewater Treatment Plant for irrigation purposes. The District's Water, Wastewater and Reclaimed Water Master Plan stresses the need to implement significant recycled and reclaimed water programs to reduce reliance on imported domestic water. Both local and regional water sources are important to the City. Surface water sources in the City are Lake Santa Margarita, the Upper Oso Reservoir, Tijeras Canyon Creek and Trabuco Creek, with several tributaries in the City's open spaces.

Map of Water District Boundaries



Power: Electric service to the City is provided by Southern California Edison (SCE), one of the nation's largest electric utilities serving over 14 million people in 50,000 square miles of central and Southern California. SCE serves all of Orange County, with the exception of the City of Anaheim (which has its own power utility) and the southern tip of Orange County (roughly from Ladera Ranch southward, which is served by San Diego Gas and Electric). SCE's primary sources of power include natural gas, hydroelectric, and renewable energies. SCE's Saddleback Service Center is located at 14155 Bake Parkway, Irvine.

Natural Gas: Southern California Gas Company is the nation's largest natural gas distribution utility, providing service to 21 million people and 20,000 square miles of central and southern California. SoCal Gas provides gas service to all of southern California, with the exception of San Diego County and the southern tip of Orange County (roughly from Ladera Ranch southward, which is served by San Diego Gas and Electric). Their Orange County Division is located at 1919 S. State College Blvd, Anaheim.

Communications: Telephone providers for landline service in the City of Rancho Santa Margarita are AT&T and Cox Communications. Wireless providers within the City of Rancho Santa Margarita are AT&T Wireless, Sprint PCS, T-Mobile and Verizon Wireless. High Speed Internet Service Providers (ISP) in the City of Rancho Santa Margarita are AT&T and Cox Communications. Television/Satellite/Cable providers in the City of Rancho Santa Margarita are Cox Communications, DirecTV and Dish Network.

Sanitation, Recycling & Recovery: CR&R Incorporated provides exclusive waste and recycling collection services in the City of Rancho Santa Margarita.

2.1.8 Transportation

Rancho Santa Margarita is bisected north-to-south by the SR 241 Foothill Transportation Corridor Toll Road. Toll roads in Orange County are owned and managed by the Transportation Corridor Agency (TCA) and maintained by the California Department of Transportation (Caltrans). The 241 Toll Road connects to the Eastern Transportation Corridor Toll Roads (SR241/261/133), which in turn connect to the 5, 405 and 91 Freeways.

The Arterial Highway system in Rancho Santa Margarita is defined using a hierarchical classification system. Roadway classifications are differentiated by size, function, and capacity and are derived directly from the County Master Plan of Arterial Highways (MPAH). There are four basic categories within the functional classification hierarchy in Rancho Santa Margarita, ranging from a six-lane divided roadway with the highest capacity, to a two-lane undivided roadway with the lowest capacity. These roadways are owned and maintained by the City and are briefly summarized below:

Major Arterial: Typically constructed within a right-of-way of 120 feet, with a curb-to-curb pavement width of 102 feet, this roadway has a maximum capacity of 56,300 average daily trips and a peak hour capacity of 5,630 trips. Major Arterials carry a large volume of regional traffic not handled by the freeway and toll way system. They are typically six-lane, divided roadways. Major Arterial highways in Rancho Santa Margarita are Santa Margarita Parkway, Antonio Parkway and Alicia Parkway.

Primary Arterial: Typically constructed within a right-of-way of 100 feet, with a curb-to-curb pavement width of 84 feet, this roadway has a maximum capacity of 37,500 average daily trips and a peak hour capacity of 3,750 trips. A Primary Arterial's function is similar to that of a Major Arterial, but with a smaller capacity. Primary Arterials are typically four-lane, divided roadways. The Primary Arterial in Rancho Santa Margarita is Avenida Empresa.

Secondary Arterial: Typically constructed within a right-of-way of 90 feet with a curb-to-curb pavement width of 84 feet, these roadways serve as collectors, distributing traffic between local streets and four- to six-lane divided arterials. The maximum capacity of this roadway is 31,000 average daily trips and 3,100 peak hour trips. Although some Secondary Arterials serve as through routes, most provide more direct access to surrounding land uses than major or primary arterials. Secondary Arterials in Rancho Santa Margarita are Melinda Road, Avenida de las Banderas, Plano Trabuco Road, Alas De Paz, La Promesa, Bienvenidos, and portions of Antonio Parkway, Robinson Ranch Road, Alma Aldea, and Dove Canyon Drive.

Collector Roadway: A collector roadway is a two lane, unrestricted access roadway with capacity ranging from 12,500 average daily trips for two-lane undivided to 18,000 average daily trips. A collector facility is designed to provide access to residential areas. Collector Roadways in Rancho Santa Margarita are Esperanza, Arroyo Vista, and portions of Avenida de las Flores, Robinson Ranch Road and Alma Aldea.

Rancho Santa Margarita was developed as a series of Planned Communities approved prior to incorporation, which include the Rancho Santa Margarita Planned Community, Rancho Trabuco Planned Community, Robinson Ranch Planned Community and Dove Canyon Planned Community. Each of these community plans features a planned roadway system of collector and local streets that interface with MPAH roadways, which may be public roadways or private roadways owned and maintained by the respective Homeowners Association.

There are no airports, freight or passenger rail lines, navigable waterways or bus depots in the City of Rancho Santa Margarita. The Orange County Transportation Authority maintains passenger bus service routes passing through the City; however the actual routes and stops are subject to change with passenger counts and budgetary restraints.

2.1.9 Schools

The City is served by two public school districts and several private schools. Each school is required to conduct emergency drills during the school year including fire, earthquake, and shelter-in-place drills.

Saddleback Valley Unified School District (SVUSD) manages the emergency preparedness and response planning for schools that fall within its district. SVUSD works closely with the Orange County Sheriff's Department on safety and evacuation planning.

SVUSD Schools in Rancho Santa Margarita

- Rancho Santa Margarita Intermediate School, 21931 Alma Aldea, Grades 7-8
- Cielo Vista Elementary School, 21811 Avenida de los Fundadores, Grades K-6
- Melinda Heights Elementary School, 21001 Rancho Trabuco, Grades K-6
- Robinson Elementary School, 21400 Lindsay Drive, Grades K-6
- Trabuco Mesa Elementary School, 21301 Avenida de las Flores, Grades K-6

Capistrano Unified School District (CUSD) manages the emergency preparedness and response planning for schools that fall within its district. CUSD works closely with the Orange County Sheriff's Department on safety and evacuation planning. The CUSD Emergency Operations Center is located at its district office: 33122 Valle Road, San Juan Capistrano, CA 92675.

CUSD Schools in Rancho Santa Margarita:

- Arroyo Vista Elementary School, 23371 Arroyo Vista, Grades K-8
- Tijeras Creek Elementary School, 23072 Avenida Empresa, Grades K-5

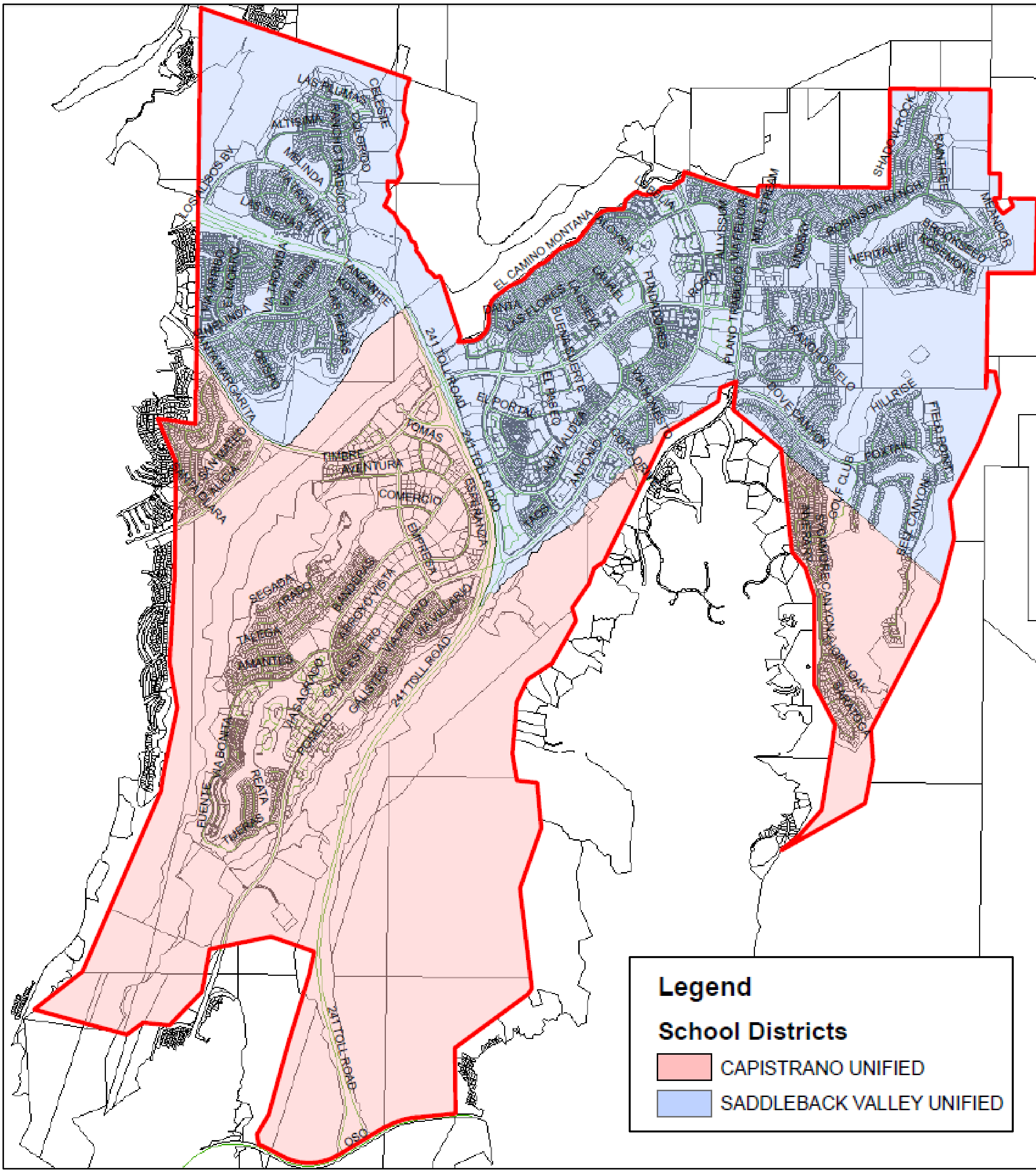
Capistrano Unified School District also maintains the following schools which are immediately outside the City of Rancho Santa Margarita, but serve a significant portion of RSM residents:

- Tesoro High School, 1 Tesoro Creek Road, Las Flores, Grades 9-12
- Las Flores Middle/Elementary Schools, 25862 Antonio Parkway, Las Flores, Grades K-5/6-8

Private Schools in Rancho Santa Margarita:

- Santa Margarita Catholic High School, 22062 Antonio Parkway, Grades 9-12
- Mission Hills Christian School, 29582 Aventura, Grades K-8,
- Rancho Viejo School, 29782 Avenida de las Banderas, Grades K-8
- Serra Catholic School, 23652 Antonio Parkway, Grades K-8
- St John's Episcopal School, 30382 Via Con Dios, Grades K-8

Map of School District Boundaries



2.1.10 Homeowners Associations

Nearly all residential properties within the City are included within a private community or homeowners association (HOA). HOAs are separate legal entities but provide to their residents public services similar to those provided by government, generally by a property management firm contracted to the HOA. HOAs:

- Own, maintain and operate the parks, recreation or athletic fields in the City with the exception of two parks. The first exception is the skate park, which resides on property owned by the SAMLARC HOA (see below). The second exception is the dog park, which is on City-owned property adjacent to Canada Vista Park. Maintenance responsibilities for the skate park and dog park are shared between the City and SAMLARC HOA.
- Maintain landscaping and vegetation management of common area properties or open spaces.
- Enforce Covenants, Conditions and Restrictions relating to private property maintenance and resident rules of conduct. Various HOAs, also as required by their CCRs, maintain landscaping within the public right of way such as within medians and street-scape parkways.
- For private streets within HOAs, provide all street maintenance and repair, street signage and lighting and traffic control devices.
- For some associations, provide private security patrols and restricted gate access.
- Community associations in the City of Rancho Santa Margarita are (see maps):
    - Rancho Santa Margarita Landscape and Recreation Corporation (SAMLARC). SAMLARC is a master association for all residential communities and parks in the City west of Plano Trabuco Road. SAMLARC is divided into 99 sub-associations for specific neighborhoods.
    - Robinson Ranch Homeowners Association
    - Trabuco Highlands Homeowners Association
    - Dove Canyon Homeowners Association
    - Rancho Cielo Homeowners Association
    - Walden Homeowners Association
    - Community Associations of Rancho (CAR). CAR is a collaborative organization made up of City HOA's, to exchange information or work together on community improvement projects.

2.1.11 Rancho Santa Margarita Commercial Maintenance Corporation (SAMCORP).

SAMCORP is a property management association covering the non-residential business and retail properties in the City, west of Plano Trabuco Road.

2.1.12 Critical Infrastructure

According to the United States Department of Homeland Security, critical infrastructure provides the essential services that serve as the backbone of the economy, security, and health.* This includes the power used in homes and businesses, drinking water, schools, hospitals, transportation routes, and the communication systems used daily. The list of critical infrastructure includes essential government buildings, bridges, communications buildings, reservoirs, pump stations, shelter locations, and schools along with which entity is responsible for completing damage assessment following a disaster.

* http://www.dhs.gov/what-critical-infrastructure

Critical Infrastructure in Rancho Santa Margarita

Facility Name	Address	Damage Assessment
Essential Government Facilities		
RSM City Hall	22112 El Paseo	City
RSM Library	30902 La Promesa	County
RSM Postal Annex	29862 Ave. de las Banderas	Federal Government
OCFA Station 45	30131 Aventura	OCFA
Pac Bell Central Switch	30161 Aventura	Communications
Santa Margarita Substation	30031 Santa Margarita Pkwy	Utilities
Bell Tower Regional Community Center	22232 El Paseo	City
Schools		
Arroyo Vista Elementary	23371 Arroyo Vista	State
Tijeras Creek Elementary	23072 Ave. Empresa	State
Cielo Vista Elementary	21811 Ave. de las Fundadores	State
Melinda Heights Elementary	21001 Rancho Trabuco	State
Robinson Elementary	21400 Lindsay	State
Trabuco Mesa Elementary	21301 Ave. de las Flores	State

RSM Intermediate	21931 Alma Aldea	State
Las Flores Elementary	25862 Antonio Pkwy	State
Las Flores Middle School	25862 Antonio Pkwy	State
Tesoro High School	1 Tesoro Creek Road	State
Mission Hills Christian	29582 Aventura	Private
Rancho Viejo School	29782 Avenida de las Banderas	Private
Santa Margarita Catholic High School	22062 Antonio Pkwy	Private
Serra Catholic	23652 Antonio Pkwy	Private
St. John's Episcopal	30382 Via Con Dios	Private
Bridges		
Banderas Bridge	Ave. de las Banderas/241 Toll Road	State
Santa Margarita Bridge (1)	Westbound Santa Margarita Pkwy over Trabuco Creek Eastbound Santa Margarita Pkwy over Trabuco Creek	City
Santa Margarita Bridge (2)	Santa Margarita Pkwy over the State Route 241 (Toll Road)	State
241 Toll Road Bridge	241 Toll Road over Trabuco Creek	State
Melinda Road Bridge	Melinda Road over the State Route 241 (Toll Road)	City
Los Alisos Bridge	Los Alisos over the State Route 241 (Toll Road)	City
Antonio Parkway Bridge (1)	Antonio Parkway over Tijeras Creek	City
Antonio Parkway Bridge (2)	Antonio Parkway over the State Route 241 (Toll Road)	City
241 Toll Road/Tijeras Creek	State Route 241 (Toll Road) over Tijeras Creek	State
Canada Chiquita Bridge	Canada Chiquita Road over the State Route 241 (Toll Road)	City
Pedestrian Bridge	State Route 241 (Toll Road) North of Santa Margarita Pkwy	City
Lift Stations		

Plano Lift Station – Sanitary Sewer	24152 Antonio Parkway	Santa Margarita Water District
Golf Lift Station - Sanitary Sewer	24233 Antonio Parkway	Santa Margarita Water District
Trabuco Lift Station – Sanitary Sewer	22352 Alicia Parkway	Santa Margarita Water District
Reservoirs		
Rancho Trabuco Reservoir	NE of Celeste & Altisima	Santa Margarita Water District
Trabuco Ridge Reservoirs (2)	South of Celeste & Altisima	Santa Margarita Water District
Star Reservoir	NE of Via del Lago & Via del Nido	Santa Margarita Water District
Foothill Reservoir	NE of Antonio & Bienvenidos	Santa Margarita Water District
Island Pasture Reservoir	NE of Camino Altura	Santa Margarita Water District
Regulating Reservoir - South County	So. End of Antonio Pkwy	Santa Margarita Water District
Dove Canyon Reservoir	No. of Field Point	Dove Canyon Master Association
Plano Reservoir	31851 Trabuco Canyon Road	Santa Margarita Water District
Pump Stations		
Mesa Pump Station	21662 Antonio Parkway	Santa Margarita Water District
Altisima Pump Station	NW Corner of Altisima & Los Alisos	Santa Margarita Water District
Trabuco Pump Station	22352 Alicia Parkway	Santa Margarita Water District
Island Pump Station	NW Corner of Santa Margarita Pkwy & 241	Santa Margarita Water District
Foothill Pump Station	SE Corner of Antonio Pkwy & Bienvenidos	Santa Margarita Water District
Island Pump Station	North of Camino Altura	Santa Margarita Water District
Antonio Pump Station	Antonio Pkwy north of Tijeras	Santa Margarita Water District
Robinson Ranch Pump Station	21397 Heritage Drive	Santa Margarita Water District
Zone 4 Fire Pump Station	29574 Camino Altizano	Santa Margarita Water District

2.2 Hazard Assessment

A hazard analysis provides information on the types of hazards that are reasonably likely to occur in or affect the City of Rancho Santa Margarita, an assessment of the risk to life, property and the environment that may result from each hazard event and potential locations within or around the City that may be susceptible to the event.

Hazard analysis is dependent on the availability of data for each hazard. Analysis is based on the record of historical events as well as future projections, and data is drawn from such disciplines as geography and geology, climate and weather, population and demographics, infrastructure and development, and homeland security. Gathering data for hazard analysis requires a commitment of resources from City departments and relevant outside agencies.

Rancho Santa Margarita's Hazard Analysis is prepared by multi-disciplinary teams of public safety and local government staff, including representatives from emergency management, police services, fire services, public works and engineering, development services, health care, and utilities. Hazard analysis consists of a four step process:

- Listing all natural, technological or manmade disasters or emergency events that may occur in or near the City;
- Rating the probability of occurrence of each event, rated on a scale of 1 to 10, with 10 being the highest probability of occurrence;
- Rating the potential impact on the community of each event, rated on a scale of 1 to 10, with 10 being the greatest impact; and
- Multiplying the probability of occurrence by the impact on the community, resulting in a numerical ranking of potential hazards.

This numerical ranking is not a mathematical certainty, but instead is an informal guide for prioritizing planning efforts, preparedness resources and community education.

Hazard analysis for the City of Rancho Santa Margarita indicates that the City is at risk from a variety of hazards associated with natural disasters, technological incidents or man-made events. Many of these hazards have the potential to cause disasters exceeding any one jurisdiction's capabilities to successfully respond and manage the event, making coordinated command and control and the support of outside resources essential.

Current Hazard Analysis for the City of Rancho Santa Margarita

City of Rancho Santa Margarita Hazard Analysis				
Tier	**Hazard**	**Probability of Occurrence**	**Impact of Occurrence**	**Hazard Rating**
1	Wildfire	9	8	72
1	Earthquake	7	8	56
2	Storm/Flash Flood	7	6	42
2	Heat	7	5	35
2	Energy Crisis/Power Failure	7	4	28
2	Pandemic/Public Health Emergency	5	5	25
3	Landslide	5	4	20
3	Hazardous Materials Release	5	4	20
3	High Wind (Santa Ana/Tornado)	6	3	18
3	Drought	5	3	15
3	Aircraft Accident	2	7	14
3	Urban Fire	3	4	12
3	Dam/Reservoir/Water Tank Failure	3	4	12
3	WMD/Terrorism/National Security	1	5	5
3	Civil Disturbance/Active Shooter	1	3	3

2.2.1 Aircraft Incident

A major air crash that occurs in a heavily populated residential area can result in considerable loss of life and property. The use of aircraft as a WMD must always be considered. The events of September 11, 2001, make it clear that any size aircraft becomes a potential weapon in the hands of terrorists. The impact of a disabled aircraft as it strikes the ground creates the likely potential for multiple explosions resulting in intense fires. Regardless of where the crash occurs, the resulting explosions and fires have the potential to cause injuries, fatalities, and the destruction of property at and adjacent to the impact point. The time of day when the crash occurs may have a profound effect on the number of dead and injured. Damage assessment and disaster relief efforts associated with an air crash incident will require support from other local governments, private organizations, and state and federal governments.

It can be expected that few, if any, airline passengers will survive a major air crash. The intense fires, until controlled, will limit search and rescue operations. Police barricades will be needed to block off the affected area. Crowds of onlookers and media personnel will have to be controlled. Emergency medical care, food, and temporary shelter will be required by injured or displaced persons. Many families may be separated, particularly if the crash occurs during working hours; a unification center should be established at a location convenient to the public. In incidents involving civilian aircraft, investigators from the National Transportation and Safety Board (NTSB), with support from the Orange County Sheriff-Coroner Department, will have jurisdiction over the crash area and an investigation will be completed before the area is released for clean-up. The military has jurisdiction over any incident involving military aircraft. The clean-up operation may consist of removing large debris, clearing roadways, demolishing unsafe structures, and towing demolished vehicles.

It can be anticipated that the mental health needs of survivors, responders, and the surrounding residents will greatly increase due to the trauma associated with such a catastrophe. A coordinated response team, comprised of behavioral health professionals, should take a proactive approach toward identifying and addressing mental health needs stemming from any traumatic disaster (for more information see the Orange County Aviation Accident Annex and/or NTSB response plan).

It is impossible to completely prepare, either physically or psychologically, for the aftermath of a major air crash. However, since Southern California has become one of the nation's most overcrowded air spaces, air crash incidents are no longer a probability but a reality. Therefore, air crash incidents must be included among other potential disasters. The Federal Aviation Agency (FAA) requires that John Wayne Airport conduct a field exercise every three years. OA jurisdictions including the City of Rancho Santa Margarita participate in this exercise.

Air crash incidents are not limited to large commercial planes; even small planes can cause major problems. On December 16, 2002, a Piper PA-24-250 went down in an Anaheim Hills neighborhood. The propeller came to rest in the principal impact crater (PIC) and the inverted engine came to rest several feet from the PIC in the direction of the main wreckage. The cabin area came to rest in a garage. Witnesses stated that the garage exploded and burst into flames several minutes after the accident. Wreckage pieces that were not inside the garage were not charred. Approximately 2/3 of the left wing separated from the cabin area by the garage wall. A portion of the right wing was in the street in front of the garage. Debris from the airplane was strewn along for approximately 1/4 mile. Increasingly heavy air traffic over the greater Los Angeles metropolitan area and Orange County are constant reminders of the possibility of aircraft accidents in Orange County. Within and surrounding Orange County there are multiple airports with air traffic lanes within the County. Aircraft crashes may occur anywhere within the County, therefore residential areas, business districts, and industrial areas are all equally in jeopardy.

The airports in and adjacent to Orange County which handle the greatest amount of air traffic are as follows:

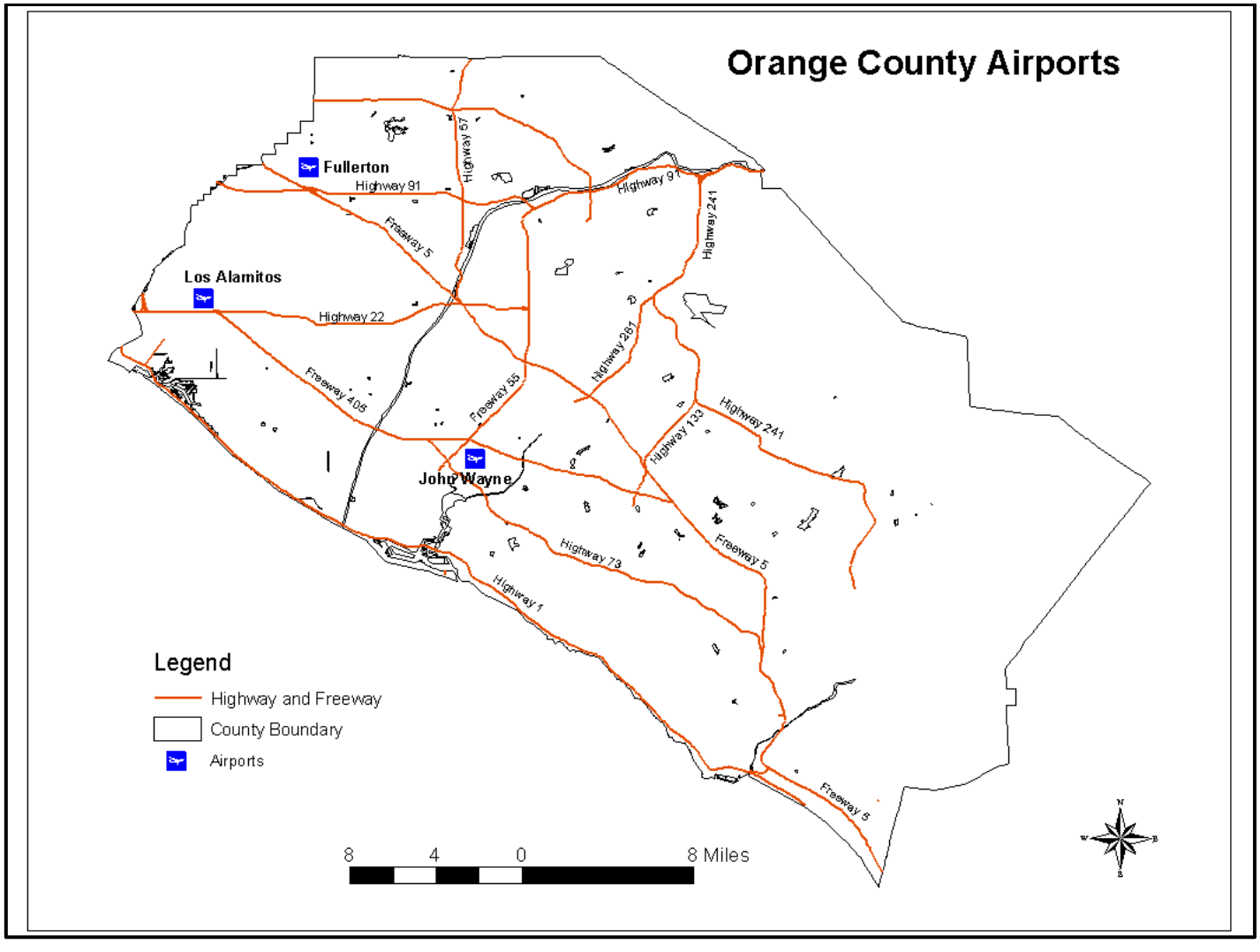
- Los Angeles International Airport (LAX) - LAX is the fifth busiest airport in the world based on number of passengers. In 2006, LAX handled 70 percent of the passengers, 75 percent of the air cargo, and 95 percent of the international passenger and cargo traffic in the five-county Southern California region. There were 656,842 takeoffs and landings in 2006. Planes arrive and depart at a rate of one per minute.
- Long Beach Airport (LGB) - LGB has a maximum of 41 daily commercial flights and 25 commuter flights. There are strict noise pollution controls at LGB and current noise level allowances limit airport operations to the hours of 7:00 AM to 10:00 PM. LGB is located just over the border of Los Angeles County, 34 miles northwest of Rancho Santa Margarita.
- John Wayne Airport (SNA) – SNA is Orange County's largest airport, with 9.6 million passengers served in 2006. Similar to LGB, SNA's hours of operation are restricted to 7:00 AM to 10:00 PM. SNA is located 16 miles northwest of Rancho Santa Margarita, at the junction of the cities of Costa Mesa, Irvine and Newport Beach.
- Ontario Airport (ONT) - Passenger traffic at ONT has increased steadily for the past 10 years. In 2006, 7 million passengers used the airport and 602,326 tons of cargo was shipped.
- Burbank Airport (BUR) - BUR has experienced approximately a 9.4 percent growth rate since 1993. In 2006, it served 5,689,291 travelers on seven major carriers, with more than 70 flights daily. Also, airport hours of operation are restricted to 7:00 AM to 10:00 PM.
- Los Alamitos Armed Forces Reserve Station - Los Alamitos is an active military base available to the region for receiving disaster resources from throughout the State. Numerous military flights leave and land on a daily basis; these flights could potentially carry an additional risk of munitions or other explosive material. This station is located in the northwest part of the County in the City of Los Alamitos close to LGB and the Los Angeles County line, 28 miles northwest of Rancho Santa Margarita.
- Fullerton Airport - Fullerton Airport is the only general aviation airport in Orange County. Aircraft flying in and out of Fullerton Airport are likely to be smaller personal craft than those at other commercial airports nearby. The Fullerton Airport is open 24 hours; the control tower is operational from 7:00 PM to 9:00 PM. Fullerton Airport is in the northern part of the county at the western border of the City of Fullerton, 27 miles northwest of Rancho Santa Margarita.
- Marine Corps Base Camp Pendleton - MCB Camp Pendleton is one of the US Marine Corps' largest facilities. Air traffic generated in the area primarily includes rotary wing (helicopter) traffic, but also some fixed-wing propeller or small jet aircraft. As with any military air traffic, these flights may include the possibility of munitions or other explosives on board. MCB Camp Pendleton is located approximately 20 miles to the southeast of Rancho Santa Margarita.

Aircraft flying over Orange County are positioned in the Los Angeles Terminal Control Area (TCA). The TCA is airspace restricted to large, commercial airliners. Each TCA has an established maximum and minimum altitude in which a large aircraft must travel. Smaller aircraft desiring to transit the TCA may do so by obtaining Air Traffic Control clearance. Aircraft departing from airports other than LAX, whose route of flight would penetrate the TCA, are required to give this information to Air Traffic Control. Pilots operating small aircraft often rely on geographical landmarks, rather than charts, to indicate their locations. If a pilot is unfamiliar with the geographical landmarks of the Southern California basin, the pilot may misinterpret a particular landmark and inadvertently enter the restricted TCA airspace. This misunderstanding could result in a mid-air collision.

Other Mass Transit Situations - The City of Rancho Santa Margarita has no passenger or cargo railways or subways, no seaport facilities and no mass transit stations. Public transit or school buses represent the only other mass

transportation scenario. While an incident involving busing could potentially result in dozens of injured, this type of incident would likely be handled by available emergency responders with minimal or no implementation of the EOP.

Map of Orange County Airport Locations:



2.2.2 Civil Unrest, Disobedience, and Riot

Civil unrest is an intentional, human-caused disruption of normal community activities which represents a material threat of physical harm to life or property. Civil unrest is distinguished from routine disturbances or disputes in that it usually occurs in large, multiple or widespread incidents, making the normally available law enforcement resources insufficient to manage the scope of events.

Civil unrest can occur by:

- Large demonstrations designed to interfere with traffic flow or block access to properties
- Arson, vandalism or looting against random or targeted victims
- Rioting, violence or assaults against random or targeted victims
- Targeting of public facilities, or high-profile or controversial private properties
- Hit and run tactics or shifting events, designed to divide or exhaust law enforcement efforts
- Diversionary events to mask other motives or targets
- Additionally, terrorist actors could use the chaos of civil unrest to camouflage a terrorist act.

Civil unrest can be triggered rapidly by a specific event or incrementally with growing public anger or discontent. Civil unrest may be a spontaneous outbreak of crowd behavior or an organized event instigated by a leader or interest group. Examples of triggering events include:

- Reactions to verdicts in high-profile court cases (either retaliation or celebration)
- Reactions to the outcome of large sporting events
- Demonstrations occurring in conjunction with political, economic, business, industrial or religious conferences or summits
- Demonstrations for or against new legislation or social, government, corporate or economic policies
- Acts of domestic or international terrorism or anti-government agitation.

Due to the variety of sources of civil unrest and the variety of ways that civil unrest can manifest itself, virtually any area of the City where the public can gather may be vulnerable. Specific locations of concern can include:

- Government buildings, facilities or meeting sites
- Conference or convention centers
- Schools, colleges or universities
- Corporate headquarters or business offices
- Parks, major traffic routes or intersections

As mentioned, civil unrest differs from routine disturbances in that additional law enforcement resources must be assembled to manage the scope of events. In addition to resolving the actual disturbances, essential facilities and critical infrastructure may need to be secured and protected. The time required to assemble the additional resources represents the greatest threat to both public safety personnel and the public.

Incidents of civil unrest may exceed the capacity of a single jurisdiction to handle the situation, or may occur in multiple jurisdictions simultaneously. When this occurs, a request for additional resources is initiated and is accommodated through mutual aid agreements.

During an episode of civil unrest, available resources and equipment may be allocated and reallocated based on changing conditions and priorities. These operations are labor intensive and amplify the need for preplanning, aggressive organizational techniques and a greater degree of coordination and organization.

Active participation by law enforcement, city officials and other public safety forces in Unified Command (UC) and ICS, as adopted by SEMS, is essential if a coordinated effort is to be initiated and maintained.

Southern California has faced civil unrest in various forms since the Watts Riots of 1964, including the 1992 Rodney King verdict, the Anaheim Civil Unrest during the summer of July 2012, and the Fullerton Kelly Thomas trial in January of 2014.

2.2.3 Dam and Reservoir Failure

Dam and reservoir failures can result from a number of natural or man-made causes such as earthquakes, erosion of the foundation, improper silting, rising flood waters, malicious events and structural/design flaws.

A dam or reservoir failure has the capability of causing loss of life, damage to property, the displacement of persons residing in the inundation path, and other hazards. Damage to the electric generating facilities and transmission lines could also impact life support systems in Rancho Santa Margarita and neighboring cities.

Governmental assistance could be required and may continue for an extended period. These efforts would be required to support evacuation, search and rescue, debris removal and roadway clearing, the demolishing of unsafe structures, reestablishment of public services and utilities, and continued care and welfare for the affected population including, sheltering and temporary housing for displaced persons, as required.

Rancho Santa Margarita has three reservoirs located within the City: Upper Oso Reservoir, Upper Chiquita Reservoir, and Trabuco Water Treatment Plant. The Upper Oso Reservoir is located near the 241 Toll Road and extends into Mission Viejo. The reservoir has been in use since 1979 and holds 1.3 billion gallons of water. The Upper Chiquita Reservoir was built in 2011 on the western slope of Chiquita Canyon and holds 244 million gallons of water.

The following is a listing of registered Dams/Reservoirs in and around Rancho Santa Margarita, their location, owner/operator, year built and capacity.

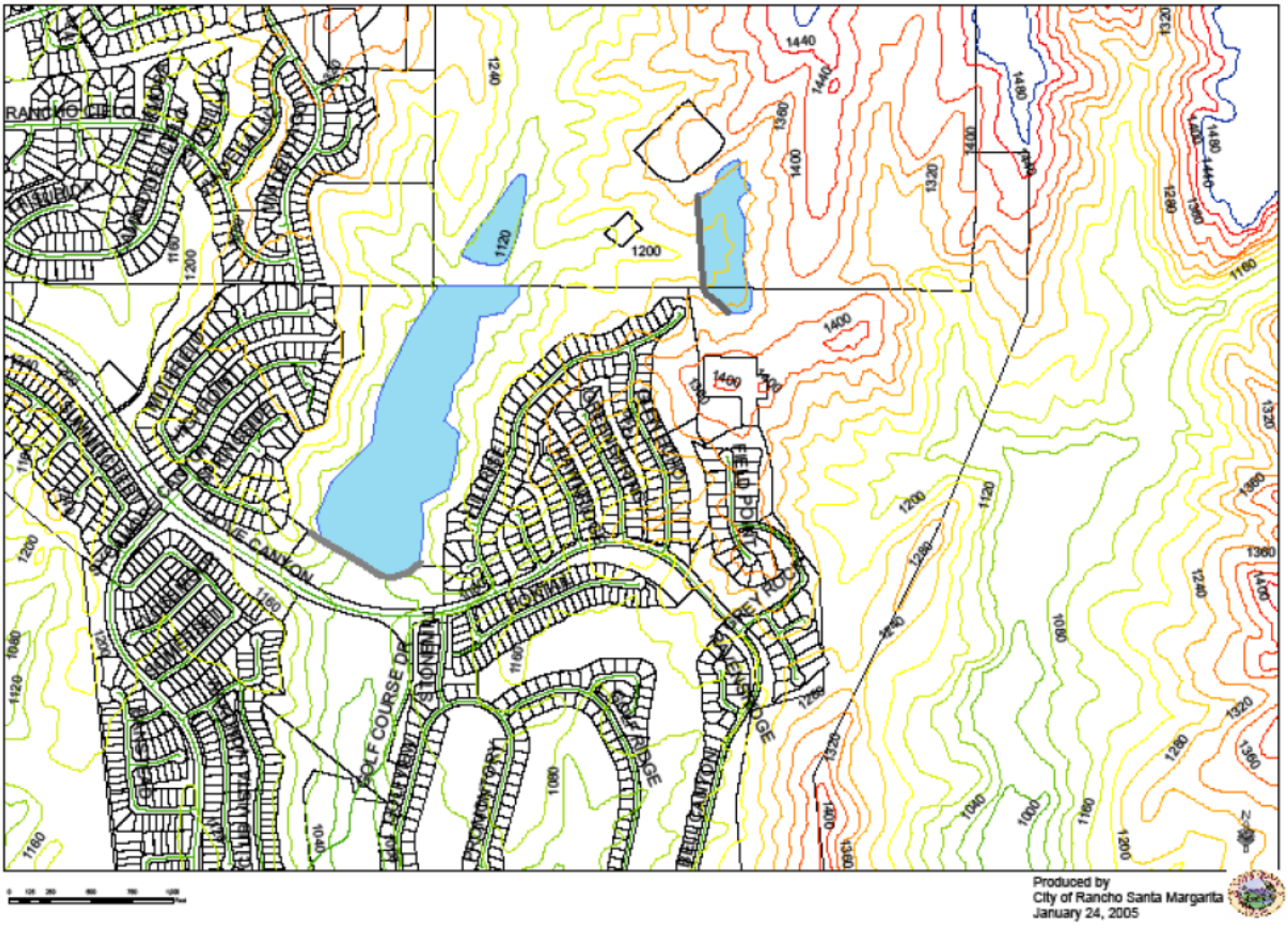
Listing of Registered Dams/Reservoirs in and around Rancho Santa Margarita:

Dam/Reservoir Name	Owner	Year built	Capacity by acre feet	Location(city and latitude and longitude		
Dove Canyon	Dove Canyon Master Association	1989	415	Dove Canyon	33.6386	-117.57
El Toro Reservoir	El Toro Water District	1967	877	Mission Viejo	33.6241	-117.67
Lake Mission Viejo	Lake Mission Viejo Association, Inc.	1976	4,300	Mission Viejo	33.6271	-117.65
Portola	Santa Margarita Water District	1980	586	Coto de Caza	33.6307	-117.58
Trabuco	Trabuco Canyon Water District	1984	138	Rancho Santa Margarita	33.6445	-117.56
Upper Chiquita	Santa Margarita Water District	2012	753.5	Rancho Santa Margarita	33.5883	-117.62
Upper Oso	Santa Margarita Water District	1979	3,700	Mission Viejo	33.6597	-117.63

In September of 1998, the 5 million gallon water storage tank in the City of Westminster ruptured due to construction defects and corrosion over time. The water flooded the local fire station and nearby homes resulting in extensive damage, but no loss of life. City employees, Orange County Fire Authority, neighboring fire services, and the Red Cross assisted residents with damage assessment and recovery. The city lost its source of water storage as the other 5 million gallon tank of similar age and construction was removed as a precautionary measure. A new reservoir came on-line in March 2003 with two 8 million gallon water storage tanks, built with more rigorous inspections and permits.

The dams and reservoirs affecting Orange County are considered potential terrorist targets. The weapon most likely to be used would be explosives with the goal of collapsing the dam. Such an event would result in an inundation event with little or no warning. The potential of using other types of weapons such as chemical or biological are considered low due to the large amount of material that would be required to contaminate the reservoirs, but the potential does exist. This scenario would only apply to those dams where the reservoirs are used for drinking water. Additional information on dam/reservoir structures, inundation maps, and proposed evacuation routes can be found in the Op Area Dam/Reservoir Failure Annex.

Map of Dam Locations in Rancho Santa Margarita



2.2.4 Disease Outbreak (Large Scale)

A disease outbreak arises when the incidence of disease within a defined community or geographical area or region during a specified time period (e.g. influenza season) exceeds what would normally be expected. An outbreak may occur with a single case of a disease long absent from a population (e.g. smallpox), an agent (e.g. bacterium or virus) not previously recognized in that community or geographical area, or the emergence of a previously unknown disease within a community. The outbreak may occur in a restricted or specific geographical area, may extend over several countries and continents; may occur naturally, be introduced intentionally (e.g. bioterrorism); and may last for a few days, weeks, or for several years.

Bioterrorism is a significant concern throughout the County and specifically Orange County. The intentional release of anthrax, smallpox or other highly communicable or virulent diseases would tax all available medical resources within the County. Such an incident could cause a significant impact to life, safety and the economy of Orange County.

Certain communicable diseases are required to be reported to the local health department according to the State of California Code of Regulations. The Orange County Health Care Agency Epidemiology and Assessment (E&A) unit's

medical directors, public health nurses, and epidemiologists investigate individual cases and outbreaks of reported communicable diseases.

See http://ochealthinfo.com/phs/about/dcepi/epi/physprov/report for the list of reportable diseases.

Statistical data on communicable diseases in the County are available at:
http://ochealthinfo.com/phs/about/dcepi/epi/geninfo/stats

Currently, the diseases of concern for epidemic in Orange County include: influenza (including seasonal, novel and pandemic influenza strains), childhood vaccine preventable diseases such as measles, foodborne illness including norovirus, West Nile Virus (WNV), and emerging pathogens such as Middle East Respiratory Syndrome Coronavirus (MERS-CoV). In 2009, H1N1 influenza pandemic spread quickly and led to over 50 deaths in Orange County. The 2009 H1N1 influenza virus quickly established itself as a seasonal influenza strain and was the predominant virus in the 2013-2014 influenza season, causing over 20 deaths in persons under 65 years of age in Orange County. Orange County continues to monitor for importation of emerging disease in other countries such as avian influenza H7N9 and MERS-CoV.

The measles outbreak in 2015 linked to the Disneyland Resort in Anaheim is an example of a highly contagious virus and its ability to spread easily across the County. The measles outbreak reached Rancho Santa Margarita when a child at a local private school tested positive for the virus.

Pandemic influenza is likely to occur in "waves" of infection, each lasting approximately 8 to 12 weeks and separated by weeks of inactivity. In total, it could last from 18 months to several years. An influenza pandemic is likely to affect everyone in Orange County at some point and can greatly impact "business as usual" in any sector of society or government. A pandemic will place a great strain on existing health care resources and may exceed available resources. Personnel, supplies, equipment, and pharmaceutical responses (e.g., vaccination and antivirals) may be in short supply and/or unavailable and non-pharmaceutical responses (e.g., strict adherence to respiratory hygiene, hand washing, self-isolation, and social distancing) will be the most effective strategies to limit transmission. This will make it difficult to pre-treat potentially exposed individuals and will limit treatment options once infection sets in. If transportation is compromised in the region or country, food and other essentials may be unavailable as well. Outbreaks are expected to occur simultaneously throughout much of the County and the State, which may limit the availability of mutual aid assistance and resources from other areas. The County, with the leadership of the Orange County Health Care Agency (OCHCA), has developed a Disease Outbreak Response Annex to the Op Area EOP that will support the County's response to this potential threat.

2.2.5 Drought

In California, drought is commonly associated with below normal precipitation. Drought impacts increase with the length of a drought, as water supplies in reservoirs are depleted and groundwater levels decline due to increased pumping. The extent of drought impacts is dependent on many factors including climate, water use patterns, available water supplies and geography.

Defining when a drought occurs is commonly a function of dry conditions' impact on water users and their responses, which may vary depending on the severity of the drought. A drought does not have a clearly defined beginning and end and it does not impact all water users equally. As a result of the variability and severity of droughts, varying impacts will be experienced by different regions and sectors.

Being proactive to drought management requires continuous monitoring of factors indicating the onset and severity of drought, as well as impacts to stakeholders. The Department of Water Resources (DWR) Drought website (www.water.ca.gov/drought) and California Data Exchange Center monitor precipitation, snowpack, and reservoir conditions. Drought and water shortage data will be used to assess drought and impacts, and help develop appropriate drought responses. The DWR Drought website will also provide information on available emergency, technical and financial assistance programs, tips on water conservation, guidance on water transfers, and links to other State, federal, and local agency websites.

An effective drought response requires clear communication among State, Federal, Local and Tribal agencies and stakeholders and the timely dissemination of information to the public. An emergency drought response will be implemented in accordance with the Standardized Emergency Management System (SEMS) mandated for multi-agency and multi-jurisdictional responses to emergencies in California. Local governments, water agencies, and individual actions are usually the first line of drought response before impacts become severe and reach emergency levels.

Governor Brown proclaimed a State of Emergency for the ongoing drought in California and issued an Executive Order on April 1, 2015, requiring the State Water Resources Control Board to impose restrictions to achieve a 25 percent reduction in potable urban water usage. The drought has resulted in higher fire danger due to a lack of precipitation as well as higher landslide and flooding risks due to the lack of vegetation to soak up rainfall. The drought has also caused mosquito abatement issues. The standing water in underground pipes is not being pushed through and is a breeding ground for mosquitos that carry the West Nile Virus.

The City of Rancho Santa Margarita, Santa Margarita Water District, and Trabuco Canyon Water District may call for voluntary or mandatory water use restrictions. Orange County may impose burning bans or take other emergency steps. State assistance may become necessary if drought persists and impacts exceed the local capacity to respond. If state resources are exhausted or inadequate to respond to a drought or water shortage, the Governor may request a presidential declaration for federal assistance.

2.2.6 Earthquake

Earthquake severity is usually classified according to magnitude (a measure of the amount of energy released when a fault ruptures) and seismic intensity (a qualitative estimate of the damage caused by an earthquake at a location).Earthquakes are considered a major threat to Rancho Santa Margarita and the County as a whole due to the proximity of several fault zones, notably the San Andreas Fault Zone and the Newport-Inglewood Fault Zone. A recent report by the United States Geological Survey (USGS) titled, Third Uniform California Earthquake Rupture Forecast, or UCERF3, indicated that the probability of an earthquake of Magnitude 8 or larger within the next 30 years has nearly doubled.[1]

A significant earthquake along one of the major faults could cause substantial casualties, extensive damage to buildings, roads and bridges, fires, and other threats to life and property. The effects could be aggravated by aftershocks and by secondary effects such as fire, landslides and dam failure. A major earthquake could be catastrophic in its effect on the population and would most likely exceed the response capability of the City of Rancho Santa Margarita, the Operational Area, and the State.

Following major earthquakes, extensive search and rescue operations may be required to assist trapped or injured persons. Emergency medical care, food and temporary shelter would be required for injured or displaced persons. In the event of a truly catastrophic earthquake, identification and burial of the dead would pose difficult problems. Mass evacuation may be essential to save lives, particularly in areas below dams. Many families could be separated, particularly if the earthquake should occur during working hours. Emergency operations could be seriously hampered by the loss of communications and damage to transportation routes within, to and out of the disaster area and by the disruption of public utilities and services.

Extensive federal assistance could be required and could continue for an extended period. Efforts would be required to remove debris and clear roadways; demolish unsafe structures; assist in reestablishing public services and utilities; and provide continuing care and welfare for the affected population including temporary housing for displaced persons.

In general, the population is less at risk during non-work hours (if at home) as wood-frame structures are relatively less vulnerable to major structural damage than are typical commercial and industrial buildings. Transportation problems are intensified if an earthquake occurs during work hours, as significant numbers of residents commute across county lines on a daily basis. Many residents reside in one county and commute to an adjacent county either for work or leisure. An earthquake occurring during work hours would clearly create major transportation problems for those displaced workers.

Hazardous materials could present a major problem in the event of an earthquake. Orange County, one of the largest industrial and manufacturing areas in the state, has several thousand firms that handle hazardous materials, which are estimated to produce more than 100 million gallons of hazardous materials per year. The County's highways serve as hazardous materials transportation corridors, and Interstate 5 is the third busiest highway corridor in the country. The Orange County Fire Authority coordinates the Hazardous Materials Area Plan which serves as a guide for emergency response and operations for hazardous materials incidents.

Much of the industrial base of Southern California, and Orange County in particular, consists of high-technology companies essential to the nation's commerce, economy, and defense effort. A catastrophic earthquake could not only have a severe impact on the local industrial base, but also a major impact on the security of our nation. For example, Census and Department of Defense data indicate that over 50 percent of the U.S. Missile and Space Vehicle business, about 75 percent of the domestic micro-chip industry, 40 percent of the U.S. semiconductor business, and more than 20 percent of the U.S. optical instrument business is located in California. Much of those capacities, including prime contractors, subcontractors or supply vendors, are located in Orange County. Approximately 5,000 defense contractors are located within 50 miles of the San Andreas Fault -- including virtually all of Orange and Los Angeles Counties. In some cases, local defense contractors are the only source for some of the most critical defense systems used by our military departments.

In addition to the loss of production capabilities, the economic impact on the City of Rancho Santa Margarita and the County from a major earthquake would be considerable in terms of loss of employment and loss of tax base. Also, a major earthquake could cause serious damage to computer facilities. The loss of such facilities could curtail or seriously disrupt the operations of banks, insurance companies, and other elements of the financial community. In turn, this could affect the ability of local government, business and the population to make payments and purchases.

Although there are no fault lines zoned in the City of Rancho Santa Margarita, the City is still at risk due to fault lines in surrounding areas as described below:

San Andreas Fault Zone: The dominant active fault in California, it is the main element of the boundary between the Pacific and North American tectonic plates. The longest and most publicized fault in California, it extends approximately 800 miles from Northern California southward to the Cajon pass near San Bernardino, and is approximately 45 miles northeast of Rancho Santa Margarita. Southeastward from the Cajon pass several branching faults, including the San Jacinto and Banning faults share the movement of the Crustal Plates. This fault was the source of the 1906 San Francisco earthquake, which resulted in some 700 deaths and millions of dollars in damage. It is the southern section of this fault that is currently of greatest concern to the scientific community. Geologists can demonstrate that at least eight major earthquakes (Richter magnitude 7.0 and larger) have occurred along the Southern San Andreas Fault in the past 1,200 years with an average spacing in time of 140 years, plus or minus 30 years. The last such event occurred in 1857 (the Fort Tejon earthquake). Based on that evidence and other geophysical observations, the Working Group on California Earthquake Probabilities (SCEC, 1995) has estimated the probability of a similar rupture (M 7.8) in the next 30 years (1994 through 2024) to be about 50%. The range of probable magnitudes on the San Andreas Fault Zone is reported to be 6.8 to 8.0.

Chino Fault: Located 11.1 miles from Rancho Santa Margarita, this fault is a right-reverse fault and is part of the Whittier-Elsinore Fault system which is located northeast of Chino Hills. The fault is approximately 17.4 miles long and extends from the Santa Ana Mountains northwest to the City of Pomona, where it joins the San Jose Fault. SCEC reports probable earthquake magnitudes for the Chino fault to be in the range of 6.0 to 7.0. The last earthquake reported was on July 29, 2008, with a magnitude of 5.4.

Elsinore Fault Zone (Whittier Fault): Located 10.1 miles away from Rancho Santa Margarita, this fault follows a general line easterly of the Santa Ana Mountains into Mexico. The main trace of the Elsinore Fault zone is about 112 miles long. The last major earthquake on this fault occurred in 1910 (magnitude 6.0), and the interval between major ruptures is estimated to be about 250 years. SCEC reports probable earthquake magnitudes for the main trace of the Elsinore fault to be in the range of 6.5 to 7.5. At the northern end of the Elsinore Fault zone, the fault splits into two segments: the 25 mile long Whittier Fault (probable magnitudes between 6.0 and 7.2), and the 25 mile long Chino Fault (probable magnitudes between 6.0 and 7.0).

Newport-Inglewood Fault Zone: This fault extends from the Santa Monica Mountains southeastward through the western part of Orange County to the offshore area near Newport Beach and was the source of the destructive 1933 Long Beach earthquake (magnitude 6.4), which caused 120 deaths and considerable property damage. During the past 60 years, numerous aftershocks ranging from magnitude 3.0 to 5+ have been recorded. SCEC reports probable earthquake magnitudes for the Newport-Inglewood fault to be in the range of 6.0 to 7.4.

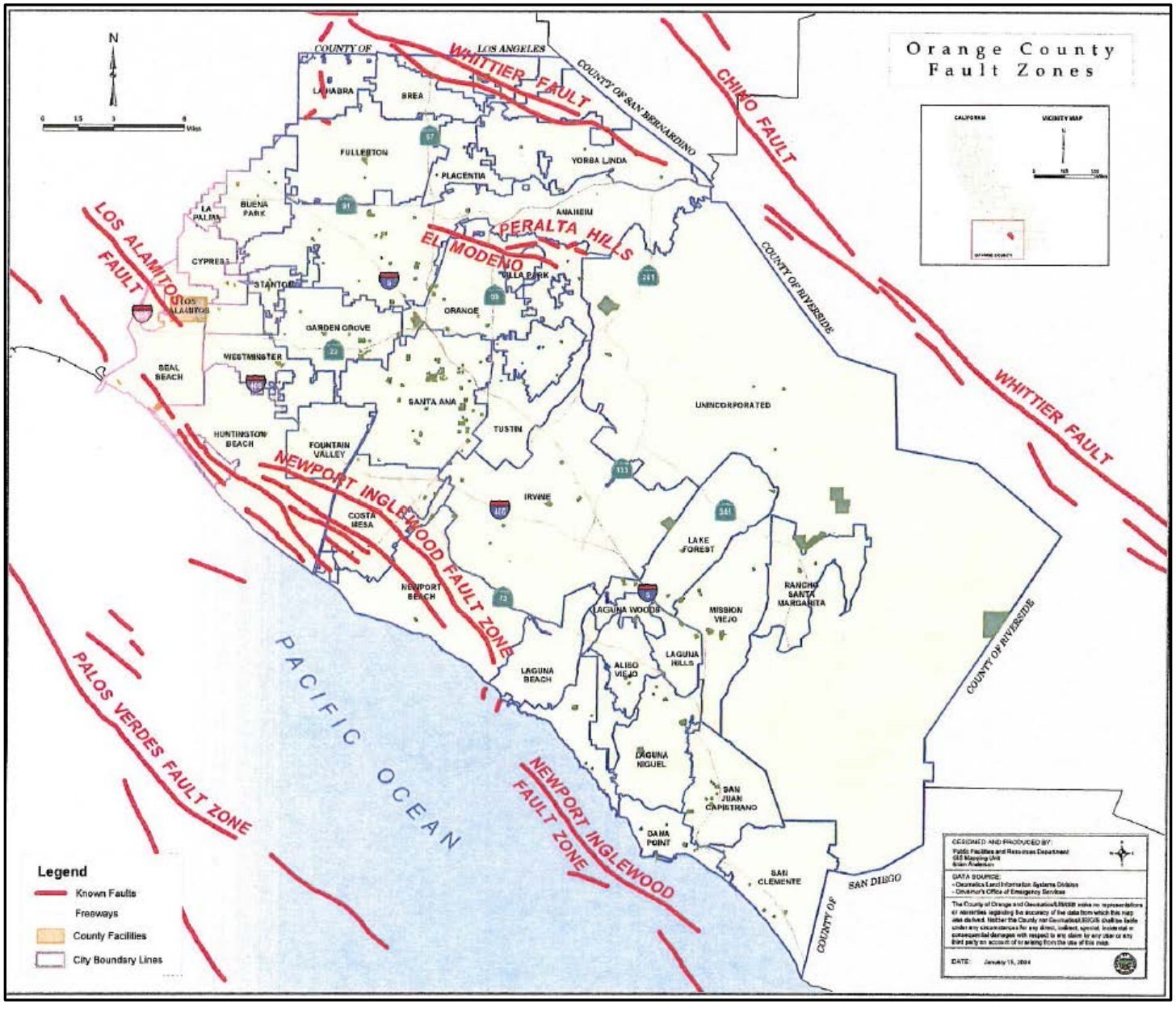
San Jacinto Fault Zone: This fault is located approximately 30 miles north and east of the county. The interval between ruptures on this 130 mile long fault zone has been estimated by SCEC to be between 100 and 300 years per segment. The most recent event (1968 magnitude6.5) occurred on the southern half of the Coyote Creek segment. SCEC reports probable earthquake magnitudes for the San Jacinto fault zone to be in the range of 6.5 to 7.5.

San Joaquin Hills Fault: Discovered in 1999, this fault is a southwest-dipping blind thrust fault originating near the southern end of the Newport-Inglewood Fault close to Huntington Beach, at the western margins of the San Joaquin Hills. Rupture of the entire area of this blind thrust fault could generate an earthquake as large as magnitude 7.3. In addition, a minimum average recurrence interval of between about 1,650 and 3,100 years has been estimated for moderate-sized earthquakes on this fault (Grant and others, 1999). Most recent activity produced a magnitude 3.9 earthquake in San Juan Capistrano on April 23, 2012.

Puente Hills Thrust Fault: This is another recently discovered blind thrust fault that runs from northern Orange County to downtown Los Angeles. This fault is now known to be the source of the 1987 Whittier Narrows earthquake. Recent studies indicate that this fault has experienced four major earthquakes ranging in magnitude from 7.2 to 7.5 in the past 11,000 years, but that the recurrence interval for these large events is on the order of several thousand years. A magnitude 5.1 earthquake struck on March 28, 2014, with an epicenter 2 kilometers east of La Habra and 2 kilometers west North West of Brea, with numerous small aftershocks.

In addition to the major faults described above, rupture of a number of smaller faults could potentially impact the City of Rancho Santa Margarita, including the Norwalk Fault (located in the north of the county in the Fullerton area), the El Modena Fault (located in the Orange area), and the Peralta Hills Fault in the Anaheim Hills area.

Orange County Fault Zones Map



As indicated, there are a large variety of earthquake events that could affect Rancho Santa Margarita. The earliest recorded earthquake in California occurred in Orange County in 1769. Predicted ground shaking patterns throughout Southern California for hypothetical scenario earthquakes are available from the United States Geological Survey as part of their on-going "ShakeMap" program. ShakeMaps in graphical and GIS formats are available on the USGS website at: http://earthquake.usgs.gov/shakemap/sc/shake/archive/scenario.html .

The most recent significant earthquake event affecting Southern California was the 1994 Northridge Earthquake. At 4:31 A.M. on Monday, January 17th, a moderate, but very damaging earthquake with a magnitude of 6.7 struck the San Fernando Valley. In the following days and weeks, thousands of aftershocks occurred, causing additional damage to affected structures. Fifty-seven people were killed and more than 1,500 people were seriously injured. For days afterward, thousands of homes and businesses went without electricity, tens of thousands had no gas, and nearly

50,000 had little or no water. Approximately 15,000 structures were moderately to severely damaged, 66,500 buildings were inspected and nearly 4,000 were severely damaged and over 11,000 were moderately damaged. Several collapsed bridges and overpasses created commuter havoc on the freeway system. Extensive damage was caused by ground shaking, but earthquake triggered liquefaction and dozens of fires also caused additional severe damage. This extremely strong ground motion felt in large portions of Los Angeles County resulted in record economic losses.

However, the earthquake occurred early in the morning on a holiday. This circumstance considerably reduced the potential effects. Many collapsed buildings were unoccupied, and most businesses were not yet open. The direct and indirect economic losses ran into the tens of billions of dollars.

For decades, partnerships have flourished between the USGS, Cal Tech, the California Geological Survey and universities to share research and educational efforts with Californians. Tremendous earthquake mapping and mitigation efforts have been made in California in the past two decades, and public awareness has risen remarkably during this time. Major federal, state, and local government agencies and private organizations support earthquake risk reduction. These partners have made significant contributions in reducing the adverse impacts of earthquakes. Despite the progress, the majority of California communities remain unprepared because there is a general lack of understanding regarding earthquake hazards among Californians.

To better understand the earthquake hazard, the scientific community has looked at historical records and accelerated research on those faults that are the sources of the earthquakes occurring in the Southern California region. Historical earthquake records can generally be divided into records of the pre-instrumental period and the instrumental period. In the absence of instrumentation, the detection of earthquakes is based on observations and felt reports, and is dependent upon population density and distribution. Since California was sparsely populated in the 1800s, the detection of pre-instrumental earthquakes is relatively difficult. However, two very large earthquakes, the Fort Tejon in 1857 (7.9) and the Owens Valley in 1872 (7.6) are evidence of the tremendously damaging potential of earthquakes in Southern California. In more recent times, two 7.3 earthquakes struck Southern California, in Kern County (1952) and Landers (1992). The damage from these four large earthquakes was limited because they occurred in areas which were sparsely populated at the time they happened. The seismic risk is much more severe today than in the past because the population at risk is in the millions, rather than a few hundred or a few thousand persons.

History of Earthquake Events in Southern California

Since seismologists started recording and measuring earthquakes, there have been tens of thousands of recorded earthquakes in Southern California, most with a magnitude below three. No community in Southern California is beyond the reach of a damaging earthquake. The chart below describes the historical earthquake events that have affected Southern California.

Southern California Region Earthquakes with a Magnitude 6.0 or Greater

1918 Orange County, 6.7
1933 San Pedro Channel, 6.4
1940 Imperial County, 6.8
1951 Gulf of Santa Catalina, 6.1
1954 San Diego County 6.2
1968 San Diego County 6.6
1979 Baja California, MX 6.4
1981 Imperial County, 6.0
1986 Riverside County, 6.2
1987 Imperial County, 6.1
1987 Imperial County, 6.5
1992 Riverside County, 6.2
1992 San Bernardino County, 7.3
1992 San Bernardino County, 6.5
1994 Los Angeles County, 6.7
1999 San Bernardino County, 7.1

*Source: USGS

Earthquake Related Hazards

Ground shaking, landslides, liquefaction, rockslides, and amplification are the specific hazards associated with earthquakes affecting Rancho Santa Margarita. The severity of these hazards depends on several factors, including soil and slope conditions, proximity to the fault, earthquake magnitude, and the type of earthquake.

Ground Shaking

Ground shaking is the most commonly experienced effects of earthquakes. Shaking can be felt hundreds of miles from the earthquake epicenter. There are three types of ground shaking that result from earthquakes; the first two are dampened (or “attenuated”) with distance from the epicenter, and are called ‘near field’ effects for that reason. Pressure waves, or P-waves, travel through the ground at about the speed of sound, and are sinusoidal in one plane. They are precursors to the more damaging (and slower) shear waves, or S-waves, which exert most of the lateral forces in the near field, and are sinusoidal in two planes. Both types of seismic waves have periods less than one second in frequency, and dissipate with distance and geologic resistance from mountains and other features. The long waves with periods of one second or more, often travel throughout the earth’s crust, and can be measured on the other side of the globe. They can also cause damage at a distance if they meet up with buildings of the correct natural period of vibration with enough force.

Earthquake Induced Landslides, Rockslides, and Mudflows

Landslides, rockslides and mudflows are the result of the down-slope movement of unstable hillside materials under the influence of weathering and gravity over time. Strength of rock and soil, steepness of slope, and weight of the hillside material all play an important role in the stability of hillside areas. Weathering and absorption of water can weaken slops, while the added weight of saturated materials of overlying construction can increase the chances of

slope failure. Sudden failure can be triggered by earthquake shaking. Rancho Santa Margarita contains areas where earthquake induced landslides, rockslides, and/or mudflows will cause damage.

Amplification

Soils and soft sedimentary rocks near the earth's surface can modify ground shaking caused by earthquakes. One of these modifications is amplification. Amplification increases the magnitude of the seismic waves generated by the earthquake. The amount of amplification is influenced by the thickness of geologic materials and their physical properties. Buildings and structures built on soft and unconsolidated soils can face greater risk. Amplification can also occur in areas with deep sediment filled basins and on ridge tops.

Earthquake Hazard Assessment

In California, many agencies are focused on seismic safety issues: the State's Seismic Safety Commission, the Applied Technology Council, California Office of Emergency Services (Cal OES), United States Geological Survey, Cal Tech, the California Geological Survey, and a number of universities and private foundations. These organizations, in partnership with other state and federal agencies, have undertaken a rigorous program in California to identify seismic hazards and risks including active fault identification, bedrock shaking, tsunami inundation zones, ground motion amplification, liquefaction, and earthquake induced landslides. Seismic hazard maps have been published and are available for many communities in California through the State Division of Mines and Geology.

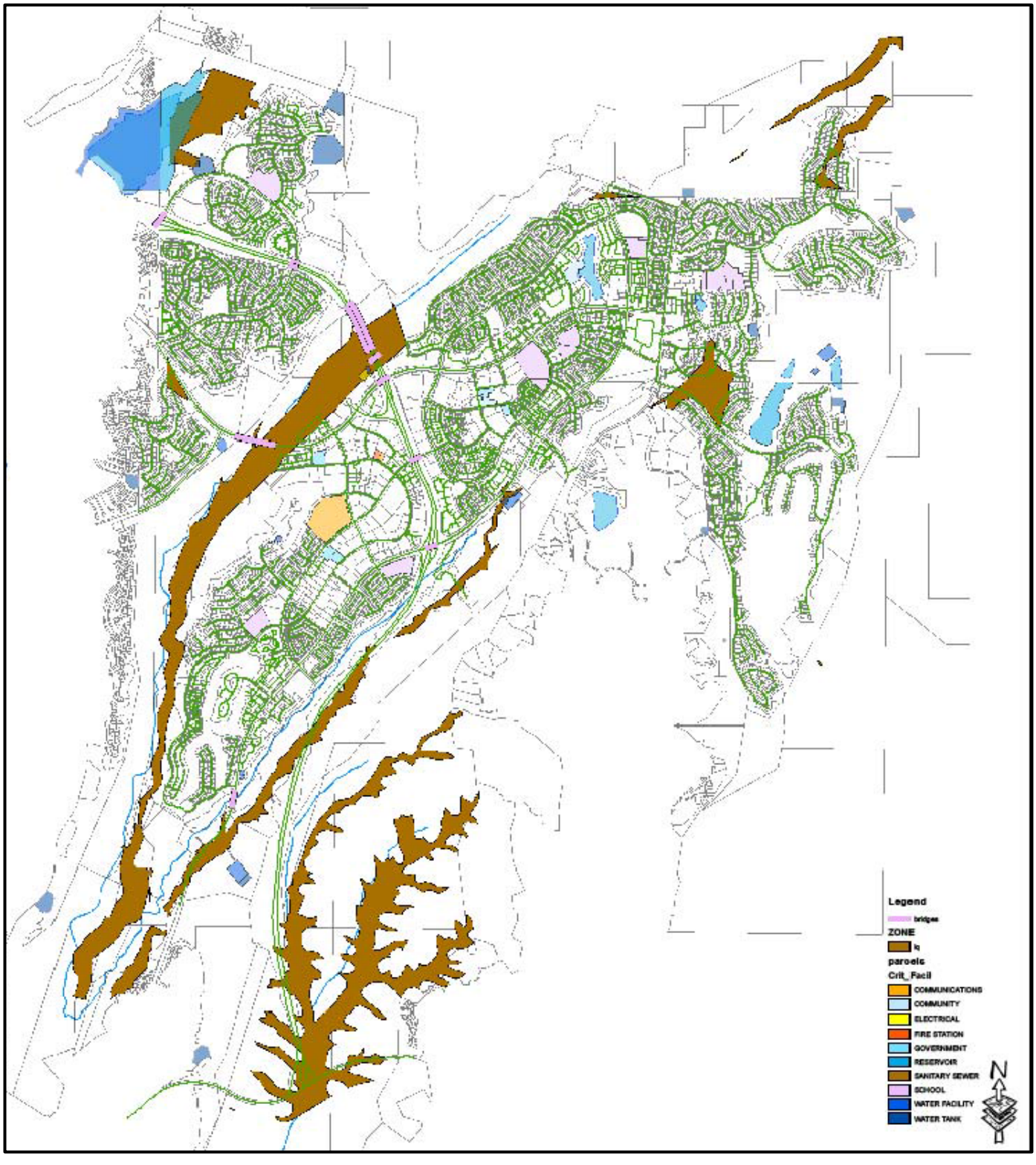
Liquefaction

Liquefaction is a major secondary seismic hazard that causes various types of ground failure. Three general conditions need to be met for liquefaction to occur:

- Strong ground shaking of relatively long duration.
- Loose, or unconsolidated, recently deposited sediments consisting primarily of silt and sand.
- Water saturated sediments within 50 feet of the surface.

Most of the lowlands in Rancho Santa Margarita have a high liquefaction potential because shallow ground water, within 50 feet of the ground surface, has been historically reported. Under certain conditions, strong ground shaking can cause the densification of soils resulting in local or regional settlement of the ground surface. During strong shaking, soil grans become more tightly packed due to the collapse of voids and pore spaces, resulting in a reduction of thickness of the soil column. This type of ground failure typically occurs in loose granular, cohesion-less soils, and can occur in either wet or dry conditions. Unconsolidated young alluvial deposits are especially susceptible to this hazard. Artificial fills may also experience seismically inducted settlement. Damage to structures typically occurs as a result of local differential settlements.

Map of Liquefaction Areas in Rancho Santa Margarita



There are 9 critical facilities within liquefaction zones. These facilities can be broken down into the following categories:

- 4 Bridges
- 2 Water Facilities
- 1 Electrical Substation
- 1 Reservoir
- 1 Water Tank

Rancho Santa Margarita Specific Earthquake Issues

Susceptibility to Earthquake

Earthquake damage occurs because humans have built structures that cannot withstand severe shaking. Buildings, airports, schools, and lifelines (highways and utility lines) suffer damage in earthquakes and can cause death or injury to humans.

Dams

There are a total of 44 dams owned and operated in Orange County, with 7 being in or around Rancho Santa Margarita. These dams hold billions of gallons of water in reservoirs. The major reservoirs are designed to protect Southern California from flood waters and to store domestic water. Seismic activity can compromise the dam structures resulting in catastrophic flooding and loss of drinking water and fire suppression capabilities.

Buildings

The City of Rancho Santa Margarita has been developed with strong seismic building codes in force, and as a result, development in the community is anticipated to experience little structural impact due to shaking should earthquakes occur on nearby faults. Although buildings themselves may not sustain serious damage, any unreinforced masonry, decorative signage, decorative brick and/or rock, as well as unsecured items in and around the building can result in major damage, injury, and even death.

Infrastructure and Communication

Residents in Rancho Santa Margarita most frequently commute by automobiles and some utilize public transportation in the form of buses. An earthquake can greatly damage bridges and roads, hampering emergency response efforts and the normal movement of people and goods. Damaged infrastructure strongly affects the economy of the community because it disconnects people from work, school, food, and leisure in addition to separating businesses from customers and suppliers.

Bridge Damage

Modern bridges can sustain damage during earthquakes, leaving them unsafe for use. Some bridges in California have failed completely due to strong ground motion resulting from earthquakes. Bridges are a vital transportation link - with even minor damages making some areas inaccessible. Because bridges vary in size, materials, location and design, any given earthquake will affect them differently. Bridges built before the mid-1970's have a significantly higher risk of suffering structural damage during a moderate to large earthquake compared with those built after 1980 when design improvements were made.

Much of the interstate highway system was built in the mid to late 1960's. The bridges in Orange County are state, county, city, or privately owned (including railroad bridges). Caltrans has retrofitted most bridges on the freeway systems; however, there are still some County and City maintained bridges that are not retrofitted. The Federal Highway Administration requires that bridges on the National Bridge Inventory be inspected every two years. Caltrans monitors when the bridges are inspected because they administer the Federal funds for bridge projects. The City has five access routes: the State Route 241 Toll Road which is owned and maintained by the State, Santa Margarita Parkway from the west, Antonio Parkway from the south, Trabuco Canyon Road from the north and through Coto de Caza from the southeast which is a gated community. The two most important facilities on these access routes controlled by the City, which doesn't include the bridges on the Toll Road, are the Antonio Parkway and Santa Margarita Parkway Bridges. The failure of these bridges would severely hinder access to and from the City.

Damage to Lifelines

Lifelines are the connections between communities and outside services. They include water and gas lines, transportation systems, electricity, and communication networks. Ground shaking and amplification can cause pipes to break open, power lines to fall, roads and railways to crack or move, and radio and telephone communication to cease. Disruption to transportation makes it especially difficult to bring in supplies or services. Lifelines need to be usable after earthquakes to allow for rescue, recovery, and rebuilding efforts and to relay important information to the public. In Rancho Santa Margarita, some critical facilities including water facilities, electrical substations, bridges, and communications facilities are located in liquefaction and/or landslide areas.

Disruption of Critical Services

Critical facilities within Rancho Santa Margarita include Orange County Fire Station #45 and Rancho Santa Margarita City Hall, which includes Police Services and the City's Emergency Operations center. These facilities are not located in a liquefaction or landslide area. These facilities and their services need to be functional after an earthquake event.

Businesses

Seismic activity can cause great loss to businesses, both to large-scale corporations and small retail shops. When a company is forced to stop production for just one day, the economic loss can be tremendous, especially when its market is at a national or global level. Seismic activity can create economic loss that presents a burden to large and small shop owners who may have difficulty recovering from their losses. Several businesses throughout Rancho Santa Margarita are located on liquefaction and landslide areas. Businesses in Rancho Santa Margarita may sustain damage due to non-structural hazards and damage to their inventory and equipment.

Death and Injury

Death and injury can occur both inside and outside due to collapsed buildings, falling equipment, furniture, debris, and structural materials. The loss of lifelines as identified above can also impact community safety and medical response.

Fire

Downed power lines or broken gas mains can trigger fires. When fire stations suffer building or lifeline damage, quick response to extinguish fires is less likely. Furthermore, major incidents will demand a larger share of resources, and initially smaller fires and problems will receive little or insufficient resources in the initial hours after a major earthquake event. Impacts to water systems in Rancho Santa Margarita will further hamper firefighting abilities.

Debris

After damage to a variety of structures, much time is spent cleaning up brick, glass, wood, steel or concrete building elements, office and home contents, and other materials. Developing a strong debris management strategy is essential in post-disaster recovery. Occurrence of a disaster does not exempt Rancho Santa Margarita and Orange County from compliance with AB 939 regulations covering recycling debris.

2.2.7 Excessive Temperatures

Excessive Heat Emergencies

Excessive heat emergencies are often slower to develop. It could take a number of days of oppressive heat to have a significant or quantifiable impact. Heat waves do not strike victims immediately, but rather the cumulative effect slowly affects the body's ability to adapt with the possibility of death for some vulnerable populations. Typical summer temperatures in California contribute to approximately 20 deaths per year.

The Operational Area has an Excessive Heat Annex that the City of Rancho Santa Margarita will comply should the plan be activated. The City has the option to open a Cooling Center, which is an indoor space with air conditioning open to the public during the day. In 2013, the Excessive Heat Annex was activated once, September 5th through 7th. The Annex was initially activated to a Phase One Readiness Phase. The activation was increased to Phase Two one day later, which is the Advisory Phase. During this time, eight inland cities exceeded 100 degrees. Cooling Centers were opened in several local city jurisdictions.

Excessive Cold Weather Emergencies

While cold weather is regarded as a rarity in Southern California, it does occur and poses a hazard to various populations. January 2007 was one of the coldest months ever in the state of California. The NWS advised that temperatures would drop, reaching the high teens to low 20s in most areas at night, and continued daytime lows in the mid-40s. This prompted Governor Schwarzenegger to call upon Californians to take common sense steps to prepare for the cold and freezing temperatures by preparing cold weather safety tips. But not all Californians have the ability to keep warm. Therefore, the state made 11 National Guard armories statewide available and began looking at other facilities to utilize during the extreme cold weather event.

Both Excessive Heat and Cold Events have impacted the Southern California region in recent history. The National Weather Service maintains records of fatalities caused by weather phenomenon. In 2013, there were 92 deaths nationally due to heat related illnesses. The 10-year average for heat deaths stands at 123 per year nationally.

Weather Fatalities:

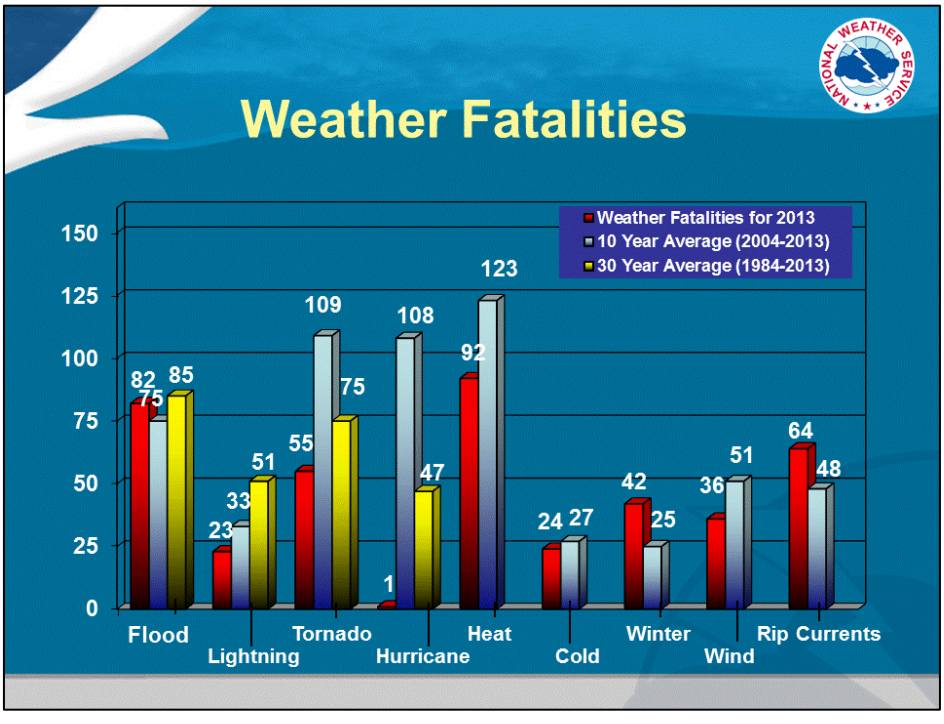


Photo URL: http://www.nws.noaa.gov/om/hazstats.shtml

The U.S. Natural Hazard Statistics provide statistical information on fatalities, injuries and damages caused by weather related hazards. These statistics are compiled by the Office of Services and the National Climatic Data Center from information contained in Storm Data, a report comprising data from NWS forecast offices in the 50 states, Puerto Rico, Guam and the Virgin Islands.

Heat Index Readings & Associated Health Risks

The heat index captures how hot the heat-humidity combination feels to humans. As relative humidity increases, the air seems warmer than it actually is because the body is less able to cool itself via evaporation of perspiration. As the heat index rises, so do health risks.

- When the heat index is 90°F, heat exhaustion is possible with prolonged exposure and/or physical activity.
- When it is 90°-105°F, heat cramps or heat exhaustion is probable with the possibility of heatstroke, with prolonged exposure and/or physical activity.
- When it is 105°-129°F, sunstroke, heat cramps or heat exhaustion is likely, and heatstroke is possible with prolonged exposure and/or physical activity.
- When it is 130°F and higher, heatstroke and sunstroke are excessively likely with continue exposure. Physical activity and prolonged exposure to the heat increase the risks.

Heat Index:

Health Information

Excessive heat can lead to medical conditions impacting community members. When the body's ability to shed heat is compromised, a heat-related disorder such as heat cramps, heat exhaustion or heat stroke may develop. Like heat, excessive cold temperatures can also lead to serious medical conditions such as hypothermia, frostbite and eventually even death.

The reaction and severity of an illness caused by an Excessive Heat or Cold Event tends to increase with age. Other persons who may have a heightened sensitivity to excessive temperatures include young children, people with disabilities or pre-existing medical conditions, and the homeless who may lack the resources to seek shelter from extreme conditions.

Rancho Santa Margarita Weather Patterns

Temperatures in the City of Rancho Santa Margarita range from 40 degrees in the winter months to 93 degrees in the summer months. However, the temperatures can vary over a wider range, especially when the Santa Ana winds blow, bringing higher temperatures and very low humidity. Temperatures rarely exceed 100 degrees in the summer months (June – September) and rarely drop below 30 degrees in the winter months (November – March).

Rainfall in the City averages 12 inches of rain per year. Recorded history of rainfall in the County of Orange shows rainfall amounts ranging from no rain at all in some years to higher than 12 inches of rain per year. Further, rainfall in Rancho Santa Margarita tends to fall in large amounts during irregular and often heavy storms, as opposed to a pattern of storm systems.

2.2.8 Flood/Storm

Rancho Santa Margarita Flood Threat

The City of Rancho Santa Margarita is subject to atmospheric events and severe weather conditions that could threaten public safety, including weather patterns leading to flooding and other storm damage. Flooding is a natural attribute of any stream and is influenced by the intensity and distribution of rainfall. Areas within the city have been identified as being subject to a 100-year flood and a 500-year flood. The City of Rancho Santa Margarita is a participant in the National Flood Insurance Administration Program and flood-prone areas of the City have been delineated on Flood Insurance Rate Maps.

According to the Division of Mines and Geology, slope instability is a concern in the San Juan Capistrano Quadrangle which encompasses most of the City. Areas underlain by shale and siltstone are more prone to landslides when compared to other bedrock geology, and the Capistrano, Monterey and Topanga Formations, prevalent throughout hillside areas in the City, are most prone to slow-developing, slump-type failure.

Slope stability is dependent on a number of interrelated factors such as rock type and degree of porousness and slope characteristics. In addition to geologic processes, climatic conditions, man-induced topographical alterations and earthquakes also trigger failure to unstable slopes. Slope stability hazards in the City relate to the undeveloped hillside areas, as grading activities and soil remediation techniques are used to mitigate these hazards prior to development.

There are five bridges located within the flood plain that have support columns which could be affected in the result of a flood. However, unless the bridge structures were damaged, the roadway surface would not be affected by flood.

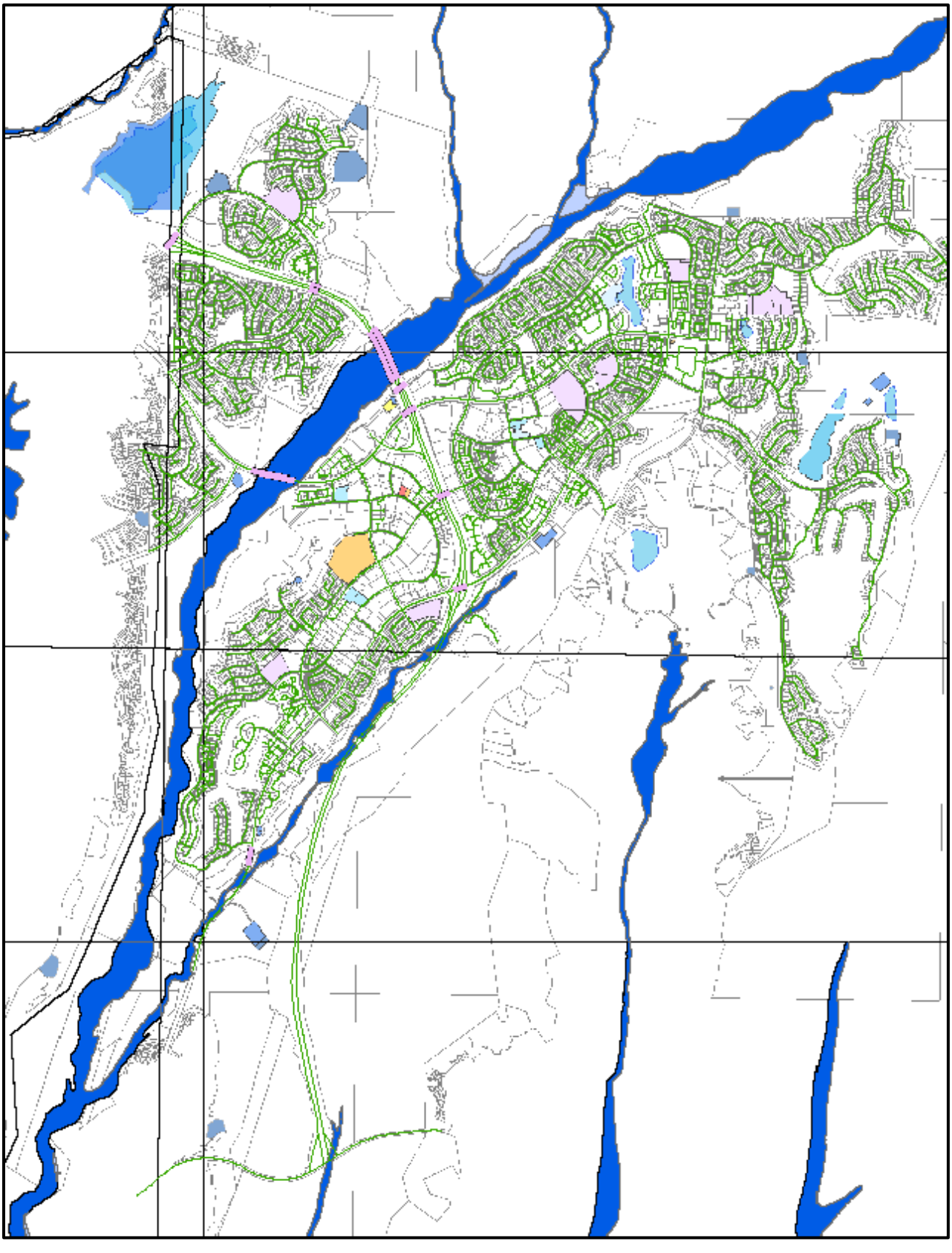
Historic Data for Rancho Santa Margarita

Residents reported damaging floods caused by severe rainstorms in December 2010. The amount of resources needed to respond and recover exceeded the City, County, and State. The Federal Emergency Management Agency reimbursed the City for response related costs.

Storm Drain Systems

The City currently owns and maintains a storm drain system within the City limits. Routine catch basin cleaning and inspection of mainline storm drain pipes is included in the City's maintenance efforts. The County also owns and maintains various storm drain structures especially discharge structures in County owned and maintained channels and streams that are within the City's boundary. HOAs are also responsible for the upkeep of various structures that lie within their respective membership areas.

Map of Flood Plain in Rancho Santa Margarita



Automated Local Evaluation in Real Time (ALERT) System

To provide quantitative information for flood warning and detection, Orange County began installing its Automated Local Evaluation in Real Time (ALERT) system in 1983. The system now comprises 130 sensors at over 80 sites that measure precipitation, water level in flood channels, temperature, barometric pressure, wind velocity and direction, relative humidity, and snow. County of Orange personnel and the public can depend on the ALERT system for real-time weather data, and with this information, the County can take appropriate actions, including evacuations, road closures, and flood channel maintenance.

Orange County Watersheds - ALERT sensors have been installed in all major watersheds located in Orange County. Although the primary purpose of the sensors is for flood warning and detection, ALERT data additionally supports fluvial sediment monitoring programs and other federally mandated water quality monitoring programs in Orange County.

Tide Stations - Water-level sensors have also been used to monitor the effects of tide on two flood control channels in Huntington Beach. In 1983, the Talbert Channel levee was overtopped in Huntington Beach causing major flood damage to adjacent neighborhoods. Extreme tides during periods of heavy rainfall drastically reduced the ability of the flood control channel to discharge storm water runoff to the ocean and emphasized the need for real time monitoring. Water level sensors have been installed on the Huntington Beach Channel at Magnolia Avenue and on the Talbert Channel at Brookhurst Street. The sensor on the Talbert Channel is also used to monitor blockage of the channel outlet. When blockage occurs, OC Public Works initiates maintenance activity to clear the blockage and restore tidal flushing to the Talbert Wetlands.

The Storm Center operated by OC Public Works is activated when heavy rainfall occurs or is predicted, or when storm run-off conditions indicate probable flood damage. The Storm Center monitors the situation on a 24-hour basis, and response may include patrols of flood control channels, and deployment of equipment and personnel to reinforce levees if needed. Storm Center activation and various emergency response actions are based on the following Emergency Readiness Stages:

For more information, see: http://ocflood.com/safety/emergency

- Stage I - Mild rainfall (watch stage).
- Stage II - Heavy rainfall or potential thereof. OCPW Storm Operations Center activated and surveillance of flood control facilities in effect.
- Stage III - Continued heavy rainfall or deterioration of facilities. County personnel assume assigned emergency duties.
- Stage IV - Conditions are or are likely to be beyond County control. Board of Supervisors, or County Director of Emergency Services when the Board is not in session, proclaims Local Emergency and assumes special powers. Mutual Aid requested.
- Stage V - Damage beyond control of all Local Resources. State forces are required. Governor requested to proclaim State of Emergency.
- Stage VI - Damage beyond control of Local and State Resources. Federal forces are required. President requested to declare Major Disaster.

2.2.9 Hazardous Materials

Orange County and Rancho Santa Margarita continue to experience residential, employment, and economic growth. Virtually all sectors of the economy are users of hazardous materials that, if improperly handled, stored, transported, or disposed of, can pose health and environmental problems.

The City faces the potential for incidents from the stationary hazardous materials users, as well as transportation accidents, pipeline ruptures, and illegal dumping. The significance of the effects on the environment, property, or human health is dependent on the type, location, and quantity of hazardous material released. The City of Rancho Santa Margarita's level of exposure to hazardous materials can be understood by examining the City's types of businesses, commercial traffic routes, and highways.

A hazardous substance poses a threat due to its inherent characteristics. Its actual impact, however, depends on where the episode occurs and on weather, geography, population, and other site-specific conditions that influence its behavior in the environment and which can vary greatly. Incidents may occur at fixed facilities where the opportunity for development of site-specific contingency plans is great. They may also occur at any place along any land, water, or air transportation route, and in the case of vessel mishaps, aircraft accidents, agricultural chemicals and illegal dumping may occur in unpredictable areas, relatively inaccessible by ground transportation. Further, hazardous material incidents often cause some type of transportation problem within the vicinity of the incident and may even require localized evacuation.

In the City of Rancho Santa Margarita the majority of hazardous material incidents are handled prior to becoming a disaster. Hazardous material incidents require specialized technical expertise that varies depending on the materials involved and the type of incident. The resources and personnel required to react to a hazardous materials incident may involve various local, special district, state, and federal agencies.

First responders are usually fire or law enforcement services followed by HCA Environmental Health. Other local agencies may include Public Works, HCA Emergency Medical Services, Epidemiology, Orange County Sheriff's Department Control One (hereafter referred to as Control One), OC Waste and Recycling Department and the Orange County Agricultural Commissioner. A long list of state and federal agencies may be included as well as districts such as the South Coast Air Quality Management District, Orange County Sanitation Districts, Orange County Water & Irrigation Districts and private agencies, associations and companies. Each agency is expected to provide on-scene assistance consistent with its operational capabilities, when requested.

With the amount of hazardous materials of all descriptions generated, stored, and transported through Orange County, access of these materials to potential terrorists is a concern. A terrorist acting alone or in a group has the potential for attaching explosive devices to the various modes of transportation used throughout the County including Rancho Santa Margarita. Such an incident will cause a major hazardous materials spill that can be timed to create the most disruption. Further, such an incident may not occur within the County geographical boundaries but in some other County when the transport of the materials begins within Orange County. Another consideration for potential terrorist activity would be in the theft of quantities of materials that could be used to develop explosive devices, "dirty bombs," or just the simple release of the materials within highly populated areas such as shopping centers.

Hazardous Materials-Transportation

Highways, freeways and toll roads are the major transportation routes in Orange County with the 241 toll road intersecting the City of Rancho Santa Margarita. Over 250 miles of interstate highway, including the third busiest highway transportation corridor in the country (Highway 5), and 719 miles of other major transportation routes run through Orange County. The California Highway Patrol (CHP) has designated these highways as hazardous materials transportation corridors.

The Federal Department of Transportation (DOT) is the primary regulatory authority for the interstate transport of hazardous materials. The DOT regulations establish criteria for safe handling procedures (e.g., packaging, marking, labeling, placarding, and routing). Criteria also exist regarding personnel qualifications and training, inspection requirements, and equipment specifications. The CHP enforces regulations related to the intrastate transport of hazardous materials and hazardous wastes.

Another major hazardous materials transportation mode in Orange County is that of underground pipelines. These pipelines predominately transport crude or refined petroleum, gasoline, and jet fuel. The major threats posed by this transportation method include explosions, fire, and contamination of groundwater potentially used as a source of drinking water. The regulatory agency responsible for enforcement as well as inspection of pipelines transporting hazardous materials is the California State Fire Marshal's Office, Hazardous Liquid Pipeline Division. Under mandate from Title 49 of the Code of Federal Regulation, the agency is charged with compliance review of:

- Inspection and enforcement
- Pipeline failure and investigation
- Pipeline training and certification

The Orange County Fire Authority has emergency response authority for responding to hazardous materials incidents in Rancho Santa Margarita.

Hazardous Materials-Management

Underground Storage Tank (UST) Program:

The Orange County Health Care Agency serves as the Certified Unified Program Agency (CUPA) for this geographic region. The CUPA is tasked by the Secretary for Environmental Protection to implement and enforce the underground storage tank codes set forth in Chapter 6.7 of the California Health & Safety Code.

As the Certified Unified Program Agency (CUPA), Environmental Health is tasked by the Secretary for Environmental Protection to implement and enforce the underground storage tank codes. To this end, specialists from Environmental Health inspect underground storage tanks, monitoring equipment and compliance documents of UST systems to ensure that these systems are in compliance with the applicable laws and regulations. The comprehensive program, implemented by HCA, includes conducting regular inspections of underground tanks, oversight of new tank installations, issuance of permits, regulation of repair and closure of tanks, ensuring the mitigation of leaking underground storage tanks, pursuing enforcement action, and educating and assisting the industries and general public about the laws and regulations governing underground storage tanks.

The County of Orange has developed a Business Portal which allows UST owners and operators to submit forms electronically through the web. Electronic Submittal of all UST Forms is a legal requirement of AB2286 which became

effective for regulated businesses on January 1, 2013.Since July 1, 2013, the Orange County CUPA began implementing the Hazardous Material Disclosure, Business Emergency Plan and California Accidental Release Prevention programs that were previously managed by the Orange County Fire Authority.

The Hazardous Material Disclosure and Business Emergency Plan programs require businesses that handle hazardous materials in quantities equal to or greater than 55 gallons of a liquid, 500 pounds of a solid, or 200 cubic feet of compressed gas, or extremely hazardous substances above the threshold planning quantity, to report this information to the local implementing agency called the Certified Unified Program Agency (CUPA). The purpose of the programs is to prevent or minimize damage to public health and safety and the environment, from a release or threatened release of hazardous materials. These locally implemented programs also satisfy federal community right-to-know laws.

The Environmental Health Division was designated as the Certified Unified Program Agency (CUPA) for the County of Orange by the State Secretary for Environmental Protection on January 1, 1997. The Hazardous Material Disclosure and Business Emergency Plan programs require Orange County businesses to:

- Inventory their hazardous materials,
- Develop a site map,
- Develop an emergency plan, and
- Implement a training program for employees.

Hazardous Materials Disclosure Program:

The Hazardous Materials Disclosure Program began as a direct result of two major incidents: the tragedy in Bhopal, India in December 1984, and the three-day fire at the Larry Fricker pesticide warehouse in Anaheim in June 1985. On November 5, 1985, the Board of Supervisors adopted an ordinance relating to hazardous materials disclosure (Orange County Code, Title 4. Division 3, Article 4).

Chemical Inventory: Title 42, Section 11022 of the United States Code and Chapter 6.95 of the California Health and Safety code require the reporting of hazardous materials when used or stored in certain quantities. These regulations require that businesses within OCFA's jurisdiction to complete and file a chemical inventory to disclose hazardous materials stored, used or handled on site. This disclosure information assists emergency responders in planning for and handling emergencies which involve hazardous materials. The program objective is to safeguard lives and minimize property loss.

Business Emergency Plan (BEP): Chapter 6.95 of the California Health and Safety code also requires that businesses which use, store or handle hazardous materials file an emergency plan indicating their preparations for and actions in an emergency. The information is also shared with emergency response personnel to mitigate a release and to minimize harm or damage to human life, the environment, and property.

Orange County Fire Authority (OCFA) is the administering agency (AA) for the chemical inventory and business emergency plan regulations for the city of Rancho Santa Margarita and the unincorporated areas of Orange County. OCFA's disclosure activities are coordinated with the Orange County Health Care Agency (HCA). HCA is the Certified Unified Program Agency (CUPA) for local implementation of the disclosure program and several other hazardous materials and hazardous waste programs.

The information disclosed by the industrial community is stored in a computerized data base and is made available to fire and police response personnel, the Sheriff’s Department, the HCA, all hazardous materials response teams in the

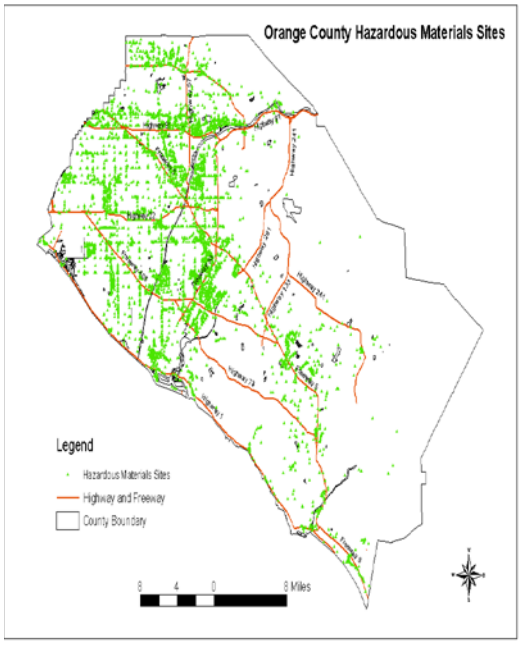
County, and the planning departments of the cities served by the OCFA including Rancho Santa Margarita. Title 4 of the Orange County Codified Ordinances mandates an orderly program for the acquisition of basic information on the use and disposal of hazardous materials in the County. On July 1, 2013, the Orange County Environmental Health Agency, Certified Unified Program Agency (CUPA) began managing the Hazardous Materials Disclosure, Business Emergency Plan, and California Accidental Release Prevention programs that were previously managed by the Orange County Fire Authority.

Hazardous Materials Planning and Coordination

On February 7, 1984, the Orange County Board of Supervisors established the Hazardous Materials Task Force (HMTF) to review the County's hazardous materials activities and make recommendations to ensure effective coordination and control of county-wide resources. The work begun by the HMTF continues under the jurisdiction of the HCA. The functions and responsibilities of the Hazardous Materials Program Office include:

- Facilitating the coordination of various parts of the County's hazardous materials program, and assisting in coordinating County hazardous materials activities with outside agencies and organizations including various state, federal, special districts, industry and community agencies and groups that impact or are involved with hazardous materials management issues and activities
- Providing comprehensive, coordinated analysis of hazardous materials issues including the needs and priorities of all the various organizations involved in hazardous materials activities
- Directing the preparation, implementation, and modification of the County's Hazardous Waste Management Plan as required by state law (Tanner Bill, AB 2948)
- Acting as a clearinghouse for information and increase public awareness of hazardous materials issues/activities

Hazardous Materials Sites in Orange County:



2.2.10 Landslide and Debris Flow

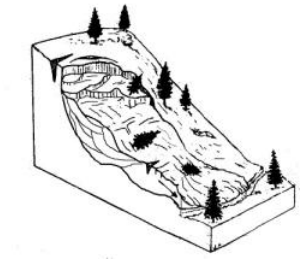
Landslides are the result of the down-slope movement of unstable hillside materials under the influence of weathering and gravity over time. Characteristics of a landslide include:

- Abrupt depression and lateral displacement of hillside surfaces over distances of up to several hundreds of feet
- Disruption of surface drainage
- Blockage of flood control channels and roadways
- Displacement or destruction of improvements such as roadways, buildings, and water wells

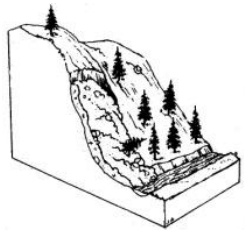
The California Geological Survey (http://www.conservation.ca.gov/cgs/geologic_hazards/landslides/Pages/index.aspx) lists the following five types of commonly found landslides:

ROCK SLIDE: A landslide involving bedrock in which the rock that moves remains largely intact for at least a portion of the movement. Rock slides can range in size from small and thin to very large and thick, and are subject to a wide range of triggering mechanisms.

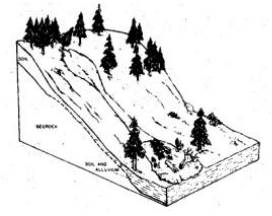
EARTH FLOW: A specific type of Soil Flow landslide where the majority of the soil materials are fine-grained (silt and clay) and cohesive. The material strength is low through much of the slide mass, and movement occurs on many discontinuous shear surfaces throughout the landslide mass.



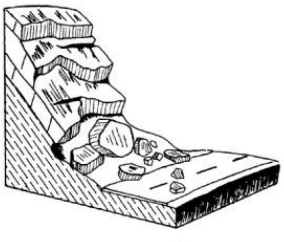
DEBRIS SLIDE: A slide of coarse-grained soil, most common in unconsolidated sandy or gravelly units, but also are common in residual soils that form from in-place weathering of relatively hard rock. Owing to the granular constituents, overall strength of the debris slide mass generally is higher than that of earth flows, but there may be a very low strength zone at the base of the soil or within weathered bedrock.



DEBRIS FLOW: A Soil Flow where the majority of the materials are coarse-grained (fine sand to boulder size particles) and non-cohesive. Debris flows are most often triggered by intense rainfall following a period of less intense precipitation, or by rapid snow melt.



ROCK FALL: A landslide where a mass of rock detaches from a steep slope by sliding, spreading or toppling and descends mainly through the air by falling, bouncing or rolling. Intense rain, earthquakes or freeze-thaw wedging may trigger this type of movement.

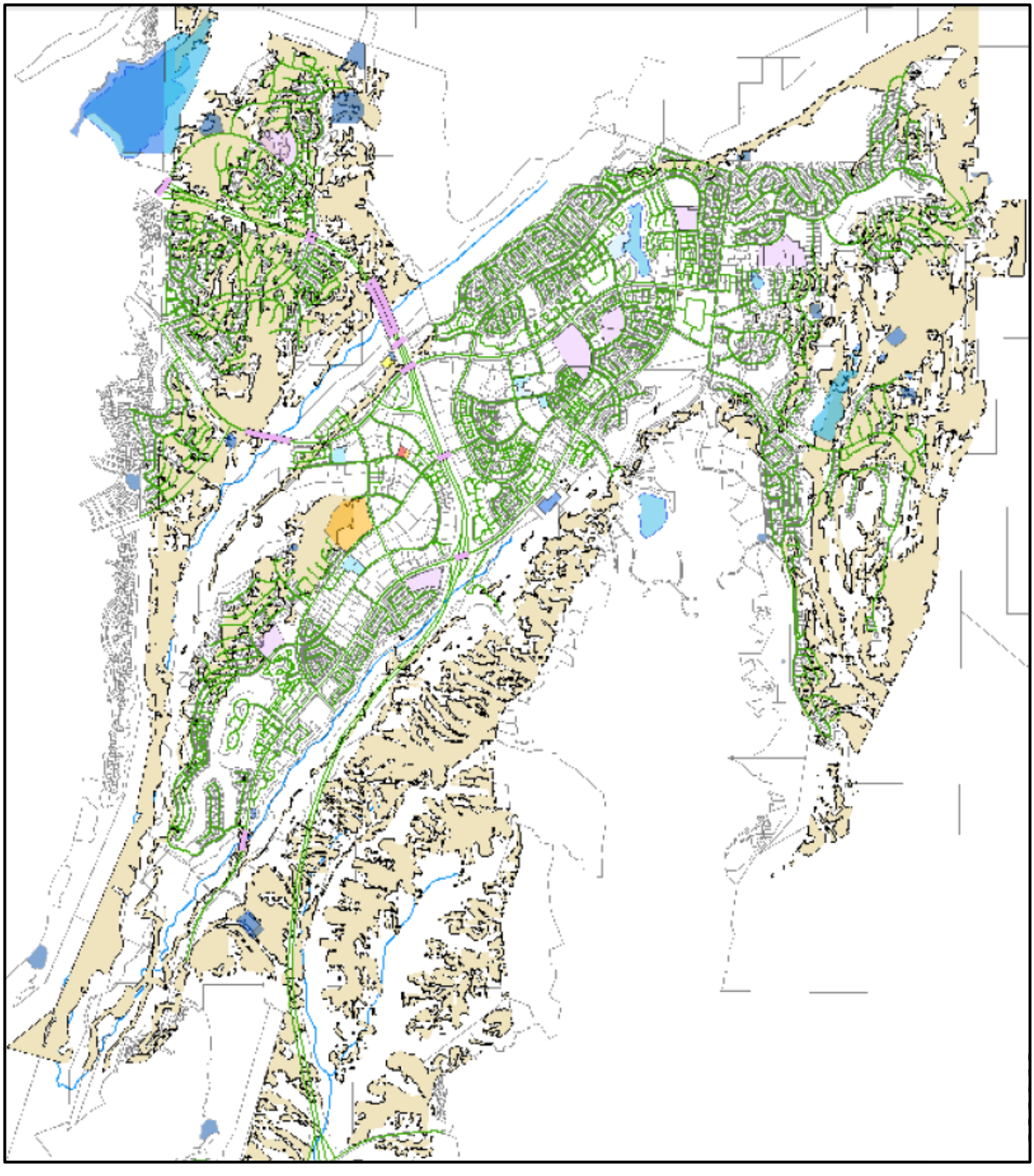


There is the potential for tremendous loss due to landslide hazards in Rancho Santa Margarita due to a combination of geologic conditions. The hilly and mountainous areas within the planning area are underlain by soft sedimentary bedrock. Numerous landslides have been mapped in the eastern half of the City and these sediments have the potential to fail (by landslide) during an earthquake.

The following map shows the landslide hazard areas and indicates that there are 3,641 residential structures and 11 commercial buildings that could be affected, in addition to 23 critical facilities. The potential loss to 100% of the residential units in the hazard area is $10,220,287,000 (3,641 structures X $280,700). Each commercial building in the hazard area was identified and an improvement value was determined via the County of Orange Assessor's Office. The potential loss to 100% of the commercial buildings in the landslide hazard area is $45,785,889. One of the Critical Facilities located in the hazard area is identified in the commercial building assessment. Of the remaining Critical Facilities located in the landslide hazard area, the County of Orange Assessor's Office could not provide a value assessment.

The Burned Area Emergency Response (BAER) Report produced by United States Forest Service (USFS) identified specific areas as high risk for landslides, mudflows and debris movement due to the burn areas of the Santiago Wildfires in 2007. A Debris Flow Response Annex was written by the Operational Area for these areas and was activated several times in the following years.

Landslide Zones in Rancho Santa Margarita



There are 23 critical facilities located within landslide zones. These facilities can be broken down into the following categories:

- 9 Water Tanks
- 3 Water Facilities
- 4 Reservoirs
- 4 Bridges
- 1 School
- 1 Communications Facility
- 1 Electrical Substation

2.2.11 Nuclear and Radiological

The increasing volume and variety of radioactive materials that is generated, stored, or transported in Orange County has created potential nuclear incident threats. Radioactive material is any material that emits radiation spontaneously. It may significantly contribute to or cause an increase in mortality and an increase in serious illness.

The circumstances and geographic features in the vicinity of potential incidents vary greatly. Incidents may occur at fixed facilities where there are opportunities for development of site-specific contingency plans. They may also occur at any place along a land, water, or air transportation route, and may occur in unpredictable locations which may be relatively inaccessible by ground transportation.

Among the possible causes of a nuclear incident are earthquakes, dam failures, transportation accidents, civil disturbances including terrorism, and problems within a nuclear facility. A nuclear incident may trigger one or more secondary events, including blasts, explosions, radioactive fallout, fires, power failures, dam failures, flash floods, transportation disruptions, accidents, overpass failures, building collapse, fuel shortages, food and water supply contamination, or disruption of distribution systems.

Nuclear Facility

There are two nuclear facilities in Orange County: San Onofre Nuclear Generating Station (SONGS) and the University of California Irvine. The UCI reactor is used for research purposes. San Onofre Nuclear Generating Station is currently in decommissioning status. Both SONGS units have been permanently shut down since January 2012. Radioactive fuel has been removed from both reactors and is currently being stored on-site in spent fuel pools or dry cask storage.

The County of Orange Nuclear Power Plant Emergency Plan for SONGS and its associated procedures will be developed to reflect the policies and concepts under which the County of Orange, including Rancho Santa Margarita, will operate during an emergency involving the spent nuclear fuel. There will be two emergency classification levels. These are:

1) Unusual Event - A minor occurrence takes place which does not affect offsite jurisdictions but might have the potential to increase in intensity. These range from small fires to major non-nuclear events.

2) Alert - When the unusual event escalates beyond certain technical specifications, the Alert level is reached. There is still no major impact on offsite agencies, except that EOCs are staffed and response personnel are put on standby.

Transportation Corridors

1) Freeways and Toll Roads

The major transportation routes in Orange County consist of the freeway and toll road systems. Over 250 miles of interstate highway and 719 miles of other major transportation routes run through Orange County. The 241 Toll Road intersects the City of Rancho Santa Margarita. The California Highway Patrol has designated these roadways as radioactive materials transportation corridors. The U.S. Department of Transportation has identified Interstate 5 as the third busiest highway transportation corridor in the country.

2) Railroads

Accidents along railroad corridors are a concern. Although small sources of radioactivity are not usually carried by train, large sources such as spent nuclear fuel are transported via railroads. Accidents involving train derailments and content exposure are rare in Orange County. A major impact would occur if a spent fuel cask were to rupture. An evacuation of up to three miles might be required in addition to the expenditure of many thousands of dollars for clean-up. Rancho Santa Margarita is located approximately 3.5 miles from the nearest railroad tracks that pass through Mission Viejo. It can be expected that residents from Mission Viejo may evacuate into Rancho Santa Margarita.

Military Bases

The military bases in and surrounding Orange County (i.e., Seal Beach Naval Weapons Center, Los Alamitos Armed Forces Reserve Center, and Camp Pendleton) have the potential to store and transport radioactive material in the form of nuclear warheads for bombs and missiles. Although a nuclear explosion is unlikely, the potential for the spread of radioactive material from the high explosive detonator may cause contamination over a two-mile area.

Large Gamma Ray Sterilization Facilities

The County has two large gamma ray sterilization facilities. Almost six million curies of radioactive cobalt 60 are stored in pools of water behind eight-foot thick concrete walls. The general public and industrial operations would be threatened if the concrete containment cracked and the pools lost their water supply. There could be up to a six-mile evacuation as a result of the opening of the containment. No contamination from the water would result.

Industrial Users

Orange County has over 200 specific licensees who use sealed and unsealed sources of radiation. The hazards range from a small spill inside a facility to a radioactive plume of smoke from a major fire. Exposure to the smoke would cause both internal and external exposure hazards.

2.2.12 Power Outage

Since each power outage or energy shortage is unique, it is impossible to envision every event or situation which might qualify as, or lead to, an energy emergency, and thus develop detailed specific response plans for every case. Instead, this plan recognizes that an emergency response is based on successful working relationships among people. Further, this plan provides a management structure, which identifies those relationships and provides a process to leverage those relationships during a power outage event.

The Northeast blackout of 2003 was a widespread power outage that occurred throughout parts of the Northeastern and Midwestern United States and Ontario, Canada on Thursday, August 14, 2003, just before 4:10 p.m. While some power was restored by 11:00 p.m., many did not get power back until 8:00 a.m. the next day. At the time, it was the second most widespread blackout in history, after the 1999 Southern Brazil blackout. The blackout affected an estimated 10 million people in Ontario and 45 million people in eight U.S. states.

The 2011 Southwest blackout, sometimes referred to as the Great Blackout of 2011, was a widespread power outage affecting large areas of Southern California as well as western Arizona and northern Baja California leaving nearly seven million people without power. The event occurred on Thursday, September 8, 2011, beginning at about 3:38 p.m. PDT as the result of 23 distinct events occurring on five separate power grids in a span of 11 minutes. Eleven hours after the outage began, power was restored to 694,000 of the affected customers, and by 4:30 am on September 9th, power was restored to all customers, although the system was described as "still fragile". All public schools in San Diego County and some in Orange County were closed on September 9th, as well as some major universities, community colleges, and the Federal court system.

The outage caused significant losses to restaurants and grocery stores, which were forced to discard quantities of spoiled food; perishable food losses at grocery stores, eating establishments and households were estimated at $12 million to $18 million. The outage also caused some sewage pumping stations to fail, resulting in contaminated beaches and potentially unsafe water supplies in several areas. As a precaution, in some neighborhoods, residents were told to boil their water or use bottled water for several days after the outage. It was the largest power failure in California history.

A rotating outage, also referred to as load shedding, is an intentionally-engineered electrical power outage where electricity delivery is stopped for non-overlapping periods of time over geographical regions resulting from either insufficient generation capacity or inadequate transmission infrastructure to deliver sufficient power to the area where it is needed. Rotating outages are a last-resort measure used by an electric company to avoid a total blackout of the power system. Rotating outages are usually in response to a situation where the demand for electricity exceeds the power supply capability of the network.

There are three stages leading to a rotating outage. In a Stage 1 emergency, only a general call for voluntary conservation is issued, while Stage 2 emergency results in power being temporarily cut off to certain large users, primarily industrial concerns, who have agreed to this arrangement in exchange for lower rates. When a Stage 3 power emergency is declared, electricity to one of the grids is shut off for a fixed period of time, which can range from 60 minutes to 2½ hours. If after this period of time the Stage 3 emergency still exists, power is restored to this grid but then the next grid in the sequence is shut off, and so on, until the situation is stabilized — the blackout thus "rotates" from one grid to the next.

In California, each customer's electric bill includes the number of the power grid (from 1 to 14) giving customers at least some advance notice of when their electricity might be turned off in the event of a Stage 3 emergency. The grids are set up in such a manner as to ensure that a large percentage of customers in the same neighborhood would not be blacked out concurrently, which could invite looting and other related problems. Normal electricity customers can fall within the areas reserved for emergency use (if they are near a hospital or other critical infrastructure), in which case their electric bill will indicate a power grid of 99 and they will not be affected by rotating outages.

An energy emergency could be caused by a terrorist event which disrupts multiple power generating stations at a time when other stations around the State are off line for maintenance and repair. Such an incident could include the

bombing of one or more local generation stations along with the destruction of trunk lines coming into the area. The likelihood of such an occurrence is low, but not improbable. In such a scenario, the local area would be unable to generate enough electricity, and the ability to bring power in from outside the area would be reduced due to the damage to trunk lines.

Extended power outages can have a disproportionate impact on people who rely on electricity to power or charge home medical and mobility equipment. Loss of power can also impact people who require refrigeration for medication or other medical supplies.

Extended power outages can render many of the City's traffic signals non-operational. Though many signals within the City have battery backup systems, those systems would only be effective for short duration outages.

2.2.13 Terrorism

In the wake of the 1993 World Trade Center bombing in New York and the Oklahoma City bombing in 1995, terrorism has become a serious concern for emergency management, emergency responders, and the public at large. The September 11, 2001 attacks on the New York City's World Trade Center and the Pentagon has now elevated concern about terrorism to a level never imagined and requires preparation to respond to situations that go beyond the terrorist incident scenarios that are familiar. The 2012 Boston Marathon bombing is an example of homegrown terrorism, which is more difficult for law enforcement and the intelligence community to detect. The bombs used in the attack were made out of household items that usually go undetected when purchased. Terrorism has evolved to now include Chemical, Biological, Radiological, Nuclear, or Explosive (CBRNE) weapons. Modern day terrorism is not always state sponsored and sometimes done by a "lone wolf" terrorist who does not belong to any particular group.

Terrorism includes the unlawful use of force or violence against persons or property to intimidate or coerce a government, the civilian population, or any segment thereof, in furtherance of political or social objectives. Terrorism affects us through fear, physical injuries, economic losses, psychological trauma, and erosion of faith in government. Terrorism is not an ideology; it is a strategy used by individuals or groups to achieve their political goals.

Terrorists espouse a wide range of causes. They can be for or against almost any issue, religious belief, political position, or group of people of one national origin or another. Due to the tremendous variety of causes supported by terrorists and the wide variety of potential targets, there is no place that is truly safe from terrorism. Throughout California there are nearly a limitless number of potential targets, depending on the perspective of the terrorist. Some of these targets include: abortion clinics, religious facilities, government offices, public places (such as shopping centers and entertainment venues), schools, power plants, refineries, utility infrastructures, water storage facilities, dams, private homes, prominent individuals, financial institutions, and other businesses.

Weapons of Mass Destruction (WMD) are: any destructive device as defined in section 921 of Title 18 U.S.C., an explosive, incendiary, or poison gas, bomb, grenade, rocket having a propellant charge of more than four ounces, missile having an explosive or incendiary charge of more than one quarter ounce, mine or device similar to the above; poison gas; any weapon involving a disaster organism; or any weapon that is designed to release radiation or radioactivity at a level dangerous to human life. WMDs are generally categorized as: Chemical, Biological, Radiological, Nuclear, or Explosive (CBRNE).

- There are a multitude of chemicals that terrorists can obtain that would incapacitate and/or kill segments of the population. Chlorine gas or ammonia could cause respiratory difficulties and possible death; nerve agents such as Sarin will cause large number of casualties and death over a small area.
- Most any infectious biological agent has the potential for being used as a terrorist weapon. Smallpox and anthrax are examples of biological agents that could cause significant health and clean up problems. Anthrax was released in the mail in Florida and Washington, D.C. in 2001.
- Radiological events are those in which radiation is spread contaminating a fixed area, for example, a "dirty bomb." Dirty bombs are explosive devices (non-nuclear) that spread radioactive materials as a result of the explosion of conventional explosives such as dynamite, nitro glycerin, or plastic explosives. The type of radiation released from such a device would depend on the radioactive materials used. The results of such an event would be a large number of casualties within a specific area with significant costs for cleanup.
- The nuclear in CBNRE refers to actual nuclear explosions resulting from a nuclear reaction. An example of such an event would be the detonation of a nuclear device that terrorists had obtained or developed. The results would be widespread casualties (depending on the explosive size of the device) with considerable radioactive contamination for an extended period of time.
- Other weapons to be considered are small firearms, (handguns and rifles,) and conventional or improvised explosives. These two categories of weapons are the most frequently used weapons by terrorists because of their low cost and availability. Firearms, both automatic and semi-automatic and the ammunition they utilize are readily available to a terrorist acting alone or with others. Acquiring them through legal or illegal means is relatively quick and simple. Explosives used may be of a commercial or military grade such as dynamite or plastic explosives, or they can be a self-constructed explosive (e.g., fertilizer and fuel oil,) or chemical reaction type (e.g., dry ice and soda water.) The explosives can be delivered or put in place in a wide variety of methods. "Suicide" bombs can be carried by the terrorist person themselves or in a vehicle. There are also numerous examples of backpacks or packages filled with explosives and left in a particular location for a timed or remote demolition.

In response to this tremendous challenge, the Orange County Sheriff's Department Emergency Management Division and the Orange County Terrorism Working Group have developed the Orange County WMD Annex to the County and OA Emergency Plans.

Experience with recent incidents demonstrates that there are no longer physical targets or victim groups 'off limits' to terrorists. There is no limit to the number of potential targets. A broad approach should be taken against terrorism rather than developing specific plans for each potential target. The City's response in other emergencies can be used as a backbone for preparing to coordinate, communicate, and cooperate with other jurisdictions and share resources.

2.2.14 Tornados

Tornadoes are one of nature's most violent storms. In an average year, 800 tornadoes are reported across the United States, resulting in 80 deaths and over 1,500 injuries. A tornado is a violently rotating column of air extending from a thunderstorm to the ground. The most violent tornadoes are capable of tremendous destruction with wind speeds of 250 mph or more. Damage paths can be in excess of one mile wide and 50 miles long.

Tornadoes come in all shapes and sizes and can occur anywhere in the U.S. at any time of the year. In the southern states, peak tornado season is March through May, while peak months in the northern states are during the summer.

In recent years, two tornados have hit Huntington Beach in 1978 and 1991. In 1978, a waterspout came in off the ocean and hit the Huntington-by-the-Sea Mobile Home Park located on Newland Street just off Pacific Coast Highway. Approximately 35-40 mobile coaches were severely damaged.

In 1991, a waterspout came in off the ocean and hit a mobile home park. The Driftwood Mobile Home Park had approximately 40-45 severely damaged coaches. The tornado continued into the housing tract off of Atlanta between Magnolia and Newland blowing several roofs off and causing damage to fences and home exteriors. No one was hurt as the result of the tornado.

Although large tornadoes are not common, Orange County has the highest occurrence of small to medium tornadoes per square mile in the United States according to FEMA. Between 1950 and 2015 Orange County was hit by 31 tornadoes. The vast majority of those events had Fujita Scale readings of F0, however one event reached F2 and one reached F3. No deaths and only a small number of injuries have been attributed to these events. The following figure provides information on some these events.

Tornado Events in Orange County

County	Locations	Date	Time	Timezone	Event	F Scale	Deaths	Injuries	Property Damage
ORANGE CO.		4/1/1958	1130	CST	Tornado		0	0	.25K
ORANGE CO.		2/19/1962	530	CST	Tornado	F0	0	0	.25K
ORANGE CO.		4/8/1965	1300	CST	Tornado		0	0	.25K
ORANGE CO.		11/7/1966	1109	CST	Tornado		0	0	2.50K
ORANGE CO.		11/7/1966	1515	CST	Tornado	F2	0	0	2.50K
ORANGE CO.		3/16/1977	2030	CST	Tornado	F1	0	4	2.500M
ORANGE CO.		2/9/1978	355	CST	Tornado	F3	0	6	2.500M
ORANGE CO.		1/31/1979	1330	CST	Tornado	F1	0	0	0
ORANGE CO.		11/9/1982	1500	CST	Tornado	F1	0	0	2.50K
ORANGE CO.		11/9/1982	1500	CST	Tornado	F0	0	0	2.50K
ORANGE CO.		1/13/1984	2019	CST	Tornado	F0	0	0	2.50K
ORANGE CO.	Anaheim	3/16/1986	730	PST	Tornado	F1	0	0	2.500M
ORANGE CO.	San Clemente	1/18/1988	1130	PST	Tornado	F0	0	0	25.00K
ORANGE CO.	Coto De Caza	1/18/1988	1200	PST	Tornado	F0	0	0	0.25K
ORANGE CO.		2/28/1991	1445	PST	Tornado	F0	0	0	0
ORANGE CO.	Huntington Beach	3/27/1991	35	CST	Tornado	F1	0	0	0
ORANGE CO.	Westminster	12/7/1992	730	PST	Tornado	F1	0	0	250.00K
ORANGE CO.	San Clemente	12/7/1992	1030	PST	Tornado	F1	0	0	2.5K
ORANGE CO.	Westminster & San Clemente	12/29/1992	1330	PST	Tornado	F0	0	0	2.5K
ORANGE CO.	Lake Forest	1/17/1993	1930	PST	Tornado	F0	0	1	5.000M
ORANGE CO.		1/18/1993	1405	PST	Tornado	F0	0	0	50.00K
ORANGE CO.	Brea	2/8/1993	1020	PST	Tornado	F0	0	0	50.00K
ORANGE CO.	Portola Hills & Santa Ana	11/11/1993	930	PST	Tornado	F0	0	2	1.00K
ORANGE CO.	Newport Beach & Tustin	2/7/1994	1815	PST	Tornado	F0	0	0	500.00K
ORANGE CO.	Irvine	11/11/1997	1240	PST	Tornado	F1	0	0	0
ORANGE CO.	Huntington Beach	12/21/1997	1340	PST	Tornado	F1	0	0	15.00K
ORANGE CO.	Huntington Beach	2/24/1998	130	PST	Tornado	F0	0	0	20.00K
ORANGE CO.	Orange	2/24/2001	1350	PST	Tornado	F0	0	0	50.00K
ORANGE CO.	Huntington Beach	2/19/2005	742	PST	Tornado	F0	0	0	15.00K
ORANGE CO.	Newport Beach	9/22/2007	1000	PST-8	Tornado	EF0	0	0	0
ORANGE CO.	Seal Beach & Sunset Beach	1/19/2010	1255	PST-8	Tornado	EF1	0	0	500.00K

URL:
http://www.ncdc.noaa.gov/stormevents/listevents.jsp?eventType=%28C%29+Tornado&beginDate_mm=02&beginDate_dd=01&beginDate_yyyy=1950&endDate_mm=02&endDate_dd=28&endDate_yyyy=2015&county=ORANGE%3A59&hailfilter=0.00&tornfilter=0&windfilter=000&sort=DT&submitbutton=Search&statefips=6%2CCALIFORNIA

2.2.15 High Winds

Santa Ana winds are generally defined as warm, dry winds that blow from the east or northeast (offshore). These winds occur below the passes and canyons of the coastal ranges of Southern California and in the Los Angeles basin. Santa Ana winds often blow with exceptional speed in the Santa Ana Canyon. Forecasters at the National Weather Service (NWS) in Oxnard and San Diego use the term "Santa Ana Winds" for winds greater than 25 knots.

The complex topography of Southern California combined with various atmospheric conditions creates numerous scenarios that may cause widespread or isolated Santa Ana wind events. Commonly, Santa Ana winds develop when a region of high pressure builds over the Great Basin (the high plateau east of the Sierra Mountains and west of the Rocky Mountains including most of Nevada and Utah). Clockwise circulation around the center of this high pressure area forces air downslope from the high plateau. The air warms as it descends toward the California coast at the rate

of 5 degrees Fahrenheit per 1,000 feet due to compressional heating. Thus, compressional heating provides the primary source of warming. The air is dry since it originated in the desert, and it dries out even more as it is heated.

Santa Ana wind conditions can result in two general disaster conditions. The most common is fire fanned by the high winds. This was the situation with the Santiago Fire, which began on Sunday, October 21, 2007. On this date, Southern California was in the midst of a "Fire Weather Watch" with strong Santa Ana winds and low relative humidity for the entire area. Critical fire weather conditions were in existence. Santa Ana winds were a major contributing factor to the fire's unpredictable behavior and rapid progression. Hot dry winds continued to fan the fire throughout the week of October 21st through 28th. Flame heights were reported as high as 100 feet. The Santiago Fire burned 28,400 acres and caused 16 minor injuries to fire personnel. Individual claims for damage or destroyed property included 24 outbuildings, 23 residential structures (8 damaged/15 destroyed), and 12 vehicles estimated at $7,358,810. The City of Rancho Santa Margarita activated its EOC during the Santiago Fire due to the close proximity of the fire and wide spread evacuations.

The second form of disaster would be direct building damage as a result of the high winds. Trees exposed to high wind loads can also pose a threat to property and safety should they fall over or have large branches that displace due to the wind loads.

Santa Ana winds commonly occur between October and February with December having the highest frequency of events. Summer events are rare. Wind speeds are typically north to east at 35 knots through and below passes and canyons with gusts to 50 knots. Stronger Santa Ana winds can have gusts greater than 60 knots over widespread areas and gusts greater than 100 knots in favored areas. Frequently, the strongest winds in the basin occur during the night and morning hours due to the absence of a sea breeze. The sea breeze, which typically blows onshore daily, can moderate the Santa Ana winds during the late morning and afternoon hours. Santa Ana winds are an important forecast challenge because of the high risk of fire associated with them. Other hazards include: wind damage to property, turbulence and low-level wind shear for aircraft, and high wind dangers for boaters.

2.2.16 Urban and Wildland Fires

Urban Fires

Fire protection challenges exist within Rancho Santa Margarita including high-density residential areas and urbanized sections located within and directly adjacent to high hazard wildland areas. The provision of adequate fire protection is directly affected by residential, commercial and industrial growth, all of which are progressing in Rancho Santa Margarita.

Arson can be a viable terrorist weapon used to attack a specific target or groups of targets within a specific area. The more prevalent terrorist arson fire would be used to make a political statement like the fire at the Sport Utility Vehicle (SUV) sales lot in West Covina in 2003. This fire was set by environmentalists in protest to the sales of SUVs. The fire itself did not have a large impact on the public in the form of disrupting a way of life, but it did convey a political message. Though the incident did not occur in Rancho Santa Margarita, it is an indication that such a domestic terrorist incident can occur anywhere at any time.

Much of the following, which addresses the threat of fire to urban areas, wildlands, and the urban/wildlands interface, has been extracted from the information prepared by the OCFA for the Safety Element of the County's General Plan.

1) Some of the most difficult fire protection problems in the urban area are:

- Multiple story, wood frame, high-density apartment developments
- Large contiguous built up areas with combustible roof covering materials
- Transportation of hazardous materials by air, rail, road, water, and pipeline
- Storage, handling and use of hazardous materials on site
- Natural disasters

The combination of building materials, population density, and natural conditions can lead to disastrous results. In April 1982, 1,500 people were left homeless when a fire associated with wooden shake rooftops and Santa Ana winds of 50 mph destroyed 525 Anaheim apartments, three houses, and two commercial buildings. The $50 million in property damage made this one of the most costly fires in Orange County history.

2) Other principal factors contributing to major fire losses are:

- Delayed detection of emergencies
- Delayed notification of the fire agency
- Response time of emergency equipment
- Street structure - private, curvilinear and dead-end
- Inadequate and unreliable water supply with poor hydrant distribution
- Inadequate code enforcement and code revisions, which lag behind fire prevention knowledge

The character of the existing built-up area and future land use determines the location of fire stations, number of companies, staffing of such companies, and future fire protection facility needs. Structural conditions also influence the quantity of water needed for fire protection (fire flow) and hydrant distribution.

Features of structural conditions that affect fire control are:

- Type of construction and use of buildings
- Area of building (ground floor area)
- Number of stories
- Type of roof covering material
- Exposures to the building

Fire prevention is the major fire department activity in urban areas; the objective is to prevent fires from starting. Once a fire starts, the objective is to minimize the damage to life and property. Urban fire prevention programs that are designed to achieve this fire prevention objective are:

- Adoption and aggressive enforcement of the most recent Uniform Fire Code
- Development of a comprehensive master plan to ensure that staffing and facilities keep pace with growth
- Plan check of new construction to ensure that all construction features meet code requirements
- Enforcement of the Hazardous Materials Disclosure Ordinance
- Active participation in Subdivision Committee and other planning activities

Wildland Fires

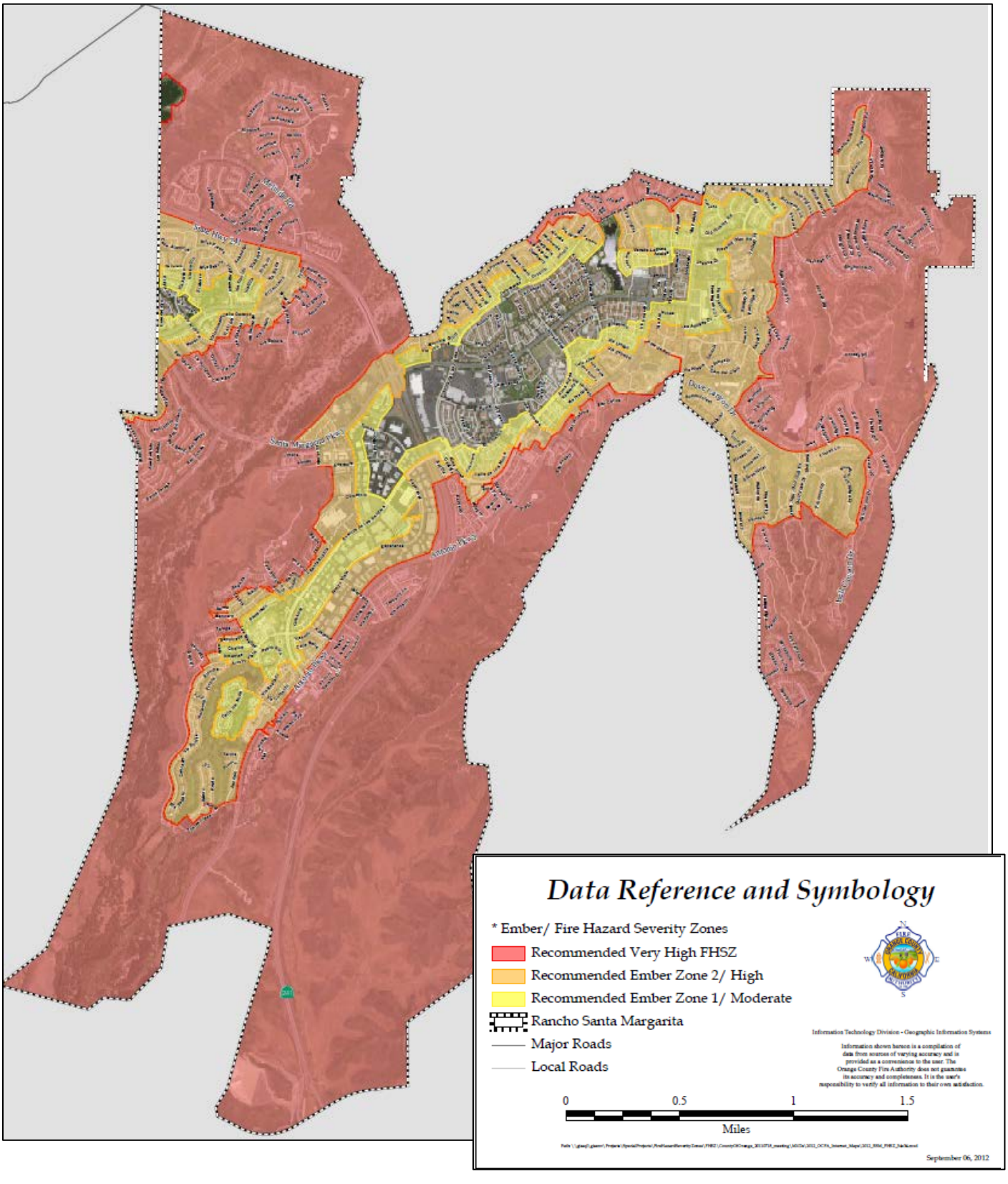
A variety of fire protection challenges exist within Rancho Santa Margarita and surrounding jurisdictions, including urban fires, wildland fires, and fires at the urban/wildland interface. This hazard analysis focuses on wildland fires, but also addresses issues related to the urban/wildland interface.

The most common causes of wildland fires are arson and weather related incidents. However, a potential terrorist incident involving wildfire should be considered. Terrorist incidents would fall into two general categories: diversionary (intended to cover other activity and divert resources) and primary (the intended event to reduce availability of critical resources and disrupt normal routines).

The following discussion, which addresses the threat of fire to wildlands and the urban/wildlands interface, has been extracted from the information prepared by the OCFA for the Safety Element of the County's General Plan.

California experiences large, destructive wildland fires almost every year, and Orange County is no exception. Wildland fires have occurred within the County, particularly in the fall, ranging from small, localized fires to disastrous fires covering thousands of acres. The most severe fire protection problem in the unincorporated areas, adjacent to Rancho Santa Margarita, is wildland fire during Santa Ana wind conditions.

Orange County Fire Authority Fire Hazard Severity Zones for Rancho Santa Margarita:



URL: http://www.ocfa.org/_uploads/pdf/FireHazardServerityMaps/RanchoSantaMargarita.pdf

OCFA created the Fire Hazard Severity Zones Maps for each contract city. The City of Rancho Santa Margarita has not formally adopted this map.

There are 16 critical facilities located within high and very high wildfire hazard areas. These facilities can be broken down into the following categories:

- 5 Bridges
- 4 Water Facilities
- 3 Reservoirs
- 3 Water Tanks
- 1 Electric Substation

Reasons for control difficulty associated with wildland fires are:

- Adverse weather conditions
- Large quantities of combustible fuel
- Inaccessible terrain
- Nonexistent or very limited water supply
- Large fire frontage requiring dispersal of fire forces

For these reasons, it is usually necessary for the fire force to meet the advancing fire front in an accessible area containing a minimum amount of vegetation for fuel. It is preferable if the accessible area is located close to a water source. The major objective of wildland fire defense planning is to prevent wildland fires from starting and, if unsuccessful, to minimize the damage to natural resources and structures. Some of the more successful programs currently in effect which contribute to the success of wildland fire prevention activities are:

- Closure of public access to land in hazardous fire areas
- Uniform Building Code prohibition of combustible roof covering materials
- Construction and maintenance of community and private fuel modification zones
- Vegetation Management Program (controlled burning)
- Weed Abatement Program
- Fire Prevention Education Programs

There are a number of natural conditions which might increase the possibility of wildland fires. Examples of such conditions are weather elements, the topography of the area, and the type and condition of wildland vegetation.

1) Weather

Weather conditions have many complex and important effects on fire intensity and behavior. Wind is of prime importance; as wind speed increases, the rate of fire spread also increases. Relative humidity (i.e., relative dryness of the air) also has a direct effect; the drier the air, the drier the vegetation and the more likely the vegetation will ignite and burn. Precipitation (annual total, seasonal distribution and storm intensity) further affects the moisture content of dead and living vegetation, which influences fire ignition and behavior.

Many wildland fires have been associated with adverse weather conditions. In the 1982 Gypsum Canyon Fire, 17 homes were lost and 18,000 acres burned, leaving an estimated $16 million in damage. The fire was difficult to contain because the Santa Ana winds were blowing at approximately 50-55 mph.

In 1993, aided by extreme fire weather conditions, devastating firestorms swept the County between October 24th and November 4th. During this period, a total of 20 major fires in six Southern California counties burned out of control. Three fires burned in Orange County during this time: the Stagecoach, Laguna Beach, and Ortega fires. The Stagecoach fire burned 750 acres and destroyed 9 buildings. The Ortega fire burned 21,384 acres and destroyed 19 buildings. The Laguna Beach fire burned 14,337 acres, destroyed 441 homes and caused approximately $528 million in damage.

In 1997, the Baker Canyon fire by Irvine Lake burned 6,317 acres of vegetation, followed by two additional fires in 1998: the Blackstar/Santiago Canyons fire destroyed 8,800 acres, and the Carbon Canyon fire burned 733 acres of brush.

In October 2007, The Santiago Fire began was a part of The California Fire Siege which included 22 fires and burned over 516,818 acres across California. Critical fire weather conditions were in existence. Santa Ana winds were a major contributing factor to the fire's unpredictable behavior and rapid progression. Hot, dry winds continued to fan the fire throughout the week of October 21-28. Flame heights were reported as high as 100 feet. The Santiago Fire burned 28,400 acres and caused 16 minor injuries to fire personnel. Individual claims for damage or destroyed property included 24 outbuildings, 23 residential structures (8 damaged/15 destroyed), and 12 vehicles estimated at $7,358,810.In addition to winds, structural development within or adjacent to wildland exposures represents an extreme fire protection problem. This problem is due to flying embers and the predominance of combustible roof coverings.

2) Topography

Topography has a considerable effect on wildland fire behavior and on the ability of firefighters to position and utilize their equipment to suppress wildland fires. Simply because of topography, a fire starting in the bottom of a canyon may expand quickly to the ridge top before initial attack forces can arrive. Rough topography greatly limits road construction, road standards, and accessibility by ground equipment. Steep topography also channels airflow, creating extremely erratic winds on leeward side of the slopes and in canyons. Water supply for fire protection to structures at higher elevations is frequently dependent on pumping units. The source of power for such units is usually from overhead distribution lines, which are subject to destruction by wildland fires.

3) Vegetation

A key to effective fire control and the successful accommodation of fire in wildland management is the understanding of fire and its environment. Fire environment is the complex of fuel, topographic, and air mass factors that influence the inception, growth, and behavior of a fire. The topography and weather components are, for all practical purposes, beyond human control. Fuels, on the other hand, can be controlled before the outbreak of fires. In terms of future urban expansion, finding new ways to control and understand these fuels can lead to possible fire reduction.

A relatively large portion of the County including Rancho Santa Margarita and surrounding jurisdictions is covered by natural (though modified) vegetation. Of these different vegetation types, coastal sage scrub, chaparral, and grasslands reach some degree of flammability during the dry summer months and, under certain conditions, during the winter months. For example, as chaparral gets older, twigs and branches within the plants die and are held in place. A stand of brush 10- to 20-years of age usually has enough dead material to produce rates of spread about the same as in grass fires when the fuels have dried out. In severe drought years, additional plant material may die and contribute to the fuel load. There will normally be enough dead fuel accumulated in 20- to 30-year old brush to give rates of spread about twice as fast as in a grass fire. Under moderate weather conditions that produce a spread rate of one-half foot per second in grass, a 20- to 30-year old stand of chaparral may have a rate of fire spread of about one foot per second.

Fire spread in old brush (40 years or older) has been measured at eight times as faster than grass, about four feet per second. Under extreme weather conditions, the fastest fire spread in grass is 12 feet per second or about eight miles per hour.

Wildland and Urban Interface

In an effort to assist in alleviating fire dangers near urban development interface, the construction of a fuel modification zone (firebreak, fuel break or greenbelt) has been required. The continued application of this method does have drawbacks and, therefore, is not the only acceptable solution. There are the impacts on wildlife, on unique vegetation and, in some cases, to the watershed cover as deep-rooted chaparral species are replaced by shallow-rooted grasses. Fuel breaks are costly to install, require expensive maintenance to ensure their success during a wildfire, and offer protection primarily to these structures with direct exposure to the wildland. This inequity in protection versus installation/maintenance costs represents a very important point with respect to the natural resource/urban development interface conflict. Fire prevention measures to reduce the level of risk to the structures with wildland exposure must be developed within the design of the residential development rather than in the natural resource.

Readiness Campaign

The Orange County Fire Authority (OCFA) has a set up a wildfire awareness campaign aimed at residents to protect their family, property and community from wildfires. Many residents in Rancho Santa Margarita have built their homes and landscaped without fully understanding the impact that could result from wildfire. There may not be a lot of time to figure out who is home, what to take, where or when to go. The Ready, Set, Go! Campaign asks residents to prepare before a threat of a wildfire. There are three stages **Ready** – prepare before the threat of a wildfire so the home is ready in case of a fire, **Set** – pack the vehicle with emergency items, stay aware of the latest news from local media and your local fire department for updated information, and **Go!** – follow your Action Plan, this will allow firefighters to be able to best assist during a wildfire and ensure the families safety.

OC Fire Watch Program

OC Fire Watch will increase public awareness of the fire dangers by raising red “Fire Alert” flags at OC Parks and other County facilities, as well as at OCFA fire stations and participating City Halls throughout Orange County. The City of Rancho Santa Margarita participates in the OC Fire Watch Program by raising the red “Fire Alert” flag at City Hall when requested by OCFA. The program also incorporates fire watch volunteers to help monitor the County’s wilderness parks, which are especially vulnerable to fire during Red Flag conditions.

OC Parks will coordinate the deployment of OC Fire Watch volunteers in and around the County’s wilderness areas during designated Red Flag conditions. OCFA will train the fire watch volunteers in communication procedures and map reading, as well as how to recognize and report potentially dangerous situations.

2.2.17 Vector Control

General Situation The information for this assessment was obtained from the Orange County Vector Control District.

The Orange County Vector Control District (“The District”) routinely conducts field surveys to determine the presence of vectors and vector-borne disease. The diseases of primary concern are those carried by mosquitoes, fleas, ticks, and rodents. Surveillance and detection programs are designed around each of these vectors. When a vector-borne disease

is detected by routine surveillance activities, the risk options are evaluated by the District management. If it is determined that a risk to the public exists, then local and state health agencies and the public are informed.

The District provides control measures for mosquitoes, rats, flies, and Red Imported Fire Ants (RIFA). Although RIFA do not vector disease, they may pose a health threat through their aggressive stings. The District provides information on how to avoid exposure to other vectors, such as fleas and ticks that are not part of its routine control programs.

Specific Situation Depending on the nature of the emergency any of these diseases may become more common, and some as yet unreported disease may emerge. The District routinely surveys for several vector-borne diseases that have been in Rancho Santa Margarita and/or surrounding jurisdictions in Orange County for some time. These include:

Mosquito-borne Disease

The District's primary concern with mosquito-borne disease is the transmission of mosquito-borne viruses to humans. Mosquito-borne viruses (arboviruses) are increasing in their world-wide distribution, with new forms being introduced presumably by air travelers from exotic localities and possibly by migratory birds. The recent introduction of West Nile virus (WNV) from the Middle East into the Americas is one example of the movement of a mosquito-borne virus. Communicable disease officials believe that more of these viruses, such as dengue fever and chikungunya, will become established in the mainland U.S. in the near future. The District's surveillance and mosquito control efforts are focused on the following mosquito-borne viruses [West Nile virus (WNV), Saint Louis encephalitis (SLE), and Western equine encephalitis (WEE)], and the potential introduction of exotic mosquito species, such as the Asian tiger mosquito, *Aedes albopictus*, and the yellow fever mosquito, *Aedes aegypti*.

West Nile virus (WNV) was first diagnosed in the United States in New York City in 1999 and rapidly spread westward throughout the United States. During subsequent years, WNV spread to nearby northeastern states, reaching all of the lower 48 states by 2003. Orange County experienced its first human case of WNV in 2004. Altogether, WNV infection has been confirmed in 252 people and has caused 9 deaths from 2004 to 2013 in the County. The District has increased staffing and its surveillance, mosquito control, and public outreach efforts to combat this disease in the County since its introduction.

Saint Louis encephalitis (SLE) was the first (1933) recognized major neuroinvasive arbovirus in the United States. Sporadic human cases have been diagnosed in southern California, although the virus and antibodies are more frequently recovered from wild birds during surveillance studies. The most recent, large-scale outbreaks occurred in southern California in 1983-84 (26 cases, five in Orange County) and the San Joaquin Valley in 1989 (29 cases); sporadic cases were reported in the Los Angeles Basin from 1990 to 1997. SLE was considered the most important mosquito-borne virus in North America until the arrival of WNV in 1999. No SLE virus activity has been detected in Orange County since the introduction of WNV into the County in late 2003.

Western equine encephalitis (WEE) had been a significant cause of death and disease in humans and horses in the United States prior to the establishment of organized vector control programs in the late 1940s. However, WEE has not been detected in mosquitoes or any other animals in Orange County in many years and is unlikely to pose a threat in the future.

Malaria is a serious infectious disease transmitted by mosquitoes and is caused by single-celled animals (protists) in the genus *Plasmodia*. Malaria was one of the major vector-borne diseases affecting early Californians. The species of mosquito, *Anopheles hermsi*, responsible for its transmission to humans is largely restricted to wetland habitats in

Orange County. Major reclamation and drainage projects to produce more arable and livable land have reduced the malaria transmission potential in many areas of the County. However, imported malaria cases among military personnel and overseas travelers returning home have the potential to spark a reintroduced of locally-transmitted malaria among the County's *Anopheles* mosquitoes.

Flea-borne Diseases

Flea-borne typhus is caused by *Rickettsia felis* and *R. typhi,* two closely-related gram-negative bacteria. Most human cases are probably attributed to *R. felis*, since it is the predominant bacterial species found in infected fleas in Orange County. The cat flea, *Ctenocephalides felis*, is considered the primary vector of both bacteria. This flea is also found on opossums (*Didelphis virginiana*) that enter the yards of homes with cats. In California, the disease seems to be confined to Orange and Los Angeles Counties. Control is usually achieved by treating household cats and dogs to rid them of fleas, although severe household infestations may require fumigation of the interior of the house and exterior yards. Testing of small mammals and the fleas they carry has demonstrated a high prevalence of flea-borne typhus bacteria in fleas (> 40%) collected from areas with human cases. In total, over 112 cases (no deaths) of flea-borne typhus have been reported in Orange County from 2006 to 2014. The District maintains a public awareness program for flea-borne typhus but has no active control program. It tries to work with local code-enforcement agencies to rid an area of problem animals if caused by feeding of backyard wildlife or maintenance of cat colonies.

Bubonic Plague is a natural-occurring bacterial disease associated with wild rodents and fleas and can be transmitted to humans through the bite of an infected flea. Bubonic plague has a very high fatality rate in humans (> 70%) if not treated with antibiotics. The same fleas and others capable of transmitting plague may occur on domestic pets, especially cats. Bubonic plague remains endemic in ground squirrel populations in many areas of California. Bubonic plague has occurred in Orange County sporadically, including instances in ground squirrels during the early 1980s in Tonner Canyon and Anaheim Hills, adjacent to Riverside and San Bernardino Counties, and in a roof rat from the City of Orange in 1998. The CDPH Vector-Borne Disease Section lists the Santa Ana Mountains as a plague endemic area. This means that the disease is present and capable of reoccurring at any time. Bubonic plague in Southern California is typically associated with ground squirrels and pack rats, and is very rarely associated with rodents like the roof rat. The District routinely traps and tests ground squirrels at parks and historic plague sites, as well as roof rats from residential areas near these sites. A sample of blood is taken along with the fleas brushed from their bodies. The blood sample is tested for plague antibodies. Rats, squirrels, and other small mammals from Orange County tested by the District laboratory have all tested negative to date since 1998.

Other Diseases:

Hantavirus

Hantavirus Pulmonary Syndrome (HPS) is an infectious disease with flu-like symptoms that progresses rapidly to potentially life-threatening breathing problems. It is a viral pathogen found in rodents that affects humans by attacking the lungs and producing an often fatal pneumonia in nearly 40% of cases. The virus is inhaled as an aerosol originating from contaminated fecal pellets (droppings) and urine from rodents, primarily the deer mouse. This mouse is widely distributed in rural areas throughout the U.S., often in close association with human development. The particular strain of hantavirus encountered locally is the Sin Nombre Virus (SNV) and is associated naturally with deer mice, occasionally pack rats, but never with roof rats. A second variant, El Morro Canyon Virus, also has been isolated from deer mice in Orange County. The District traps and takes blood samples from both deer mice and pack rats throughout the County.

Chapter Three: Concept of Operations

3.1 Principles of Operations

This EOP is designed to effectively and efficiently organize and coordinate the City of Rancho Santa Margarita's response to major emergencies by:

- Providing effective life safety measures, reducing property loss, and protecting the environment.
- Providing for the rapid resumption of impacted businesses and community services.
- Providing accurate documentation and records required for cost recovery efforts for government and community members.

3.2 Prioritizing Operations

The priorities that guide decision making within the EOC environment are as follows:

- Saving human lives
- Protecting property
- Restoring essential services
- Providing public information
- Protecting and restoring the environment
- Preserving government
- Providing for the needs of survivors

3.3 Phases of Emergency Management

This City of Rancho Santa Margarita EOP addresses the entire spectrum of contingencies, ranging from relatively minor incidents to large-scale disasters, such as an earthquake. Some emergencies will be preceded by a buildup or warning period, providing sufficient time to warn the public and implement preparedness measures designed to reduce loss of life, property damage, and effects on the environment. Other emergencies occur with little or no advanced warning, thus requiring immediate activation of the EOP and efficient and coordinated mobilization and deployment of resources. All departments of the City must be prepared to promptly and effectively respond to any foreseeable emergency, taking all appropriate actions, including requesting and providing mutual aid.

Emergency management activities during peacetime and national security emergencies are often associated with the five National Governor's Association (NGA) and National Fire Protection Association (NFPA) defined phases:

- Prevention Phase
- Preparedness Phase
- Response Phase
- Recovery Phase
- Mitigation Phase

3.3.1 Prevention Phase

The prevention phase includes activities, tasks, programs, and systems intended to avoid or intervene in order to stop an incident from occurring. Prevention can apply both to human-caused incidents (such as terrorism, vandalism, sabotage, or human error) as well as to naturally occurring incidents.

3.3.2 Preparedness Phase

The preparedness phase involves activities that are undertaken in advance of an emergency or disaster. These activities develop the City's capabilities for an effective response to disasters. Disaster plans are developed and revised to guide disaster response and increase available resources. Planning activities include developing hazard analyses, training response personnel, purchasing of EOC equipment and improving public information and communications systems.

3.3.3 Response Phase

The response phase includes any action taken, before, during or after an emergency situation to save lives, minimize damage to property and enhance the effectiveness and speed of recovery.

3.3.4 Recovery Phase

Recovery activities will involve the restoration of services to the public and returning the affected area(s) to pre-emergency conditions. Recovery activities may be both short-term and long-term, ranging from restoration of essential utilities such as water and power, to mitigation measures designed to prevent future occurrences of a given threat.

3.3.5 Mitigation Phase

Mitigation efforts occur both before and after emergencies or disasters. Post-disaster mitigation is actually part of the recovery process. This includes eliminating or reducing the impact of hazards that exist within the jurisdiction. Pre-disaster mitigation is also very important.

3.4 Organization and Assignment of Responsibilities

During disasters, the City of Rancho Santa Margarita is required to coordinate emergency operations with the Orange County OA and, in some instances, other local governments. The California Emergency Services Act requires the Orange County OA to support OA jurisdictions, or local governments, in identifying and coordinating resources and in communicating with regional and state authorities.

Under the Standardized Emergency Management System (SEMS) and the National Incident Management System (NIMS), the City has responsibilities at two levels, the field response level and local government levels. At the field response level, all departments and agencies will use the Incident Command System (ICS) and NIMS to standardize the emergency response and report emergency related information to the emergency management organization in the City's EOC.

The Rancho Santa Margarita EOC manages, for the City's jurisdiction, the overall response to major disasters and coordinates interdepartmental activity, implements local policies, determines the mission and priorities, and provides direction and the authority to act. The City's EOC engages in long-range planning and coordination with outside agencies. The City also is the source of information for dissemination to the public, and provides support for cost recovery efforts for the City by tracking and reporting the personnel, supplies, and equipment used by its various departments.

The City EOC then shares information and passes requests to the OA EOC, which is managed by the Orange County Sheriff-Coroner Department-Emergency Management Division. The OA is overseen by the Orange County Operational Executive Area Executive Board, which consists of members from the Board of Supervisors, Orange County Sheriff-Coroner Department, City Manager's Association & League of Cities, Health Care Agency, Department of Education,

Independent Special Districts, OC Public Works, City Engineers' and Public Works Director's Association, Orange County Fire Authority, Fire Chiefs' Association and Police Chiefs' and Sheriff Association. The Orange County OA:

- Shares information amongst OA jurisdictions and with California Office of Emergency Services (Cal OES) Southern Regional Emergency Operations Center (REOC).
- Assists the City in obtaining appropriate resources and personnel to manage its operations.
- Serves as the OA-level mutual aid coordination point for OA jurisdictions, including Rancho Santa Margarita, in seeking resource support from within or outside the Operational Area.
- Serves as the City's link to state government authorities and resources.
- Identifies and coordinates with resources outside the mutual aid system for the benefit of the City.
- Identifies the best strategy for sharing, acquiring, and/or distributing resources and personnel in the OA based on its overall perspective of the needs of all involved OA jurisdictions.
- Deploys or coordinates regional resources to serve all OA jurisdictions when a single collective approach to certain operations is more efficient than individual efforts spread amongst OA jurisdictions.
- Identifies opportunities to improve the efficient use of response resources and personnel amongst OA jurisdictions.

Requests that the OA is unable to meet are passed to the Southern Regional Emergency Operations Center or appropriate mutual aid regional coordinator. California is divided into 6 mutual aid regions. The Orange County OA is in Region I, which includes Orange, Los Angeles, Ventura, Santa Barbara, and San Luis Obispo Counties. The Region I REOC is located in Los Alamitos. Mutual Aid Regions I and VI make up the Southern California OES Administrative Region, which is managed through the Los Alamitos REOC.

Cal OES Southern Region:

URL:
http://www.caloes.ca.gov/RegionalOperationsSite/Documents/OES_ESC_OA_Assignments_Southern_04152015_Web.pdf

The emergency response of government agencies in California is an extension of day-to-day operations. Emergency operations rely on the normal authority and responsibilities of government, plus police powers that may be invoked by executive authority under specified conditions. Governments at all levels must work together effectively, along with the private sector, business and industry, community based organizations, and volunteers, to meet the challenges posed by a disaster. SEMS and NIMS are the systems required for managing response to multi-agency and multi-jurisdiction emergencies in California as described in the next section. SEMS/NIMS help unify all elements of California's emergency management organization into a single integrated system.

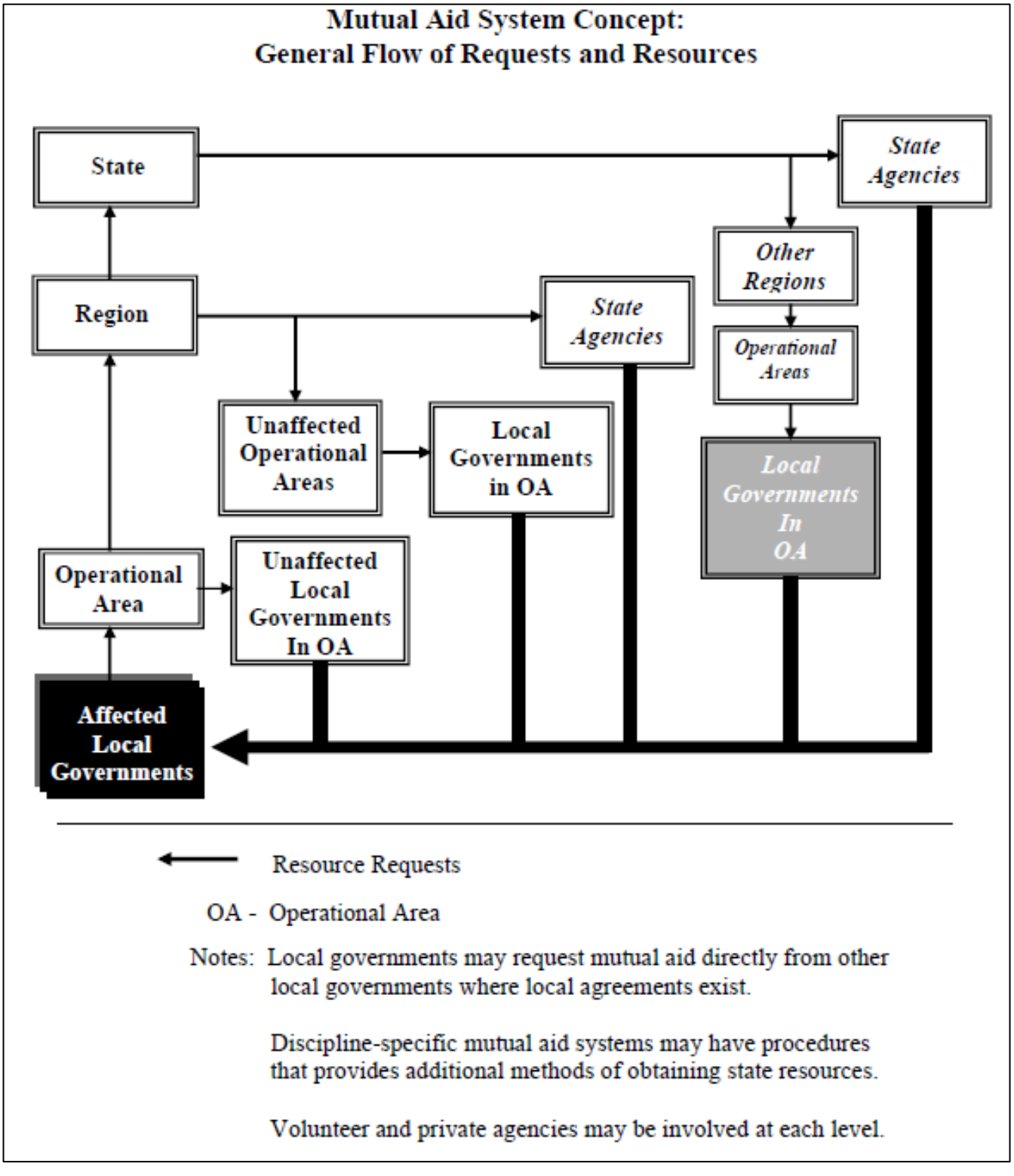
The five SEMS/NIMS organization levels, together with the private sector, are collectively referred to as the California Emergency Organization. This organization represents all resources available within the State which may be applied in disaster response and recovery phases. The system operates from established EOCs at all levels of government, as well as in many businesses and industries. The goal is to support emergency activities to protect life, property, and the environment.

Emergency mutual aid response and recovery activities are generally conducted at the request and under the direction of the affected local government. Some emergency responses are led by designated state agencies. In some cases, there may be joint response that requires a Unified Command between state and local jurisdictions (e.g., hazardous material, nuclear power plant, and terrorism emergencies).

Resource requests for response and recovery originate at the lowest level of government and are progressively forwarded to the next level until filled. For example, if an OA is unable to provide the necessary requested assistance, it may contact the Cal OES Region at the REOC and forward the request. During complex emergencies involving multiple jurisdictions and agencies, coordination of resources can be achieved through the use of liaison officers, agency representatives, and unified command.

When support requirements cannot be met with state resources, the State may request assistance from those federal agencies having statutory authority to provide assistance in the absence of a Presidential Declaration. The State may also request a Presidential Declaration of an Emergency or Major Disaster under the provisions of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, Public Law 93288, as amended. The picture below illustrates the communication and resource request and supply paths for the Orange County OA.

Communications, Resource Request, and Supply Paths for Local Governments:



URL: http://www.caloes.ca.gov/PlanningPreparednessSite/Documents/12%20SEMS%20Guidelines%20Complete.pdf

3.4.1 Emergency Organizational Levels

When fully activated, the Standardized Emergency Management System (SEMS) consists of five levels: field response, local government, Operational Area, Cal OES Mutual Aid Regions, and state government. For the OA, those levels are assigned as follows:

Field	Field Command
Local Government	Emergency Operations Center
Operational Area	Orange County OA EOC
Region	Cal OES Southern Region EOC (REOC)
State	Cal OES State Operations Center (SOC)

Field Response Level

The field response level is where emergency response personnel and resources, under the command of an appropriate authority, carry out tactical decisions and activities in direct response to an incident or threat. SEMS and NIMS regulations require the use of the ICS at the field response level. The ICS field functions to be used for emergency management include Command, Operations, Planning and Intelligence, Logistics, and Finance and Administration.

Local Government Level

Local governments include cities, counties, school districts, and special districts. Local governments manage and coordinate the overall emergency response and recovery activities within their jurisdiction and amongst their field responders. Local governments are required to use SEMS and NIMS when their EOC is activated or a local emergency is proclaimed in order to be eligible for state funding of response-related personnel costs. In SEMS and NIMS, the local government emergency management organization and its relationship to the field response level may vary depending upon factors related to geographical size, population, function, and complexity. Local jurisdictions are responsible for the overall direction of personnel and equipment provided for emergency operations through mutual aid (Government Code Section 8618). Local governmental levels shall provide the following functions: Management, Operations, Planning and Intelligence, Logistics, and Finance and Administration.

Operational Area Level

Section 8605 of the California Emergency Services Act designates each county area as an Operational Area (OA). California is comprised of 58 OAs, one for each geographic county. The OA is the intermediate level of the state's emergency services organization, and consists of the county government, local (city) governments and special districts, located within the county area. During a State of Emergency, a State of War Emergency, or a Local Emergency, OAs are used to coordinate resources, develop priorities, disseminate information, and serve as a coordination and communication link to the State Mutual Aid System. As of December 1, 1996, per SB 1841, the utilization of the OA during emergencies is mandatory for local governments that wish to receive financial reimbursement for personnel-related response costs. Signatories to the Orange County OA Agreement consist of cities, school districts, special districts and the County of Orange. The OA is responsible for:

- Coordinating information, resources and priorities amongst local governments within the OA.
- Coordinating information, resources and priorities between the regional level and the local government level.

- Using multi-agency and inter-agency coordination to facilitate decisions for overall OA level emergency response activities.

SEMS regulations specify that the county board of supervisors is responsible for the establishment of an OA. The Orange County Sheriff-Coroner Department is the lead agency for the Orange County OA. All local governments cooperate in organizing an effective operational area, but the OA's authority and responsibility are not affected by the nonparticipation of any local government.

Activation of the OA EOC during a State of Emergency or a Local Emergency is required by SEMS regulations under the following conditions:

- On Request - A local government within the OA has activated its EOC and requested activation of the OA EOC to support its emergency operations. Jurisdiction(s) determine that additional response resources beyond that which would normally be covered by mutual aid are required and assistance from the OA may be necessary.
- Two City Local Emergency - Two or more cities within the OA have proclaimed a Local Emergency.
- County and City Local Emergency - The County and one or more cities have proclaimed a Local Emergency.
- Request for Governor's Proclamation - A city, city and county, or county has requested a Governor's proclamation of a State of Emergency, as defined in Government Code 8558(b).
- State of Emergency - A State of Emergency is proclaimed by the Governor of the State for the County or two or more cities within the OA.
- Request for Outside Resources - The OA is requesting resources from outside its boundaries, except those resources used in normal day-to-day operations which are obtained through existing agreements providing for the exchange or furnishing of certain types of facilities and services on a reimbursable, exchange, or other basis as provided for under the Master Mutual Aid Agreement.
- Request for OA Resources - The OA has received resource requests from outside its boundaries, except those resources used in normal day-to-day operations which are obtained through existing agreements providing for the exchange or furnishing of certain types of facilities and services on a reimbursable, exchange, or other basis as provided for under the Master Mutual Aid Agreement.

County of Orange signed the Orange County Operational Area Agreement in 1995, agreeing to participate in the OA and to support the Orange County Emergency Management Division operations at Loma Ridge. The City of Rancho Santa Margarita signed the Operational Area Agreement on November 6, 2012.

If the Orange County OA EOC is activated, an Operational Area Coordinator (OAC) will be appointed depending on the type of hazard and will have the overall responsibility for coordinating resources on behalf of OA jurisdictions and supporting emergency operations within the county. The Orange County EOC located at Loma Ridge fulfills the role of the OA EOC.

3.4.2 Emergency Organization Functions and Concepts

SEMS and NIMS require five functions: Management, Operations, Planning and Intelligence, Logistics, and Finance and Administration. The term command is used in the field and management is used in multiagency coordination centers (e.g., EOCs). These functions are the basis for structuring the City of Rancho Santa Margarita EOC organization:

Management	Responsible for the overall emergency policy and coordination through the joint efforts of governmental agencies and private organizations; dissemination of information and protective actions to the public.
Operations	Responsible for coordinating and supporting tactical operations of the emergency response at the field level.
Planning and Intelligence	Responsible for collecting, evaluating and documenting information, resources, developing the EOC Incident Action Plan, Situation Summary Reports, and After-Action Reports in coordination with other EOC functions.
Logistics	Responsible for obtaining and providing services, personnel, equipment, supplies, materials, facilities and volunteer coordination.
Finance and Administration	Responsible for all financial activities and other administrative aspects.

Organization Flexibility and Modular Organization

The five essential SEMS and NIMS functions are established as "sections" within the City EOC. All other functions will be organized as branches, groups, or units within sections. The activated functions and their relationship to one another will depend upon the size and nature of the incident. Only those functional elements required to meet current objectives will be activated. Those functions that are needed but not staffed will be the responsibility of the next higher element in the organization.

Management of Personnel - Unity of Command and Span of Control

Each activated function will have only one person in charge of it (unity of command), but a supervisor may be in charge of more than one functional element. Every individual will have only one supervisor to eliminate any potential for conflicts or confusion among supervisors, and each supervisor will be responsible for no more than seven persons or functions, with the ideal span of control being three to seven with five being ideal.

The City EOC Section Chiefs for Operations, Planning and Intelligence, Logistics, and Finance and Administration constitute the EOC General Staff. The General Staff are responsible for:

- Overseeing the internal functioning of their section.
- Interacting with each other, the DES, EOC Coordinator, and other entities within the City's EOC to ensure the effective functioning of the EOC organization.

Unified Command and Area Command Concepts

Unified Command (UC) is an ICS application used when more than one agency has incident jurisdiction or when incidents cross political jurisdictions. Agencies work together through the designated members of the UC, often the senior person from agencies or disciplines participating in the UC, to establish a common set of objectives and

strategies and a single Incident Action Plan (IAP) (e.g., EOC, Field, etc.). This is accomplished without losing or abdicating agency authority, autonomy, responsibility, or accountability. This occurs most frequently at the field level, in large-scale events that involve more than one jurisdiction.

An Area Command is an organization established to oversee the management of multiple incidents that are each being handled by an ICS organization, or to oversee the management of large or multiple incidents to which several Incident Management Teams have been assigned. The Area Command has the responsibility to set overall strategy and priorities, allocate critical resources according to priorities, ensure incidents are properly managed, and ensure objectives are met and strategies followed. Area Command becomes Unified Area Command when the multiple incidents under the control of the Area Command are multi-jurisdictional. Area Commands are typically established at EOCs or some location other than an incident command post.

The City EOC could become a Unified Command depending on the situation and the types of disciplines requiring involvement in the coordination of response activities. Typically the EOC does not serve as an Area Command; however, it is an option based on the flexible nature of ICS and the given situation. The City of Rancho Santa Margarita may also be integrated into a UC or Area Command established in another jurisdiction during an incident in which it is involved in.

Multi-Agency and Organizational Level Coordination

An integral part of SEMS and NIMS is the use of multi- and inter-agency coordination. Within the context of SEMS and NIMS, this involves prioritizing and assigning resources, handling competing demands, and maximizing resources amongst numerous response organizations, disciplines, and levels.

3.4.3 Mutual Aid

The foundation of California's emergency planning and response is a statewide mutual aid system which is designed to ensure adequate resources, facilities, and other support are provided to jurisdictions whenever their own resources prove to be inadequate to cope with a given situation. The basis for the system is the California Disaster and Civil Defense Master Mutual Aid Agreement and is provided for in the California Emergency Services Act. This Agreement was developed in 1950 and has been adopted by the state, all 58 counties and most incorporated cities in the State of California. The Master Mutual Aid Agreement creates a formal structure wherein each jurisdiction retains control of its own facilities, personnel and resources, but may also receive or render assistance to other jurisdictions within the state. State government is obligated to provide available resources to assist local jurisdictions in emergencies.

California Mutual Aid System

A statewide mutual aid system, operating within the framework of the California Master Mutual Aid Agreement, allows for the progressive mobilization of resources to and from emergency response agencies, local governments, Operational Areas, regions, and the state with the intent to provide requesting agencies with adequate resources. The statewide mutual aid system includes several discipline-specific mutual aid systems, such as fire and rescue, law, medical, emergency management, water and waste water and public works. These systems work through local government, operational areas, regional, and state levels consistent with the SEMS and NIMS. Mutual aid may also be obtained from other states. Interstate mutual aid may be obtained through direct state-to-state contacts pursuant to interstate agreements and compacts, or may be coordinated through federal agencies. California mutual aid regions are established under the Emergency Services Act by the Governor.

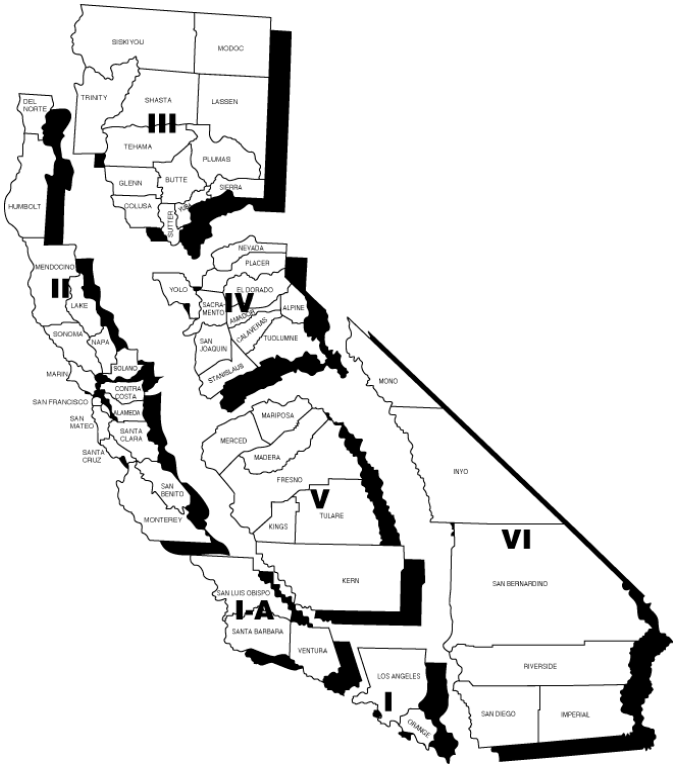
Mutual Aid Coordinators

To facilitate mutual aid, discipline-specific mutual aid systems work through designated mutual aid coordinators at the local, Operational Area, regional, and state levels. The basic role of a mutual aid coordinator is to receive mutual aid requests, coordinate the provision of resources from within the coordinator's geographic area of responsibility, and pass on unfilled requests to the next level. Mutual aid requests that do not fall into one of the discipline-specific mutual aid systems are handled through the emergency services mutual aid system by emergency management staff at the local government, Operational Area, regional and state levels.

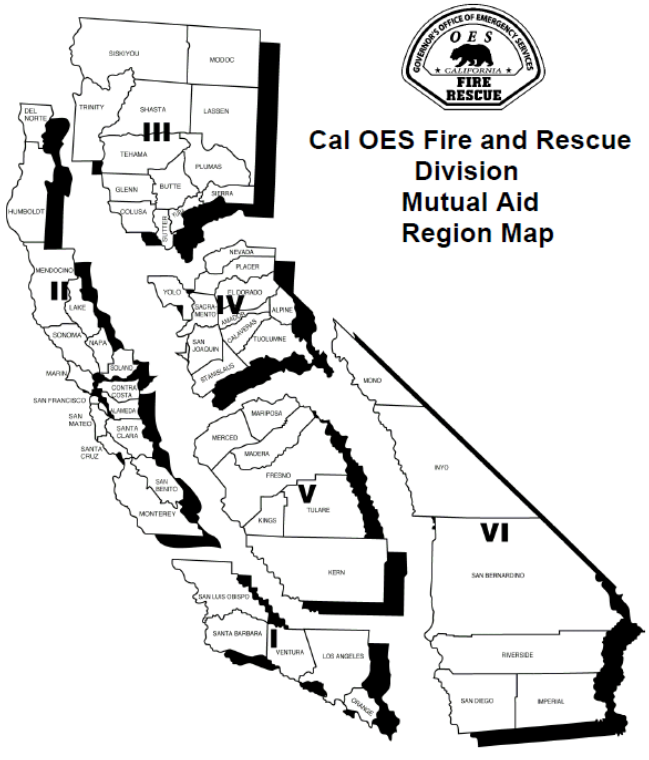
Mutual aid coordinators may function from an Emergency Operations Center (EOC), their normal departmental location or other locations depending on the circumstances. Some incidents require mutual aid but do not necessitate activation of the affected local government or OA EOC because of the incident's limited impacts. In such cases, mutual aid coordinators typically handle requests from their normal work location. When EOCs are activated, all activated, discipline-specific mutual aid systems should establish coordination and communications with the EOCs as follows:

- When the County EOC is activated, the County mutual aid system representative should be at the County EOC to facilitate coordination and information flow.
- When an OA EOC is activated, Operational Area mutual aid system representatives should be at the OA EOC to facilitate coordination and information flow.
- When Cal OES or regional EOC (REOC) is activated, regional mutual aid coordinators should have representatives in the REOC unless it is mutually agreed that effective coordination can be accomplished through telecommunications.
- State agencies may be requested to send representatives to the REOC to assist Cal OES regional staff in handling mutual aid requests for disciplines or functions that do not have designated mutual aid coordinators.
- When the State Operations Center (SOC) is activated, state agencies with mutual aid coordination responsibilities will be requested to send representatives to the SOC.

Law Enforcement and Coroner Mutual Aid Regions:



Fire and Rescue Mutual Aid Regions:



County of Orange Mutual Aid Activation:

When there are not enough resources within the County of Orange to respond effectively to an emergency, the County Mutual Aid Coordinators will be responsible for coordinating the securing of resources through the OA. Such coordination and acquisition of resources does not require an activation of the OA EOC. When resources are required from outside of the County, the OA Mutual Aid Coordinators will provide relevant information and submit requests for support to the Cal OES REOC. In larger scale incidents, Mutual Aid Coordinators will work from the OA EOC when mutual aid channels are active.

Resource requests submitted to the OA from the City and those passed from the OA to the Southern REOC should specify, at a minimum:

- Number and type of personnel needed.
- Type and amount of equipment needed.
- Reporting time and location.
- Authority to which resources should report.
- Estimated duration of operations.
- Access routes.
- Risks and hazards.

Mutual aid assistance may be provided under one or more of the following authorities:

- California Master Mutual Aid Agreement.
- California Fire and Rescue Emergency Mutual Aid Plan.
- California Law Enforcement Mutual Aid Plan.
- California Coroners' Mutual Aid Plan.
- California Emergency Management Mutual Aid Plan.
- California Medical Mutual Aid Plan.
- Statewide Public Works Mutual Aid Agreement.
- Emergency Management Assistance Compact (EMAC).
- Transit Mutual Assistance Compact (TransMac).
- Orange County Operational Area Agreement.
- Water Emergency Response Organization of Orange County (WEROC).
- California Water/Wastewater Agency Response Network (Cal WARN).
- Robert T. Stafford Disaster Relief and Emergency Assistance Act.

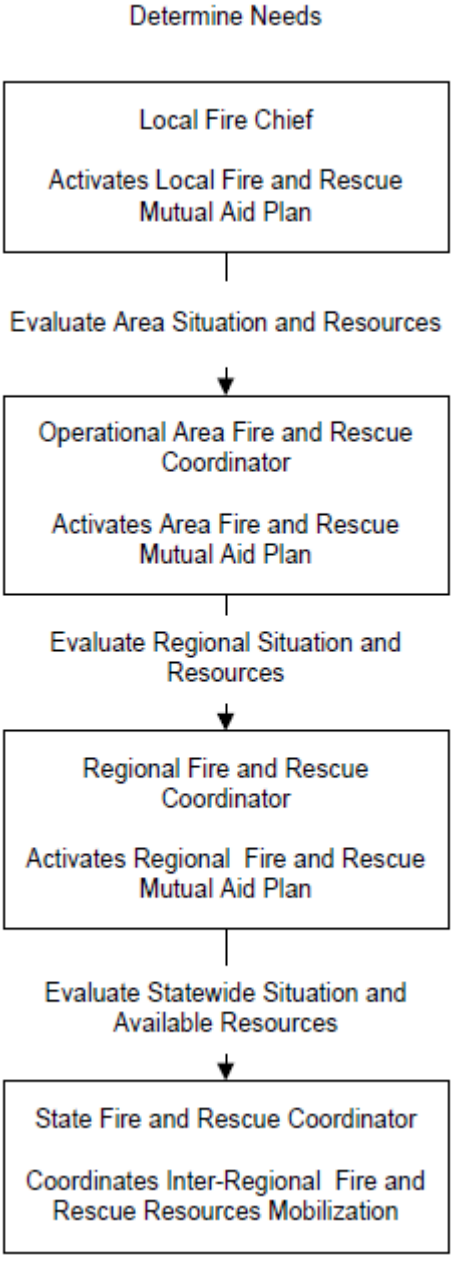
County of Orange Mutual Aid Structure

Fire and Rescue Mutual Aid:

The Orange County Fire Authority (OCFA) coordinates the Fire and Rescue Mutual Aid System for the County. The Fire and Rescue Mutual Aid Coordinator is responsible for organizing and coordinating with other fire and rescue agencies within the OA for resources to support the County. If the Fire and Rescue Mutual Aid Coordinator is unable to mobilize appropriate resources from within the Operational Area, then the Regional Fire and Rescue Coordinator and the Southern REOC, will be contacted.

Fire and Rescue Mutual Aid air support will be coordinated through normal fire mutual aid channels. Additional air support assets can be requested through the Law Enforcement Mutual Aid Coordinator. Sheriff's Department and Anaheim Police Department helicopters may be used for aerial reconnaissance water drops.

Channels for Requesting Fire and Rescue Mutual Aid Resources:



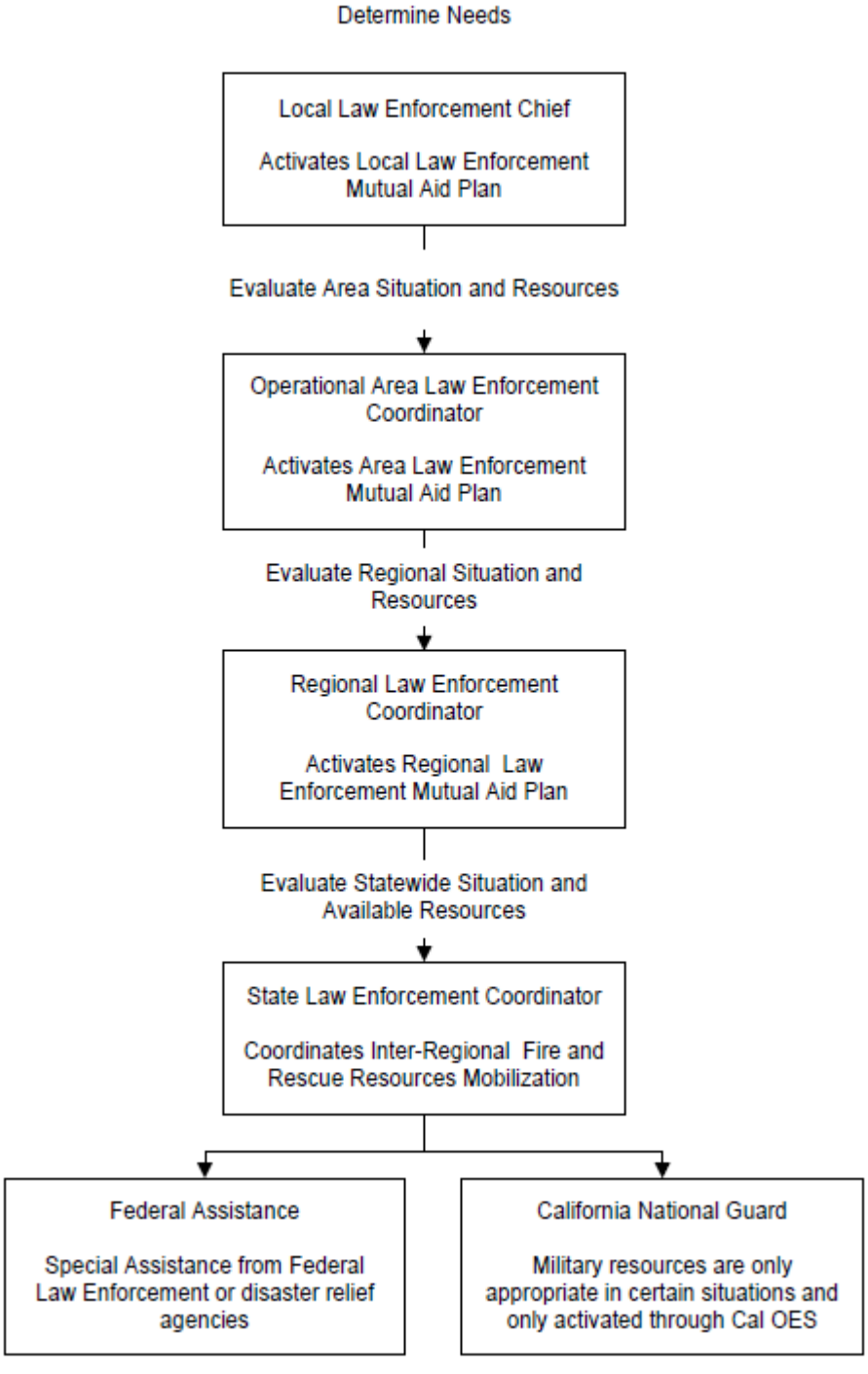
Law Enforcement and Coroner Mutual Aid:

The Orange County Sheriff-Coroner Department coordinates the Law Enforcement and Coroner Mutual Aid System for the County. The Law Enforcement and Coroner Mutual Aid Coordinator is responsible for organizing and coordinating with other law enforcement agencies within the OA for resources to support the County. If the Law Enforcement and Coroner Mutual Aid Coordinator is unable to gather appropriate resources from within the Operational Area, then the Regional Law Enforcement and Coroner Coordinator and the Southern REOC, will be contacted.

The Law Enforcement Mutual Aid system is further boosted by Section 830.1 of the Penal Code, which states that whenever a State of Emergency exists within a region or area, the following personnel within the region or area, or who may be assigned to duty therein, have full peace officer powers and duties:

- All members of the California Highway Patrol.
- All deputies of the Department of Fish and Game who have been appointed to enforce the provisions of the Fish and Game Code.
- The State Forester and the staff of the Department of Forestry who are designated by the State Forester as having the powers of peace officers.
- Peace officers who are state employees within the provisions of Section 830.5 of the Penal Code

Channels for Requesting Law Enforcement and Coroner Mutual Aid Resources:



Public Works Mutual Aid

OC Public Works coordinates the Public Works Mutual Aid System for the County and OA. The Public Works Mutual Aid Coordinator is responsible for organizing and coordinating with other public works resources and agencies in the OA for resources to support the County. If the Public Works Mutual Aid Coordinator is unable to mobilize appropriate resources from within the Operational Area, then the Regional Public Works Coordinator at the Southern REOC will be contacted.

The Public Works Mutual Aid Coordinator also coordinates with the Water Emergency Response Organization of Orange County (WEROC). WEROC plays a critical role in managing the OA regional water supply system during an emergency. WEROC was organized on the basis that each water agency would be responsible for implementing its own preparedness plan to meet specific emergency needs within its service area. WEROC acts as a facilitator in expediting requests for and offers available personnel, equipment, and materials between water agencies. WEROC assists in maintaining contact with the OA and other key entities. The Public Works Mutual Aid Coordinator and WEROC representatives must coordinate closely when both are activated.

The City of Rancho Santa Margarita has a signed agreement with Orange County Public Works for mutual aid.

Medical Mutual Aid

The Health Care Agency coordinates the Medical Mutual Aid System during emergencies for the County and OA and serves as the Medical and Health Operational Area Coordinator (MHOAC). The MHOAC is responsible for organizing and coordinating with other health and medical resources and agencies within the OA for resources to support the County. If the MHOAC is unable to obtain appropriate resources from within the OA, then the Regional Medical and Health Coordinator at the Southern REOC will be contacted.

California Emergency Management Mutual Aid (EMMA):

The purpose of Emergency Management Mutual Aid (EMMA) is to provide emergency management personnel and technical specialists from unaffected areas to support local jurisdictions, OA and regional emergency operations impacted by a disaster. EMMA is a system, which includes organization, information and forms to coordinate the formal request, reception, assignment, training and demobilization of assigned personnel.

Emergency Management Assistance Compact (EMAC):

The Emergency Management Assistance Compact (EMAC) is a congressionally-ratified organization that provides form and structure to interstate mutual aid. Through EMAC, a disaster-impacted state can request and receive assistance from other member states quickly and efficiently, resolving two key issues upfront: liability and reimbursement.

Collaborating Organizations Active in Disaster-Orange County (COAD-OC):

COAD-OC is an organization in Orange County that focuses on coordinating private sector, nonprofit and community based organizations and government agencies in order to support response and recovery coordination of volunteer and material resources, and to assist with the long-term recovery by identifying emerging and unmet needs of the community.

COAD-OC is the official Voluntary Organizations Active in Disaster (VOAD) for Orange County and is a member of Southern California VOAD, a State Chapter of National VOAD. National VOAD was formed in 1970 and is the forum

where organizations share knowledge and resources throughout the disaster cycle, preparation, response and recovery to help disaster survivors and their communities. In addition to being part of a national standard, following a disaster, COAD-OC can request resources or other support from Southern California VOAD when requested and in coordination with the Orange County Operational Area Emergency Operations Center. The City of Rancho Santa Margarita can utilize COAD by requesting resources through the OA EOC.

Water and Wastewater

The Water Emergency Response Organization of Orange County (WEROC) is a mutual aid agreement between 35 water and wastewater utilities within Orange County; including city departments, special districts and one private entity. The purpose of WEROC is to share information and resources amongst the water utilities to ensure a coordinated response amongst systems that are operationally connected and utilize similar resources. The WEROC Mutual Aid Coordinator (OA WEROC Liaison) is responsible for organizing and coordinating with the water utilities in the OA for resources to support the response. If the WEROC Mutual Aid Coordinator is unable to mobilize appropriate resources from within the Operational Area, then the CalWARN Region 1 Representative and the Southern REOC will be contacted.

The California Water and Wastewater Agency Response Network (CalWARN) is a state-wide mutual aid program recognized by the CalOES. CalWARN currently has 325 water and wastewater utilities as signatories throughout the State of California. CalWARN is divided by the CalOES mutual aid areas and is coordinated through the Water Sector Unit Leader at each CalOES Regional EOC. CalWARN has committed to coordinating information and resources for all water and wastewater utilities, regardless of a signed agreement, to ensure the coordination of resources essential to life safety and health.

3.4.4 Emergency Proclamations

The City of Rancho Santa Margarita will retain the powers and responsibilities granted by law to proclaim an emergency in its jurisdiction. Per City Ordinance No. 03-04, § 7, Sec. 6.05.060., the Director of Emergency Services is empowered to request the City Council to proclaim the existence or threatened existence of a "local emergency" if the City Council is in session, or to issue such proclamation if the City Council is not in session. Whenever a local emergency is proclaimed by the Director, the City Council shall take action to ratify the proclamation within seven days thereafter or the proclamation shall have no further force or effect. The Director of Emergency Services can request the Governor to proclaim a "state of emergency" when, in the opinion of the Director; the locally available resources are inadequate to cope with the emergency.

Definition of a Local Emergency

A proclamation of Local Emergency is the proclaimed existence of:

- Actual or threatened existence of conditions of disaster or of extreme peril to the safety of persons and property within the City caused by such conditions as air pollution, fire, flood, storm, epidemic, riot, or earthquake, or other conditions, including conditions resulting from war or imminent threat of war, but other than conditions resulting from a labor controversy, which conditions are or are likely to be beyond the control of the services, personnel, equipment, and facilities for the City, requiring the combined forces of other political subdivisions to combat (Ordinance No. 03-04, § 3, Sec. 6.05.020.).

Provisions of an Emergency Proclamation

A proclamation of emergency sets the stage for assistance from the neighboring or higher levels of government, including the county, state, federal, and private agencies. It enables the local government to rely on special immunities for its discretionary decisions relating to the disaster. It also allows the promulgation, on an expedited basis, of necessary orders and regulations. Special provisions of a proclamation include:

- Gives public employees and governing bodies legal immunities for emergency actions.
- Enables the City to request state assistance under the California Natural Disaster Assistance Act.
- Allows the City to establish curfews, take measures necessary to protect public health and safety, and exercise other authorities established by local ordinance.
- Does not necessitate the full activation of the City and/or OA EOC. However, there exists a requirement for reliable, current information on the nature and extent of the situation, an initial situation analysis damage assessment, and dollar estimate of resources committed or anticipated to be required to meet the emergency. These tasks can be more efficiently accomplished in a centralized location.
- Allows request for relief from state-imposed regulatory deadlines.
- Allows adoption of interim building ordinances, and restriction of persons from the disaster area.
- Provides emergency powers for issuing rules and regulations for the protection of life and property; emergency purchasing and commandeering of public and private resources; recruitment of emergency workers and emergency worker injury coverage; requisition of jurisdiction and department personnel and materials.
- Enables the Board of Supervisors to act as a Board of Equalization to reassess damaged property and provide property tax relief (if applicable).
- Provides certain exceptions to the Political Reform Act, Brown Act, and permits the County to suspend County regulations such as building review deadlines.

City Proclamation of Emergency

The City of Rancho Santa Margarita and every other city in the County have the power to proclaim a Local Emergency in its jurisdiction and request a State Proclamation of Emergency. In addition, the Board of Supervisors may proclaim a Local Emergency for the County. Whenever the Board proclaims an emergency in the County, its proclamation includes the entire County geographic area. A County proclamation of a Local Emergency protects the interests of all County jurisdictions, even if initially it appears that they are not affected by the emergency.

If a Proclamation of Local Emergency is warranted, the Director of Emergency Services must issue a proclamation a Local Emergency within 10 days of the event. The City Council must then ratify the proclamation of a Local Emergency within seven days of the proclamation for the City to be eligible for reimbursement through the California Disaster Assistance Act (CDAA).

Review and Termination of City Proclamation of Emergency

The Proclamation of Local Emergency must be reviewed at regularly scheduled City Council Meetings until terminated, but no review is to exceed 21 days from last review to be eligible for reimbursement through the California Disaster Assistance Act (CDAA).

County Proclamation of Emergency

SEMS and the creation of an OA do not affect the authority or responsibility of an individual jurisdiction or the County to proclaim a Local Emergency. However, the Chair of the County Board of Supervisors (Board) may proclaim an emergency in the County due to disaster conditions in the unincorporated area, or other areas over which the County has responsibility such as the Flood District, or at the request of an OA jurisdiction. In the event of a health emergency, the County Health Officer has the authority to proclaim a Health Emergency. The proclamation of a Health Emergency opens all the mutual aid avenues for medical operations.

The OA EOC will request information from OA jurisdictions regarding the status of the emergency in their jurisdiction, including any proclamations of Local Emergency. The DES/OAC and OA Executive Board may brief the Chair, Vice Chair, or successor Board member and provide advice on a proclamation of Local Emergency upon determining that local resources are going to be reasonably overwhelmed. A proclamation of an emergency approved by the Legal Advisor will be presented. This proclamation may or may not request a Governor's Proclamation of Emergency.

By Board Ordinance, if the Board is not in session, the Chair of the Board of Supervisors can proclaim a Local Emergency. In the absence of the Chairperson, the Vice Chair, and then each Board member in succession, by ascending district number, can proclaim an emergency. Ratification by the governing body is required within seven days. The Board is required to review the need for continuing the proclamation no less than every thirty (30) days and to terminate the proclamation as soon as possible.

If the proclamation includes a request for the Governor to proclaim a State of Emergency, it will be transmitted to the Cal OES REOC. The REOC will advise the Cal OES Director and the Governor of the request for a State Proclamation of Emergency.

Emergency proclamations are necessary for many reasons and typically serve the public well during emergencies. Proclamations may also have some drawbacks. The Board should consider the following things before declaring an emergency:

- Must have enough information to reasonably determine that local resources are or will be exhausted.
- The benefits that a proclamation of emergency will provide to the responding agencies and community members.
- A proclamation of an emergency, when only small or slight damage is sustained, may appear to be appropriating resources which are or could be needed elsewhere.

State Proclamation of Emergency

If the Governor proclaims a State of Emergency, it may or may not include a request for a Federal Declaration of Emergency from the Director of FEMA, who in turn will advise the President. If a State of Emergency is proclaimed, local jurisdictions may be eligible for 75 percent reimbursement of damages and personnel costs. In addition, all state resources such as the National Guard and other personnel and material become available. A State of Emergency may be proclaimed by the Governor when:

- Conditions of disaster or extreme peril exist which threaten the safety of persons and property within the State caused by natural or man-made incidents.
- The Governor is requested to do so by local authorities.
- The Governor finds that local authority is inadequate to cope with the emergency.

- Whenever the Governor proclaims a State of Emergency, mutual aid shall be rendered in accordance with approved emergency plans when the need arises in any county, city and county, or city for outside assistance.
- The Governor shall, to the extent deemed necessary, have the right to exercise all police power vested in the State by the Constitution and the laws of the State of California within the designated area.
- Jurisdictions may command the aid of citizens as deemed necessary to cope with an emergency.
- The Governor may suspend the provisions of orders, rules, or regulations of any state agency and any regulatory statute or statute prescribing the procedure for conducting state business.
- The Governor may commandeer or make use of any private property or personnel (other than the media) in carrying out the responsibilities of their office.

The Governor may promulgate, issue, and enforce orders and regulations deemed necessary. The Director of the Governor's Office of Emergency Services may proclaim the existence of an emergency in the name of the Governor whenever conditions exist within any region or regions of the State that warrant the proclamation by the Governor of a State of Emergency and the Governor has not acted by reason of the fact that he has been inaccessible. This action will be ratified by the Governor as soon as he or she becomes accessible. In the event that the Governor does not ratify the action, he or she shall immediately terminate the proclamation.

State of War Emergency

Whenever the Governor proclaims a State of War Emergency, or if a State of War Emergency exists, all provisions associated with a State of Emergency apply, plus:

- All state agencies and political subdivisions are required to comply with the lawful orders and regulations of the Governor which are made or given within the limits of his authority as provided for in the Emergency Services Act.

Presidential Declaration of Emergency or Major Disaster

Definition

Major disaster: A major disaster is defined as "any natural catastrophe (including any hurricane, tornado, storm, high water, wind driven water, tidal wave, tsunami, earthquake, volcanic eruption, landslide, mudslide, snowstorm, or drought), or, regardless of cause, any fire, flood, or explosion, in any part of the U.S. which in the determination of the President causes damage of sufficient severity and magnitude to warrant major disaster assistance under this Act to supplement the efforts and available resources of States, local governments, and disaster relief organizations in alleviating the damage, loss, hardship, or suffering caused thereby."

Emergency: An emergency is defined as "any occasion or instance for which, in the determination of the President, federal assistance is needed to supplement state and local efforts and capabilities to save lives and to protect property and public health and safety, or to lessen or avert the threat of a catastrophe in any part of the U.S."

Process

In order for the President to declare a federal disaster or emergency for the State of California, which may include Orange County, the Governor of California must submit the following to the Federal Emergency Management Agency:

- Orange County's Local Emergency Proclamation.

- The California State of Emergency Proclamation.

The Governor's written request for federal assistance must also include:

1. Certification of implementation of the State Emergency Plan.
2. Description of how the disaster caused needs beyond state or local capabilities.
3. A description of state or local resources already committed.
4. Preliminary estimates of supplementary federal assistance needed.
5. The specific federal assistance programs needed.
6. Certification of compliance with cost-sharing requirements of the Stafford Act.

If the Governor requests and receives a Presidential declaration of an Emergency or Major Disaster under Public Law 93-288 (Federal Disaster Relief Act of 1974), the Governor will appoint a State Coordinating Officer (SCO). A duly appointed Federal Coordinating Officer (FCO) and the SCO will coordinate and control state and federal efforts in support of the OA and OA jurisdiction operations.

Basis for Request

A request for a Presidential Declaration is made when the situation is of such severity and magnitude that effective response is beyond the capabilities of the State, County, and affected local governments. Federal assistance under the Stafford Act is necessary to supplement the efforts and available resources of the State, affected local governments, disaster relief organizations, and compensation by insurance.

If state and then federal emergencies are declared, the local jurisdictions may be eligible for reimbursement of up to 93.75 percent of the damages and associated response costs. In addition, federal resources such as the military and other personnel and material may become available.

3.4.5 Continuity of Government

A major disaster could result in the death or injury of key government officials, the partial or complete destruction of established seats of government, and loss of public and private records essential to the continued operations of both government and industry. To help preserve law and order and to continue and restore local services, it is essential that units of local governments continue to function during or following such situations. The California Government Code, the State Constitution and the California Emergency Services Act provide legal authority for the continuity and preservation of state and local government in the event incumbents are unable to serve. Within the context of this document, the concept of Continuity of Government is comprised of three elements: 1) Standby Officers for the Governing Body; 2) Alternate Seat of Government; and 3) Preservation of Vital Records. Since the City of Rancho Santa Margarita and its City Council are responsible for the establishment and performance of the City's Emergency Management operations, this section describes continuity considerations for the City.

3.4.6 Alternate Facilities

The City of Rancho Santa Margarita EOC meets the objectives required for managing a disaster response including meeting the requirements of the Americans with Disabilities Act. The primary City EOC is located in City Hall at 22112 El Paseo, Rancho Santa Margarita, CA 92688.

The alternate EOC location is the Bell Tower Regional Community Center, the use of another local government EOC, such as a neighboring City EOC, or the use of a local fire station.

3.4.7 Succession

City of Rancho Santa Margarita Line of Succession

City Ordinance No. 03-04, § 6, Sec. 6.05.050. establishes the City Manager as the Director of Emergency Services. City Ordinance No. 03-04, § 7, Sec. 6.05.060. empowers the Director of Emergency Services to designate the order of succession to that office, to take effect in the event the Director is unavailable to attend meetings and otherwise perform duties during an emergency. Such order of succession shall be approved by the City Council.

City Ordinance No. No. 01-10, § 1(2.10.100), Sec. Sec. 6.05.090. states the line of succession for the position of Mayor during a state of emergency, war emergency, local emergency, or other condition of disaster, unless otherwise ordered by the City Council, shall be the Mayor Pro Tempore followed by the remaining City Council members in the order of their seniority, unless standby successors have been appointed pursuant to Section 8638 of the California Government Code.[2]

3.4.8 Vital Records Program

Preservation of important records and measures to ensure reconstitution are necessary for the continued operation of local government during and after catastrophic disasters or national security emergencies. The City Clerk is the designated custodian of vital records and is responsible for maintaining, securing and protecting those permanent records that are considered essential to the continuity of City government.

The Vital Records Program was developed to protect records necessary to keep the City operating in the event of a disaster. Disasters include earthquake, fire, flood, and office building destruction. Effective document recovery after a disaster allows the City to minimize the impact of a disaster by decreasing any downtime for the City's day-to-day operations. Day-to-day disaster prevention includes:

- Records stored in the Central File Room are stored at least one-foot off the ground in event of flooding, we attempt to follow the same practice throughout other areas in City Hall where applicable;
- All rooms where records are stored contain fire-sprinklers;
- Minutes, Resolutions, Ordinances and other original vital records are stored in the vault;
- All filing cabinets are bolted to the walls in the event of an earthquake;
- Archive storage rooms are locked during non-office hours.

The City's Vital Records include:

- Articles of Incorporation (0420-10)
- Ordinances (0480-20)
- Resolutions (0480-30)
- Minutes (0410-50)

These records are microfiched and the microfiche is stored out of state in the event of a disaster. The original Ordinances, Resolutions and Minutes are kept in the City's vault on archival paper. A copy of each is located in the City Clerk's office.

[2] State law reference—Preservation of local government, Government Code § 8635 et seq.

An index of all City records is printed annually and stored off-site in the event records are lost or destroyed, or there are computer-related disasters. A copy of the City's records database is copied onto computer disk semi-annually and stored in the City's vault.

3.4.9 City of Rancho Santa Margarita EOC Organization and Responsibilities

This section describes the organization of the City EOC and includes clear descriptions of each position's role and responsibility.

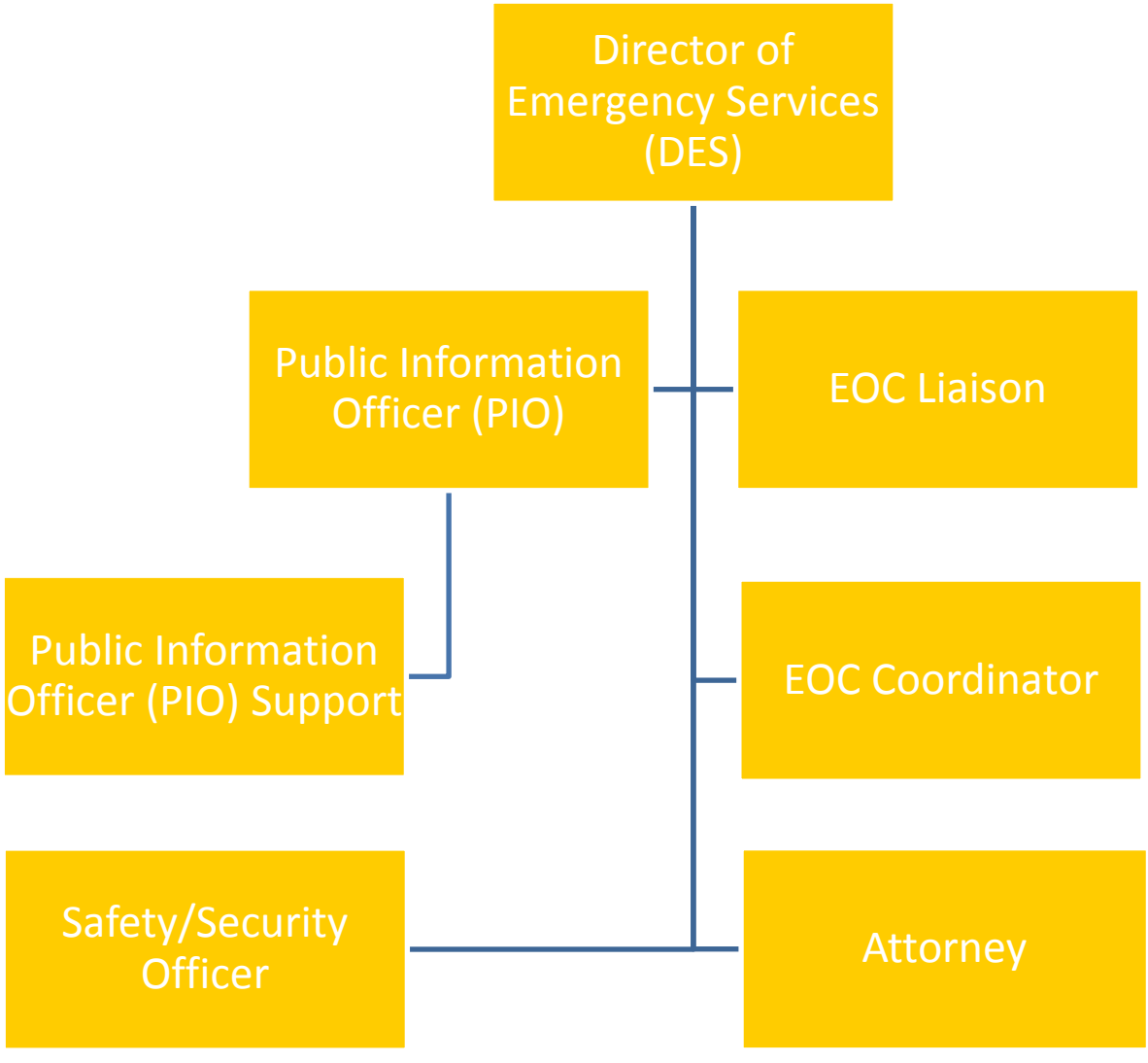
City Ordinance No. 03-04, § 8, Sec. 6.05.070. states that all officers and employees of the City, together with those volunteer forces enrolled to aid them during an emergency, and all groups, organizations, and persons who may, by agreement or operation of law, including persons impressed into service under the provisions of Section 6.05.060, be charged with duties incident to the protection of life and property in the City during such emergency, shall constitute the emergency organization of the City of Rancho Santa Margarita.

The requirement to use SEMS, NIMS and ICS includes providing for the five essential functions: Management, Operations, Planning and Intelligence, Logistics and Finance and Administration. In an emergency situation requiring activation of the EOC during an emergency requiring response by more than one Department (whether or not the EOC is activated), or in cases where a Local Emergency, State of Emergency, or State of War Emergency is proclaimed, the relationships described in this section will apply.

It is important to note that the organizational structure described in this section describes the City of Rancho Santa Margarita's ultimate capability and full staffing of all potential EOC positions. The Incident Command System is flexible and modular by nature; it will be rare that every position and organizational element identified in this section will be active simultaneously. The incident will define which elements need to be staffed. In addition, it may be discovered that one element of the organization can manage the responsibilities of those elements under it. For example, the Finance and Administration Section Chief may be able to handle the responsibilities of the Claims and Compensation and Time and Cost Units. In that case, the supporting Units will not be staffed, but the Finance and Administration Section Chief will have responsibility for performing the functions of those Units, as necessary. If the organization is not fully expanded, then supervisory positions are responsible for performing the functions of the un-staffed Units, Groups, Branches, or Sections (as applicable) they oversee.

City of Rancho Santa Margarita EOC Organizational Chart

3.4.9.1 Management Section



In the City of Rancho Santa Margarita's incident command organization, the Director of Emergency Services (DES) manages the overall incident. The command staff element (the term "command" is used in the field; "management" is used in the EOC) is provided through staff positions that are specifically designated and report directly to the DES. The management staff positions pre-identified for the EOC are: Attorney, Public Information Officer, EOC Liaison, EOC Coordinator, and EOC Safety/Security Officer. The City Emergency Response Organization is based on the concepts presented in ICS as adopted by SEMS.

3.4.9.1.1 Director of Emergency Services

Responsibilities per City Ordinance No. 03-04, § 7, Sec. 6.05.060.

- Requests the City Council to proclaim the existence or threatened existence of a "local emergency" if the City Council is in session, or to issue such proclamation if the City Council is not in session. Whenever a local emergency is proclaimed by the Director, the City Council shall take action to ratify the proclamation within seven days thereafter or the proclamation shall have no further force or effect.
- Requests the Governor to proclaim a "state of emergency" when, in their opinion, the locally available resources are inadequate to cope with the emergency.
- Directs cooperation between and coordination of services and staff of the City's emergency organization; and resolve questions of authority and responsibility that may arise between them.
- Represents the City in all dealings with public or private agencies on matters pertaining to emergencies as defined herein.
- In the event of the proclamation of a "local emergency" as herein provided, the proclamation of a "state of emergency" by the Governor or the Director of the State Office of Emergency Services, or the existence of a "state of war emergency,":
    - To make and issue rules and regulations on matters reasonably related to the protection of life and property as affected by such emergency, provided, however, such rules and regulations must be confirmed at the earliest practicable time by the City Council;
    - To obtain vital supplies, equipment, and such other properties found lacking and needed for the protection of life and property, to bind the City for the fair value thereof, and, if required immediately, to commandeer the same for public use;
    - To require emergency services of any City officer or employee and, in the event of the proclamation of a "state of emergency" in the County of Orange or the existence of a "state of war emergency," to command the aid of as many citizens of this community as deemed necessary in the execution of duties; such persons shall be entitled to all privileges, benefits, and immunities as are provided by State Law for registered disaster services workers;
    - To requisition necessary personnel or material of the City's departments or agencies; and
    - To execute all ordinary powers as City Manager, all of the special powers conferred by this chapter or by resolution or emergency plan pursuant hereto adopted by the City Council, and all powers conferred by any statute, by any agreement approved by the City Council, or by any other lawful authority
- Designates the order of succession to that office, to take effect in the event the Director is unavailable to attend meetings and otherwise perform duties during an emergency. Such order of succession shall be approved by the City Council.
- Has overall management responsibility and authority for the operation in the EOC.

- In conjunction with the General Staff, sets jurisdictional priorities for response efforts. Ensure all department and agency actions are accomplished within the priorities established at the EOC.
- He/she will assure that the EOC is staffed and operated at a level commensurate with the emergency.

3.4.9.1.2 EOC Coordinator

Responsibilities

- Ensures physical set-up for and staffing of support staff in the City's EOC.
- Serves as the 24-hour contact for the City, including that for the neighboring jurisdictions, the OA, and State.
- Acts as advisor to the DES, Management, and General Staff regarding emergency management issues, legislation, and previous (historical) actions.
- Develops and maintains all plans and procedures pertaining to emergency response and recovery involving the City.
- Handles requests from other agencies for sending liaison personnel to other EOCs.
- Directs and coordinates EOC support staff and EOC personnel.

3.4.9.1.3 Attorney

Responsibilities

- Advises the DES and City Council on legal implications of emergency actions.
- Drafts local emergency proclamations.
- Drafts requests for a Governor's Proclamation of a State of Emergency.
- Advises on legal implications prior to and during response and recovery operations.
- Maintains legal information, records, and reports relative to the incident.
- Commences legal proceedings as needed.

3.4.9.1.4 EOC Liaison

Responsibilities

- Provides and relays information between outside agencies and the City EOC.
- Acts as a point of contact for the following types of agencies and external organizations:
    - American Red Cross/Non-Governmental Organizations (NGOs)
    - OC Health Care Agency
    - Businesses
    - COAD
    - CalOES
    - FEMA
    - Operational Area
    - School Districts
    - Hospitals
- Functions as a central point of contact for incoming agency representatives, provides workspace, and arranges for support as necessary.

- Ensures all developed guidelines, directives, EOC Incident Action Plans, and appropriate situation information is disseminated to agency or external representatives.
- Coordinates with Planning and Intelligence, Situation Analysis Unit on any information received from external agencies.
- Works with the EOC Sections to ensure up-to-date information is posted to WebEOC® and other information sharing boards or systems.

3.4.9.1.5 Public Information Officer

Responsibilities

- Establishes contact and coordinates with the Field PIO, the OA, Cal OES and other jurisdictions.
- Evaluates the incident and public information immediate needs, including EOC PIO support.
- Develops, coordinates and distributes emergency public information and warnings to the public, media in a timely manner.
- Ensures all public information releases are distributed to the OA for distribution to 2-1-1 Orange County.
- Establishes with the DES if there are any limits on information release.
- Obtains approval for media releases and public messaging from the DES.
- Establishes contact with pre-identified community partners, which serve the non-English speaking, and people with disabilities and others with access and functional needs to allow them to initiate their communications protocols.
- Establishes contact with the media and begins releasing lifesaving and health preservation instructions in conjunction with the OA.
- Provides information on what is being done to respond to the emergency.
- Develops and distributes strategies and protocols for interviews, briefings and photo opportunities, including considerations for people with disabilities and access and functional needs.
- Monitors media reporting for accuracy.
- Monitors and responds to approved social media sites and accounts.
- Responds to media inquiries.
- Ensures all EOC staff is kept apprised of public information releases.
- Serves as the arbitrator on all public information related issues when conflicts or discrepancies arise.
- Approves all press releases, press materials, press conference agendas, messages, and media briefings.
- Analyzes other sources of emergency information.
- Coordinates dignitary services for observers, visitors, dignitaries, and experts not involved in assisting in the emergency response (e.g., tours of damaged areas, EOC briefings, meetings with decision makers, etc.).
- Coordinates with the Logistics Section for logistical issues regarding dignitary services.
- Coordinates with the Law Enforcement and the Health Care Branch regarding security, and health and safety issues for dignitaries.
- Coordinates with the DES regarding dignitary protocols.
- Coordinates the interaction of dignitaries with the media in accordance with the overall public information strategy and protocols.

3.4.9.1.6 Public Information Officer (PIO) Support

Responsibilities

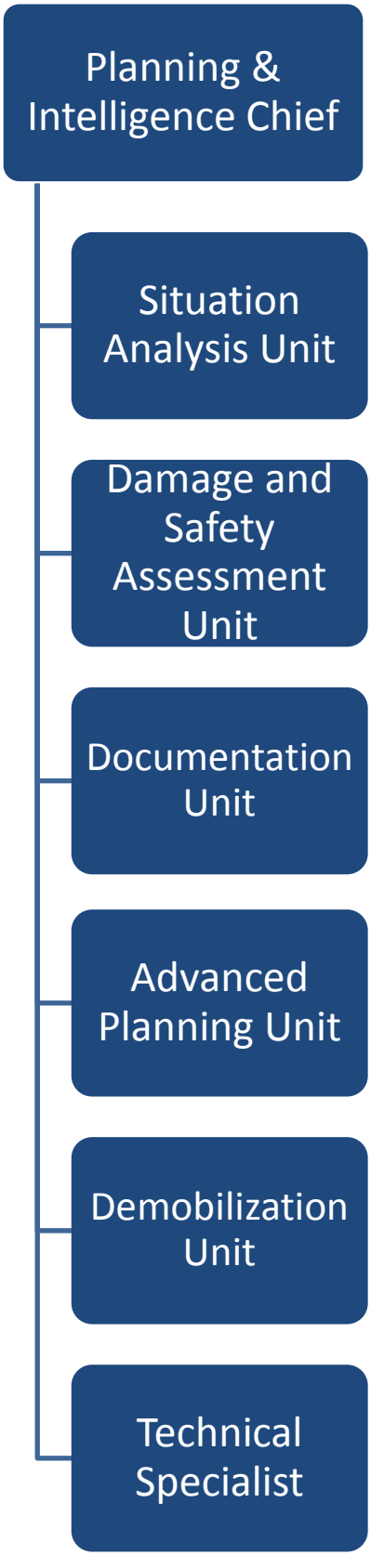
- Coordinates and disseminates all information to the public for City operations.
- Supervises the Public Information Hotline, if activated, and support staff at the City EOC.
- Provides the media and public with the City official information being released.
- Ensures the Public Information Officer, Director of Emergency Services, City Council, and City EOC staff are kept apprised of emergency public information issues concerning the emergency.
- Coordinates the drafting, approval and dissemination of official press releases for the City of Rancho Santa Margarita in conjunction with the OA, if activated.
- Obtains approval for media releases and messaging from PIO.
- Ensures dissemination on all press releases and AlertOC notifications.
- Maintains contact with the OA, Department Operation Centers (DOCs), Incident Command Post (ICP) and Joint Information Center (JIC) in order to coordinate information gathering and dissemination.
- Establishes contact with pre-identified community partners that serve the non-English speaking, and people with disabilities and access and functional needs to allow them to initiate their communications protocols.
- Establishes contact with media, and begins releasing lifesaving and health preservation instructions.
- Supports PIO in development and implementation of a public information plan for media releases, development of briefings, dignitary coordination and coordination of public information with the OA, ICP, and people with disabilities access and functional needs.
- Uses fax, internet or EOC-to-EOC radio to coordinate and communicate public information with the OA.
- Analyzes other sources of emergency information.
- Responds to media inquiries.
- Monitors and responds to approved social media sites and accounts.
- Ensures all public information releases are distributed to the OA for distribution to 2-1-1 Orange County.

3.4.9.1.7 EOC Safety/Security Officer

Responsibilities

- Ensures all EOC personnel follow and demonstrate appropriate safety precautions during an emergency.
- Ensures all facilities used in support of EOC operations have healthy and safe operating conditions and meet the Americans with Disabilities Act (ADA) requirements.
- Reviews the EOC Incident Action Plan for safety implications and provides safety messages to the Planning and Intelligence Section for inclusion in the EOC Incident Action Plan.
- Exercises emergency authority to stop any activity deemed unsafe or to prevent unsafe acts.
- Develops on-site safety plans.
- Identifies and mitigates safety hazards and situations of potential City liability within the EOC.
- Investigates accidents that have occurred within the EOC sites or facilities supporting EOC operations.
- Provides twenty-four hour security for EOC facilities.
- Controls personnel access to facilities in accordance with policies established by the DES.

3.4.9.2 Planning and Intelligence Section



The Planning and Intelligence Section is responsible for collecting, evaluating, and disseminating situational information pertaining to the incident. This section maintains information and intelligence on the current and forecasted situations. The Planning and Intelligence Section gathers and disseminates information and intelligence critical to the incident. In addition, personnel prepare and develop the EOC Incident Action Plans (EOC IAP) and incident maps. This Section is headed by a Planning and Intelligence Section Chief and is divided into several smaller units, depending upon the needs of the incident. Technical Specialists in this section help ensure real time information is factored into strategy development and if necessary, pass warnings to City departments and agencies and the County. The Planning and Intelligence staff positions and units pre-identified for the City EOC are:

- Planning and Intelligence Section Chief
- Situational Analysis Unit
- Documentation Unit
- Advance Planning Unit
- Damage and Safety Assessment Unit
- Demobilization Unit
- Technical Specialist

3.4.9.2.1 Planning and Intelligence Section Chief

Responsibilities

- Ensures the Planning and Intelligence function is performed consistent with SEMS and NIMS guidelines, including:
    - Collecting, analyzing all data regarding the status and operations of the City.
    - Preparing periodic situation reports.
    - Initiating and documenting the EOC's Incident Action Plan and After-Action Report.
    - Advance planning for future operational periods and recovery operations.
    - Planning for demobilization.
- Provides Geographic Information Services (GIS) and other technical support services to the various organizational elements within the EOC.
- Establishes the appropriate level of organization within the Section, and continuously monitors the effectiveness of that organization.
- Tracks the incident and provides information to the Director of Emergency Services on the overall effectiveness of the policies established.
- Briefs the EOC and response agencies on the situation and status of the incident and resources.
- Collects and maintains event documents for all activities and a master log of events.
- Collects and reports damage assessment information to the OA in WebEOC.
- Coordinates directly with Section Chiefs in the EOC on the ICP to gather situational and operational status of the incident.
- Facilitates meetings with the other section chiefs and key EOC positions in accordance with the Planning "P".
- Provides briefings to general staff as well as situation information from Policy Group meetings.

3.4.9.2.2 Situation Analysis Unit

Responsibilities

- Directs the collection, collation, organization and display of incident situational information.
- Monitors and assesses situation and operational information.
- Ensures situational awareness and a common operating picture is maintained amongst all EOC stakeholders.
- Evaluates information and assists in the development of EOC Incident Action Plans.
- Notifies the Planning and Intelligence Section Chief of important information, unusual events, information discrepancies, etc. that need to be brought to the attention of the Director of Emergency Services and/or Section Chiefs.
- Coordinates information for use in the Preliminary Damage Assessment (PDA).
- Maintains charts, display boards, and records of situation information, coordinates the information to be displayed or plotted, such as:
    - Personnel status information.
    - Relevant maps.
    - Records of situation information.
    - Current location and status of incidents and resources.
- Coordinates the relevant event incident situational and status information in WebEOC®.
- Prepares situation summaries and meeting minutes from briefings.
- Prepares maps and gathers and disseminates information and intelligence for use in the EOC IAP.
- Maintains a master list of all resources committed to incident operations.
- Identifies resources immediately available and accessible to meet short-term needs.
- Tracks resources committed and available.
- Establishes a resource status display within the EOC.
- Monitors specific situational status information in WebEOC®.
- Monitors, updates, collects, processes, and organizes ongoing situation information. Ensures situational status information is displayed.
- Coordinates with OA jurisdictions, OA EOC, DOCs, ICP Situation Analysis Units or Planning Sections to ensure the collection of information for a complete and accurate common operational picture.
- Coordinates information and reporting systems including the Initial Damage Estimates (IDE).
- Coordinates with Documentation Unit to ensure relevant event summaries and status sections are being documented in hard copy.
- Supports the Operations Section Chief to ensure that incident resources being tracked in the EOC are accounted for.
- Works closely with the Demobilization Unit Leader and assists with development of demobilization plan.
- Collects, processes, organizes and updates ongoing situational information.

3.4.9.2.3 Documentation Unit

Responsibilities

- Coordinates with the Planning and Intelligence Section Chief and Situation Analysis Unit Leader to develop the EOC IAP, maintains the files, records that are developed as part of the overall EOC IAP and planning function.

- Maintains accurate and complete incident files, including a complete record of the major steps taken to resolve the incident.
- Monitors, maintains and updates situational information in WebEOC®.
- Files, maintains, and stores incident files for legal, analytical, and historical purposes.
- Assists in financial recovery and maintains official records and reports.
- Maintains an accurate and complete activity log for the Section, Branch, Unit or Group assigned to. The activity log is a complete record of the major steps taken to resolve the incident.
- Maintains all files and paperwork for the Section, Branch, Unit or Group assigned.
- Participates in the development of the EOC IAP and maintains the files and records that are utilized as part of the overall EOC IAP and planning function.
- Monitors, maintains and updates situational information in WebEOC® for the assigned Section, Branch, Unit or Group.
- Records all actions taken and decisions made within the Section, Branch, Unit or Group and properly secures all documents for future filings and legal actions.
- Coordinates with Documentation Unit Leader with messages, and incident activities, to ensure complete documentation is maintained.
- Provides situational and mission tracking information for input through the Cal OES web portal also known as CalEOC.

3.4.9.2.4 Damage and Safety Assessment Unit

Responsibilities

- Collects and documents safety assessments (evaluation of structures to determine whether or not they can continue to be occupied).
- Collects and documents damage assessments (process of determining how badly a facility or structure has been damaged and provides an estimate of what it will cost to repair). This information documents the impacts of the disaster and is used for obtaining public disaster assistance and individual assistance from the State and/or Federal government.
- Assists in evaluating damages to jurisdiction.
- Provides damage and safety assessment reports to the Finance and Administration Section and Situation Analysis Unit for tracking of overall costs and situation status reports.
- Assists in the determination of whether a Local Emergency should be proclaimed.
- Works with the Situation Analysis Unit to estimate property losses to be included in the Initial Damage Estimate.
- Identifies the impacts on the ability of a damaged facility to function (e.g., impact on customers), and the cost to repair or replace it.

3.4.9.2.5 Advanced Planning Unit

Responsibilities

- Identifies issues and requirements related to future time periods, normally 36 to 72 hours or longer.
- Prepares reports and briefings as necessary for use in strategy and planning meetings.
- Monitors action-planning activities to determine the shift in operational objectives from response to recovery.
- Begins identifying considerations and developing strategies to support a transition to recovery.

- Coordinates with the Demobilization Unit Leader.

3.4.9.2.6 Demobilization Unit

Responsibilities

- Prepares the demobilization plan for the EOC to ensure an orderly, safe, and cost-effective release of personnel and equipment.
- Develops strategies for demobilization.
- Provides input to the OA EOC on timeline for demobilization.

3.4.9.2.7 Technical Specialist

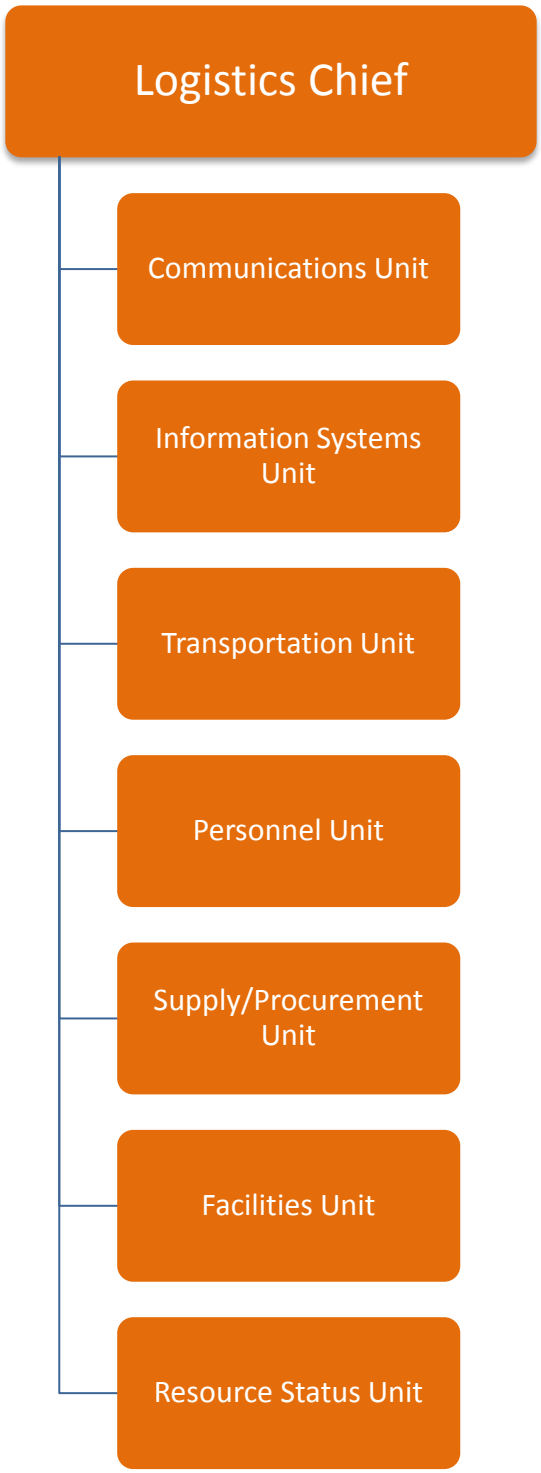
Responsibilities

Technical Specialists are advisors with special skills and are activated only when needed. Specialists may serve anywhere within the organization, including the Management Section. No minimum qualifications are prescribed, as technical specialists normally perform the same duties during an incident that they perform in their everyday jobs, and they are typically specially certified in their fields or professions.

Technical specialists assigned to the Planning and Intelligence Section may report directly to its chief, may report to any function in an existing unit, or may form a separate unit within the Planning and Intelligence Section, depending on the requirements of the incident and the needs of the organization. Technical specialists may also be assigned to other parts of the organization (e.g., to the Operations Section to assist with tactical matters or to the Finance and Administration Section to assist with fiscal matters). Generally, if the expertise is needed for only a short period and normally involves only one individual, that individual should be assigned to the Situation Analysis Unit. If the expertise will be required on a long-term basis or may require several personnel, it is advisable to establish a separate Technical Specialist Unit in the Planning and Intelligence Section.

- Provides technical expertise to the EOC Planning and Intelligence Section and others as required.
- Provides support specific to a field or function not addressed elsewhere or by any other discipline in the EOC.

3.4.9.3 Logistics Section



The Logistics Section is responsible for providing facilities, services, transportation, personnel, equipment, food service, communications and other materials to the City EOC operation to ensure that its role as a coordination point can continue without interruption. In addition, the Logistics Section will support the resource needs of any resource mobilized and directed by the City's EOC Operations Section. This may include ordering resources through appropriate procurement authorities, distribution resources, and monitoring and managing resources in support of the City's EOC objectives. The logistics staff positions and units pre-identified for the EOC are:

- Logistics Section Chief
- Logistics Branch
    - Communications Unit
    - Information Systems Unit
    - Transportation Unit
    - Personnel Unit
    - Supply/Procurement Unit
    - Facilities Unit
    - Resource Status Unit

3.4.9.3.1 Logistics Chief

The Logistics Section Chief directly manages all Logistics Section activities in support of EOC and field activities. The Logistics Section Chief should be designated for each operational period and will have direct involvement in the preparation of the EOC IAP for the period of responsibility.

Responsibilities

- Ensures the Logistics function is performed consistent with SEMS and NIMS guidelines.
- Provides situational and resource status information to Section Chiefs and Management.
- Generates the Emergency Purchase Order that will be used on all contracts and purchases.
- Provides logistical support for EOC, field and shelter operations, such as:
    - Personnel, except for Law and Fire
    - Food and water
    - Facilities
    - Services and supplies
    - Transportation
    - Fuel
    - Communications
    - Donated goods
    - Volunteer management
- Coordinates and tracks all incident resources procured by the Logistics Section.
- Implements management decisions with respect to priorities and EOC IAP.
- Monitors incident activities and recommends course of action, as necessary.
- Coordinates directly with Section Chiefs in the EOC to gather situational and resource status of the incident.

3.4.9.3.2 Communications Unit

- Develops and distributes the Communications Plan to ensure effective use of the communications equipment and facilities assigned to the incident.
- Identifies the best strategy for sharing, acquiring and distributing EOC radio, data, and telephone needs.
- Monitors all communication systems to ensure they are operational.
- Coordinates the installation of communication equipment utilized to support the incident.
- Coordinates the maintenance and repair of the City's communications equipment at the City EOC and in the field.
- Coordinates telephone, radio, and data communications support for the field response, ICP, shelters, etc. as needed.

3.4.9.3.3 Information Systems Unit

- Provides technical support for the audio and visual systems utilized by the City EOC.
- Repairs and maintains the audio and visual equipment as well as information technology equipment utilized by the City EOC.
- Provides technical support for the telecommunications systems, information technology, and delivery systems utilized by the City EOC.
- Installs, repairs, and maintains the telecommunication equipment utilized by the City EOC.
- Repairs and maintains the information technology equipment utilized by the City EOC.

3.4.9.3.4 Transportation Unit

- Identifies the best strategy for sharing, acquiring and distributing transportation equipment and personnel.
- Coordinates with the OA EOC and other agencies to ensure adequate vehicles are available, including para-transit vehicles for movement of impacted population.
- Coordinates with the OA EOC to ensure vehicles are available to assist in the transportation of impacted population to and from medical facilities as needed.
- Ensures auxiliary transportation methods for supporting people with disabilities and access and functional needs.
- Records usage time for all City ground equipment, including contract equipment.
- Coordinates fuel for all City response vehicles.
- Coordinates transportation support from outside agencies.
- Coordinates and maintenance and repairs of City vehicles used to support the incident.

3.4.9.3.5 Personnel Unit

- Supports the incident by coordinating and providing EOC personnel related operations.
- Identifies the best strategy for sharing, acquiring, and distributing EOC personnel.
- Manages personnel issues and sets personnel policies during emergency situations.
- Coordinates use of City personnel by implementing the California's Disaster Service Worker authorities.
- Ensures the general welfare and safety of all volunteers utilized.

- Documents and maintains records of personnel utilized for the incident, generates reports for distribution to Management and Section Chiefs.
- Ensures all EOC responders have picture identification, sign in, and direct them to the appropriate position or supervisor.
- Ensures all responders sign out at end of their shift.
- Ensures shift change registration is ready for next shift.
- Maintains copies of each shifts sign in sheet.
- Provides status report of any unfilled positions to the EOC Coordinator.
- Contacts the PIO to report and request disposition of any media visitors or dignitaries.
- Coordinates transportation support for EOC responders, if offsite parking has been implemented.
- Identifies the best strategy for acquiring and distributing COAD-OC resources and personnel from the OA.
- Supports the incident by coordinating affiliated and spontaneous volunteers.
- Coordinates with the OA on events where an Emergency Volunteer Center is established.
- Ensures officially requested volunteers fill out the appropriate Disaster Service Worker Volunteer Program paperwork, and is administered the Disaster Service Worker Oath under the Disaster Service Worker Volunteer Program authority.
- Ensures the general welfare and safety of all volunteers utilized. Reports any volunteer injuries to the Finance Branch.
- Documents and maintains records of personnel utilized for the incident, generates reports for distribution to Management and Logistics Chief.

3.4.9.3.6 Supply/Procurement Unit

- Coordinates with City departments and OA EOC to identify sources for equipment.
- Prepares and signs equipment rental agreements, and processes all administrative requirements associated with equipment rental and supply contracts.
- Purchases necessary equipment, materials and supplies in support of the EOC and field operations in conjunction with the Finance Branch.
- Maintains resource listings of vendors.
- Coordinates delivery of supplies and materials to designated sites.

3.4.9.3.7 Facilities Unit

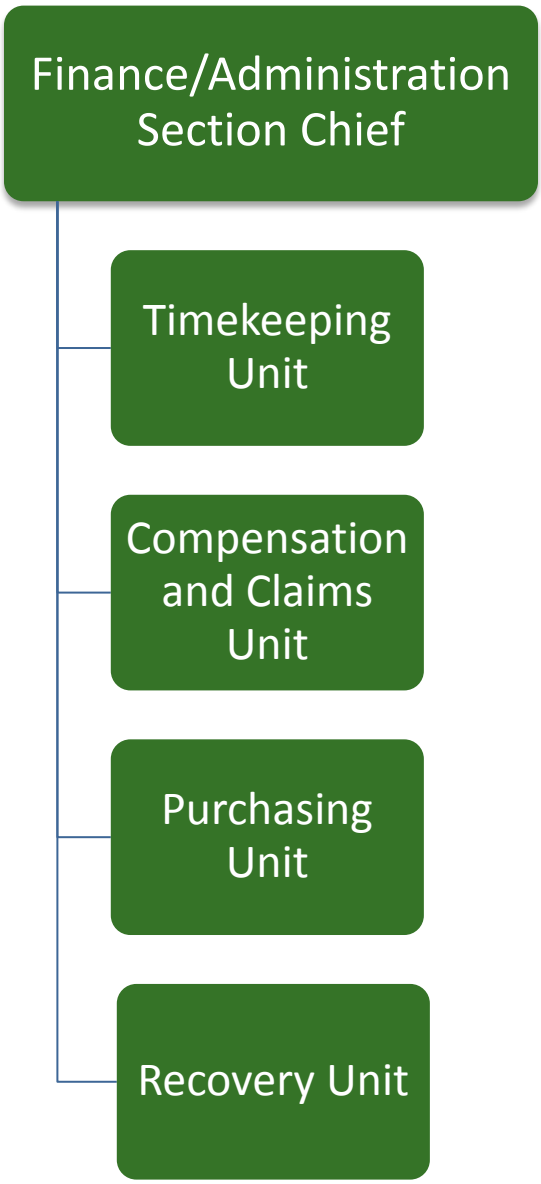
- Coordinates facility maintenance and security services at the City EOC.
- Coordinates the setup of necessary support areas, including areas for food and water service, sleeping, sanitation, showering, etc. within the City EOC.
- Ensures EOC remains functional by coordinating all support facility needs.
- Obtains additional facilities, as required.
- Provides technical support for the operating and delivery systems utilized by the City EOC, including but limited to:
    - Water system
    - Heating and air conditioning systems

- Trash collection
- Septic system
- Propane
- Facility generators

3.4.9.3.8 Resources Status Unit

- Supports the incident by acquiring and coordinating resources as needed.
- Coordinates and tracks incident resources and works with the Planning and Intelligence Resource Unit Leader for tracking of personnel.
- Identifies the best strategy for sharing, acquiring, and distributing response resources and personnel.
- Provides resources, technical support and maintenance to the City EOC as necessary.
- Receives, stores, and delivers supplies to the City EOC.
- Supports the acquisition and distribution of food for incident responders.
- Supports the Care and Shelter Branch in supplying food, water and supplies to incident victims at shelters or reception centers.
- Coordinates directly with Unit Leaders and Section Chiefs in the EOC for resource and personnel status and deficiencies.

3.4.9.4 Finance and Administration Section



When there is a specific need for financial, reimbursement (individual and agency or department), and/or administrative services to support City EOC management activities, a Finance and Administration Section is established. Not all incidents will require such assistance. In large, complex scenarios involving significant funding originating from multiple sources, the Finance and Administration Section is an essential part of the response organization. In addition to monitoring multiple sources of funds, the Finance Section must track and report on the financial "burn rate" as the incident progresses. This allows City EOC management to forecast the need for additional funds before operations are negatively affected. This is particularly important if significant operational assets are under contract from the private sector. The Finance Section may also need to monitor cost expenditures to ensure applicable statutory rules are met.

Close coordination with the Planning and Intelligence Section and Logistics Section is also essential so operational records can be reconciled with financial documents. Because of the flexible nature of SEMS, NIMS, and ICS, in some cases, only one or a few specific functions may be required.

The Finance and Administration Section will be activated as required for purposes of maintaining records on personnel and equipment time, providing payments to vendors for supplies and equipment usage, and determining the cost considerations or various alternative strategies associated with incident planning. The Finance and Administration Section Chief will determine, given current and anticipated future requirements, the need for establishing the subordinate unit.

3.4.9.4.1 Finance and Administration Section Chief

Responsibilities

- Responsible for all financial and cost analysis of incident.
- Identifies the best strategy for sharing, acquiring and distributing response expenditures.
- Implements a Disaster Accounting System.
- Provides regular accounting of costs (personnel and equipment) reports associated with the incident.
- Quantifies damage to public property.
- Acts as a financial liaison between the City EOC and other agencies.
- Recommends financial policies to the DES and carries out agreed upon policies.
- Processes purchase orders and contracts associated with the incident.
- Processes workers compensation claims associated with the incident.
- Processes travel and expense claims associated with the incident.
- Processes insurance claims associated with the incident.
- Manages the financial claims process, working with the Operational Area, Cal OES and FEMA.
- Coordinates directly with Section Chiefs in the EOC and ICP.

3.4.9.4.2 Timekeeping Unit

Responsibilities

- Maintains and processes complete and accurate time records of all personnel utilized in the incident.
- Prepares regular reports for the Finance/Admin Chief that documents all personnel related costs of the operation at the City EOC and field level.
- Ensures proper recording of personnel time in accordance with the policies of the City of Rancho Santa Margarita and the relevant agencies.
- Documents excess hours worked and overtime of response personnel.
- Prepares personnel cost reports for management, Operational Area, state and federal agencies.
- Provides all cost analysis activity associated with EOC and incident operations.
- Ensures personnel time records, travel expense claims and other related forms are prepared and submitted to payroll.

3.4.9.4.3 Compensation and Claims Unit

Responsibilities

- Coordinates documentation of incident injury and property damage.
- Accepts claims resulting from the incident as the agent for the City.
- Initiates and coordinates the investigation and compensation of injury in the areas of: workers compensation, property/equipment damage, and liability.
- Ensures preparation of forms required by workers compensation programs, providing support of claims, etc.
- Maintains a file of injuries and illnesses associated with response personnel.

3.4.9.4.4 Purchasing Unit

Responsibilities

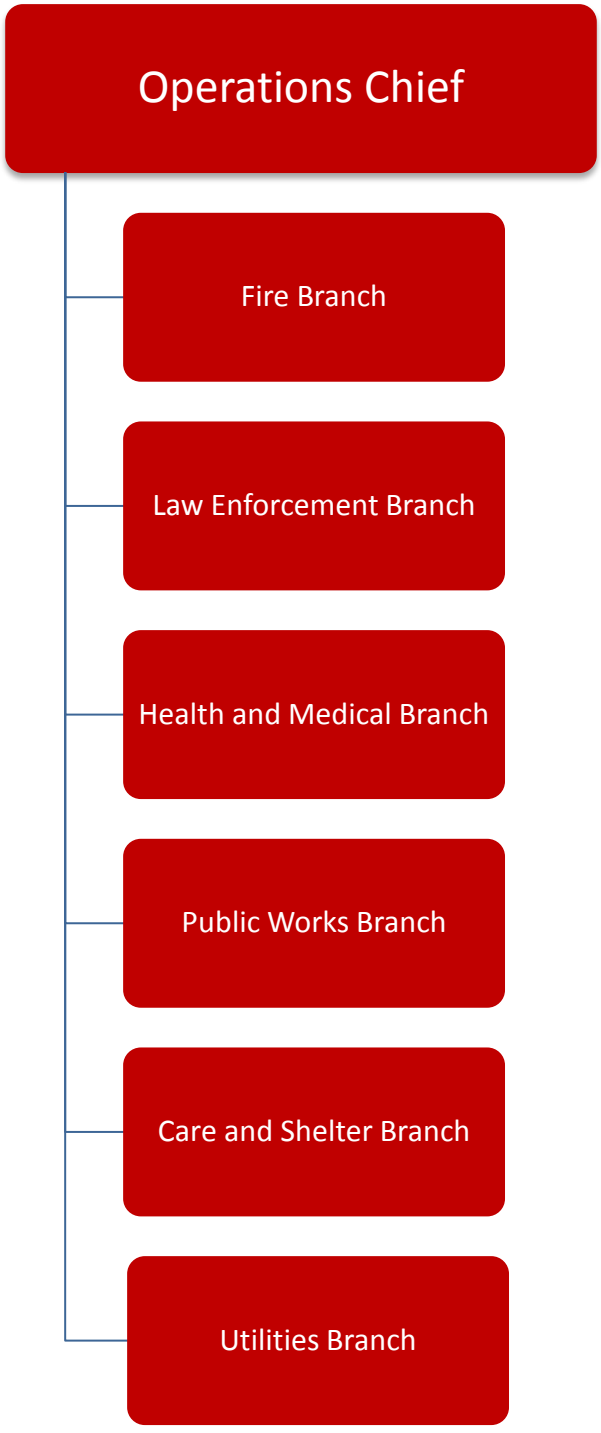
- Coordinates vendor contracts not previously addressed by existing approved vendor lists.
- Coordinates with Supply/Procurement Unit on all matters involving the need to exceed established purchase order limits.

3.4.9.4.5 Recovery Unit Leader

Responsibilities

- Determines impacts of the emergency requiring recovery planning.
- Initiates recovery planning meetings with appropriate individuals and agencies.
- Develops the initial recovery plan and strategy for the jurisdiction.
- Ensures all appropriate agencies are kept informed and have the opportunity to participate in the recovery planning process.
- Develops the strategy to transition from recovery planning in the EOC to a wider post-emergency recovery effort.

3.4.9.5 Operations Section



The Operations Section is responsible for coordinating resources within the City or through mutual aid support for the tactical operations in the City of Rancho Santa Margarita. The Operations Section Chief and each of the Branch Directors are responsible for coordinating with their counterparts and the Logistics Sections in the City's EOC and the OA EOC to identify and seek out needed response resources on their behalf. In addition, there may be situations in which OA jurisdictions can better respond to a regional incident if their resources are pooled and coordinated under a single command. In these cases, City EOC Operations Section personnel will coordinate with the OA EOC Operations Section personnel to direct the deployment and tactical operations of that regional resource.

3.4.9.5.1 Operations Section Chief

Responsibilities

- Manages activities in direct support of field operations.
- Implements executive decisions with respect to priorities and response plans.
- Supports Incident Command in identifying incident priorities, assessing resources and maintaining situational awareness.
- Determines the need for resources, as required by the incident.
- Requests mutual aid and other necessary resources in support field operations.
- Coordinates directly with Section Chiefs in the EOC, ICPs, and with representatives at the Department Operations Center if activated.

3.4.9.5.2 Fire Branch

Responsibilities

- Monitors and supports field tactical operations related to:
    - Urban search and rescue
    - Heavy rescue
    - Fire suppression and control
    - Emergency medical service
    - Hazardous materials
    - Mass casualty
- Coordinates resources to assist with the mobilization and deployment for fire operations as necessary.
- Coordinates directly with appropriate personnel in the EOC, ICP, and with representatives at the Fire Department Operations Center, if activated.
- Identifies the best strategy for sharing, acquiring and distributing search and rescue resources and personnel.
- Coordinates resources and personnel in the support of the safe removal of endangered, trapped, injured or isolated persons.
- Coordinates with the Urban Search and Rescue Group in the Fire and Rescue Branch at the OA as necessary.
- Coordinates with the Law Enforcement Branch on fatality management/Coroner as necessary.
- Provides operational expertise, policies, and procedures for response and recovery operations associated with hazardous material situations.
- Coordinates and supports hazardous materials situation response and recovery operations.

- Supports preliminary damage assessment surveys.

3.4.9.5.3 Law Enforcement Branch

Responsibilities

- Monitors and supports field operation related to:
    - Enforcing laws, orders, and regulations.
    - Alerting and warning the public and responders.
    - Managing and directing vehicular traffic, access and perimeter control.
    - Managing evacuations.
    - Providing security for critical facilities and resources.
    - Assisting in light search and rescue operations.
- Supports the Security Officer in law enforcement activities within the City EOC.
- Identifies resources required to assist with the mobilization and deployment for law enforcement, traffic control and perimeter control operations as necessary.
- Provides security for all City facilities, shelter, reception centers, and evacuated areas.
- Supports preliminary damage assessment surveys.
- Coordinates directly with appropriate personnel in the EOC, ICP, and with representatives at Department Operations Center, if activated.
- If Transportation Assembly Points are activated by OA, assists OA in establishing and staffing the Transportation Assembly Points in the jurisdiction for evacuees without transportation of their own.
- Coordinates with the Transportation Unit in Logistics regarding the number and type of vehicles available for deployment to identified TAP locations.
- Coordinates with the OA on resource needs and activities at TAPs.
- Implements the strategies and objectives for the jurisdiction from the Orange County Operational Area Evacuation Annex.
- Identifies the best strategy for acquiring and distributing evacuation resources and personnel in support of the incident.
- Coordinates evacuation and movement of persons out of the impacted area.
- Coordinates resources and personnel to support traffic control for the movement of impacted populations.
- Coordinates with field personnel to ensure evacuated areas are reasonably secured and that access to the evacuated area is controlled.
- Implements objectives and strategies for the jurisdiction from the Orange County Mass Fatality Plan.
- Coordinates emergency procedures to expand decedent operations, which may include the establishment of temporary morgues, personal property management, and family reception center.
- In coordination with the OA and Coroner, implements policy for the collection, identification, and disposition of human remains.
- Coordinates with the Search and Rescue Groups at the OA as necessary to acquire resources for search and recovery operations.

3.4.9.5.4 Health and Medical Branch

Responsibilities

- Monitors and coordinates with field tactical operations related to:
    - People with disabilities and access and functional needs
    - Emergency medical systems
    - Environmental health concerns
    - Injured transport
    - Skilled Nursing and Assisted Living Facilities
    - Disease control
    - Medical mass care
- Coordinates resources to assist with the mobilization and deployment for health, medical and environmental operations as necessary.
- Coordinates directly with personnel in the OA EOC, ICP, and with representatives at the Health Emergency Operations Center (HEOC), if activated.
- Coordinates medical response with hospitals and private ambulance companies as needed.
- Coordinates and supports Skilled Nursing and Assisted Living Facilities with relocation.
- Implements procedures for handling Medical Mass Care and medical surge.
- Coordinates emergency medical services for incident victims.
- Coordinates logistical requests for medical transportation and medical supplies with the OA.
- Coordinates health and medical resource requests with the OA.
- Coordinates resources and personnel to support inspection and advisory services on public health issues, including handling of food in mass care facilities and resolving sanitation issues.
- Coordinates with the OA on environmental health resources and personnel to support food, water, facility inspections, environmental remediation, hazardous waste, contamination, and sanitation.

3.4.9.5.5 Public Works Branch

Responsibilities

- Coordinates resources and personnel to assist with the mobilization and deployment for public works operations.
- Coordinates flood mitigation and abatement operations.
- Coordinates resources and personnel heavy equipment support.
- Assists law and fire personnel in establishing or maintaining traffic control points, perimeter control, and hazardous material incident operations by providing changeable message signs, k-rails, barriers or other closure items.
- Coordinates with Planning and Intelligence Section on damage assessment inspections of public and private facilities.
- Coordinates emergency repair and restoration, debris clearance, and route recovery operations.
- Coordinates debris removal and develops a debris management plan for the incident.

- Coordinates directly with OA EOC, ICP and with representatives at the OC Public Works Department Operations Center, if activated.

3.4.9.5.6 Care and Shelter Branch

Responsibilities

- Coordinates resources and personnel to assist with the mobilization and deployment for care and shelter operations as necessary.
- Coordinates with OA Care and Shelter Branch to ensure shelter sites meet ADA (American with Disabilities Act) requirements.
- Coordinates with the OA Care and Shelter Branch on Disabilities and Access and Functional Needs related issues, resources, and public information needs for both impacted and non-impacted populations.
- Communications shelter status to the Public Information Officer and Public Information Officer Support staff.
- Coordinates with American Red Cross, Orange County Chapter and others as needed, in support of shelter operations.
- Coordinates with OA Care and Shelter Branch for the care of animals and determination of appropriate animal care sites.
- Coordinates with the American Red Cross and OA Care and Shelter Branch in identifying appropriate sites for care and shelter operations.
- Keeps the emergency organization appraised of issues relating to schools and children.
- Coordinates with private schools and child care facilities including maintenance of list, evacuation, and reunification plan.
- Monitors and supports field tactical operations related to animal evacuations.
- Coordinates and supports operations relating to:
    - Establishing animal shelters
    - Animal transportation
    - Coordinates with volunteer groups for large animal relocation
    - Reunification with owners
- Coordinates with the Public Information Officer and Public Information Support Staff on animal related issues, status and operations.
- Coordinates behavioral health resources and personnel in support of shelter operations.
- Coordinates with the Public Information Officer to ensure all methods of emergency communications with the public are as accessible as possible, including AlertOC.
- Coordinates with Operations Section to identify access and functional needs-related issues and available resources.
- Works with Planning and Intelligence Section to provide information for inclusion in Incident Action Plan.
- Maintains communication with organizations serving people with disabilities and access and functional needs and continue to monitor their response activities and needs.
- Provides information to PIO Support Staff on effectively communicating with people with disabilities and access and functional needs.

- Coordinates with PIO Support Staff to ensure organizations serving people with disabilities and access and functional needs are receiving all EOC press releases, activation notices and EOC situation summaries.
- Coordinates with Transportation Unit to address any needs related to transportation accessibility and availability.
- Coordinates with American Red Cross Liaison and OA Care and Shelter Branch to address any accessibility issues in official and unofficial shelter locations.
- Coordinates with other shelter agencies on access and functional needs issues in shelters including the American Red Cross, Health Care Agency Behavioral Health, and Animal Care Services.
- Assists Logistics Section as needed with technical expertise on certain resources such as durable medical equipment (DME) and consumable medical supplies (CMS).
- Coordinates with:
    - Advance Planning Unit (for access and functional needs resource forecasting)
    - Public Works Branch and Utilities (to obtain manifest list of those who need electricity to use critical devices for use during power outages)
    - Situational Analysis Support Staff (to facilitate specific information related to access and functional needs is collected)

3.4.9.5.7 Utilities Branch

Responsibilities

- Coordinates utility resources and personnel (e.g. emergency repairs, temporary construction, restoration of essential utilities, etc.).
- Coordinates with the Santa Margarita Water District for damage assessment and restoration of water and wastewater systems. If the OA is activated, work with Santa Margarita Water District and the Water Emergency Response of Orange County (WEROC) at the OA for damage assessments and restoration of water and wastewater systems; including the coordination of water mutual aid.
- Coordinates with outside utility vendors, providers, and contractors as necessary (e.g., Southern California Edison, San Diego Gas and Electric, Southern California Gas Company, telecommunication providers) for damage assessments and restoration of operations.
- Coordinates directly with appropriate positions in the EOC, ICP and with representatives at the OC Public Works Department Operations Center, if activated.

3.5 Direction, Control and Coordination

3.5.1 EOC Purpose

The City EOC is the communication and coordination center for the City of Rancho Santa Margarita, providing the central point for coordinating operational, administrative, and support needs of the City.

3.5.2 City of Rancho Santa Margarita Role and Responsibilities

The City of Rancho Santa Margarita's Emergency Operations are the lower level of the State's emergency services organization. During a State of Emergency, a State of War Emergency, and Local Emergency, the City coordinates

resources, priorities, and information and serves as a coordination and communication link for responders in the field. The City sends information up to the Operational Area to provide them with a Common Operating Picture. The City EOC is responsible for:

- Coordinating information, resources, and priorities amongst departments within the jurisdictional boundaries.
- Coordinating information, resources and priorities between the local government level and the Operational Area.

3.5.3 Location of Primary and Alternate EOCs

The City of Rancho Santa Margarita EOC facility meets the objectives required for managing a disaster response including meeting the requirements of the Americans with Disabilities Act. In addition, the City's EOC is co-located within City Hall to simplify operations. Also located in the facility is the Sheriff's Department local Police Services. The primary City EOC is located at 22112 El Paseo, Rancho Santa Margarita, CA 92688.The alternate EOC location has three options, the use of the Bell Tower Regional Community Center, another local government EOC, such as a neighboring City EOC, or the use of a local fire station.

3.5.4 EOC Activation

Activation of the City EOC occurs under the following conditions:

- There is an "emergency" as described by City Ordinance No. 03/04, § 3, 6.05.020.: Actual or threatened existence of conditions of disaster or of extreme peril to the safety of persons and property within the City caused by such conditions as air pollution, fire, flood, storm, epidemic, riot, or earthquake, or other conditions, including conditions resulting from war or imminent threat of war, but other than conditions resulting from a labor controversy, which are or are likely to be beyond the control of the services, personnel, equipment, and facilities for the City, requiring the combined forces of other political subdivisions to combat. The DES, alternate or successor, will declare the EOC operational when adequate personnel have arrived to facilitate decisions.

3.5.5 Determining the Need to Activate

- Designated emergency response in the field (Fire, Law Enforcement, Health Care, Public Works, etc.) will respond to emergencies, assess damage, and provide status reports to the Director of Emergency Services.
- Based on the information from the field, the Director of Emergency Services will analyze the situation and determine if the situation meets the criteria of an emergency as defined in City Ordinance No. 03/04, § 3, 6.05.020. described in the previous section.

3.5.6 Deactivation of the City of Rancho Santa Margarita EOC

The DES has the authority to determine when it is appropriate to deactivate the EOC. The duration of the EOC activation is often dependent on the severity of the emergency situation. For pre-planned events or smaller incidents with few recovery concerns, the activation might be limited to days or even hours. In major catastrophic situations, the EOC may be activated for months and potentially a year or longer as operations shift from response to supporting long-term recovery of the community.

Following smaller incidents, deactivation of the EOC will typically take place after on-scene incident management activities have ceased, when it is determined that on-scene personnel have the incident fully contained and there is limited or no possibility of escalation, or when the incident has become small and specific enough that a single DOC can manage the incident alone. In either case, the DES will determine the appropriate time to deactivate the EOC.

Once the decision has been made to deactivate the EOC, reducing EOC activities will occur in a phased process. Depending on the magnitude of the incident and the associated response, this phased process may be implemented over months, days, hours, or even minutes. The precise timing of each phase will be determined by the DES. The five phases are as follows:

1. **Operations Section:** The Operations Section will typically be the first to deactivate. The specifics of demobilization will be determined by the Operations Section Chief and Branch Directors in accordance with the Demobilization Plan developed by the Planning and Intelligence Section, Demobilization Unit.

2. **Logistics Section:** The Logistics Section will support the Operations Section's deactivation. It will begin closing down facilities and reclaiming or disposing of resources that were used to support emergency workers (e.g., feeding locations, lodging, sanitation, etc.). It will also assist in accounting for resources, determining their status, returning or disposing of response resources, and reporting status, costs, and losses to the Finance and Administration Section.

3. **Planning and Intelligence Section:** Following the deactivation of the Operation Section and Logistics Section without incident, the Planning and Intelligence Section will cease operations. The Planning and Intelligence Section remains active while the Operations and Logistics Sections deactivate in case complications with field demobilization or resource management arise that might need to be addressed strategically. In addition, the Planning and Intelligence Section, Demobilization Unit is responsible for developing the demobilization plan that is being used by the Operations and Logistics Sections. Should questions arise or revised strategies be needed, the Planning and Intelligence Section will be available during this critical time.

4. **Finance and Administration Section:** The Finance and Administration Section is the next to the last functional element to cease operations because it is responsible for gathering all documentation related to the incident, identifying all associated costs (including demobilization costs), and leading cost recovery efforts. It may sometimes take considerable time to ensure all appropriate documentation is gathered from the other sections and to validate costs. Furthermore, complete accountability for the operation cannot be determined until all other sections have fully deactivated.

5. **Management Section:** The Director of Emergency Services is accountable for all emergency management activities occurring in the EOC from start to finish. Therefore, the Management Section is the last to deactivate. At any time throughout the deactivation process, the DES may choose to dismiss elements of the Management Section. The DES will typically receive a debriefing from the Section Chiefs as they cease operations. Once the last Section Chief has provided their debrief and the DES is confident that operations are terminated and all things are accounted for, then official operational deactivation may result.

As individuals are released from the EOC, they will perform the following activities in accordance with the SEMS Generic Demobilization Phase Checklist:

- Close out logs when authorized by the appropriate Section Chief.
- Complete all required forms, reports, and other documentation and submit all forms and logs to the Planning and Intelligence Section, Documentation Unit, prior to departure.
- Notify other appropriate organizations of the deactivation.
- Ensure any open actions not yet completed will be handled after deactivation.
- Be prepared to provide input to the after-action report.

Following an EOC activation and prior to deactivation, the Emergency Management Coordinator will be responsible for restoring the City EOC to a state of readiness. This may include:

- Coordinating cleaning services.
- Servicing equipment or coordinating repairs.
- Restocking supplies.
- Reorganizing and rearranging furniture or other resources.
- Producing fact sheets or public information for use by the PIO.
- Ensuring the PIO continues to update of City website, Twitter and other social media accounts with information as needed.

3.5.7 Levels of EOC Activation

The extent to which the EOC is activated depends on the type of emergency situation, its potential for escalation, its geographic extent, and other factors. The DES determines an appropriate level of activation for the EOC. The activation levels and their associated staffing are identified below:

Minimum staffing may vary with the actual situation.

LEVEL 1 – ACTIVATION (Monitoring)

1. DES
2. Operations Chief
3. EOC Coordinator

LEVEL 2 – ACTIVATION (Mid-Level Activation)

1. DES
2. EOC Coordinator
3. Section Chiefs
4. Public Information Officer
5. Branches and Units as required
6. Support pool staffing as required
7. Specialists as required

LEVEL 3 – ACTIVATION (Full- Scale Activation)

1. All EOC positions as required by the event/situation

3.6 Information Collection, Analysis, and Dissemination

Prior to the EOC being activated, the City can directly receive alert and warning notifications from several sources such as the State Warning Center, the National Weather Service and County departments and agencies. The City of Rancho Santa Margarita has the responsibility to collect and disseminate notifications based upon current procedures.

Upon activation of the City's EOC, the Planning and Intelligence Section will be responsible for gathering timely, accurate, accessible and consistent intelligence during an emergency. EOC Incident Action Plans (EOC IAP) will be utilized to create a common operating picture and be used to adjust the operational goals, priorities and strategies.

- Information dissemination within the EOC: Information communication will take place using various communication tools. Primarily, the EOC provides the structure for face-to-face communication and coordination. The EOC Message form is used for written communications and documentation of key messages.
- Information disseminated outside of the EOC: The EOC provides the single point of contact for information sharing to City departments and supporting agencies within the City. Such communications take place via typical systems such as telephone, e-mail, radio, and fax.

3.6.1 Alert and Warning

Alert and warning is the process by which governmental forces and the general public are made aware of the threat of imminent, extraordinary danger. Dependent upon the nature of the threat and the population at risk, warning can originate at any level of government.

Success in saving lives and property is dependent upon timely dissemination of warning and emergency information to the populations in threatened areas. The City of Rancho Santa Margarita is responsible for warning and alerting the City of Rancho Santa Margarita.

There are various mechanical systems in place, described below, whereby an alert or warning may originate and be disseminated to the City and/or County.

Government Notifications and Alerts

The OA and City of Rancho Santa Margarita may become aware of specific emergency situations or conditions via the following methods:

California State Warning Center (CSWC):

The California State Warning Center is the official state level point of contact for emergency notifications. The CSWC maintains contact with County Warning Points, state agencies, federal agencies and the National Warning Center.

- Notifications received by CSWC: Local governments and OAs notify the CSWC of emergencies that affect their community in accordance with existing laws, protocols or when state assistance is requested or anticipated.

- Earthquake Notifications: the CSWC receives notifications of earthquakes from the California Integrated Seismic Network (CISN), National Earthquake Information Center (NEIC) and the United States Geological Survey (USGS).
- Tsunami Notifications: CSWC receives tsunami notifications from the National Tsunami Warning Center via the National Weather Service (NWS) and the National Warning Center.
- Weather Notifications: notification of severe weather is received from the NWS-San Diego Office.
- Energy Notifications: the California Independent Systems Operator (California ISO) monitors the state's power grids. When the grid is unable to meet electrical demands, the California ISO will direct utilities to reduce their load and issue emergency notices of energy interruptions. CSWC will be notified when the operating reserves reach these critical levels.
- Hazardous Materials, Oil Spill Release Notifications: in accordance with state law, CSWC will be notified of any release or threatened release of hazardous materials.

CSWC Dissemination of Alert and Warnings: the CSWC is responsible for informing, communicating, alerting and notifying local government, OAs, state officials and the Federal government of emergencies. CSWC is equipped with a number of telephone, data and radio systems, including CALWAS, CLETS, NWS Weather Wire, EDIS and Dialogic Automated Notification System, most of these systems are used on a day-to-day basis; others are available for use in an emergency, as conditions require.

- CALWAS: The CSWC maintains the California Warning System (CALWAS) to communicate with Cal OES Regional Offices and County Warning Points during an emergency. CALWAS is part of the National Warning System (NAWAS).
- CLETS: The California Law Enforcement Telecommunications System (CLETS) is a high speed message switching system that provides law enforcement and criminal justice agencies with the capability of obtaining information directly from federal, state and local computerized information files. In addition, the system will provide fast and efficient point to point delivery of messages between agencies.
- CLEMARS: The California Law Enforcement Mutual Aid Radio System provides common police radio frequencies for use statewide by state and local law enforcement agencies during emergencies where inter-agency coordination is required. It operates under appropriate FCC rules and regulations and is administered by the State through Cal OES. Participation in CLEMARS is open to all California law enforcement agencies which are eligible to operate on radio frequencies authorized by the FCC for Police Radio Service.

CLEMARS use is governed by a system of priorities:

- Priority 1-Disaster and extreme emergency operations for mutual aid and interagency communications
- Priority 2-Emergency or urgent operations involving imminent safety of life or protection of property
- Priority 3-Special event control activities, such as a planned event involving the participation of two or more agencies
- Priority 4-Drills, tests and exercises
- Priority 5-Single agency secondary communications

CLEMARS programmed radios are available through the Orange County Sheriff's Department, Control One.

- EDIS: the Emergency Digital Information Service is a Cal OES provided service, developed in response to a legislative mandate, as a method to assist the media in providing messages visually to the hearing impaired. EDIS is utilized for the distribution of warning and emergency information to the media and to the public
- OASIS: the Operational Area Satellite Information System is a satellite based communications system. OASIS provides an alternate method of communication between the State, Cal OES Regions and Operational Areas

National Weather Service (NWS):

The NWS provides warnings for weather, hydrologic and climate needs for the United States, its territories, adjacent waters and oceans. Orange County receives its notifications from the San Diego Forecast Office, which prepares any necessary warning for Orange County.

The National Weather Service transmits continuous weather information for the Orange County area on 162.450 MHz. Weather Service severe weather broadcasts are preceded with a 1,050 MHz tone that activates weather monitor receivers equipped with decoders. The Weather Service can also access Orange County NAWAS to announce severe weather information which is disseminated to the county warning points utilizing the CALWAS system.

The levels of notifications that the NWS issues include the following:

- Outlook
- Statements
- Watches
- Advisories
- Warnings

National Oceanic and Atmospheric Administration's (NOAA) National Tsunami Warning Center:

Tsunami warnings for California are issued by NOAA's National Tsunami Warning Center (NTWC) located in Palmer, Alaska. The NTWC monitor a network of seismic and sea-level stations, providing the basis for which tsunami warnings, advisories, watches and information statements to the State Warning Center and to local coastal communities.

Public Media:

Like all individuals, the City's emergency management and response personnel have access to and monitor media outlets on a daily basis. If the media reports on incidents underway or threats of pending incidents, then the City will become aware of those warnings just as any ordinary citizen would.

3.6.2 Public Notifications and Alerts

Emergency information warnings, advice and protective action instructions may be broadcast to the public by one or more methods including: EAS, SigAlerts, media releases, route alerting and AlertOC.

Methods of warning the public of specific emergency conditions are described below. These systems may also be primary ways that state and local governments become aware of emergency information. All public notifications and

alerts issued by the City and/or OA will be coordinated with other jurisdictions that are or may be impacted and in accordance with current plans and procedures.

Integrated Public Alert and Warning System (IPAWS)

IPAWS is an internet based alert and warning gateway operated by FEMA. Organizations with a responsibility for alerting the public may request approval to send alerts to IPAWS when authorized to do so under their state or local EAS plan. To use IPAWS, a jurisdiction must acquire software from a third party vendor, file a Memorandum of Agreement (MOA) with FEMA and submit a request for Public Alerting Authority to the Cal OES. Upon approval, jurisdictions will receive a Collaborative Operating Group (COG) identification number and an electronic security certificate which will allow their software to connect to the IPAWS gateway.

IPAWS messages are geographically targeted to a specific county and are electronically transmitted over the internet to the requesting alerting system. Jurisdictions can use their connection to IPAWS to route alerts in the EAS and WEA system. Orange County Operational Area has been approved and has the authority to implement EAS and WEA for alerting the public. The City of Rancho Santa Margarita can request the OA to send out the IPAWS alerts on its behalf.

Emergency Alert System (EAS):

The Emergency Alert System (EAS) is designed for cable television systems and AM, FM and TV broadcast systems to disseminate emergency public information. This system enables the President as well as federal, state and local governments to communicate with the general public.

This system uses the facilities and personnel of the broadcast industry on a volunteer basis. EAS is operated by the broadcast industry according to established and approved EAS plans, standard operating procedures and within the rules and regulations of the Federal Communications Commission (FCC). FCC rules and regulations require all participating stations with an EAS operating area to broadcast a common program. Each broadcast station volunteers to participate in EAS and agrees to comply with established rules and regulations of the FCC.

EAS can be accessed at federal, state, and local levels to transmit essential information to the public. Message priorities under Part 73.922(a) of the FCC's rules are as follows:

Priority One……Presidential Messages (carried live)

Priority Two……..Operational (Local) Area Programming

Priority Three…….State Programming

Priority Four……..National Programming and News

Presidential messages, national programming, and news will be routed over established network facilities of the broadcast industry. State programming will originate from the state operations center and will be transmitted through the state using the state's California Law Enforcement Radio System (CLERS). Local programming will be transmitted by the Local Primary (LP-1) and (LP-2) stations.

Examples of emergencies identified by the County which may warrant EAS activation by the broadcast industry are earthquake, serious fires, heavy rains and flooding, 9-1-1 system outages, severe industrial accidents, and hazardous material accidents. The context of any emergency broadcast transmitted on EAS should be of concern to a significant segment of the population of Orange County. The message must be a voice message, it may be prerecorded, and it must not be longer than two (2) minutes in length.

EAS activation can be authorized by any one of the following parties for the County:

- Orange County Sheriff-Coroner Department, Department Commander
- Orange County Fire Authority Chief, Division Chief, Battalion Chief
- Orange County Health Care Agency
- OC Public Works
- County of Orange Director of Emergency Services

Orange County relies on KWVE-107.9 FM as its LP-1 EAS station. The LP-2 back-up is located at the Control One Communications Center at the Loma Ridge facility.

Additional information can be found in the Orange County Emergency Alert System (EAS) Communications Operations Plan. The City of Rancho Santa Margarita can request the OA to send out EAS alerts on its behalf.

Wireless Emergency Alerts (WEA):

WEA are free informational text messages that are sent to WEA-enabled cell phones within range of an imminent and dangerous local situation, severe weather event or AMBER emergency.

WEAs are emergency messages sent by local authorized government authorities through wireless carriers' networks. The alerts include a unique sound and vibration, are no more than 90 characters and instruct specific actions individuals should take. These messages are authorized to be sent by the County. It shall be noted, these cannot be issued to a specific city boundary; therefore all WEA messages go to the entire county geographic area when initiated. The City of Rancho Santa Margarita can request the OA to send out WEA alerts on its behalf.

AlertOC:

AlertOC is Orange County's regional public mass notification system designed to keep those who live or work in Orange County informed of important information during emergency events. AlertOC is available 24/7 and has been pre-loaded with Orange County landline phone numbers (including unlisted) and countywide geographic maps. Additionally, citizens have the option to provide additional contact information via self-registration portal www.alertoc.com. Upon local authority decision to activate, the System will be used to send a message, describing the situation and recommended action the public should take, to affected businesses and households via:

- Phone Calls
- TTY and TDD
- E-mail
- Text message

Use of the Mass Notification System for emergency activity contains two components:

- The need to disseminate critical, safety-related information to individuals regarding emergency events occurring now; follow up information regarding the event and termination of the emergency event.
- Communicating with safety-responder staff, volunteers and involved parties about the emergency event.

As a general rule, the System is to be used when the public is being asked to take some action (e.g. evacuate, prepare to evacuate, shelter in place, boil tap water before drinking, local assistance centers and other follow up information, re-entry to an areas after evacuation orders have been lifted or termination of the emergency because the danger has passed).

Emergency Public Notifications are limited to:

- Imminent or perceived threat to life or property
- Disaster notifications
- Evacuation notices
- Public health emergencies
- Public safety emergencies
- Any notification to provide emergency information to a defined community

Emergency Responder Notifications are limited to:

- Contacting first responders to advise of an emergency
- Contacting first responders to report for duty due to an emergency
- Contacting key staff regarding an emergency or crisis situation
- Contacting agency employees to report at a different time or location (or provide an update) due to an emergency
- Exercises

The City of Rancho Santa Margarita has the ability to utilize AlertOC to send out notifications within the Rancho Santa Margarita city limits. Select City staff members have accounts within AlertOC enabling them to send out notifications to the public. Additional information can be found in the Orange County Operational Area Countywide Public Mass Notification System Standard Operating Procedures.

Route Alerting and Door-to-Door Canvassing:

Route Alerting is a form of alert and notification that is used frequently in small scale emergencies or during rapidly changing situations in a designated area. In route alerting, emergency officials drive or walk through an affected or potentially affected area alerting residents in that area of the emergency and actions they need to take. Route Alerting can be conducted door-to-door or via a public address system on a police car, fire engine etc. Although route alerting is effective when other systems are unavailable, it is dependent on resource availability and can be a slow process. Route Alerting is traditionally utilized only in areas that are ordered to take action.

3.7 Communications

3.7.1 Communication with the Public

The role of public information during and after a disaster is crucial to maintaining order. If employees, residents and businesses lack reliable information, this can create confusion, the spreading of rumors, and distrust in the response entities who are responsible for supplying accurate, timely information. It is imperative that the City go beyond minimal efforts to keep the public aware and informed. Therefore, the City will include the provision of timely, reliable, and regular information via multiple media channels, including print, broadcast, website(s), social media, community organizations and networks, direct outreach, etc., as well as in multiple languages and formats.

All efforts will be made to keep members of the City, including residents, businesses, and government employees informed of what they can expect from the City, where and how they can access resources and information. Conversely, they should be informed of what their community expects of them and where and how they can access the resources they need to be self-reliant and advance their own recoveries.

Public information channels such as social media, hotlines, or in-person visits must be quickly established to receive incoming questions and referrals. Communication with employees, residents and businesses that may have been displaced outside the County will also need to be addressed.

The City and the OA have a multitude of tools available to assist in the dissemination of public information. It is the responsibility of the City PIO to initiate the use of all applicable communication mediums in order to reach the intended audience during response and recovery. The tools listed below are intended to complement each other in distributing public information. The same message should be distributed across all channels to minimize confusion that may arise from conflicting information.

Media Outlets

A list of media outlets for Orange County and the surrounding region is maintained by the Orange County Sheriff's Department, Emergency Management Division. The City PIO can work with the OA PIO members in attempting to contact as many media outlets as possible when disseminating information, paying special attention to include non-English speaking outlets and any other information delivery vehicles to ensure the greatest number of affected people is informed. Additionally, media outlets should be encouraged to provide a television crawl and sign language interpreters during press conferences, or media releases so people with disabilities and others with access and functional needs have every opportunity to receive the message being broadcasted.

Website Pages

The City of Rancho Santa Margarita website (http://www.cityofrsm.org/) is an informational site for the public and City employees. During an activation of the EOC, this site serves as a place for press releases and information to be publicly posted online.

The Orange County Sheriff's Department, Emergency Management Division EOC, FEMA, and Cal OES maintain websites that provide information and resources available to assist businesses and individuals, their addresses are as follows:

- OCSD EM Division: http://www.ocgov.com/eoc
- FEMA: http://www.fema.gov and http://www.DisasterAssistance.gov
- Cal OES: http://www.caloes.ca.gov
- OCFA: http://www.ocfa.org/

2-1-1 Orange County

2-1-1 Orange County (2-1-1) is a telephone-based service set aside by the Federal Communications Commission for the public's use in accessing community services 24 hours a day, 7 days a week. This need becomes even greater during and following a disaster. 2-1-1 works closely with the OA to provide essential information to County residents in the event of an emergency and maintains close working relationships with the County, Orange County Red Cross, Orange County Social Services Agency, Orange County Health Care Agency and the COAD. 2-1-1 is kept informed with the most up-to-date information from County authorities to ensure it can relay and support accurate information to any calls received. 2-1-1 also forwards calls to the OA if there are specific requests beyond the scope of services, such as people with disabilities and access and functional needs requests and volunteer and donation offers.

News Conferences, Public Forums and Community Meetings

News conferences are an integral part of the public information function before (when possible), during, and after an emergency. A well-crafted news conference needs to identify important facts to share with the public, such as public resources (e.g., Local Assistance Center(s), 2-1-1, volunteer services, donations).

There may be multiple spokespersons participating during a news conference, public forum, or community meeting. There may be times when one spokesperson for all aspects of the incident may be enough, but in most cases of a complex incident, a unified approach with multiple spokespersons is preferred. Consequently, preplanning meetings prior to a press conference is of vital importance.

For public meetings, consideration must be given to ensure all resources are available to accommodate the audience being addressed. The City should consider the use of sign-language interpreters, large-print handouts and displays, non-English translation services, and media using in-frame captioning at all press conferences held by public officials.

The public looks to its elected officials as sources of information and strength during an emergency and recovery. Officials need to advise the public on the status of the response and recovery efforts, the resources available to them, and what the public needs to do to assist in recovery. The PIO can provide tools or guidance to help elected officials, including the following:

- Preparing talking points and key messages for elected officials to deliver during interviews.
- Anticipating questions elected officials may be asked and prepare appropriate answers (particularly for difficult questions).
- Highlighting public response efforts and recovery resources.

Social Media

The City of Rancho Santa Margarita has approved the use of its official social media pages, including Facebook, Twitter, Instagram, YouTube, Constant Contact, etc. for communications to the public during a disaster. Integrating information being received from verified accounts into the emergency organization can help to increase situational awareness and gain a better common operating picture. The City will monitor these accounts for relevant information; however, the City's social media sites will be used strictly for providing information and not to receive any communications from the community.

Social media can also be a powerful tool in information dissemination; however, messages released by the City to social media sites must be approved by the DES. Social media outlets used by the City will only contain information present in approved press releases, and only authorized City representatives may post to the social media outlets.

Public Information Hotline and Rumor Control

The County Public Information Hotline and Rumor Control, when activated, provides current, accurate and approved information to the community including Rancho Santa Margarita.

Non-Governmental, Non-Profit, Voluntary Organizations

Non-government, non-profit and voluntary organizations have a significant role in public information within the OA. Organizations will be looking for up-to-date information and citizens will be turning to their familiar community organizations as a source of information. Accurate, timely and approved information that is developed by the PIOs will need to be disseminated to local organizations as well as residents. PIOs will work with all information personnel, including organization liaisons, to ensure the communication of the most accurate and up-to-date information.

Additional information can be found in the County of Orange and Orange County Operational Area Joint Information System (JIS) Annex.

3.7.2 Communicating with Operational Area Partners

A variety of voice, data and combined voice and data systems are available in the City EOC to ensure uninterrupted communications amongst county departments and supporting organizations.

Telephones

The EOC has 9 separate phone lines and 9 dedicated landline phones. There are also conference call phones and numbers available for communications. All additional telecommunications services should be requested through the Logistics Section, Facilities Unit.

Cellular Phones

The EOC allows the use of cellular phones to communicate. The EOC is located in a high coverage area for multiple wireless carriers so cell services should not be an issue.

800 MHz Radios

The EOC has connectivity to the County's 800 MHz system, which provides access from the EOC to field personnel (e.g., fire, police, public works, public utilities, etc.) and potentially to mutual aid partners as well. During an emergency, City radios should be limited to emergency radio traffic only.

EOC to EOC Radio

The OA has EOC-to-EOC radio systems through frequencies known as OA1, OA2, WEROC, and County Administrative channel that are designed as an additional communications system between the OA EOC, County departments and OA Jurisdictions with these radio capabilities. The frequencies are always monitored by Control One in the event a department or jurisdiction cannot communicate by any other method. However, the City does not monitor this system continuously. Once the OA EOC has been activated, notifications are sent out advising all cities to monitor the EOC-to-EOC radios. The City of Rancho Santa Margarita has the OA1 Radio installed in the Administrative Sergeant's office at City Hall.

Satellite Phone

These can be used as back-up communication devices if telephones, cellular phones, radios, or other devices fail. It is not necessary to notify stakeholders that the satellite phone is being used because calls are automatically rolled over from the satellite system to the commercial telephone. The City of Rancho Santa Margarita does not currently have Satellite phones.

Radio Amateur Civil Emergency Service (RACES)

RACES consists of volunteer amateur radio (ham radio) operators who are committed to assisting with emergency communications in times of disaster. This group can provide auxiliary communications for all response agencies and other departments. The County maintains a cadre of RACES volunteers and radio base stations to ensure communications between the EOC and various locations can be maintained. Individual operators may have their own base stations that can also be dispatched at the discretion of the OA EOC. Emergency information can be communicated through RACES operators to any location where an operator is dispatched (e.g., mutual aid EOCs, Incident Command Posts, shelters, staging areas, etc.). Emergency information of any sort may be communicated through a ham radio operator. While operating in a RACES capacity, RACES stations and amateurs registered in the local RACES organization may not communicate with amateurs not operating in a RACES capacity. The City can request RACES volunteers through a resource request to the OA.

E-Mail

E-mail is a redundant method of communication between the OA EOC and the City EOC due to the number of reporting jurisdictions and the quantity of documentation provided. Like cellular telephones, if other primary means of data or voice communications fail, then e-mail should be considered a sufficient back-up. Before using e-mail, however, personnel should confirm that the intended recipient(s) has access to and is checking their e-mail. Critical information should never be sent over e-mail unless confirmation exists that the intended recipient is receiving the messages.

Fax Machines

Facsimile is utilized as a redundancy between the OA EOC and City EOC in addition to WebEOC® and e-mail. Fax machines are available throughout City Hall. Messengers will assist EOC personnel in sending facsimiles and in collecting, collating, and distributing received facsimiles. The EOC may use facsimile transmissions as a redundant communications method with e-mail being its primary communication method to the OA EOC.

Chapter Four: Plan Development and Maintenance

4.1 Revision and Plan Maintenance Process

The City of Rancho Santa Margarita's Emergency Operations Plan will be reviewed annually by the City's Emergency Management Coordinator (EMC) in conjunction with City staff. Changes to improve the plan will be incorporated into the Plan as they are identified based on deficiencies during drills, exercises or actual emergencies. The EMC is responsible for making revisions to the Plan that will enhance the conduct of response operations and will prepare, coordinate, publish and distribute any necessary changes to the Plan to all entities as shown on the record of distribution list of this City of Rancho Santa Margarita Emergency Operations Plan. This Plan will be approved by the Rancho Santa Margarita City Council.

The EMC will ensure this Plan and associated checklists and procedures are maintained according to the identified need. As needed, the EMC will be assisted in this responsibility by other City departments and agencies. Revisions will be distributed to all holders of the Plan as identified under the EOP Distribution heading.

Between regularly scheduled reviews and updates of this Plan, City staff may use the "Request for Modification of Rancho Santa Margarita Emergency Plan" form found in Attachment B to request revision, addition, or deletion of specific information. The completed form should be sent to the EMC where it will be kept on file until the regularly scheduled review. At the discretion of the City Manager, the requested modification can be considered as an emergency request and acted on immediately. Emergency requests will still require approval of the City Council.

4.2 Training and Exercise

The training and exercise requirements and programs serve to improve operational readiness by improving individual skills and by improving the emergency management system in the City of Rancho Santa Margarita. Training and exercises are essential to ensure emergency operations personnel are operationally ready. The objective is to train and educate City staff, emergency response personnel, and the public. Emergency management training is coordinated through the City's Emergency Management Coordinator (EMC) and the Orange County Sheriff's Department, Emergency Management Division (EMD). The EMC and EMD have a basic philosophy on training and exercises that lies at the foundation of the City's EOC preparedness. Below are some of the philosophies that the EMC and EMD have institutionalized to ensure its readiness:

- Exercises are critical to a well-functioning EOC. People remember what they do, not what they read. Therefore, exercises are done frequently and in accordance with procedures.
- To ensure redundancy when people cannot respond, more people are trained.
- Repetition is a key element of emergency management training.
- EOC training is offered frequently throughout each year.
- Small events and activations are used to practice response procedures.
- Volunteers are engaged during trainings, exercises, and real life incidents as much as possible
- Staff alert and notification systems are regularly tested, including during odd times and days, to ensure efficient activation in an actual incident.

4.2.1 Training

All City staff or other agency and department staff who may participate in emergencies in the City's EOC must receive appropriate SEMS, NIMS, and other specialized training as required by SEMS regulations, NIMS policy, or their job function, respectively. The City's Emergency Management Coordinator is responsible for coordinating and executing training or sending City employees to attend appropriate training programs. SEMS and NIMS training is offered on an ongoing basis to ensure all emergency response personnel are trained in SEMS and NIMS and the City's EOP. Training is scheduled as needed and to accommodate personnel changes. Specialized training courses (e.g., fire suppression, tactical operations, etc.) for first responders are the responsibility of individual agencies and City Departments to identify, develop, execute, and attend.

As required, each department shall coordinate the following NIMS training at relevant levels for emergency personnel:

All City Staff and Contractors

- FEMA IS-700: NIMS, An Introduction
- ICS-100: Introduction to ICS or equivalent

EOC Staff

- IS-700
- IS-800.B National Response Framework
- ICS-100; ICS-200
- ICS-300: Intermediate ICS

EOC Management and Branch Chiefs

- IS-700
- IS-800.B
- ICS-100
- ICS-200
- ICS-300
- ICS-400: Advanced ICS

As required by, the EMC shall coordinate the following SEMS training at relevant levels for emergency personnel (some of the SEMS and NIMS training requirements overlap):

COURSE NAME	TARGET AUDIENCE
SEMS Introductory Course	For all personnel that may become involved in multi-agency or multi-jurisdictional response at any level.
ICS Orientation IS-100	A general orientation to ICS for personnel working in support roles and for off incident personnel who require a minimum of ICS orientation.
ICS Basic IS-200	Personnel who respond to an incident to assist or support the organization but do not normally supervise others.
ICS Intermediate ICS-300	Personnel who supervise an ICS branch, division, group, or unit or are members of the Command Staff.
ICS Advanced ICS-400	Personnel who will supervise sections; Command Staff; Incident or Area Commanders. Also those who may assume key agency management roles over incidents.
SEMS Emergency Operations Center Course	Support, supervisory, and management personnel who would perform an EOC function at any SEMS level.
SEMS Executive Course	Administrators and policy makers that are required have SEMS mastery.

The City of Rancho San Margarita is required to document and maintain their own SEMS and NIMS training records.

4.2.2 Exercises

The best method for putting training to the test and for allowing staff to demonstrate and practice their skills in a near real life situation is through exercises. At the City level, exercises are conducted at least annually and then as needed. Individual departments or EOC branches may conduct exercises more frequently as they deem necessary. The OA-level, multiagency, or regional exercises (which are the responsibility of the OA) will be conducted at least annually to ensure OA staff is able to efficiently perform emergency functions, work together, and work with external organizations. The City of Rancho Santa Margarita is invited to participate in the County level exercises.

Exercises are conducted to maintain the readiness of operational procedures. Exercises provide personnel with an opportunity to become thoroughly familiar with relevant procedures, facilities, and systems which will actually be used in emergency situations.

Other forms of exercises include the following:

Seminars: Seminars are commonly employed to orient participants to or provide an overview of authorities, strategies, plans, policies, procedures, protocols, response resources, or concepts and ideas. Seminars provide a good starting point

for jurisdictions that are developing or making major changes to their plans and procedures. They offer the following attributes:

- Low-stress environment employing a number of instruction techniques, such as lecture, multimedia presentations, panel discussions, case study discussions, expert testimony, and decision support tools
- Informal discussions led by a seminar leader
- Not constrained by real-time portrayal of events
- Effective with both small and large groups

Workshops: Workshops usually focus on having attendees develop a product. It is common to organize attendees into functional groupings aided by facilitators and to use breakout sessions. Final results are often presented and approved in a plenum session. In conjunction with exercise development, workshops are most useful in achieving specific aspects of exercise design, such as the following:

- Determining program or exercise objectives
- Developing exercise scenario and key events listings
- Determining evaluation elements and standards of performance

Tabletop Exercises (TTXs): TTXs involve senior staff, elected or appointed officials, or other key staff in an informal setting to discuss simulated situations. This type of exercise is intended to stimulate discussion of various issues regarding a hypothetical situation. It can be used to assess plans, policies, and procedures, or to assess types of systems needed to guide the prevention, response to, and recovery from the defined event. TTXs can also be used to solve a specific problem. TTXs are typically aimed at facilitating the understanding of concepts, identifying strengths and shortfalls, and/or achieving a change in attitude. The effectiveness of TTXs is derived from the energetic involvement of participants and their assessment of recommended revisions to current policies, procedures, and plans. Attributes of a TTX may include the following:

- Practicing group problem solving
- Familiarizing management staff
- Conducting a specific case study
- Examining personnel contingencies
- Testing group message interpretation
- Participating in information sharing
- Assessing interagency coordination
- Achieving limited or specific objectives

Drills: A drill is a coordinated, supervised activity usually employed to test a single specific operation or function in a single agency. Drills are commonly used to provide training on new equipment, develop or test new policies or procedures, or practice and maintain current skills. Typical attributes include:

- A narrow focus, measured against established standards
- Instant feedback
- Realistic environment

- Performance in isolation

Functional Exercises (FEs): The FE is designed to test and evaluate individual capabilities, multiple functions or activities within a function, or interdependent groups of functions. It is generally focused on exercising the plans, policies, procedures, and personnel of the direction and control nodes of incident command and unified command. Generally, events are projected through an exercise scenario with event updates that drive activity at the management level. The movement of personnel and equipment is simulated. The objective of the FE is to execute specific plans and procedures and apply established policies, plans, and procedures under crisis conditions, within or by a particular function team(s). The FE simulates the reality of operations in a functional area by presenting complex and realistic problems requiring rapid and effective responses by trained personnel in a highly stressful environment. Attributes of an FE include:

- Evaluating functions
- Evaluating EOCs and staff
- Reinforcing established policies and procedures
- Measuring the adequacy of resources
- Examining inter-jurisdictional relationships

Full-Scale Exercises (FSEs): In an FSE, response elements are required to mobilize and deploy to a designated site or locale in response to a simulated incident, generally for an extended period. Actual mobilization and movement of personnel and resources are required to demonstrate coordination and response capability. EOCs and field command posts are activated. The FSE is the largest, most costly, and most complex exercise type and may involve participation at the state, local, regional, and federal level. Although pre-scripted events may be used, the exercise is primarily driven by player actions and decisions. The FSE is used to evaluate the operational capabilities of systems, functional interfaces, and interactions during an extended period. It involves testing a major portion of operations plans and organizations under field conditions. Attributes of an FSE may include the following:

- Assessing organizational and individual performance
- Demonstrating inter-agency cooperation
- Allocating resources and personnel
- Assessing equipment capabilities
- Activating personnel and equipment locations
- Assessing inter-jurisdictional cooperation
- Exercising public information systems
- Testing communication systems and procedures
- Analyzing memoranda of understanding (MOUs), standard operating procedures (SOPs), plans, policies, and procedures

As a part of the Anaheim/Santa Ana Urban Area, the OA, through EMD as its administrator, is a signatory to the Combined Areas Homeland Security Exercise and Evaluation Program (HSEEP) Three-Year Exercise Plan. The Exercise Plan, which presents a common approach for cross-jurisdictional exercises in Anaheim, Santa Ana, and the OA (referred to as the Combined Areas), provides a framework for developing desired exercises, exercise execution work plans, and

timelines that tentatively schedule the Combined Areas' exercises for a three year period, based on the Combined Areas' needs and capabilities.

- The Exercise Plan includes a schedule for the various types of exercises. Exercises may be discipline-specific, agency-specific, multiagency, or multi-jurisdictional. Generally, the frequency of each type of exercise is as follows (this does not indicate how frequently individual organizations exercise):
    - Seminars: Quarterly
    - Workshops: Quarterly
    - Tabletops: Quarterly
    - Drills: Annually
    - Functionals: Semi-Annually
    - Full Scales: Bi-Annually

Chapter Five: Authorities and References

5.1 Authorities

The following legal documents provide the City of Rancho Santa Margarita and the Orange County OA with the authority to conduct and support emergency operations. When dictated by the situation, additional ordinances or other emergency regulations may be enacted by City authorities through emergency proclamations.

5.2 Federal Authorities and References

- Homeland Security Act of 2002, as amended
- Homeland Security Presidential Directive (HSPD) 5, Management of Domestic Incidents
- Homeland Security Presidential Directive and HSPD 8, National Preparedness
- United States Department of Homeland Security (USDHS), NIMS
- USDHS, National Response Framework (NRF)
- Presidential Directives 39 and 62 (directing primary terrorism investigative authority to U.S. Department of Justice and FBI, authority reference in Terrorism Annex)
- Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988 (Public Law 93-288, as amended)
- Federal Civil Defense Act of 1950 (Public Law 920), as amended
    - Provides the basic elements to build an emergency management capability at the state and local levels. The City's EOP was developed in accordance with the State Local Emergency Planning Guide and the USDHS directives.
- Federal Disaster Relief Act of 1974 (Public Law 93-288) - Section 406 Minimum Standards for Public and Private Structures
- Public Law 84-99 (U.S. Army Corps of Engineers-Flood Fighting)
- NRT-1, Hazardous Materials Emergency Planning Guide and NRT-1A Plan Review Guide (Environmental Protection Agency's National Response Team)
- Disaster Mitigation Act of 2000
- ADA Best Practices Tool Kit for State and Local Governments, Chapter 7, Emergency Management under Title II of the ADA (2007), Addenda 1-3, and the Introduction to Appendices 1 and 2 (Attached as Exhibit 1); Titles II, III, and V of the Americans with Disabilities Act of 1990, 42 U.S.C. §§ 12101-12103, 12131-12134, 12181-12188, and 12201-12213, as amended by the ADA Amendments Act of 2008
- Nondiscrimination on the Basis of Disability in State and Local Government Services, 28 C.F.R. pt. 35
- Nondiscrimination on the Basis of Disability by Public Accommodations and in Commercial Facilities, 28 C.F.R. pt. 36
- The Americans with Disabilities Act Title II Technical Assistance Manual (1993) and Supplement (1994)
- Section 504 of the Rehabilitation Act of 1973, 29 U.S.C. §§ 794, as amended
- Enforcement of Nondiscrimination on the Basis of Handicap in Programs or Activities Conducted by the Federal Emergency Management Agency, 44 C.F.R. pt. 16
- Enforcement of Nondiscrimination on the Basis of Handicap in Programs or Activities Conducted by the Department of Justice, 28 C.F.R. pt. 39

- Nondiscrimination on the Basis of Handicap in Programs or Activities Conducted by the Department of Justice, 28 C.F.R. pt. 39
- Nondiscrimination on the Basis of Handicap in Programs or Activities Receiving Federal Financial Assistance, 45 C.F.R. pt. 84 (Department of Health and Human Services)
- Nondiscrimination on the Basis of Handicap in Programs or Activities Receiving Federal Financial Assistance, 34 C.F.R. pt. 104 (Department of Education)
- Nondiscrimination Based on Handicap in Federally Assisted Programs and Activities of the Department of Housing and Urban Development, 24 C.F.R. pt. 8
- Title VIII of the Civil Rights Act of 1968 ("Fair Housing Act"), as amended, 42 U.S.C. §§ 3601-3631. Discriminatory Conduct Under the Fair Housing Act, 24 C.F.R. pt. 100
- The Architectural Barriers Act of 1968, as amended, 42 U.S.C. §§ 4151-4157 Construction and Alteration of Public Buildings, 41 C.F.R. pt. 101-19
- The Post-Katrina Emergency Management Reform Act, 6 U.S.C. § 761(d), as amended

5.3 State Authorities and References

- California State Emergency Plan, 2009
    - Promulgated by the Governor, provides overall statewide authorities and responsibilities, and describes the functions and operations of government at all levels during extraordinary emergencies, including wartime. Section 8568 of the Act states, in part, that "the State Emergency Plan shall be in effect in each political subdivision of the State, and the governing body of each political subdivision shall take such action as may be necessary to carry out the provisions thereof." Local, County, and OA Emergency Plans are, therefore, considered to be extensions of the California Emergency Plan.
- Standardized Emergency Management System (SEMS) Regulations (Chapter 1 of Division 2 of Title 19 of the California Code of Regulations 2400-2450) and (Government Code Section 8607(a)
- Standardized Emergency Management System (SEMS) Guidelines.
- California Emergency Services Act, as amended January 2011 (Chapter 7 of Division 1 of Title 2 of the Government Code) (Government Code 8660 – Good Samaritan Act)
    - Provides the basic authorities for conducting emergency operations following a proclamation of Local Emergency, State of Emergency, or State of War Emergency by the Governor and appropriate local authorities, consistent with the provisions of the Act.
    - Section 8558: Defines a Local Emergency as the duly proclaimed existence of conditions of disaster or of extreme peril to the safety of persons and property within territorial limits. It further defines a State of Emergency or State of War Emergency as incidents of such magnitude as to require or appear to require the combined resources of a Mutual Aid region(s) to manage the emergency.
    - Section 8617: Provides that in emergency situations, which do not require or result in proclaimed emergencies, mutual aid may be provided. It is under this section that the Statewide Fire and Law Enforcement Mutual Aid plans are utilized, as needed, on a day-to-day basis.
    - Section 8630: States that a Local Emergency may be proclaimed only by the governing body or an official so designated by ordinance.

  - Section 8610, "Creation by Ordinance; Plan Development, cities and counties create disaster councils by ordinance. A disaster council shall develop plans for meeting any condition constituting a Local Emergency or State of Emergency."
- California Government Code 8607 (a)
- Emergency Management Assistance Compact, 2005
- California State Hazard Mitigation Plan, 2013
- Government Code, Title I, Division 4, Chapter 8, Sections 3100-3109
  - Declares all public employees to be disaster service workers; defines disaster service worker; defines public employees; and describes Loyalty Oath requirements.
- California Oil Spill Contingency Plan
- California Disaster Assistance Act (Chapter 7.5 of Division 1 of Title 2 of the Government Code)
- California Hazardous Materials Incident Contingency Plan
- California Health and Safety Code, Division 20, Chapter 6.5, Sections 25115 and 25117, Chapter 6.95, Sections 2550 et seq., Chapter 7, Sections 25600 through 25610, dealing with hazardous materials
- Water Code, Division 1, Chapter 2, Article I, Section 128 (California Department of Water Resources – Flood Fighting)
- Orders and Regulations which may be Selectively Promulgated by the Governor during a State of Emergency
- Orders and Regulations Promulgated by the Governor to Take Effect upon the Existence of a State of War Emergency
- California Master Mutual Aid Agreement
- Chapter 8, Division 4 of Title 1, Section 3100 of the California Government Code, “all public employees are hereby declared to be disaster service workers subject to such disaster activities as may be assigned to them by their superior or by law”
- California Fire Service and Rescue Emergency Mutual Aid Plan, 2010
- California Law Enforcement Mutual Aid Plan, 2009
- California Emergency Resources Management Plan
- Disaster Assistance Procedure Manual
- California Emergency Management Mutual Aid Plan, October 2012
- State of California Hazardous Materials Plan
- Disaster Assistance Procedure Manual (Cal OES)
- California Terrorism Response Plan
- Proclaiming a Local Emergency Guidance
- OES Earthquake Recovery Manual for Local Governments (1993)
- Operational Area Satellite Information System (OASIS) Guidelines (1993)
- Orders and Regulations which may be selectively promulgated by the Governor during a State of Emergency
- Orders and Regulations promulgated by the Governor to take effect upon the Existence of a State of War Emergency

5.4 County Authorities and References

- Orange County Code, Title 3, Division 1 (Emergency Services)

- Orange County Operational Area Agreement
    - OA Agreement, Section H(2): The OA Manager [Orange County Emergency/Operational Area Manager, (hereafter referred to as OA Manager)] has the responsibility for directing the daily coordination and cooperation between OA staff, the OA Emergency Response Organization, and Executive Board Subcommittees including OCEMO. The OA Manager is also responsible for maintaining the OA EOC in a constant state of readiness as needed to support OA EOC operations during times of emergency.
    - OA Agreement, Section G(4)d: States that in the event of actual or threatened emergency the OAC shall request the County Board of Supervisors to proclaim a Local Emergency if the Board is in session, or issue such proclamation if the Board is not in session, subject to confirmation by the Board within seven days. Such proclamation shall be reviewed by the Board of Supervisors every 14 days (County Ordinance No. 3915, Section 3-1-6, Board of Supervisors Resolution 08-001).
- Orange County Resolution adopting the California Master Mutual Aid Agreement, November 28, 1950
- Orange County Board of Supervisors Resolution No. 05-144, adopting the National Incident Management System, dated June 7, 2005
- Orange County Board of Supervisors Ordinance 95-870 creating the Orange County OA
- Orange County Fire Service Operational Area Mutual Aid Plan, December 1, 1997
- Orange County Law Enforcement Mutual Aid Contract, October 1999
- County of Orange adoption of Orange County Public Works Mutual Aid Plan
- Orange County Operational Area Emergency Alert System (EAS) Plan, Revision 8, dated May 2010
- San Onofre Nuclear Generating Station Emergency Plan (SONGS), July 2013

5.5 City Authorities and References

- Chapter 6.05 - Emergency Management and Continuity of Government of the Codified Ordinances of the City of Rancho Santa Margarita.

5.6 Relationship to Other Plans/References

This City of Rancho Santa Margarita EOP is the primary document used by the City to describe the conduct of emergency management activities from the City's perspective. The EOP provides a conceptual framework for all other emergency management planning of the City.

This Plan is designed to be flexible enough that it can adapt to changing response environments. Some of the plans and guidelines that this EOP will frequently support/complement include:

- County of Orange and Operational Area Basic Emergency Operations Plan
- County of Orange and Operational Area San Onofre Nuclear Generating Station (SONGS) Emergency Plan
- County of Orange and Operational Area Weapons of Mass Destruction (WMD) Annex
- County of Orange and Operational Area Aircraft Accident Annex
- County of Orange and Operational Area Metropolitan Medical Response System (MMRS) Annex
- County of Orange and Operational Area Tsunami Annex
- County of Orange and Operational Area Care and Shelter Annex
- County of Orange and Operational Area Evacuation Annex

- County of Orange and Operational Area Heat Annex
- County of Orange and Operational Area Dam and Reservoir Failure Annex
- County of Orange and Operational Area Strategic National Stockpile (SNS) Annex
- Orange County Cities Readiness Initiative Plan
- City Position Checklists
- Orange County Fire Authority's Hazardous Materials Area Plans
- Orange County Law Enforcement Mutual Aid
- Orange County Mass Casualty Incident Plan
- Orange County Tactical Interoperability Communications Plan
- Orange County Fire Service Operational Area Mutual Aid Plan
- California State Emergency Plan
- California Terrorism Response Plan
- California Emergency Resources Management Plan
- National Response Plan (NRP)/National Response Framework (NRF)
- Disaster Assistance Procedure Manual
- California Emergency Resources Management Plan
- California Emergency Management Mutual Aid Plan
- California Master Mutual Aid Agreement
- California Law Enforcement Mutual Aid Plan
- California Fire and Rescue Operations Plan
- Emergency Management Mutual Aid Plan

STANDARD OPERATING PROCEDURES and GUIDELINES (SOPs or SOGs)

Departments, agencies, and organizations that have responsibilities in this Plan have prepared organizational and/or position-specific SOPs or SOGs detailing personnel assignments, policies, notification rosters, resource lists, and specific steps for accomplishing the functions assigned in this EOP. City emergency response personnel should be acquainted with these SOPs or SOGs, and receive periodic training on the policies and procedures contained within the SOPs or SOGs in support of this EOP.

Supporting plans, operating procedures, and checklists developed in concert with this plan will be reviewed periodically by the City's Emergency Management Coordinator.

Attachment A:

SAMPLE PROCLAMATION

WHEREAS, Ordinance No. 03-04, § 7, Sec. 6.05.060. of the City of Rancho Santa Margarita empowers the Director of Emergency Services to proclaim the existence or threatened existence of a local emergency when the City of Rancho Santa Margarita is affected or likely to be affected by a public calamity and the City Council is not in session, and;

WHEREAS, the Director of Emergency Services of the City of Rancho Santa Margarita does hereby find that conditions of extreme peril to the safety of persons and property have arisen within the City of Rancho Santa Margarita caused by _____ *(fire, flood, storm, mudslides, torrential rain, wind, earthquake, drought, or other causes)*; which began on the _____th day of _____, 20_____. and;

WHEREAS, these conditions are or are likely to be beyond the control of the services, personnel, equipment, and facilities of the City of Rancho Santa Margarita, and;

WHEREAS, the City Council of the City of Rancho Santa Margarita is not in session and cannot immediately be called into session;

NOW, THEREFORE, IT IS HEREBY PROCLAIMED that a local emergency now exists throughout the City of Rancho Santa Margarita, and;

IT IS FURTHER PROCLAIMED AND ORDERED that during the existence of said local emergency the powers, functions, and duties of the emergency organization of the City of Rancho Santa Margarita shall be those prescribed by state law, by ordinances, and resolutions of the City of Rancho Santa Margarita, and that this emergency proclamation shall expire in 7 days after issuance unless confirmed and ratified by the governing body of the City of Rancho Santa Margarita.

Dated: _____ By: _____
Director of Emergency Services

Print Name_____

Address_____

Attachment B:

Request for Modification of Rancho Santa Margarita Emergency Plan

Requester: _____ Date: _____

Page of Requested Modification(s): _____

Modification(s) Requested: