2019

City of Moreno Valley

Emergency Operations Plan

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City of Moreno Valley

9/1/2019

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PART 1: BASIC PLAN

PART 2: FUNCTIONAL ANNEXES

These documents are published separately in support of the Emergency Operations Plan and are for internal use only. They include, but are not limited to:

PART 3: STANDARD OPERATING PROCEDURES (SOPs)

These documents are published separately to support the Emergency Operations Plan and Functional Annexes. Standard Operating Procedures (SOPs) are instructions that detail how a particular task will be carried out. They include checklists, resource lists and specific tasks. SOPs are for internal use only.

FOREWORD

This Emergency Operations Plan provides guidance for the City of Moreno Valley's response to extraordinary emergency situations associated with natural, man-made and technological disasters. This plan does not address ordinary day-to-day emergencies or the established routine procedures used to cope with such incidents. Rather, this plan concentrates on operational concepts and response procedures relative to large-scale emergencies and disasters.

The Emergency Operations Plan (EOP) is a preparedness document and is designed to be read, understood, and exercised prior to an emergency. The EOP has been developed in accordance with the Standardized Emergency Management System (SEMS) and the National Incident Management System (NIMS).

City departments are responsible for assuring the preparation and maintenance of Standardized Operating Procedures (SOPs), resource lists and checklists that detail how assigned responsibilities are performed and to ensure that they support the implementation of the EOP. These are published separately and are for internal use only.

There are three parts to the Moreno Valley Emergency Operations Plan. Part One is the basic plan which describes our concept of operations; continuity of government; utilization of the Standardized Emergency Management System (SEMS) and the National Incident Management System (NIMS); emergency operations center; mutual aid; emergency declarations; emergency communications; hazard mitigation; hazard analysis; and threat assessments.

Part Two is published separately and includes our functional annexes for direction and control; alerting and warning; shelter and mass care; donation management; volunteer management; evacuation; damage assessment; and recovery.

Part Three is published separately for internal use only and includes our departmental and emergency operations center Standardized Operating Procedures (SOPs) with supporting documents and checklists. They are intended to be used in conjunction with this plan.

PROMULGATION

RESOLUTION NO. 2009-20

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MORENO VALLEY, CALIFORNIA, ADOPTING THE EMERGENCY OPERATIONS PLAN

WHEREAS, the City of Moreno Valley has long recognized its responsibilities to mitigate the effects of natural, man-made or war-caused emergencies which result in conditions of disaster or extreme peril to life, property, and resources of the City; and

WHEREAS, the City of Moreno Valley is required by the California Emergency Services Act, within California Government Code Chapter 7 of Division 1 of Title 2, to have an Emergency Operations Plan which describes the principles and methods to be applied in carrying out emergency operations or rendering mutual aid during emergencies; and

WHEREAS, the Emergency Operations Plan includes continuity of government, emergency services, mobilization of resources, mutual aid and public information elements; and

WHEREAS, the Emergency Operations Plan conforms with current State and Federal guidelines for emergency plans and complies with the California Standardized Emergency Management System and the National Incident Management System standards; and

WHEREAS, as per the California Emergency Services Act, the Emergency Operations Plan was reviewed and approved by the Governor's Office of Emergency Management Agency (CalEMA); and

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF MORENO VALLEY, CALIFORNIA, HEREBY adopts the Emergency Operations Plan. This resolution supersedes Resolution 96-68. A copy of said plan, as hereby adopted, shall be kept on file in the Office of the City Clerk.

APPROVED AND ADOPTED this 24th day of March, 2009.

Mayor

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Resolution No. 2009-20
Date adopted: March 24, 2009

MAINTENANCE AND DISTRIBUTION OF THE PLAN

Maintenance of the Plan

The City's Emergency Operations and Volunteer Services Program Manager is responsible for regular review and maintenance of the City of Moreno Valley Emergency Operations Plan (EOP). Modifications may occur as a result of post-incident critiques and/or changes to responsibilities, procedures, laws, or regulations.

Distribution

This Emergency Operations Plan will be distributed as follows:

Moreno Valley City Council

Moreno Valley Council Members

Moreno Valley City Manager

Moreno Valley Fire

Moreno Valley Police

Moreno Valley City Departments

Moreno Valley Emergency Operations Center personnel

Moreno Valley Hospitals

Moreno Valley Library Reference Desk

Moreno Valley Website

Moreno Valley Unified School District

Val Verde Unified School District

Special Districts Servicing Moreno Valley

County of Riverside Emergency Management Department

American Red Cross Riverside Chapter

California Office of Emergency Services

RECORDS OF REVISIONS

DATE	PAGE	TOPIC	CHANGE	REVISED BY
3/2017	All	Format	Updated the format so that it has auto-tables making it easier to work with and review	Z. Bricker
3/20/17	All	County agency	Reference to Riverside County Office of Emergency Services is now County of Riverside Emergency Management Department	Z. Bricker
3/2017	All	State Agency	Reference to California Emergency Management Agency is now California Office of Emergency Services (Cal OES)	Z. Bricker
4/2017	Pg.30	EOC	Updated location of EOC	Z. Bricker
5/2017	Pg. 32	Organizational chart	Updated the chart to reflect changes under operations.	Z. Bricker
5/2017	Pg. 49	Communications	Updated communications section to show current technology in use	A. Cheng
5/2017	Pg. 95	Local Authorities	Worked with city attorney to review and provide current authorities	A. Gutierrez
7/2017	Pg. 21	Lines of Succession	Removed city positions that no longer existed and changed those that needed to be updated	A. Gutierrez
8/2017	Various pages	Threat Assessment	Added information about the new Metro link, updated information on the decommissioning of San Onofre, Flood map and fault/liquefaction map	Z. Bricker
8/2017		Homeland Security Alert	Updated to reflect change from 2011	Z.Bricker
8/2017	Pg.35	WebEOC	Added information about WebEOC under our EOC Tracking information section	Z. Bricker
8/2017		Whole Community	Section added	Z. Bricker
11/2017		Activation Level	Updated the activation levels to mirror the state and Feds	Z.Bricker
9/2019		City stats	Updated the statistics listed through out	Z.Bricker
9/2019		Gov. Code	Updated change in Gov. Code 8630	Z.Bricker

PURPOSE AND SCOPE

Purpose

The purpose of City of Moreno Valley Emergency Operations Plan is to establish a comprehensive, all-hazards approach to natural, man-made and technological disasters. The plan provides an overview of operational concepts; identifies the components of the City's Emergency Management Organization; and describes overall responsibilities of federal, state and local agencies.

The plan establishes a system for coordinating the prevention, preparedness, response, recovery and mitigation phases of emergency management in Moreno Valley. It is intended to be an overview of emergency management and not a detailed operational document. Detailed Standard Operating Procedures (SOPs) and checklists are distributed to Emergency Operations staff separately and are for internal use only.

Scope

The Moreno Valley Emergency Operations Plan encompasses a broad range of large-scale emergencies and disasters that could potentially impact the City of Moreno Valley. They include:

- Major Earthquakes;
- Hazardous Materials;
- Wildfire;
- Flooding;
- Dam Failure;
- Transportation Emergencies;
- Civil Unrest;
- Power Outage;
- Terrorism;
- Public Health Emergencies; and
- Nuclear Incidents.

SITUATION AND ASSUMPTIONS

Situation

Moreno Valley is located in northwestern Riverside County, approximately 52 miles east of downtown Los Angeles, and 42 miles west of Palm Springs. It is surrounded by Riverside, Perris, March Air Reserve Base, Lake Perris and the Badlands and encompasses 50 square miles with an elevation of 1,650.

The population of Moreno Valley is 207,629, according to the State Department of Finance as of May 1, 2018. Moreno Valley is the second largest city in Riverside County, fourth largest in the Inland Empire. Fast growth attributed to a range of housing options: affordable single family homes, condominiums and executive homes, family oriented lifestyle, good schools, and quality-of-life amenities.

The City is situated along two major freeways. The Moreno Valley Freeway (State Route 60) connects directly to downtown Los Angeles and the regional freeway system. State Route 60 connects to Orange County via the Riverside freeway (State Route 91). To the east, State Route 60 connects with Interstate 10, running to Palm Springs, Phoenix, and beyond. Interstate 215 runs by the westerly city limits, and is an important north-south link from San Diego through western Riverside and San Bernardino counties and beyond.

Moreno Valley is vulnerable to effects of natural disasters such as earthquakes, floods, fires, and winter storms.

Moreno Valley is also vulnerable to a variety of man-made hazards such as hazardous materials accidents, terrorism, nuclear incidents, dam failures, transportation emergencies and public health emergencies.

Assumptions

The following assumptions apply to this plan:

1. A major emergency or disaster may cause numerous injuries, property loss, disruption of normal life-support systems, and may have an impact on economic, physical, and social infrastructures.

2. A major emergency or disaster may overwhelm the capabilities of Moreno Valley to provide prompt and effective emergency response and recovery. Mutual aid will be requested when disaster relief requirements exceed the City's ability to meet them.

3. Transportation infrastructure may be damaged or disrupted. Emergency responders may have difficulty reaching people and evacuation routes may cause traffic backups slowing egress from damaged areas. The movement of emergency supplies may be impeded.

4. Communication infrastructure may be damaged or disrupted, thus slowing dissemination of information and reporting of persons needing help.

5. Homes, businesses, public buildings, antenna sites, and other critical facilities may be damaged or destroyed. Public utilities may be damaged and either completely or partially inoperable.

6. Emergency medical services and transport ambulances may be in short supply. Medical and health care facilities that do remain open may be overwhelmed with medical care requests. Additionally, medicines may be in short supply.

7. Damage to facilities that use hazardous or toxic chemicals could result in the release of these hazardous materials into the environment.

8. Businesses in Moreno Valley may not be able to supply the public with basic necessities such as food, water, blankets, etc. Additionally, businesses may have difficulty remaining open or providing paychecks to their employees.

9. Volunteers may come from other areas to help, causing problems with accountability. Donated goods that are not presently needed may be dropped off.

10. Effective emergency operations require periodic training and exercising.

11. Moreno Valley emergency personnel and disaster service workers will utilize the Standardized Emergency Management System (SEMS) and the National Incident Management System (NIMS).

CONCEPT OF OPERATIONS

General

The Emergency Operations Plan addresses major incidents as well as large-scale disasters, such as an earthquake. Some emergencies will be preceded by a warning period, providing sufficient time to warn the public and reduce the loss of life, property damage, and effects on the environment. Other emergencies occur with little or no warning, thus requiring immediate activation of the Emergency Operations Plan. All City departments and Emergency Operations staff must be prepared to promptly and effectively respond to any foreseeable emergency, taking all appropriate actions.

The process of emergency management involves five phases. They are:

- Prevention;
- Preparedness;
- Response;
- Recovery; and
- Mitigation.

PREVENTION PHASE

Prevention Phase

The prevention phase includes actions taken to avoid an incident or to intervene and stop an incident from occurring. This involves actions taken to protect lives and property. It also involves applying intelligence and other information to a range of activities that may include such countermeasures as:

- Deterrence operations;
- Heightened inspections;
- Improved surveillance; and
- Interconnections of heath and disease prevention among people, domestic animals, and wildlife.

PREPAREDNESS PHASE

Preparedness Phase

The preparedness phase involves activities that are undertaken in advance of an emergency or disaster. These activities develop the City of Moreno Valley's capabilities and effective responses to a disaster. Emphasis is on emergency planning, training, exercises, and public awareness programs.

Emergency planning includes developing Standard Operating Procedures (SOP's) detailing personnel assignments, policies, notification rosters, and resource lists. In the event of an emergency, SOP's are designed to be used as

a checklist by those who are trained to work a designated position as well as those who are not familiar with a particular emergency operations center (EOC) position. All emergency operations staff should become acquainted with SOPs, policies, notification rosters, and resource lists which are distributed to employees separately.

Increased Readiness

Events that may trigger increased readiness activities include:

- Issuance of a credible long-term earthquake prediction;
- Receipt of a flood advisory or other special weather statement;
- Receipt of a potential dam failure advisory;
- Conditions conducive to wildfires, such as the combination of high heat, strong winds, and low humidity;
- An expansive hazardous materials incident;
- A rapidly-deteriorating International situation that could lead to an attack upon the United States; and
- Information or circumstances indicating the potential for acts of violence, terrorism or civil disturbance.

Examples of increased readiness activities may include, but are not limited to, the following:

- Briefing of City Manager and key officials or employees on the situation;
- Activate the Emergency Operations Center to a Level 3 / Management Watch.
- Reviewing the City of Moreno Valley's Emergency Operations Plan & Standardized Operating Procedures;
- Increasing public information and training efforts;
- Inspecting critical facilities and equipment, including testing warning and communication systems;
- Recruiting additional staff and Disaster Service Workers;
- Warning threatened elements of the population;
- Conducting precautionary evacuations in the potentially impacted area(s); and
- Mobilizing personnel and pre-positioning resources and equipment.

Training and Exercising

Training and exercising is essential at all levels of government to make emergency operations personnel operationally ready. Emergency operations personnel involved in emergency response and management functions will be provided ongoing training to include Standardized Emergency Management System (SEMS), National Incident Management System (NIMS), Incident Command System (ICS), Terrorism Awareness, Emergency Operations Plan orientation, Emergency Operations Center (EOC) section training, tabletop exercises, functional drills, and full-scale drills involving multi-agencies. Key management and emergency personnel will also receive additional specialized training, as available. Emergency Operations and Volunteer Services Program Manager is responsible for providing training and exercising.

Planning Scenarios

The White House Homeland Security Council (HSC) – in partnership with the Department of Homeland Security (DHS), the federal interagency, and state and local homeland security agencies – developed fifteen all-hazards planning scenarios for use in national, federal, state, and local homeland security preparedness activities. Moreno Valley will consider these planning scenarios when planning and exercising. They are:

1. Nuclear Detonation
2. Aerosol Anthrax
3. Pandemic Influenza
4. Plague
5. Food Contamination
6. Foreign Animal Disease (Foot and Mouth Disease)
7. Blister Agent
8. Toxic Industrial Chemicals
9. Nerve Agent
10. Chlorine Tank Explosion
11. Natural Disaster - Earthquake
12. Natural Disaster - Hurricane
13. Radiological Dispersal Devices
14. Bombing Using Improvised Bomb Device
15. Cyber Attack

Types of Exercises

The City of Moreno Valley conducts regular Emergency Operations Center (EOC) disaster exercises providing personnel with an opportunity to become thoroughly familiar with the procedures, equipment, and systems used during emergencies.

The three forms of disaster exercises are as follows:

- Tabletop Exercise - provides a means to evaluate our policies, Standardized Operating Procedures (SOPs), emergency plans, resolve coordination and learn EOC position responsibilities. EOC staff simulates a response to a given disaster scenario. The EOC is not activated during tabletop exercises.

- Functional Exercise – is designed to evaluate and test the capability of an individual function such as evacuation, care and shelter or communications. The EOC is fully activated during a functional exercise. Generally, some resources are activated in the field.

- Full-Scale Exercise – is designed to simulate an actual emergency. Full-scale exercises involve emergency management staff, response personnel, and multi-agency coordination. The EOC is fully activated during a full-scale exercise as well as field staff and other resources.

City of Moreno Valley full-scale exercise
MARB Air Crash

March 8, 2012

Public Awareness and Education

The public's response to any emergency is based on an understanding of the nature of the emergency, the potential hazards, the likely response of emergency services and knowledge of what individuals and groups should do to increase their chances of survival and recovery.

Pre-disaster awareness and education programs must be viewed as equal in importance to all other preparation for emergencies and receive an adequate level of planning.

The City of Moreno Valley places a high priority in public disaster education by providing citizens emergency training such as Federal Emergency Manangement Agency (FEMA) Community Emergency Response Team (CERT)

training, emergency preparedness workshops, disaster presentations for schools, Cardiopulmonary resuscitation (CPR) and First Aid training, HAM radio classes and Terrorism Awareness training. In addition to the public awareness and training programs offered, the city provides preparedness outreach at several safety fairs and events throughout the year.

The City of Moreno Valley also has several emergency volunteer programs in which the citizens of Moreno Valley may participate. A few examples are:

- Emergency Response Force (ERF) – ERF consists of professionally trained, multi-level volunteer emergency personnel. ERF assists during emergency and disaster situations, often reporting directly to the incident commander. ERF members also provide first aid during large public events and gatherings such as the 4th of July festivities. Members receive a wide array of emergency and disaster training including Care and Shelter Operations, Damage Assessment, Medical and Triage, Emergency Response to Terrorism, Automated External Defibrillator (AED), CPR/First Aid, Traffic Control, Search and Rescue, and Evacuation techniques.

Members of the City of Moreno Valley Emergency Response Force team. July 2004.

- Community Emergency Response Team (CERT) – CERT volunteers must attend the 20-hour course to participate on the volunteer team. Graduates are trained to help themselves, their families and their neighborhoods during a disaster and are also trained to work effectively with emergency responders. Examples of training provided in the 20-hour FEMA course are: disaster preparedness, triage and rapid treatment techniques, damage assessment, rescuer safety, search and

Volunteers practice cribbing technique during a recent CERT training class.

rescue techniques, cribbing and leveraging, terrorism awareness, and disaster fire suppression.

Training is provided in English and Spanish and accessible to all community members.

- Moreno Valley Amateur Communications Emergency Services/Radio Amateur Civil Emergency Services (MV ACES/RACES) – In an emergency, ham radio operators who belong to our Moreno Valley ACES/RACES group, provide emergency communication for the City. Using special equipment, these volunteers, are also capable of sending live pictures from the incident site to our City's emergency operations center via the ham radio.

Moreno Valley ACES/RACES volunteer, Ray Campbell, operates a ham radio during the annual National Association for Amateur Radio Field Day event (Source: Moreno Valley ACES/RACES)

Response Phase

Public education and awareness programs are given priority before any emergency occurs and are crucial to all emergency management phases. Therefore, the decision to initiate and support this function is made at the highest level. Our pre-disaster awareness and education programs are viewed as equal in importance to all other preparations for emergencies and receive an adequate level of planning.

Initial Response

RESPONSE PHASE

The response phase includes initial response and extended response activities. Upon receipt of a warning or the observation that an emergency is imminent or likely to occur, City of Moreno Valley will initiate actions to increase its readiness. During this phase, the priority is to save lives and to minimize the effects of the emergency or disaster.

The City's initial response activities are primarily performed at the field response level. Emphasis is placed on minimizing the effects of the emergency or disaster. Field responders will use the Incident Command System (ICS), which includes unified command, action planning, span of control, and hierarchy of command.

Examples of initial response activities include:

- Briefing of City Manager and key officials or employees on the situation;
- Dissemination of warnings, emergency public information, and instructions to the citizens of Moreno Valley;
- Conducting evacuations and/or rescue operations;
- Caring for displaced persons and treating the injured;
- Conducting initial damage assessments and surveys;
- Assessing need for mutual aid assistance;
- Restricting movement of traffic/people;
- Establishing Unified Commands;
- Coordinating with state and federal agencies working in the field;
- Developing and implementing incident Action Plans.

Extended Response

The City's extended response activities are primarily conducted in the field and at the City of Moreno Valley Emergency Operations Center (EOC).

Extended emergency operations involve the coordination and management of personnel and resources to mitigate an emergency and facilitate the transition to recovery operations.

Examples of extended response activities include:

- Preparing detailed damage assessments;
- Operating mass care facilities;
- Conducting coroner operations;
- Procuring required resources to sustain operations;
- Documenting situation status;
- Protecting, controlling, and allocating resources;

- Restoring vital utility services;
- Documenting expenditures;
- Developing and implementing Action Plans for extended operations;
- Dissemination of emergency public information;
- Declaring a local emergency;
- Requesting a gubernatorial and federal declaration, if required;
- Prioritizing resource allocation; and
- Inter/multi-agency coordination.

Recovery Phase

RECOVERY PHASE

The recovery phase involves the restoration of services to the public and returning the affected area(s) to pre-emergency conditions. As the immediate threat to life, property, and the environment subsides, the rebuilding of Moreno Valley will begin through various recovery activities. Recovery activities may be both short-term and long-term, ranging from restoration of essential utilites such as water and power, to mitigation measures designed to prevent future occurrences of a given threat facing the City.

Examples of recovery activities include:

- Restoring utilities;
- Applying for state and federal assistance programs;
- Providing public assistance information for disaster assistance;
- Conducting hazard mitigation analyses;
- Identifying residual hazards; and
- Determining and recovering costs associated with response and recovery.

Short-term Recovery

Long-term Recovery

Recovery occurs in two phases: short-term and long-term. Short-term recovery operations will begin during the response phase of the emergency. The major objectives of short-term recovery operations include rapid debris removal and clean-up, and orderly and coordinated restoration of essential services (electricity, water and sanitary systems). Short-term recovery operations will include all the agencies participating in the City's disaster response. Structures that present public safety threats will be demolished and abated during short-

term recovery operations.

The City of Moreno Valley and special districts will record a detailed assessment of damage during the recovery phase. This detailed assessment provides the basis for determining the type and amount of state and/or federal financial assistance available for recovery.

Damage Assessment

Under federal disaster assistance programs, documentation must be obtained regarding damage sustained to:

- Roads;
- Water control facilities;
- Public buildings and related equipment;
- Public utilities;
- Facilities under construction;
- Recreational and park facilities;
- Educational institutions; and
- Certain private non-profit facilities.

After-Action Report

The damage assessment documentation information should include the location and extent of damage, and estimates of costs for debris removal, emergency work, and repairing damaged facilities to pre-disaster condition. The cost of compliance with building codes for new construction, repair, and restoration will also be documented. The cost of improving facilities may be included under federal mitigation programs.

Any city or county declaring a local emergency for which the governor proclaims a state of emergency much complete and transmit an After-Action/Corrective Action report to CAL OES (OES) within (90) days of the close of the incident period.

Disaster Assistance Programs

The After-Action/Corrective Action report will serve as a source for documenting the City of Moreno Valley's response activities, identifying areas of success as well as areas of improvement. It will also be utilized to develop and describe a work plan for implementing improvements.

The Emergency Operations and Volunteer Services Program will be responsible for completion of the report and will forward to CAL OES within the 90-day period.

Grants Available During Local Declarations

Disaster assistance programs have been developed for the needs of four distinct groups:

- Individuals – may receive loans or grants for such things as real and personal property, dental, funeral, medical, transportation, unemployment, sheltering, and rental assistance, depending on the extent of damage.
- Businesses – loans for many types of businesses are often made available through the United States Small Business Administration, assisting with physical and economic losses because of a disaster or an emergency. Programs for agricultural needs include assistance for physical and economic losses because of a disaster or an emergency.
- Governments – Funds and grants are available to government to repair damage because of a disaster or emergency and mitigate the risk of future damage.
- Non-profit organizations – Funds and grants are also available to certain non-profit organizations.

Grants Available During State of Emergency Proclamation

At each level of emergency declaration, various disaster assistance programs become available to individuals, businesses, governments, and non-profit organizations.

- Local Emergency Declarations – City of Moreno Valley may be eligible for assistance under the Natural Disaster Assistance Act (with concurrence of the Governor's Office). Businesses and individuals may be eligible for the following disaster assistance programs and services:

    1. American Red Cross
    2. Mennonite Disaster Service
    3. Natural Disaster Assistance Act (NDAA)
       (CAL OES Director Concurrence)
    4. Assistance with Utilities
    5. Local government tax relief
    6. US Small Business Administration Disaster Loans
    7. Salvation Army
    8. US Department of Agriculture
    9. Other Community and Volunteer Organizations

Grants Available During Presidential Declarations

- State of Emergency Proclamation - City of Moreno Valley, special districts, individuals, and businesses may be eligible, in addition to local emergency assistance, for services from the following agencies:

    1. Board of Registration for Professional Engineers and the Contractor's License Board
    2. Department of Insurance
    3. Department of Social Services
    4. Franchise Tax Board Tax Relief
    5. Department of Motor Vehicles
    6. Department of Aging
    7. State Board of Equalization
    8. Natural Disaster Assistance Act (NDAA)
    9. Department of Veteran's Affairs (CALVET)
    10. US Department of Agriculture
    11. US Small Business Administration Disaster Loans
    12. Prior Assistance Available with Local Declarations

Local Assistance Center

- Presidential Declaration – Under a Presidential Declaration, the City of Moreno Valley, special districts, individuals, and businesses may be eligible for the following disaster assistance programs and services:

    1. Cora C. Brown Fund (Individual Assistance)
    2. Crisis Counseling Program
    3. Disaster Unemployment
    4. Temporary Housing Program
    5. Individual and Family Grant Program
    6. Internal Revenue Service Tax Relief
    7. Public Assistance
    8. Legal Aid
    9. Hazard Mitigation
    10. Veteran's Affairs Assistance (Housing/Medical)
    11. Federal Financial Institutions

12. Employment Development Assistance
13. Prior Assistance with Local/State Declarations

Mitigation Phase

The City of Moreno Valley will assist individuals affected by the disaster. This may include offering disaster assistance phone numbers or providing a location for a Local Assistance Center where affected citizens can access disaster assistance directly from various agencies. The City of Moreno Valley's objective is to provide our citizens with the necessary information to help themselves recover from the disaster.

Riverside County Local Assistance Center staff helps relocated Hurricane Katrina victims obtain aid from various agencies. (Sept. 2005)

MITIGATION PHASE

The mitigation phase occurs 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 City of Moreno Valley.

Mitigation efforts include, but are not limited to:

- Amending local ordinances and statutes, such as zoning ordinances, building codes, and other enforcement codes;
- Initiating structural retrofitting measures;
- Assessing tax levies or abatements;
- Emphasizing public education and awareness;
- Undertaking flood control project;
- Removing fuel in areas having a high potential for wildfires; and
- Assessing and altering land use planning.

Whole Community Planning

Requirements of the Americans with Disabilities Act and California Access and Functional Needs Legislation

Access to emergency services shall not be denied on the grounds of race, color, national origin, sex, age, or handicap. To ensure that this goal is met, Title II of the ADA requires State and local governments to make their programs and services accessible to persons with disabilities. This requirement extends not only to physical access at government facilities, programs, and events -- but also to policy changes that governmental entities must make to ensure that all people with disabilities and others with access and functional needs can take part in, and benefit from, the programs and services of State and local governments.

The Americans with Disabilities Act of 1990 (ADA) signed into law on July 26, 1990, by President George H. W. Bush, is a broad civil rights law that prohibits discrimination against people with disabilities and others with access and functional needs, including but not limited to mobility, vision, hearing, cognitive disorders, mental illnesses, and language barriers. In 2008, President George W. Bush signed an updated version of the ADA, which is known as the ADA Amendments Act (ADAAA). The revised law broadens the scope of the definition of what it means to have a disability. These changes went into effect January 1, 2009. These amendments make it easier for individuals whole require whole community support services to seek protection under the law.

According to a 2010 study, there are almost 11 million people who require access to Whole Community Support Services in California. The lessons documented from the years of assisting individuals who require whole community support services in disasters show three areas that are repeatedly identified as most important to these individuals: communications (alert, warning, notification), evacuation (transportation), and sheltering.

California Assembly Bill 2311 (Brown, Chapter 520, Statutes of 2016), added California Government Code section 8593.3, which requires each county and city to integrate access and functional needs upon the next update to its emergency response plan. The new Government Code reads:

> 8593.3. (a) A county, including cities, shall, upon the next update to its emergency plan, integrate access and functional needs into its emergency plan by addressing, at a minimum, how the access and functional needs population is served by the following:
>
> (1) Emergency communications, including the integration of interpreters, translators, and assistive technology.
>
> (2) Emergency evacuation, including the identification of transportation resources and resources that are compliant with the federal Americans with Disabilities Act of 1990 (42 U.S.C. Sec. 12101 et seq.) for individuals who are dependent on public transportation.

(3) Emergency sheltering, including ensuring that designated shelters are compliant with the federal Americans with Disabilities Act of 1990 (42 U.S.C. Sec. 12101 et seq.) or can be made compliant through modification and that showers and bathrooms are fully accessible to all occupants.

(b) For purposes of this section, the "access and functional needs population" consists of individuals who have developmental or intellectual disabilities, physical disabilities, chronic conditions, injuries, limited English proficiency or who are non-English speaking, older adults, children, people living in institutionalized settings, or those who are low income, homeless, or transportation disadvantaged, including, but not limited to, those who are dependent on public transit or those who are pregnant.

The City will make every effort to address the needs of individuals who require whole community support services. Initially, priorities are focused on lifesaving operations, evacuations and stabilization of the incident. The County of Riverside will take into consideration the needs of individuals such as issues with communications, mobility, and accessibility. Included in the County's planning efforts for individuals who require whole community support services are:

- TTD/TTY contact and captioned cable alert for the hearing-impaired;
- Spanish/English outreach programs identified language skills of City employees for interpretation;
- ADA compliant access to City facilities and Red Cross shelter facilities;
- Identified transportation assistance for those requiring physical assistance;
- Alert MoVal Reverse 911 telephone system for specific geographic areas;
- Notification and warning procedures;
- Evacuation considerations;
- Emergency transportation issues;
- Sheltering requirements;
- Accessibility to medications, refrigeration and back-up power;
- Accessibility for mobility devices or service animals while in transit or at shelters and
- Accessibility to emergency information.

The City will plan for and serve access and functional needs including the most needs most commonly found to be needing improvement:

- Emergency communications;
- Emergency evacuations and
- Emergency sheltering.

Part of any successful planning effort is to understand the impacted population(s). The legal requirements are set forth in Government Code section 8593.3, and define access and functional needs as individuals who have:

- Developmental, intellectual or physical disabilities;
- Chronic conditions or injuries and
- Limited English proficiency or non-English speaking.

Or, individuals who are:

- Older adults, children, or pregnant;
- Living in institutional settings;
- Low-income, homeless, and/or transportation disadvantaged; or
- From diverse cultures.

Lessons documented from years of assisting individuals with access and functional needs in disasters show three areas repeatedly identified as needing improvement: communications, evacuation, and sheltering.

Emergency communications

During a disaster, effective communication becomes especially critical. As such, information delivered at press conferences by public officials and broadcasted on television during a disaster needs to be effective, understood, consumable, and actionable by the whole community. Effective communication considerations include:

- Sign Language interpreters for individuals who are deaf or hard of hearing;
- Alternative formats for individuals who are blind/low vision and
- Translation services for persons with limited English proficiency or for non-English speaking individuals.

Emergency evacuation

When local evacuations become necessary, considerations for the whole community include:

- Accessible transportation options;
- Medical needs and
- Keeping individuals connected with their families, personal care providers, essential equipment, technologies, and service animals.

Proper planning is including agreements and partnerships with local public and private accessible transportation providers to ensure individuals with disabilities and persons with access and functional needs can evacuate safely during emergencies.

Emergency evacuation plans should be viewed as living documents because communities change and integrating the needs of individuals with access and functional needs is a dynamic process. OEM will work and partner with local disability and whole community stakeholders to regularly practice, review, revise, and update plans to reflect changes in technology, personnel, and procedures.

Sheltering

Shelters can be stressful environments and may, without proper planning, exacerbate the physical and emotional impacts that survivors with access and functional needs experience during disasters.

Sheltering needs to be inclusive and integrated not segregated. General population shelters need to be in physically accessible locations and equipped with accessible resources (e.g. bathrooms, cots, showers, etc.) to meet the needs of individuals with access and functional needs in a manner that ensures they can remain with their support systems (e.g. personal care provider, service animal, etc.). Assessing potential sheltering facilities before disasters occur is essential as designated shelters should comply with the requirements of the Americans with Disabilities Act (ADA).

Cal OES Office of Access and Functional Needs

The County Operational Area receives guidance from the California Governor's Office of Emergency Services (Cal OES), Office of Access and Functional Needs. The Cal OES Office of Access and Functional Needs have made resources available to assist communities as they integrate access and functional needs within their emergency planning. Two such tools are:

The Cal OES Access and Functional Needs Web Map

To empower emergency managers to identify the access and functional needs-related assets and resources needed to support the health and independence of survivors, the Cal OES Office of Access and Functional Needs partnered with the Cal OES' GIS Division to create the California AFN Web Map – the first-ever searchable, comprehensive, statewide resource for locating AFN-related assets and resources in California.

Using data from the U.S. Census, the web map contains the following information for every county in the State of California:

- **Disability** - Total number of individuals in each county with a disability, listed into four categories: hearing difficulty; vision difficulty; cognitive difficulty; and ambulatory difficulty.
- **Culture** - The ethnicity and primary language(s) spoken at home within each county.
- **Age** - The age (across the life spectrum) of individuals in every county.

The web map outlines where each of the following resources are located:

- **Accessible Hygiene Resources** - Showers, toileting, and hand washing stations that meet Americans with Disabilities Act (ADA) standards.
- **Accessible Transportation** - Organizations providing public transportation services to seniors and individuals with disabilities that meet Americans with Disabilities Act (ADA) standards.
- **American Sign Language Interpreting Services** - Organizations providing interpretation services for individuals who are deaf or hard of hearing.
- **Assistive Technology** - Organizations providing devices, equipment or technology systems, and services for individuals with disabilities.
- **Community Emergency Response Teams (CERT) Programs** - Local programs that educate individuals about disaster preparedness and train them in basic disaster response skills.
- **Independent Living Centers** - Community-based, non-profit organizations designed and operated by individuals with disabilities.
- **Language Translation Services** - Organizations providing written text or interpretation services in a language other than English.
- **Regional Centers** - Non-profit private corporations that contract with the Department of Developmental Services to provide or coordinate services and support for individuals with developmental disabilities.

The Cal OES Office of Access and Functional Needs Library

In order to ensure that community leaders, state agencies, advocacy organizations, emergency managers and others have the best and most current access and functional needs-related planning resources available in an easy to access, one-stop-shop central repository, we created the OAFN Library. The OAFN Library is a comprehensive clearinghouse for access and functional needs-specific best practices, guidance documents, videos, and more. For additional questions regarding access and functional needs contact the Cal OES Office of Access and Functional needs at: OAFN@caloes.ca.gov

CONTINUITY OF GOVERNMENT

Introduction

A major disaster could destroy the ability of local government to carry out executive functions by causing death or injury to key government officials, destroying established seats of government, destroying the ability of local government to carry out executive functions, and cause the destruction of vital records. Government is responsible for providing continuity of effective leadership and authority, direction of emergency operations and management of recovery operations. The California Government Code and the Constitution of California provide the authority for state and local government to reconstitute itself in the event incumbents are unable to serve. It is particularly essential that the City of Moreno Valley continue to function as a government entity.

Council Lines of Succession

To this end, the City Council has adopted Resolution No. 2007-96, designating up to three standby officers for each City Council Member. The standby Council Members shall have the same authority and powers as the regular Council Members. Pursuant to Section 8641 of the Government Code, each standby Council Member shall take the oath of office required for the office of City Council Member. Persons appointed as standby Council Members shall serve in their posts at the pleasure of the City Council appointing them and may be removed and replaced at any time with or without cause. Standby Council Members serve only until the regular Council Member becomes available or until a new Council Member is either elected or appointed. In the event a standby office becomes vacant because of removal, death, resignation, or other cause, the City Council shall have the power to appoint another person to fill said office.

Department Lines of Succession

Below is the continuity of government, lines of succession plan for department emergency functions.

Figure 1: Lines of Succession for City Department Heads

Function/Department	Title/Position
City Manager	1. Assistant City Manager 2. Public Works Director
Police Chief	1. Police Lieutenant 1 2. Police Lieutenant 2 3. Police Lieutenant 3
Fire Chief	1. Fire Battalion Chief 1 2. Fire Battalion Chief 2
Public Works Director/City Engineer	1. Deputy Public Works Director/Assistant City Engineer 2. Electric Utility Division Manager
Parks & Community Services Director	1. Recreation Services Division Manager 2. Park Maintenance Division Manager
Community Development Director	1. Planning Official 2. Building Official
Economic Development Director	1. Redevelopment Division Manager 2. Senior Management Analyst
Finance Director/City Treasurer	1. Financial Operations Division Manager 2. Treasury Operations Division Manager
Human Resources Director	1. Senior Human Resources Analyst 2. Human Resources Analyst
Financial & Admin. Svcs. Director	1. Purchasing & Facilities Division Manager 2. Technology Services Division Manager
City Clerk	1. Assistant City Clerk 2. Deputy City Clerk
City Attorney	1. Assistant City Attorney 2. Deputy City Attorney 1

EOC Lines of Succession

Lines of succession for Emergency Operations Center (EOC) staff are maintained separately in the EOC Standardized Operating Procedures manual.

Essential Facilities: Alternate Seat of Government

When government offices are not operable because of emergency conditions, the temporary seat of government will be selected from public buildings remaining that offer maximum security and safety. The primary and alternate locations are listed below.

Primary Seat of Government:

City Council Chambers
14177 Frederick Street

Alternate Seat of Government

Conference and Recreation Center; or Moreno Valley Library.

Essential Facilities: Emergency Operations Center

When the Emergency Operations Center is not operable because of emergency conditions, an alternate location will be selected from public buildings remaining that offer maximum security and safety. The primary and alternate locations of the Emergency Operations Center are listed below.

Primary Emergency Operations Center:

Moreno Valley Emergency Operation Center
22870 Calle San Juan de Los Lagos

Alternate Emergency Operations Center:

Public Safety Building
Fire Station 58
City Council Chambers; or
Conference and Recreation Center; or

Preservation of Vital Records

In the City of Moreno Valley, the City Clerk's Office is responsible for the preservation and protection of the City's vital records.

Vital records are defined as those records that are essential to:

- Protect and preserve the rights and interests of individuals, governments, corporations, and other entities. Records of this type would include authorizing legislation, land use, infrastructure engineering drawings, payroll, accounts receivable, and licenses.
- Conduct emergency response and recovery operations. Records of this type would include utility system maps, locations of emergency

supplies and equipment, emergency operations plans and procedures, and personnel rosters.

- Reestablish normal governmental functions and protect the rights and interests of government. Records of this type would include the municipal code, minutes, ordinances, resolutions, official proceedings, and financial records of the City.

Vital records of the City of Moreno Valley are routinely stored in the City Clerk's Office located on the second floor of City Hall. Archived records are stored offsite in a private contractor's facility. Each department within the City will identify, maintain, and protect its own essential records.

STANDARDIZED EMERGENCY MANAGEMENT SYSTEM (SEMS) AND NATIONAL INCIDENT MANAGEMENT SYSTEM (NIMS)

SEMS

The Standardized Emergency Management System (SEMS) was developed in 1991 after the devastating Oakland-East Bay Hills Fire. During the mutual aid responses to the fire, it was determined that many problems existed with communications, insufficient information flow and no set organizational structure. As a result, Senator Petris, who also lost his home during the fire, introduced Senate Bill 1841. This bill went into effect on January 1, 1993. It is intended to standardize response to emergencies involving multiple jurisdictions or multiple agencies.

In order to receive response-related funding for personnel costs during a disaster, the City of Moreno Valley has adopted Resolution No. 95-34 approving participation in the Standarized Emergency Management System of the State of California.

Components of SEMS

SEMS requires emergency response agencies to use basic principles and components of emergency management, including the incident command system, multi-agency coordination system, the operational area concept, and mutual aid systems.

Incident Command System (ICS)

Incident Command System (ICS)

ICS is a nationally recognized on-scene emergency management system specifically designed to allow its user(s) adopt an integrated organizational structure equal to the complexity and demands of single or multiple incidents without being hindered by jurisdictional boundaries. ICS uses a common organizational structure to effectively accomplish management of the incident by objectives.

The five functions of the ICS organization are command, operations, planning, logistics and finance.

Command is responsible for directing, ordering, and/or controlling resources by virtue of explicit legal, agency, or delegated authority. It includes the incident commander (IC) who is responsible for the overall management of the incident. The command function also includes the Information Officer, Liaison Officer, and Safety Officer.

ICS Functions

Operations is responsible for the coordinated tactical response of all field operations directly applicable to or in support of the mission(s) in accordance with the Incident Action Plan. Operations develops the operations portion of the Incident Action Plan, requests resources to support tactical operations, maintains close communication with the Incident Commander, and ensures safe tactical operations. The operations function includes branches, divisions,

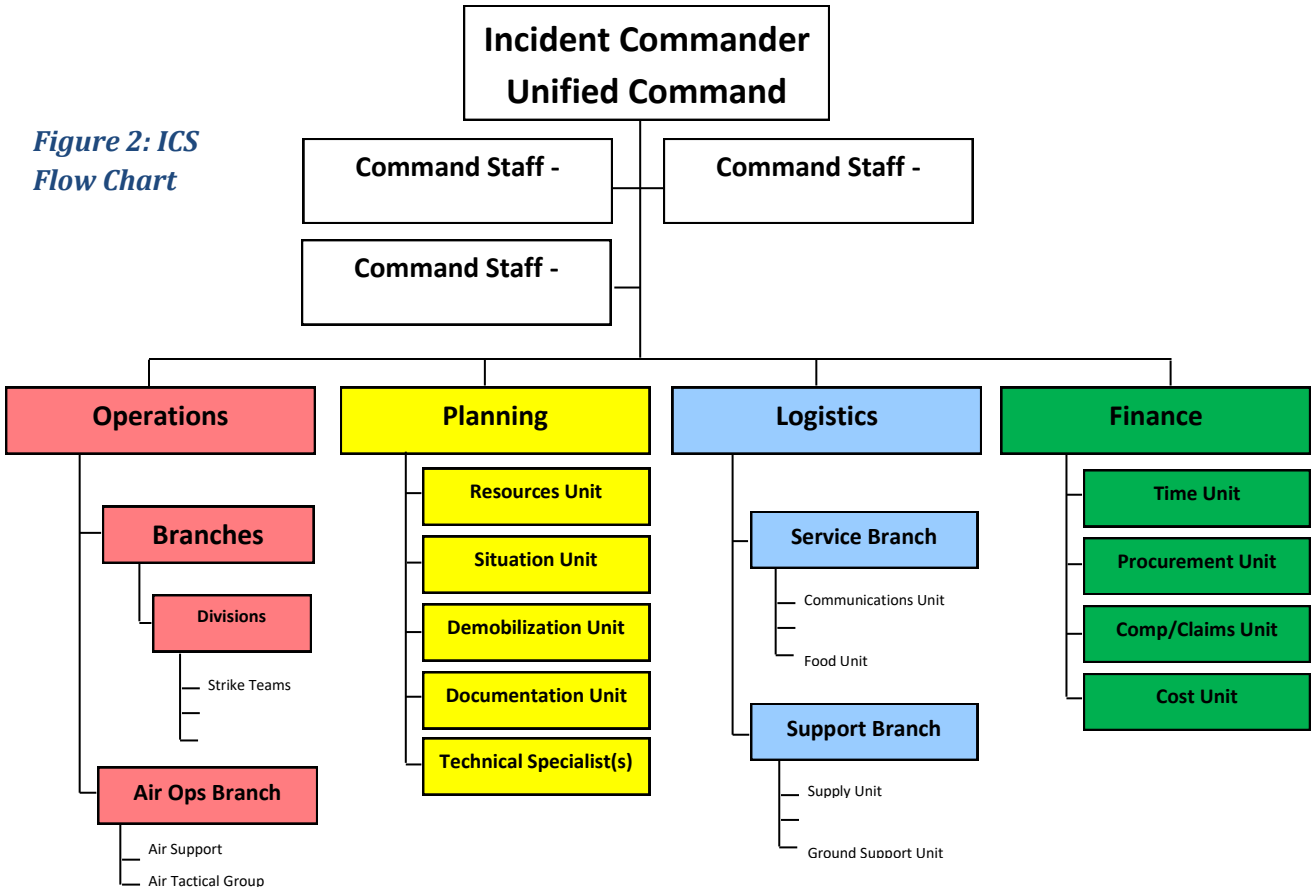
groups, and air operations personnel.

Planning is responsible for the collection, evaluation, documentation, and use of information about the development of the incident. The planning function includes the resource unit, situation unit, documentation unit, and demobilization unit.

Logistics is responsible for providing facilities, services, personnel, equipment, and tracking the status of resources and materials in support of the incident. The logistics function includes the supply unit, facilities unit, ground support unit, communications unit, food unit, and medical unit.

Finance is responsible for all financial and cost analysis aspects of the incident, and/or any administrative aspects not handled by the other functions. The finance function includes the time unit, procurement unit, compensation/claims unit, and the cost unit.

Figure 2: ICS Flow Chart



Principles of ICS

The system's organizational structure adapts to any emergency or incident to which emergency response agencies would expect to respond.

Components of ICS are:

- Common terminology;
- Modular organization;
- Unified command structure;
- Consolidated action plans;
- Manageable span-of-control;
- Pre-designed incident facilities;
- Comprehensive resource management; and
- Integrated communications.

Common titles for organizational functions, resources, and facilities within ICS are utilized.

The organizational structure is developed based upon the type and size of an incident. Staff builds from the top down as the incident grows, with responsibility and performance placed initially with the Incident Commander.

At all incidents there will be five functions: management; operations; planning; logistics; and finance. Initially, the Incident Commander may be performing all five functions. Then, as the incident grows, each function may be established as a section with several units under each section.

Unified Command

Unified command structure is a unified team effort that allows all agencies with responsibility for the incident to manage an incident by establishing a common set of incident objectives and strategies.

Mutual Aid System

Mutual Aid System

California's emergency planning and response includes a statewide mutual aid system which is designed to ensure that adequate resources, facilities and other support is provided to jurisdictions whenever their own resources prove to be inadequate to cope with a given situation(s). The basis for the system is the California Disaster and Civil Defense Master Mutual Aid Agreement, as provided for in the California Emergency Services Act. This agreement is designed to ensure that adequate resources, facilities and other support is provided to jurisdictions whenever their own resources prove to be inadequate to cope with an emergency.

Multi-Agency Coordination System

Multi-Agency Coordination System (MACS)

The multi-agency coordination system (MACS) is the decision-making system used by member jurisdictions of the Riverside County Operational Area.

Agencies and disciplines involved at any level of the Standardized Emergency Management System (SEMS) organization working together to facilitate decisions for overall emergency response activities, including the sharing of critical resources and the prioritization of incidents.

Operational Area Concept

Operational Area Concept

SEMS regulations specify that all local governments within a county geographic area be organized into a single Operational Area. The County of Riverside is the lead agency for the Riverside County Operational Area in accordance with SEMS. The City of Moreno Valley is located within the Riverside County Operational Area.

Five Levels of SEMS

There are five designated levels in the SEMS organization: Field Response, Local Government, Operational Area, Regional and State.

- **Field Response Level** – Under the command of an appropriate authority, emergency personnel and resources carry-out tactical decisions and activities in direct response to an incident or threat. SEMS regulations require the use of the Incident Command System (ICS) at the field response level. The ICS field functions to be used for emergency management are: command, operations, planning/intelligence, logistics, and finance/administration.

- **Local Government Level** - Local governments manage and coordinate overall emergency response and recovery activities within their jurisdiction, which includes special districts. Local governments are requried to use SEMS when their EOC is activated or a local emergency is proclaimed in order to be eligible for state funding of response-related personnel costs.

- **Operational Area Level** – Under SEMS, the Operational Area serves as an intermediate level of the state's emergency services organization and encompasses the County, including special districts. The Operational Area manages and coordinates information, resources and priorities among local governments within the County and serves as the coordination and communication link between the local government level and the regional level.

In order to facilitate and coordinate at the operational area level Riverside County has two emergency operation center (EOCs) to serve Riverside County. They are located at :

Riverside County Administrative Center

4080 Lemon Street
Riverside, CA 92502

East County Emergency Operations Center

82-695 Dr. Carreon Blvd
Indio, CA 92201

- **Regional Level** – In Standardized Emergency Management System (SEMS), the regional level manages and coordinates information and resources among Operational Areas within the mutual aid region and also between the Operaional Areas and the state level.

- **State Level** – The state level of SEMS manages state resources in response to the emergency needs of the other levels and coordinates mutual aid among the mutual aid regions and between the regional level and state level. The state level also serves as the coordination and communication link between the state and the federal disaster response system.

NIMS

National Incident Management System (NIMS)

NIMS is a system very simular to the State of California Standardized Emergency Management System (SEMS) and is mandated by Homeland Security Presidential Directive (HSPD-5). The purpose of NIMS is to enhance the ability to manage domestic incidents by establishing a uniform set of processes and procedures that emergency responders at all levels of government will use to conduct response operations.

NIMS Components:

1. Command and management utilizing the incident command system (ICS), multi-agency coordination and joint information systems (JIS);
2. Resource management;
3. Communications and information management;
4. Preparedness, which includes planning, training, exercising, personnel qualification and certification, equipment acquisition and certification, and publications;
5. Supporting technologies; and
6. Ongoing management and maintenance.

National Incident Management System (NIMS) Compliance Requirements:

1. Adopt NIMS to receive federal preparedness assistance. On June 13, 2006, the City of Moreno Valley adopted NIMS.

2. Adopt the Incident Command System (ICS). The City of Moreno Valley meets this requirement since ICS is a foundational element of

Standardized Emergency Management System (SEMS) and is practiced by emergency management on a day-to-day basis.

3. Develop mutual aid agreements. Resolution No. 91-96, the California Disaster and Civil Defense Master Mutual Aid Agreement, was approved and adopted by the City of Moreno Valley City Council on June 25, 1991. The agreement enables the sharing of every type of emergency response resource (firefighting, law enforcement, medical, etc.) between all jurisdictions.

4. Equipment certification and resource management. The State of California has designated a SEMS Resource Management Specialist Committee to address this through the development of templates and/or guidelines consistent with NIMS. Once templates and/or guidelines are available, the City of Moreno Valley will implement them.

MORENO VALLEY EMERGENCY OPERATIONS CENTER (EOC)

Emergency Operations Center (EOC)

The City of Moreno Valley Emergency Operations Center (EOC) is a centralized location for decision making about our jurisdiction's emergency response. The EOC is where our emergency response actions can be managed and resource allocations and responses can be tracked and coordinated with the field, operational area, and State. The City of Moreno Valley's primary EOC and alternate EOC are as follows:

Primary Emergency Operations Center:

Emergency Operations Center
22870 Calle San Juan De Los Lagos, Moreno Valley, CA 92552

Alternate Emergency Operations Center:

Public Safety Building
22850 Calle San Juan de Los Lagos, Moreno Valley, CA 92552

SEMS EOC Functions

- Operations Section is responsible for coordinating all field operations in support of the emergency. The Operations Section includes the following positions: Operations Section Chief; Public Works/Utilities Branch Director and Construction/Engineering, Maintenance/Ops, and Damage Assessment Unit Leaders; Community Services Branch Director and Medical/Health, Care & Shelter, and Animal Shelter Unit Leaders; Fire & Rescue Branch Director and Hazmat/Search & Rescue Unit Leaders; and Law Enforcement Branch Director and Coroner, and Evacuation Unit Leaders.

- Planning/Intelligence Section is responsible for collecting, evaluating, and disseminating information, developing an Action Plan every 12-hour period during activation, and documentation. The Planning/Intelligence Section includes the following positions: Planning/Intelligence Section Chief, Advanced Planning Unit Leader, Documentation/Recovery Unit Leader, Situation Assessment Unit Leader, Message Center Unit Leader, EOC Operators and EOC Runners.

- Logistics Section is responsible for coordinating and processing requests for additional resources. The Logistics Section includes the following positions: Logistics Section Chief, Communications Unit Leader, Facilities Coordination Unit Leader, Personnel Unit Leader,

Supply/Procurement Unit Leader, IT Unit Leader, GIS Unit Leader, Transportation Unit Leader and Donations Management Unit Leader.

- Finance Section is responsible for financial activities such as tracking emergency hours, compensation and claims, and overall emergency costs. The Finance Section includes the following positions: Finance Section Chief, Time Keeping Unit Leader, Compensation and Claims Unit Leader, Cost Recovery Unit Leader, and Purchasing Unit Leader.

EOC Policy Group

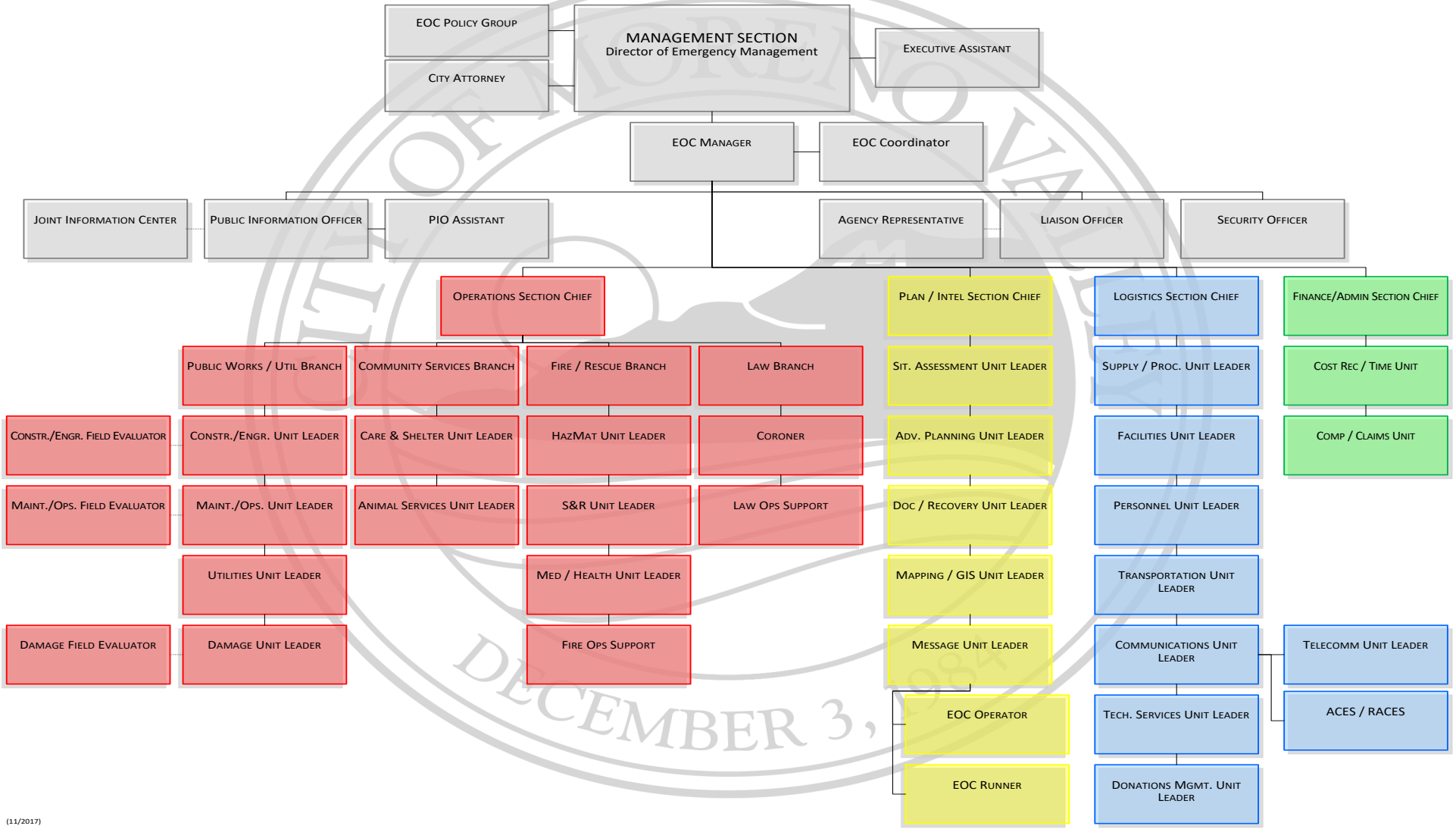
The policy group is responsible for recommending emergency management policies necessary to protect life and property. This includes, but is not limited to:

- Recall of employees;
- Establishing curfews;
- Preventing price gouging; and
- Issuing large scale evacuation orders.

Members of the policy group include the Director of Emergency Management and City Council. Advisory members are: City Attorney, EOC Manager, Section Chiefs and Branch Directors as needed.

The EOC Policy Group and other EOC positions are shown in the EOC Organization Chart shown in Figure 3 (next page).

EMERGENCY OPERATIONS CENTER



EOC ACTIVATION POLICIES

The Director of Emergency Management or designee has the authority to activate, increase or reduce activation level or deactivate the EOC completely. The EOC Manager is responsible for ensuring the readiness of the EOC. The EOC Manager is also responsible for assuring that EOC staff is notified during activations.

Depending on the nature of the emergency, the Director of Emergency Management or designee may activate the EOC to three levels. They are:

- Normal Operations / Monitoring
- Level Three - Management Watch
- Level Two - Partial Activation
- Level One - Full Activation

The criteria utilized for activating our EOC is listed in Figure 4 (below).

EOC ACTIVATION LEVELS

EVENT / SITUATION	ACTIVATION LEVELS	MINIMUM STAFFING
• Normal Operations	**Normal Operations**	• OEM Staff
• Light Earthquakes 4.0-4.9 magnitude • Fire Red Flag Conditions • Weather Watches • Community Events/Festivals • Low Public Health Emergency • DOC Activation	**Management Watch**	• OEM Staff
• Moderate Earthquake 5.0 to 5.9 magnitude with damage • Flood or Wind Watch or Minor Flooding occurring • Citywide Utility Outage • Moderate Transportation Incident • Minor Hazardous Materials • Conflagration in Urban Area or Wildland Urban Interface Fire • Law Enforcement Event • Moderate Public Health Emergency	**LEVEL THREE** **(Partial Activation)**	• As determined by Director of Emergency Management
• Strong Earthquake 6.0 to 6.9 magnitude with damage • Intense Wide-Spread flooding or Wind Warnings • Major Utility Outage • Major Transportation Incident • Moderate Hazardous Materials • Conflagration in Urban Area • Wildland Urban Interface Fire • Multiple Law Enforcement Events • Major Public Health Emergency	**TWO LEVEL** **(Partial Activation)**	• Increased staffing as determined by the Director of Emergency Management
• Major to Great Earthquake 7.0 or greater magnitude • Severe Flooding or Wind Event • Regional Utility Outage or Communications Failure • Large-Scale Transportation Incident • Major Hazardous Materials • Major Conflagration in Urban Area/Wildland Urban Interface Area • Major Law Enforcement Event(s) • Declared State of War Emergency	**LEVEL ONE** **(Full Activation)**	• All EOC Positions

Figure 4: EOC Activation Levels

EOC HOURS OF OPERATIONS

The Director of Emergency Management (or designee) will set the hours of operation for the EOC. This decision is based on the circumstances of the emergency. Examples of hours of operation based on the EOC activation levels are:

Management Watch

- The initial stage of response activities for the City EOC. Management Watch requires Office of Emergency Management (OEM) to monitor events and notify the Fire Chief to recommend/advise if Management Watch is warranted or next level.

Level Three

- Staff may be requested to monitor the situation from the EOC or from their regular workstations during normal or extended hours and periodically meet to discuss the situation status.
- Staff may be requested to monitor the situation from the EOC 24 hours a day, rotating shifts every 12 hours.

Level Two (Limited Activation)

- Staff may be requested to operate the EOC during normal or extended hours.
- Staff may be requested to operate the EOC 24 hours a day, rotating shifts every 12 hours.

Level One (Full Activation)

- Staff will be requested to operate the EOC 24 hours a day, rotating shifts every 12 hours.

EOC COORDINATION

During EOC activations, coordination will occur at all levels. Field personnel (via the Incident Commander) will coordinate with Moreno Valley EOC utilizing their department-specific branch representative located in the EOC. An example is the Incident Commander (IC) for rescue operations will coordinate with the EOC Fire and Rescue Branch Director.

Field Level

EOC Coordination DOC

A Department Operation Center (DOC) is simply a designated area within a discipline-specific department utilized for coordinating response and recovery-related issues. This could be a briefing room or a dispatch center. Moreno Valley departments shall coordinate information and logistics requests through their discipline-specific representative located in Moreno Valley EOC.

Depending on the kind of incident, Moreno Valley EOC may coordinate with special

EOC Coordination Other Agencies

districts, utilities, volunteer organizations and/or private organizations. During EOC activations, special districts, utilities, volunteer organizations and/or private organization responding to Moreno Valley-focused emergencies will coordinate and communicate directly with Moreno Valley EOC. Ideally, they will provide an agency representative to Moreno Valley EOC to better facilitate coordination.

EOC Coordination Riverside County EOC

Riverside County Operational Area EOC will coordinate with Moreno Valley EOC and other EOCs within Riverside County. Information from all EOCs within Riverside County will be filtered into the Riverside County Operational Area EOC, who will then disseminate county-wide information back to EOCs within the County. If mutual aid is required, Moreno Valley EOC will request it through the Riverside County Operational Area EOC.

Riverside County serves as the single point of contact for its jurisdiction to the State's Regional Emergency Operating Center (REOC). Riverside County EOC reports county-wide information to REOC utilizing the stat version of WebEOC called CALEOC. REOC tracks information via RIMS for all county Operational Areas (OAs).

EOC Information Tracking

Moreno Valley EOC utilizes an EOC Database System to track all messages, position logs, situation reports, damage reports, press releases, action plans, and resource requests. This database system is networked, allowing users to easily share information. If the network system is not available, each EOC computer has the EOC Database System installed locally. In the event that computers are damaged or the backup generator is not working, all EOC database forms are printed and available to utilize manually.

Joint Information Center

To facilitate multi-agency public information communications and coordination, Moreno Valley Public Information Officer may activate a Joint Information Center (JIC). A Joint Information Center is activated when multiple agencies need to collaborate to provide timely, useful, and accurate information to the public.

Example of Joint Information Center (JIC).

MUTUAL AID

Introduction

California participates in a statewide mutual aid system that is designed to ensure adequate support is provided to jurisdictions whenever their own resources are exhausted. The basis for the system is the California Disaster and Civil Defense Master Mutual Aid Agreement.

Mutual Aid Agreements

The California Disaster and Civil Defense 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. It is the responsibility of the local jurisdiction to negotiate, coordinate and prepare mutual aid agreements. Mutual aid agreements exist for law enforcement, fire, public works, medical services and emergency managers.

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

- California Disaster and Civil Defense Master Mutual Aid Agreement
- Emergency Management Assistance Compact (EMAC)
- Law Enforcement Mutual Aid System
- Search and Rescue Mutual Aid System
- Fire Mutual Aid System
- Urban Search & Rescue
- Public Works Mutual Aid Agreement
- Emergency Managers Mutual Aid (EMMA)
- Coroner/Medical Examiner Mutual Aid
- Disaster Medical Mutual Aid System
- Riverside County Operational Area Agreement
- Robert T. Stafford Disaster Relief and Emergency Assistance Act (Public Law 100-705)

Interstate Mutual Aid

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. In September of 2005, Governor Arnold Schwarzenegger signed legislation that makes California party to the Emergency Management Assistance Compact (EMAC), already in place in the 47 other contiguous states. This allows states to share emergency response resources immediately during a disaster without having to use valuable time reaching aid agreements.

Progressive Mobilization

Our statewide mutual aid system, operating within the framework of the California Disaster and Civil Defense Master Mutual Aid Agreement, allows for the progressive mobilization of resources to and from emergency response agencies, local governments, operational areas, regions and state with the intent to provide

requesting agencies with adequate resources. The general flow of mutual aid resource requests and resources within mutual aid systems are depicted in the diagram as follows:

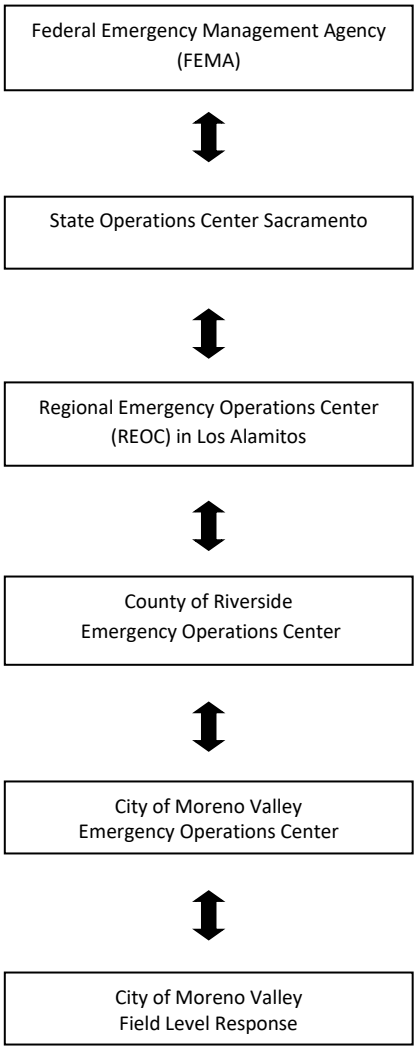


Figure 5: Mutual Aid Flow Chart for the

City of Moreno Valley

Mutual Aid Coordination

Mutual aid coordination is essential to emergency operations. To help facilitate mutual aid requests, mutual aid coordinators are assigned at the State, Regional and Operational Area levels. The role of a mutual aid coordinator is to receive and coordinate mutual aid requests. All unfilled requests will then move up to the next level. Some incidents do not require the activation of an Emergency Operations Center (EOC), therefore Mutual aid coordinators may function from either their normal departmental location or from an EOC.

Discipline-specific mutual aid representatives may be located in various EOC sections, branches or units or may serve as an agency representative depending on how the EOC is organized and to the extent to which it is activated.

Coordination with Volunteer and Private Agencies

A significant component of our mutual aid system is volunteer and private agencies. These include agencies such as the American Red Cross and Salvation Army who mobilize to provide assistance with mass care and shelter. During large-scale incidents that require mass care and sheltering, these agencies typically provide representatives to the Moreno Valley Emergency Operations Center (EOC).

Many private agencies, churches, non-profits and other organizations offer to provide their assistance during emergencies. If needed, Moreno Valley EOC may request that the agency provide a liaison to the EOC to help facilitate and coordinate mutual aid.

To facilitate the coordination and flow of mutual aid, the State is divided into six Emergency Mutual Aid Regions by Cal OES numbered I-VI. They are further divided into Coastal Region (region II), Southern Region (regions I & VI) and Inland Region (regions III, IV & V). The City of Moreno Valley is located in Region VI, which is considered the Southern Region. Southern Region headquarters is located at: 4671 Liberty Avenue, Building 283, Los Alamitos, California. The mutual aid and administrative regions are depicted as follows:

Mutual Aid Regions

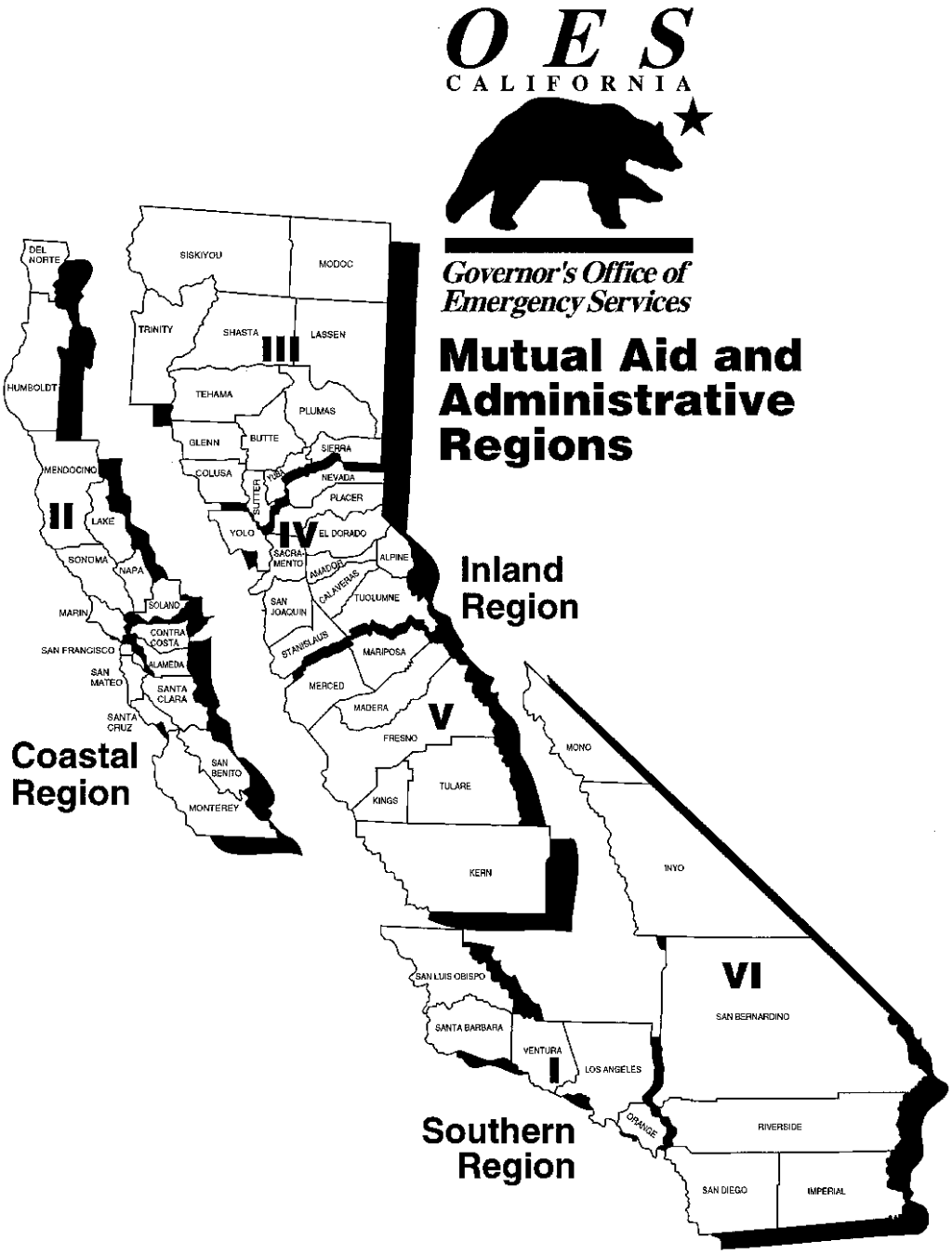


Figure 6: Mutual Aid Regions

Mutual Aid Facilities

Mutual aid resources may be received and processed at several types of facilities. They are:

- **Marshalling Areas** – An area used for the complete assemblage of personnel and other resources prior to their being sent directly to the disaster area. Marshalling areas may be established in other states for a catastrophic event in California.
- **Mobilization Center** – An off-site location where emergency services personnel and equipment are temporarily located pending assignment, release or reassignment.
- **Staging Areas** – A location established where resources can be placed while awaiting a tactical assignment within a three minute time frame.

Resource Tracking

Tracking of mutual aid resources occur at several levels. They are:

- **Incident Level** – Resources are tracked at the incident through the Resources Status Unit. Leaders are assigned to track resources utilizing a check-in process and form ICS 203 (Organizational Assignment List) and form ICS 204 (Division/Group Assignment List).
- **EOC Level** – During EOC activations, Moreno Valley EOC will process and track mutual aid resource requests ordered through the Riverside County Operational Area. Regional and State EOCs will process and track requests utilizing the Response Information Management System (RIMS) and will assign a mission tasking number (for State Agencies & Search & Rescue) or a resource request number (for all other requests).
- **Fire Mutual Aid** – Fire will track resources by using a resource ordering status sytem.

EMERGENCY DECLARATIONS

As necessary, the Emergency Operations Center (EOC) will be activated and EOC staff will convene to evaluate the situation and make recommendations for a possible Local Declaration. There are four types of emergency declarations possible. They are:

Local Declaration

Local Declaration - A Local Declaration will usually be proclaimed for large-scale emergencies or disasters threatening the safety of the persons and property within the City of Moreno Valley. Typically, the EOC staff will convene to discuss the emergency situation. If warranted, City Ordinance No. 325 authorizes the Director of Emergency Management to make a Local Declaration. The City Council must formally ratify the declaration within seven days. The Proclamation of a Local Declaration provides the City of Moreno Valley with the legal authority to:

- Request that the Governor proclaim a State of Emergency;
- Issue or suspend orders and regulations necessary to provide for the protection of life and property, including issuing orders or regulations imposing a curfew;
- Exercise full power to request mutual aid from state agencies and other jurisdictions;
- Require the emergency services of any Moreno Valley official or employee;
- Obtain vital supplies and equipment and, if required, immediately commandeer the same for public use;
- Impose penalties for violation of lawful orders; and
- Conduct emergency operations without incurring legal liability for performance, or failure of performance per Article 17 of the Emergency Services Act.

State of Emergency

State of Emergency - A State of Emergency may be proclaimed by the Governor when a City or County declares an emergency. The Governor may also declare a State of Emergency when conditions of disaster or extreme peril exist, which threaten the safety of persons and property within the state. Whenever the Governor declares a State of Emergency the following will apply:

- Mutual aid shall be rendered as needed;
- The Governor shall have the right to exercise all police powers vested in the state by the Constitution and the laws of the State of California within the designated area;

- The Governor may suspend 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 media) in carrying out the responsibilities of his office; and
- The Governor may promulgate, issue and enforce orders and regulations deemed necessary.

State of War Emergency

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 subdivsions 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 California Emergency Services Act.

Presidential Declarations

Presidential Declaration - If an emergency is beyond the ability of local and state government to manage effectively, the Director of the California Emergency Management Agency (CalEMA) may recommend that the Governor request a Presidential Declaration of Major Disaster under the Robert T. Stafford Disaster Relief and Emergency Assistance Act which provides the authority for the Federal government to respond to disasters and emergencies.

Following a Presidential Declaration, federal assistance is availible to supplement the efforts and resources of state and local governments to alleviate public and the private sector damage and loss.

In February of 2005, Moreno Valley suffered damage during severe winter storms. On March 16, 2005, the Governor added Riverside County to the declaration. A Presidential Declaration soon followed allowing the City of Moreno Valley and its affected residents to recover costs for damage.

The chart below shows that out of 58 counties, Riverside County ranked #3, following Los Angeles and San Bernardino Counties, for the most proclaimed States of Emergencies.

Figure 7: California Proclaimed States of Emergency 1950 to 1997 (source: Cal OES)

Counties	Floods	Earthquake	Agricultural Emergency	Wildland Fires	Drought	Fire, Urban Intermix	Medical Disaster	Weather Storm	Civil Disturbance	Transport Disaster	Landslide	Energy Shortage	Epidemic	Hazardous Material	Dam Failure	TOTALS
Alameda	11	1	1	3	2			2	1			2				23
Alpine	6			1	2			2								11
Amador	7			1	2			2								12
Butte	9			2	2			5								18
Calaveras	5			2	2			1								10
Colusa	10			1	2			3								16
Contra Costa	12	1	1		2			4	1			2				23
Del Norte	8	1		1	1			1			1					13
El Dorado	8			2	1			3								14
Fresno	7	1	1	1	2			4								16

Counties	Flood	Earthquake	Agricultural Emergency	Wildland Fires	Drought	Fire, Urban Intermix	Medical Disaster	Weather Storm	Civil Disturbance	Transport Disaster	Landslide	Energy Shortage	Epidemic	Hazardous Material	Dam Failure	TOTALS
Los Angeles	13	6	7	17	2	1		11	2	1	4	2	1			68
Glenn	10				3			2								15
Humboldt	9	2		2	1			5			1					20
Imperial	6	2	1				1	2								12
Inyo	6			1	1			4								12
Kern	8		1	4	1			6			1					21
Kings	7				2			3								12
Lake	9			1	1			3								14
Lassen	9			2	1			2								14
Madera	7		1	1	2			4								15
Marin	9	2		1	2			4				2				20
Mariposa	5			2	1			1								9

Counties	Flood	Earthquake	Agricultural Emergency	Wildland Fires	Drought	Fire, Urban Intermix	Medical Disaster	Weather Storm	Civil Disturbance	Transport Disaster	Landslide	Energy Shortage	Epidemic	Hazardous Material	Dam Failure	TOTALS
Mendocino	10			1	2			5			1					19
Merced	5		1		2			3								11
Modoc	8			1	1			4								14
Mono	7	1		1	1			2								12
Monterey	8	1	1	3	2			8			2	4				29
Napa	9			3	2			4								18
Nevada	8			3	2			3								16
Orange	9	3	2	3		1		5			2	2	1			28
Placer	10			2	1			3		1						17
Plumas	8			2	1			3								14
Riverside	**12**	**1**	**4**	**4**	**1**	**1**		**6**			**1**	**4**	**1**			**35**
Sacramento	9	1	1		1			3		1						16

Counties	Flood	Earthquake	Agricultural Emergency	Wildland Fires	Drought	Fire, Urban Intermix	Medical Disaster	Weather Storm	Civil Disturbance	Transport Disaster	Landslide	Energy Shortage	Epidemic	Hazardous Material	Dam Failure	TOTALS
San Benito	6	1	1		3			3								14
San Bdno	12	2	2	6	2	1		7			1	5	1			39
San Diego	10		1	5	1	1	2	8		1	2	1	1			33
San Francisco	4	1							1			1				7
San Joaquin	10	1	1		2			6								20
San Luis Obispo	6			2	2			6								16
San Mateo	10	1	1		2			2			1	1				18
Santa Barbara	9	1		4	3			7	1		1		1	1		28
Santa Clara	9	2	2	1	2			2				2				20
Santa Cruz	10	1	1	1	1			3			1	2				20
Shasta	8		1	4	1			2								16

Counties	Flood	Earthquake	Agricultural Emergency	Wildland Fires	Drought	Fire, Urban Intermix	Medical Disaster	Weather Storm	Civil Disturbance	Transport Disaster	Landslide	Energy Shortage	Epidemic	Hazardous Material	Dam Failure	TOTALS
Sierra	7			2	1			3								13
Siskiyou	7			1	1			4								13
Solano	9	1	1	2	2			4			1					20
Sonoma	8			2	2			6				1				19
Stanislaus	6		2		2			4			1					15
Sutter	10				2			3								15
Tehama	9			3	2			5								19
Trinity	10			1	1			2								14
Tulare	6		1	1	2			6								16
Toulumne	5			2	2			1								10
Ventura	9	1	1	6		1		10			1	2	1			32
Yolo	8		1		2			3								14
Yuba	11			1	1			3								16
TOTALS	**483**	**35**	**38**	**112**	**90**	**6**	**3**	**223**	**6**	**4**	**22**	**33**	**7**	**1**	**1**	**1064**

GOVERNMENT CODE

GOVERNMENT CODE

Section 8630

8630. (a) A local emergency may be proclaimed only by the governing body of a city, county, or city and county, or by an official designated by ordinance adopted by that governing body.

(b) Whenever a local emergency is proclaimed by an official designated by ordinance, the local emergency shall not remain in effect for a period in excess of seven days unless it has been ratified by the governing body.

(c) The governing body shall review the need for continuing the local emergency at least once every 60 days until the governing body terminates the local emergency.

(d) The governing body shall proclaim the termination of the local emergency at the earliest possible date that conditions warrant.

EMERGENCY COMMUNICATIONS

800 MHz Radio System

To assure that necessary communications are not disrupted, the City of Moreno Valley has identified alternatives for emergency communications (identified below). These systems are tested regularly:

The City of Moreno Valley's 800 Megahertz (MHz) system consists of radio repeaters, mobile units, base stations, and handheld transceivers (HT) that operate on the Public Safety band. Three 800 MHz repeater systems are utilized for citywide coverage within the City.

The City is licensed under Part 90 of the Federal Communication Commission (FCC) rules and regulations to operate on six radio channels. This includes three repeater channels and three simplex / talk-around channels in the 800 MHz Public Safety band.

Radio channels are assigned into three radio service groups:

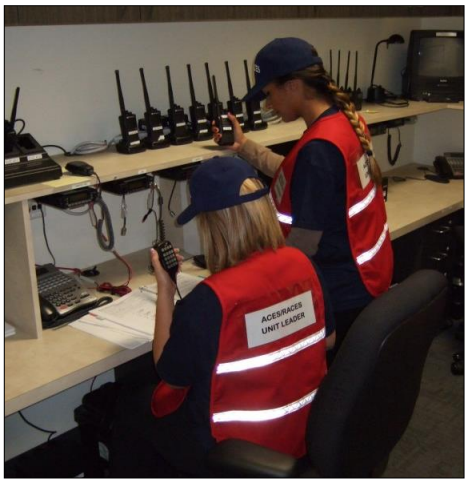
- General Services
- City Tactical
- Public Safety

During a declared or identified emergency or incident, emergency communications supersedes day-to-day business communications.

Amateur Radio

Moreno Valley has an Amateur Civil Emergency Services / Radio Amateur Civil Emergency Services (MV ACES/RACES) group, which operates on HAM radio frequencies in support of governmental emergency communications. MV ACES/RACES can augment existing systems and establish communication links with otherwise inaccessible areas.

MV ACES/RACES members play an important role in emergency communications for the City. Not only do they provide alternate communications in an emergency, they are capable of sending live video and audio from the incident site to our City's Emergency Operations Center (EOC) via the ham radio frequencies.



Pictured: Moreno Valley ACES/RACES EOC Radio Room

During emergency incidents and special events, the MV ACES/RACES group is activated by the Office of Emergency Management Program Manager or its designees. During an Emergency Operations Center (EOC) activation, the group is activated by our Logistics Section.

MV ACES/RACES also has mobile radio communications capabilitiesutilizing the MV ACES/RACES Mobile Emergency Communications trailer. It is capable of communicating on most HAM radio frequencies and the City's 800 MHz Radio System.

Pictured: Moreno Valley ACES/RACES Mobile Emergency Communications Trailer

Disaster Net Radio

The City of Moreno Valley utilizes the low-band "Disaster Net" radio system to communicate with Riverside County's Primary and Alternate EOC's, and neighboring jurisdictions within Riverside County during an emergency or incident. This system uses a low frequency band and has back-up frequencies in case of an outage on the primary channel.

Disaster Case Radio Unit

The City has a portable disaster case radio unit. This portable case holds several radios which allow communications with other agencies such as County Emergency Services, County Fire, County Police, Hospitals, cities within Riverside County, Moreno Valley Unified School District and Valley View Unified School District.

Mobile Radio

Mobile radio communications is available utilizing the Moreno Valley Police Mobile Command Center (MCC). The command center has the capability of patching Sheriff, California Highway Patrol (CHP), Riverside Police, CALFIRE, March Air Reserve Base and Moreno Valley Park Rangers all on the same frequency at the same time. Our command center also has the capability to use a Handheld Transceiver (HT) "pigtail" connector that takes any agency HT radio, attached to our radio system, and is able to communicate with that agency and the agencies listed above.

Pictured: Moreno Valley Police Mobile Command Center

Mobile radio communications is also available using the Office of Emergency Management (OEM) city vehicles and Emergency Response Force (ERF) apparatus. These vehicles are equiped with the City's 800 MHz (mobile) radios and HAM radios.

Pictured: Emergency Response Force Apparatus

HAZARD MITIGATION AND HAZARD ANALYSIS

Hazard Mitigation

Hazard mitigation is defined as any action taken to reduce or eliminate the long-term risk to human life and property from natural hazards. Section 409 of Public Law 93-288, requires, as a condition of receiving federal disaster aid that repairs and construction be done in accordance with applicable codes, specifications, and standards. It also requires that the state or local government recipients of federal aid evaluate the natural hazards of the area in which the aid is to be used, and take action to mitigate them, including safe land use and construction practices.

To be effective, hazard mitigation actions must be taken in advance of a disaster. After disaster strikes, mitigation opportunities exist only during recovery and even those opportunities can be limited by the absence of advance planning. Nevertheless, the immediate post-disaster period does present special opportunities for mitigation. Section 409 deals with the opportunities presented in a current disaster to mitigate potential hardship and loss resulting from future disasters. Hazard mitigation is a continuing effort in which all-local communities and state agencies are encouraged to prepare hazard mitigation plans that identify ways to reduce damage caused by disasters.

Local Government Responsibility

The key responsibilities of local governments are to:

- Participate in the process of evaluating hazards and adoption of appropriate hazard mitigation measures, including land use and construction standards.
- Appoint a Local Hazard Mitigation Officer, if appropriate.
- Participate on Hazard Mitigation Survey Teams and Inter-agency Hazard Mitigation Teams, as appropriate.
- Participate in the development and implementation of section 409 plans or plan updates, as appropriate.
- Coordinate and monitor the implementation of local hazard mitigation measures

Hazard Mitigation Plan

The City of Moreno Valley, in coordination with Riverside County and its jurisdictions, worked together to complete a county-wide multi-hazard mitigation plan, called the Riverside Operational Area Multi-Jurisdictional Local Hazard Mitigation Plan. This plan is pursuant to the Disaster Mitigation Act of 2000 (Public Law 106-390), signed into law by the President of United States on October 30, 2000 to amend the Robert T. Stafford Disaster Relief Act of 1988. This new legislation reinforces the importance of pre-disaster infrastructure

mitigation planning to reduce disaster losses nationwide.

Moreno Valley City Council approved the Riverside Operational Area Multi-Jurisdictional Local Hazard Mitigation Plan (Resolution 2005-11) on January 25, 2005.

The Hazard Mitigation Grant Program (HMGP) provides grants to states and local governments to implement long-term hazard mitigation measures after a major disaster declaration. The purpose of the HMGP is to reduce the loss of life and property due to natural disasters and to enable mitigation measures to be implemented during the immediate recovery from a disaster. The HMGP is authorized under Section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act.

The HMGP is only available to applicants that reside within a Federally declared disaster area. Eligible applicants are:

Hazard Mitigation Grant Program

- State and local governments;
- Indian tribes or other tribal organizations; and
- Certain non-profit organizations.

Although individuals may not apply directly to the state for assistance, local governments may sponsor an application on their behalf.

The amount of funding available for the HMGP under a particular disaster declaration is limited. The program may provide a state with up to 7.5 percent of the total disaster grants awarded by the Federal Emergency Management Agency (FEMA). States that meet higher mitigation planning criteria may qualify for a higher percentage under the Disaster Mitigation Act of 2000. FEMA can fund up to 75% of the eligible costs of each project. The grantee must provide a 25% match.

HAZARD ANALYSIS

The City of Moreno Valley has identified hazard risks to various natural, technological, and man-made emergencies and disasters. The matrix below identifies these hazards and their likelihood to occur in our City. Specific threat assessments are located in the Threat Summary section (following the Hazard Analysis).

Figure 8: Hazard Matrix: Likelihood of Occurrence

Hazard	Infrequent	Sometimes	Frequent	Impact on City (Depending on Severity)		
				Low	Moderate	High
Earthquake < 5.0		X		X		
Earthquake >5.0 and <7.0	X				X	X
Earthquake >7.0	X					X
Hazardous Materials		X		X	X	X
Wildfire		X		X	X	X
Flooding		X		X	X	X
Dam Failure	X				X	
Transportation Emergencies		X		X	X	X
Civil Unrest	X			X	X	
Power Outage		X		X	X	
Terrorism	X				X	X
Public Health Emergency	X			X	X	X
Nuclear Incident	X			X	X	X

THREAT ASSESSMENT SUMMARY

This section of the Emergency Operations Plan consists of a series of threat assessments. The purpose is to describe the area at risk and the anticipated nature of the situation, which could result should the event threaten or occur.

The City of Moreno Valley encompasses over 50 square miles and is located in the western portion of Riverside County, surrounded by Riverside, Perris, March Air Reserve Base, Lake Perris and the Badlands. It is the second largest in population within Riverside County with a population of 180,466 (as of January 1, 2007, State Department of Finance). Moreno Valley is California's sixth fastest-growing city. Moreno Valley is located within the Southern Administrative Region VI of the State Office of Emergency Services (CalOES).

The City of Moreno Valley, as of May 2007, is home to two public school districts: Moreno Valley Unified School District, with a total of 23 Elementary Schools, 6 Middle Schools, 4 Comprehensive High Schools, 1 Charter School, 1 Adult School, 1 Continuation School, 1 Community Day School, 1 Pre-School and 1 Academic Center with a total of 37,001 students enrolled; and Val Verde Unified School District (includes Perris, Mead Valley and Moreno Valley) has 12 Elementary Schools, 3 Middle Schools, 3 High Schools, 1 Continuation School and 1 Pre-school with a total of 17,624 students enrolled. Moreno Valley is also home to one of the Riverside Community College campuses with 7,000 students enrolled.

Moreno Valley has two acute care facilities within its boundaries: Riverside County Regional Medical Center and Kaiser Permanente Hospital.

The City of Moreno Valley is vulnerable to a wide range of threats. In the past, Moreno Valley has experienced major emergencies such as earthquakes, floods, wildfires and hazardous materials incidents. These, and other emergency incidents, could occur at any time. Consider the following:

- A major earthquake occurring in Moreno Valley could have a catastrophic effect on the population.
- Portions of Moreno Valley are subject to dam failure.
- A transportation incident could affect areas within the City. Major highways such as Highway 215 and Highway 60 traverse Moreno Valley, as well as a railway. A major air crash from surrounding March Air Reserve Base or other nearby airports could also occur within Moreno Valley.

- Moreno Valley has many industrial businesses that have hazardous materials on site posing a serious threat during an incident such as an accident, fire, earthquake or terrorist incident.
- A civil unrest incident, as well as a terrorist incident could affect areas within the City or the entire City.

Any single incident as well as a combination of events could require evacuation and/or sheltering of the population. The police department is the lead agency in evacuations. American Red Cross is notified if a shelter site is needed. During a large-scale disaster whereby the American Red Cross is inundated with requests, American Red Cross trained Moreno Valley City personnel will staff and manage Red Cross Shelters if needed. Moreno Valley has on hand a Red Cross Care and Shelter trailer with cots and supplies needed to activate a shelter.

The following threat assessments identify and summarize the hazards that could affect the City of Moreno Valley:

Threat Assessment 1 - Major Earthquake

Threat Assessment 2 – Hazardous Materials

Threat Assessment 3 – Wildfires

Threat Assessment 4 – Flooding

Threat Assessment 5 – Dam Failure

Threat Assessment 6 – Transportation Emergencies

Threat Assessment 7 – Civil Unrest

Threat Assessment 8 – Power Outages

Threat Assessment 9 – Terrorism

Threat Assessment 10 – Public Health Emergency

Threat Assessment 11 – Nuclear Incident

THREAT ASSESSMENT 1 - MAJOR EARTHQUAKE

Major Earthquake

The City of Moreno Valley is located near several known active and potentially active earthquake faults including the San Jacinto fault, Elsinore fault, San Andreas fault and Casa Loma fault. The major potential for earthquake damage to Moreno Valley is from activity along the San Jacinto Fault Zone. The San Jacinto Fault Zone is considered to be the most active fault in Southern California.

In the event of an earthquake, the location of the epicenter as well as the time of day could have a profound effect on the potential number of deaths and casualties.

An earthquake occurring in or near this area could result in property damage, environmental damage, and disruption of normal government and community services and activities. The effects could be aggravated by collateral damage such as fires, flooding, hazardous material spills, utility disruptions, landslides, transportation emergencies and possible dam failure.

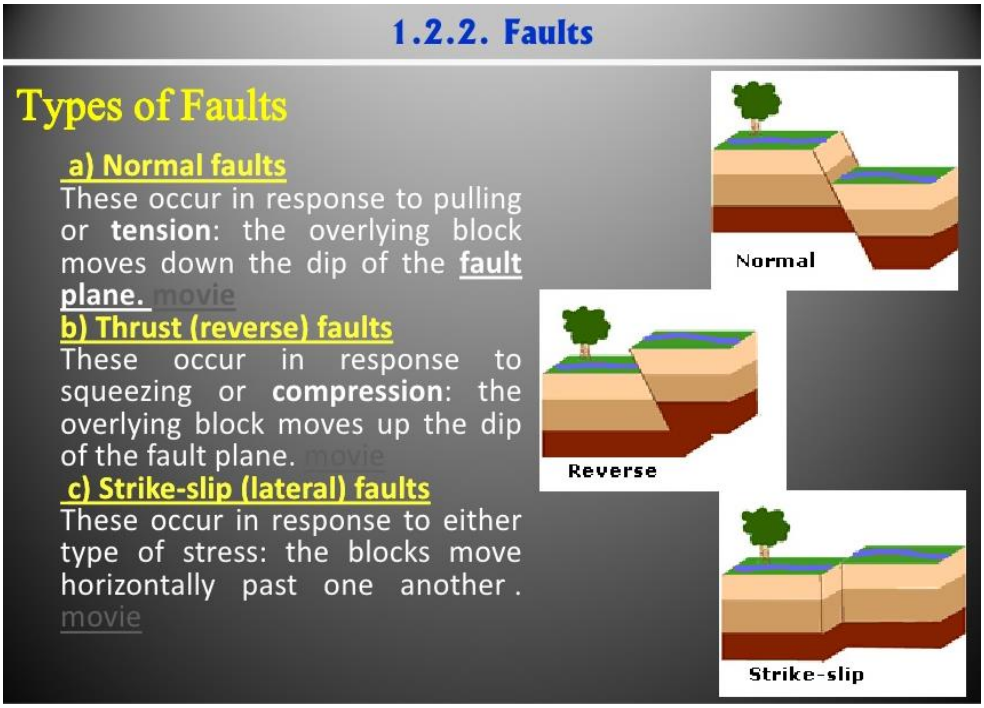
Significant damage to buildings and infrastructure could occur due to severe ground shaking. The community needs could exceed the response capability of the City of Moreno Valley's emergency management organization, requiring mutual aid from other areas. Response and disaster relief support could be required from the county, state and federal governments.

The primary consideration during an earthquake is saving lives. Emergency response will include providing shelter to displaced citizens and restoring basic needs and services. A major effort will be made to remove debris and clear roadways, demolish unsafe structures, assist in reestablishing public services and utilities and provide continuing care for affected citizens.

After any earthquake, there could be a loss of income. Individuals could lose wages due to business closure or damage to goods. Economic recovery is critical to our community.

Types of Faults

A fault is a fracture in the earth's crust whereby two blocks of the crust have slipped with respect to each other. Faults are divided into three main groups, depending on how they move.



(Source: Earthquake engineering)

Figure 9: Types of Faults

Local Faults

San Jacinto fault passes through the eastern portion of Moreno Valley and the San Andreas fault is located approximately 15 to 20 miles northeast of Moreno Valley. Both the San Jacinto and San Andrea's faults are right-lateral strike-slip faults. Below is a map of California Faults:

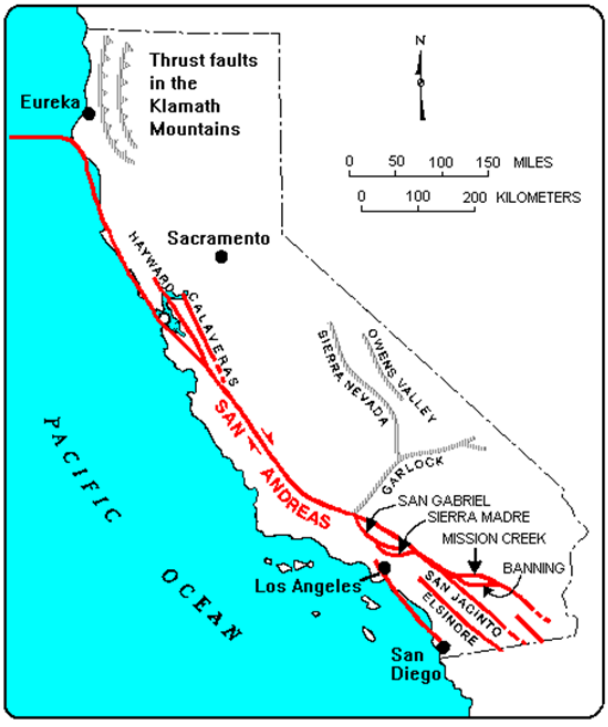


Figure 10: California Earthquake Faults. Source California Conservation

Earthquake Strength

The strength of an earthquake is generally expressed in two ways: magnitude (Richter Scale) and intensity (Modified Mercalli Intensity Scale). The magnitude

is a measure that depends on the seismic energy radiated by the earthquake as recorded on seismographs. An earthquake's magnitude is expressed in whole numbers and decimals (e.g. 6.8). The intensity at a specific location is a measure that depends on the effects of the earthquake on people or buildings. Intensity is expressed in Roman numerals or whole numbers (e.g. VI or 6). Although there is only one magnitude for a specific earthquake, there may be many values of intensity (damage) for that earthquake at different sites. A comparison of both the Richter scale and Modified Mercalli is as follows:

Figure 11: Comparison of Richter Magnitude and Modified Mercalli Intensity

Richter Magnitude	Expected Modified Mercalli Maximum Intensity (at epicenter)	
2	I - II	Usually detected only by instruments
3	III	Felt indoors
4	IV - V	Felt by most people; slight damage
5	VI - VII	Felt by all; many potentially frightened and could run outdoors; damage minor to moderate
6	VII - VIII	People running outdoors more frequent; damage moderate to major
7	IX - X	Major damage
8+	X - XII	Total and major damage

California Earthquakes

California has many active earthquake faults. In 1996, California had an average of 1280 earthquakes per month. In 1997, there was an average of 899 earthquakes per month and in 1998, the average was 975 per month (according to US Geological Survey). Below is a map from the Southern California Earthquake Data Center showing earthquakes of 4.5 magnitude or greater since 1812.

Liquefaction

- **Liquefaction** - is a phenomenon involving the loss of shear strength of a soil. It happens when loosely packed, waterlogged sediments lose their strength in response to strong shaking and can cause major damage during earthquakes. During the 1989 Loma Prieta earthquake, liquefaction of the soils and debris used to fill in a lagoon caused major subsidence, fracturing, and horizontal sliding of the ground surface in the Marina district in San Francisco.

Although Moreno Valley has not seen evidence of liquefaction events occurring in the community nor has geotechnical reports submitted to the City identified liquefaction hazards, the Riverside County General Plan has identified a range of liquefaction susceptibility in Moreno Valley from very low with deep groundwater in the northern and eastern portions of the community to very high with shallow groundwater generally west of Perris Boulevard. See Figure 13.

- **Land settlement** - may be a problem in that subsurface soils are similar to those in the Perris Valley to the south, where significant settlement has been reported.
- **Landslides** – there is some potential for landslides in the Badlands because the slopes are steep and the underlying geologic material is poorly consolidated.
- **Seiching** – this is water movement caused by ground shaking. Seiching may present a hazardous situation during an earthquake at Poorman's Reservoir, Sunnymead Lake and Lake Perris if the seiching in conjunction with ground shaking resulted in dam failure. Water storage tanks located within Moreno Valley are also susceptible to seiching. However, water tanks are designed to safely detain and direct the flow of water in the event of failure or leakage.

Expected Damage

EXPECTED DAMAGE FROM A MAJOR EARTHQUAKE - Damage to public services may include disruption of communications, water, sanitation, electrical power, natural gas, petroleum fuels; damage to highways and bridges, hospitals; and disruption of public safety operations.

Fires

Numerous fires due to disruption of power and natural gas networks can be expected. Electrical shorting, gas explosions, unsecured water heaters and chemical fires. Fires caused ninety percent of the damage during the 1906 San Francisco earthquake. Damage to water supply could reduce the effectiveness of conventional firefighting methods. Fire involving hazardous materials will require additional resources.

Communication

System failure, overloading and loss of electrical power will most likely affect local telephone systems. The 911 system may be overloaded immediately following an earthquake. Radio systems are expected to operate at 40% effectiveness within the first 12 hours following an earthquake. Microwave systems will most likely be 30% or less effective following a major earthquake.

Electrical Power

Transmission lines are the most vulnerable during an earthquake. They are subject to extensive earthquake induced land sliding, particularly during the wet season. Transmission lines can be put out of service by conductors swinging together short circuiting them out of service, and also by broken lines

	due to increased tension from the surface fault movement. Damage to substations may cause outages. Repairs to electrical equipment require physically clearing the roadways, and movement of special equipment. Restoration of local electrical power will be coordinated with regional and local utility representatives. Up to 60% of the system load may be interrupted immediately following the initial earthquake shock wave. Much of the affected area may have service disrupted for days and severely damaged areas could take longer to repair.
Natural Gas	Damage to natural gas facilities may consist primarily of isolated breaks in major transmission lines. Breaks in mains and individual service connections within the distribution system may be significant, particularly near the fault zones. Two 30-inch diameter lines cross the San Andreas in the San Gorgonio Pass and into Moreno Valley. These transmission lines, running the entire width of Riverside County and crossing all three major faults, provide 40% of the natural gas distributed all throughout Southern California. There is a risk of fire at various rupture sites.
Water	Water availability is a major concern to the City of Moreno Valley. Water would be used to support life, treat the sick and injured and fire suppression. If damage occurs to water reservoirs, potable water would have to come from surrounding areas. Water wells may not be functioning due to damage, loss of electricity and lack of back up power.
Sanitation System	Overflow of sewage through manholes and ponds can be expected due to breakage in mains and loss of power. As a result, there could be a danger of excessive collection of explosive gas in sewer main and flow of untreated sewage in some street gutters. Many house sewer connections will break and plug, causing them to become inoperative.
Petroleum Fuels	Many major pipelines cross the San Andreas Fault and San Jacinto Fault. Pipeline breakage is expected and there is a possibility of fire and explosion where failures occur.
Highways and Bridges	Moreno Valley has two freeways that run through the City. They are: Interstate 215 (runs north and south) and Highway 60 (runs east and west). There is a possibility of bridge and overpass collapse that would isolate citizens and make it difficult to transport rescue equipment to effected areas. Significant damage is expected on surface streets. Debris, falling electrical wires and pavement damage will block many surface streets.
Dam Rupture	Moreno Valley is located within the vicinity of four dams that could affect thousands of people. There is some potential of dam rupture during an earthquake. From the time of complete failure to inundation there could be as little as 5 to 10 minutes which will not be enough time to issue a warning to the public and initiate evacuations. Failure of the dam at Poorman's Reservoir

(Pigeon Pass Reservoir) could result in extensive flooding along the downstream watercourse. The risk of flooding due to dam failure is limited to the period during and immediately after major storms, as the reservoir does not retain water throughout the year. Failure of the Lake Perris Dam would only affect a small area south of Nandina Avenue along the Perris Valley Storm Drain and the Mystic Lake area in the southeast corner of Moreno Valley.

An earthquake could cause landslides, particularly in the Badlands area of Moreno Valley because the slopes are steep and the underlying geologic material is poorly consolidated. Falling debris from steep slopes throughout Moreno Valley is considered a hazard during an earthquake.

Airport

March Air Reserve Base airport is designated as a Regional Assistance Center and may be used to disseminate large amounts of material to outlying areas. The airport is situated on the Perris Block, which is a relatively stable granite base. Therefore, its runways are expected to remain viable. However, there is a potential for the control tower to be damaged and the air traffic might have to be controlled by an alternate command center or mobile unit. No damage is anticipated to occur to the underground fuel storage units.

Railroads

The Union Pacific Southern Pacific passes through the San Gorgonio Pass and San Timeteo Canyon west of Moreno Valley to Redlands. The rail lines parallel almost the entire length of the San Andreas Fault through the County. During an earthquake, train rails could be bent or destroyed which would overturn cars (possibly with hazardous materials on board) and damage could occur to supporting structures.

The Burlington Northern and Santa Fe Railway has lines running parallel along Interstate 215 then easterly through Winchester to downtown Hemet and San Jacinto. Due to its origination in the San Bernardino/Colton area, there could be major damage in those areas, possibly disrupting normal services.

Metro Link - June 6, 2016 along with the Perris Valley Line extension of the Metro link commuter rail system.[Moreno Valley/March Field is a train station in unincorporated Riverside County, California, United States, near March Air Reserve Base and Moreno Valley.

CRITICAL FACILITY DAMAGE

Structure Damage

There are two hospitals located within the City of Moreno Valley. They are: Kaiser Permanente Hospital and Riverside County Regional Medical Center. Both hospitals are located approximately two miles of each other south of the 60 freeway and east of the 215 freeway. This could present a major problem depending on the type of damage and road blockages. Both hospitals are also located within 3 to 4 miles of the San Jacinto Fault. If the earthquake damaged our local hospitals, patients would be transported to nearby hospitals or field

hospitals.

EXPECTED STRUCTURE DAMAGE – Depending on the location of the earthquake, we can predict what types of damage might occur to certain types of structures.

Single-family homes – might suffer some structural damage and loss of contents. Wood frame homes should sustain light damage

Mobile homes – these types of homes would be subject to shifting off their foundation supports. Attached awnings, porches and skirting could be subject to separation along with utilities possibly being sheared off.

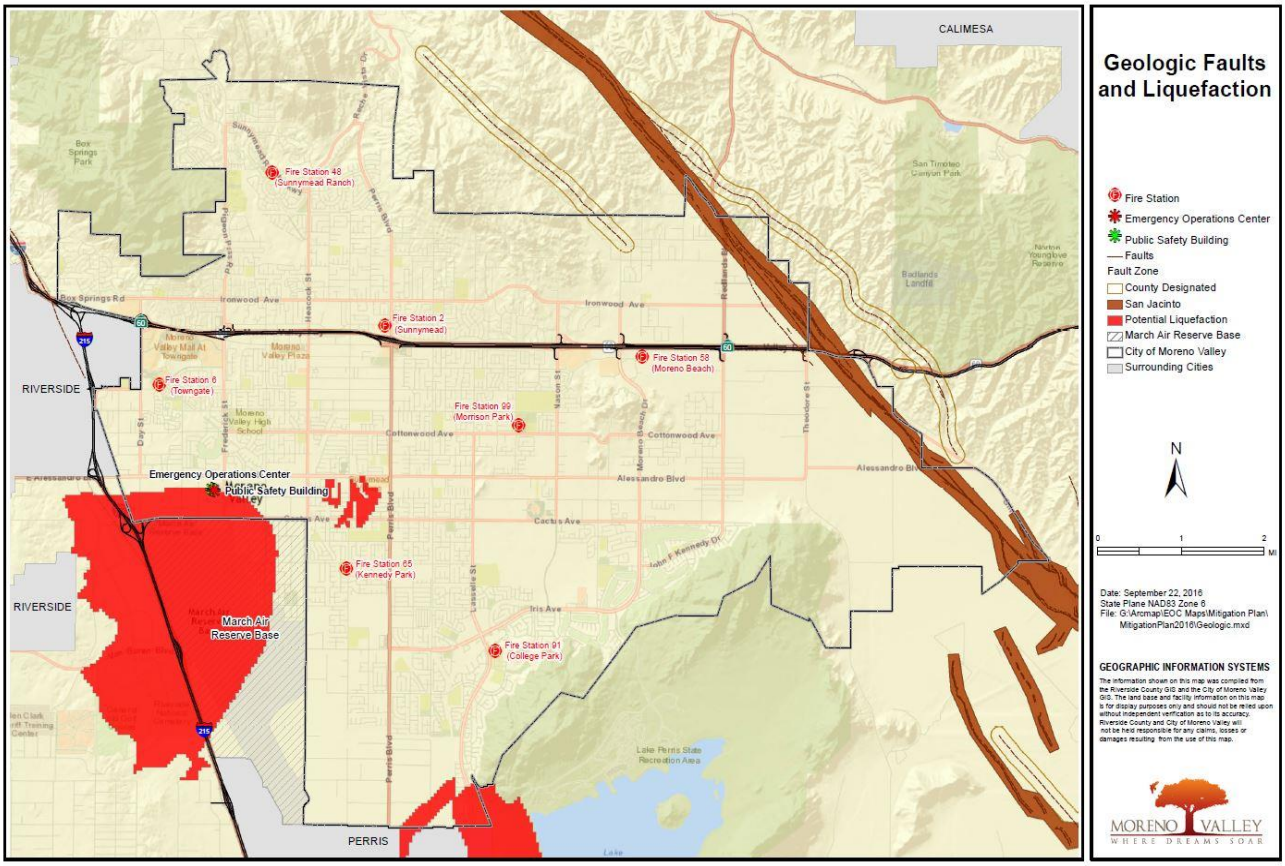


Figure 13 – Geologic Faults and Liquefaction

THREAT ASSESSMENT 2 – HAZARDOUS MATERIALS

Hazardous Materials

Hazardous materials are any substance or combination of substances that may pose a risk to human health and safety or the environment. Hazardous materials include toxic, corrosive, infectious, flammable, explosive and radioactive substances. Federal, state and local governments have enacted a variety of laws and established programs to deal with the transport, use, storage, and disposal of hazardous materials to reduce the risks to public health and the environment.

Specific Situation

Hazardous material incidents can happen anywhere, however there are certain areas that are at a higher risk. Roadways and railways that are used to transport hazardous materials have increasing potential as well as industrial facilities that use, store and dispose of such materials.

Releases of explosive, caustic and flammable materials can cause many injuries and deaths as well as large-scale evacuations or sheltering in place.

Transportation Accident

Using the Riverside County Hazardous Materials Program and Response Plan, hazardous materials response is provided to the City of Moreno Valley by Riverside County Fire Department Hazardous Materials Response Team. A hazardous situation in the City of Moreno Valley would most likely involve either transportation of hazards by railroad or truck, storage of hazardous materials at a business or illegal dumping of chemical waste.

Trucks heavily travel Interstate 215 and Highway 60. An accident involving hazardous materials could require evacuations of surrounding areas as well as major re-routing of traffic. Extensive decontamination of affected areas would occur.

Facility HazMat Scenario

One major concern is the many transportation trucks that travel daily throughout the county. Metropolitan Water District often has trucks containing chlorine traveling to and from Moreno Valley.

Many hazardous materials travel nearby our city in the county via the railways. Train cars can leave the tracks for various reasons such as debris on the tracks, a collision or an earthquake.

Illegal Dumping

Currently, there is one business located in Moreno Valley that exceeds the Federal and California threshold for storing chlorine gas and is required to file both Federal and California Response Plans. The City of Moreno Valley has well over 293 facilities that use smaller amounts of chemicals such as gas stations, retail stores, dry cleaners, auto repair shops, hospitals, school laboratories etc.

Although many rules and regulations are in place about the disposal of hazardous waste, illegal dumping does occur. It is anticipated that as the costs and restrictions increase for legitimate hazardous waste disposal sites, illegal dumping will increase proportionately.

The Hazardous Materials Branch (HMB) of the Environmental Health Services Division of the Riverside County Health Department operates a hazardous waste program. The HMB inspects those involved in generating, hauling, storage, treating and disposing of these wastes. The HMB also operates mobile household hazardous waste roundups and checks loads at local landfills for hazardous wastes.

THREAT ASSESSMENT 3 – WILDFIRE

Wildfire

The City of Moreno Valley contracts with the Riverside County Fire Department through CALFIRE for fire services. CALFIRE is an all risk fire protection agency with primary responsibility for protection of approximately 33 million acres from wildfires in the State of California. Headquarters for the CALFIRE Riverside Unit is located in the City of Perris.

Based on geographical makeup and climatic conditions, Riverside County is statistically one of the most active wildfire counties in the state.

Typically, from June until October, cities and unincorporated areas face a serious threat of wildfires. Dry seasons and flammable brush contribute to this serious threat, as well as high temperatures, low humidity and high winds. Below average rainfall concern fire agencies. In 2003, the Cedar fire set an ominous tone for the fire season when it burned 280,278 acres and destroyed 2,232 homes in San Diego County. CALFIRE actively requires homeowners to do their part by clearing vegetation between 30 to 100 feet around their homes.

Cedar Fire, San Diego County 2003

Moreno Valley has several areas of concern for wildfires. They are: Box Springs Mountain, located in the western end of Moreno Valley and north of Highway 60; San Timoteo Canyon, which is located north of highway 60 off Redlands Blvd; and Reche Canyon, located north of Highway 60 and the hills north and south of highway 60 between the Gilman Springs and Jack Rabbit Trail exit.

Specific Situation

In October of 2005, winds fanned a blaze, dubbed the Woodhouse Fire, which burned 6,442 acres and was centered in the Badlands area near Moreno Valley. This caused closure of portions of Highway 60 and San Timoteo Canyon Road. An evacuation center was established at Valley View High School in Moreno Valley. The Woodhouse Fire burned up to an area already blackened by a fire the week before that burned 1160 acres northeast of Moreno Valley at San Timoteo Road destroying three commercial chicken houses and over 90,000 chickens.

THREAT ASSESSMENT 4 – FLOODING

Flooding

Floods are normally classified as slow-rise floods or flash floods. Generally, a warning may be issued for a slow-rise flood allowing time to conduct evacuations and sandbagging. Flash floods happen very quickly, thus allowing very little, if any, time to warn the public. Flash flood warnings usually require immediate evacuations within the hour.

Emergency response personnel will need to assist in rescue efforts, sandbagging flooded areas, evacuations and controlling traffic. These actions may require additional personnel and equipment resources from adjacent jurisdictions or through existing mutual aid agreements.

Specific Situation

Four types of actual and potential flooding conditions exist within Moreno Valley. They are: flooding in defined watercourses, ponding, sheet flow, and dam inundation.

Flooding within defined watercourses occurs within drainage channels and immediately adjacent floodplains. Ponding occurs when water flow is obstructed due to manmade obstacles such as the embankments of highway 60 and other roadways where they cross watercourses. Sheet flow occurs when capacities of defined watercourses are exceeded and water flows over broad areas.

Currently, the City of Moreno Valley has three extensive flood prone areas. They are:

Along the Quincy Channel between Cottonwood Avenue and Cactus Avenue.

Along the Oliver Street alignment from a point north of Alessandro Blvd. to John F. Kennedy Drive and extending in a southwesterly direction as far as the northeast corner of Morrison Street and Filaree Avenue and the northeast corner of Nason Street and Iris Avenue.

East of Heacock Street and Lateral A of the Perris Valley Channel between Cactus Avenue and a point north of the intersection of Lateral A and Indian Street.

Several portions of Moreno Valley are subject to a 100-year flood, meaning that a flood of that intensity might occur once in one hundred years (1% chance of occurring in any given year). See map on following page.

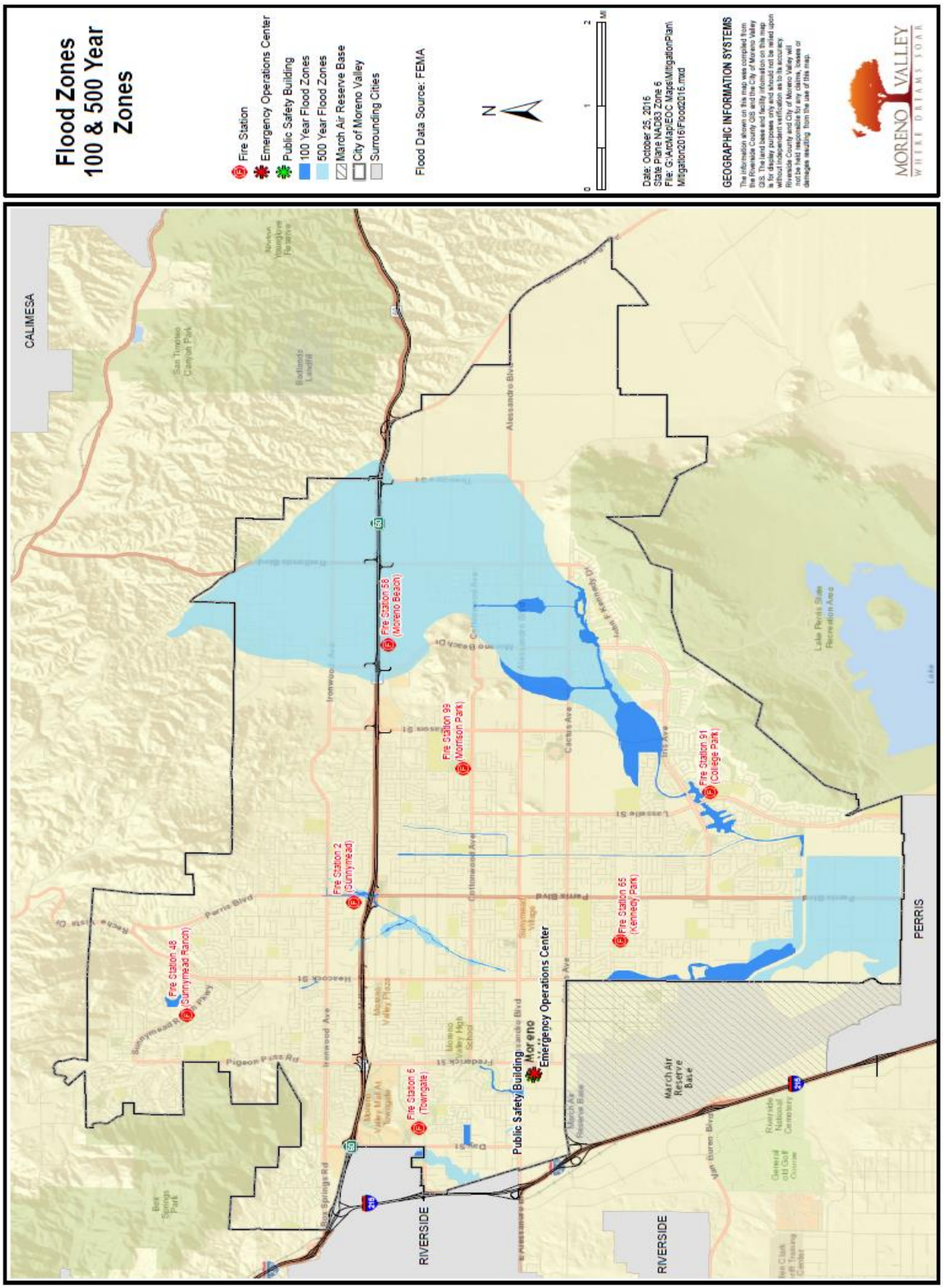


Figure 14: Moreno Valley Flood Hazard Map

THREAT ASSESSMENT 5 – DAM FAILURE

Dam Failure

Dam failure is the collapse or failure that causes significant downstream flooding. Dam failure may be caused by a severe storm, earthquakes, erosion of piping or foundation, or landslides flowing into the dam.

Specific Situation

The main consequences of dam failure are injury, loss of life, and significant downstream property damage. Evacuations and extensive rescue efforts would be necessary to save lives of those in or around the downstream areas. A major dam failure would require mutual aid from other local, state and federal governments and other organizations.

Dam inundation is a potential flood hazard in several portions of Moreno Valley. There are two specific locations of concern in Moreno Valley. They are:

Pigeon Pass Dam

Pigeon Pass Dam (Poorman's Reservoir) – Failure at this dam could result in extensive flooding along the downstream watercourse. Dam failure is limited to times during and immediately following major storms, as the reservoir does not retain water throughout the year. The Pigeon Pass Dam is 36 feet high and has a crest length of 2915 feet. The reservoir surface area is 86 acres with a storage capacity of 900 acre-ft (approx. 293,000 gallons) and a drainage area of 8.71 square miles (Berkeley, 2002). Although there was no threat to life or property, in December 1978, transverse cracks were discovered in the embankment. The causes of the crack were determined to be a combination of embankment shrinkage and differential foundation settlement due to hydro compaction and possibly seismic shaking. Excavating and placing compacted embankment repaired the largest crack. The proximity of a nearby active San Jacinto fault at 4 miles away, dictated that repairs include more than treating identified cracks. Cracks could rapidly re-open or new ones could form in the rather brittle embankment during an earthquake. A chimney drain was placed in a trench in the downstream slope to act as a crack stopper. Gallery drains were provided as outfalls from the chimney (Department of Water Resources, 2003).

Perris Dam

Perris Dam - Failure of the Perris Dam would only affect a very small area south of Nandina Avenue along the Perris Valley Storm Drain and the Mystic Lake area in the southeast corner of Moreno Valley. The Lake Perris Dam is 128 feet high and has a crest length of 11,600 feet. The reservoir surface area is 2,340 acres with a storage capacity of 131,452 acre-ft (approx 42,834,000 gallons) and a drainage area of 10 square miles (Berkeley, 2002). See figure 15: Perris Dam on next page.

The California Department of Water Resources (DWR), with support from expert consultants, has identified potential seismic safety risks in a section of the foundation of Perris Dam, suggesting that major damage and uncontrolled water releases could occur in a major earthquake. There is no imminent threat to life or property, however, DWR is taking steps to ensure maximum public safety while further analysis, feasibility studies, design work, environmental review and repairs are completed.

In response, the lake level as been reduced to 27 feet below the crest of the dam, reducing reservoir storage by about 42 percent and the surface area by about 18 percent.

The lake will remain at the lowered level for several years while work on the feasibility studies, design, environmental review and repairs are performed. (Source: California Department of Water Resources/Perris Dam Fact Sheet).

Figure 15: Perris Dam

Figure 15: Perris Dam (Source: California Department of Water Resources)

THREAT ASSESSMENT 6 – TRANSPORTATION EMERGENCIES

Transportation Emergencies

Transportation systems in or near Moreno Valley include airways, roadways, and rail systems. All of these systems provide services on a national, regional, and local basis. A major accident is possible in any of these modes of transportation. Large accidents are investigated by The National Transportation Safety Board (NTSB), which is an independent Federal agency charged by Congress with investigating every civil aviation accident in the United States and significant accidents in the other modes of transportation -- railroad, highway, marine and pipeline -- and issuing safety recommendations aimed at preventing future accidents. The Safety Board determines the probable cause of:

- All U.S. civil aviation accidents and certain public-use aircraft accidents;
- Selected highway accidents;
- Railroad accidents involving passenger trains or any train accident that results in at least one fatality or major property damage;
- Major marine accidents and any marine accident involving a public and a nonpublic vessel;
- Pipeline accidents involving a fatality or substantial property damage;
- Releases of hazardous materials in all forms of transportation; and
- Selected transportation accidents that involve problems of a recurring nature.

Since its inception in 1967, the NTSB has investigated more than 132,000 aviation accidents and thousands of surface transportation accidents.

TRANSPORTATION - TRUCKING INCIDENT

Trucking Incident

The trucking industry has consistently increased in size over the last century. Today, there are more trucks on the road than 20 years ago. “In 2000, one out of every eight fatal car accidents involved a large truck. This can be attributed not only to the size and weight of these trucks but also to significant blind spots in the field of view of truck drivers (Trucking Accident Info Center, 2003).” According to the U.S. Department of Transportation National Highway Traffic Safety Administration (NHTSA), in On average in the country, large trucks made up 8.1 percent of all vehicles involved in fatal crashes. The NHTSA says that large trucks were much more likely to be involved in a fatal multiple-vehicle crash.

In 2016, there were 4,317 people killed in crashes involving large trucks. Fatalities in crashes involving large trucks increased by 5 percent, from 4,094 in 2015 to 4,317 in 2016.

Over a 10-year period, there was a 10-percent decrease in the total number of people killed in large truck crashes, from 4,822 fatalities in 2007 to 4,317 fatalities in 2016. Of the fatalities in 2016:

- 72 percent (3,127) were occupants of other vehicles,
- 17 percent (722) were occupants of large trucks, and
- 11 percent (468) were non-occupants (pedestrians, pedal cyclists, etc.).

From 2015 to 2016, there was a 4-percent increase in the number of occupants of other vehicles killed, and a 13-percent increase in the number of non-occupants killed. This is the highest number of other occupants killed since 3,151 died in 2008, and is the highest number of non-occupants killed in the last 10 years.[1]

The chart below shows 2016 DATA collected by NHTSA's National Center for Statistics and Analysis:

TRAFFIC SAFETY FACTS | LARGE TRUCKS | 2016 DATA

Table 1
People Killed or Injured in Crashes Involving Large Trucks, by Person Type and Crash Type, 2007–2016

	Truck Occupants by Crash Type						Other People						
	Single Vehicle		Multiple Vehicle		Total		Occupant of Other Vehicle		Nonoccupant		Total		
Year	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Total
Killed													
2007	502	10%	303	6%	805	17%	3,608	75%	409	8%	4,017	83%	4,822
2008	430	10%	252	6%	682	16%	3,151	74%	412	10%	3,563	84%	4,245
2009	333	10%	166	5%	499	15%	2,558	76%	323	10%	2,881	85%	3,380
2010	339	9%	191	5%	530	14%	2,797	76%	359	10%	3,156	86%	3,686
2011	408	11%	232	6%	640	17%	2,713	72%	428	11%	3,141	83%	3,781
2012	423	11%	274	7%	697	18%	2,857	72%	390	10%	3,247	82%	3,944
2013	431	11%	264	7%	695	17%	2,845	71%	441	11%	3,286	83%	3,981
2014	405	10%	251	6%	656	17%	2,859	73%	393	10%	3,252	83%	3,908
2015	395	10%	270	7%	665	16%	3,015	74%	414	10%	3,429	84%	4,094
2016	460	11%	262	6%	722	17%	3,127	72%	468	11%	3,595	83%	4,317
Injured													
2007	10,000	7%	13,000	12%	23,000	18%	75,000	79%	2,000	2%	78,000	82%	101,000
2008	10,000	8%	13,000	12%	23,000	20%	64,000	78%	3,000	3%	67,000	80%	90,000
2009	7,000	7%	9,000	12%	17,000	19%	56,000	79%	1,000	2%	57,000	81%	74,000
2010	9,000	6%	11,000	12%	20,000	19%	58,000	78%	2,000	3%	60,000	81%	80,000
2011	7,000	6%	15,000	13%	23,000	19%	64,000	79%	2,000	2%	65,000	81%	88,000
2012	9,000	6%	17,000	13%	25,000	19%	76,000	78%	3,000	3%	79,000	81%	104,000
2013	9,000	8%	15,000	16%	24,000	25%	69,000	72%	2,000	3%	71,000	75%	95,000
2014	10,000	9%	17,000	14%	27,000	23%	82,000	74%	2,000	3%	84,000	77%	111,000
2015	10,000	8%	19,000	15%	30,000	24%	84,000	73%	3,000	4%	86,000	76%	116,000
2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Note: Injury totals may not equal the sum of components due to independent rounding.
Sources: 2007–2015 Fatality Analysis Reporting System (FARS) Final File, 2016 FARS Annual Report File (ARF)
2007–2015 National Automotive Sampling System (NASS) General Estimates System (GES)
N/A – 2016 Crash Report Sampling System (CRSS) data not available.

[1] https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812497.pdf

Specific Situation

The City of Moreno Valley is located within western Riverside County and is served by two major freeways, the Highway 60 and Interstate 215. Highway 60 runs east and west through Moreno Valley and serves as a major corridor from the Arizona border to Los Angeles. Interstate 215 runs north and south and is a major transportation corridor from the Mexico border through Utah.

In January of 2003, a big rig truck plunged off the Highway 60 overpass and onto Perris Blvd, 20 feet below striking vehicles below. Miraculously, motorists below were mostly unhurt but the driver of the big rig died (Press Enterprise, 2003).

Big Rig Accident on Perris Blvd at Highway 60 Overpass (Source: MVTV-3)

TRANSPORTATION – TRAIN DERAILMENT

Train Derailment

A major train derailment can result in considerable loss of life and property. There is a potential of a hazardous materials incident or fire when a train derails.

Specific Situation

The City of Moreno Valley has two railroads operating in close proximity. The Union Pacific line is the main line from the Pacific Coast to Texas and the Midwest. It runs through San Timoteo Canyon near Moreno Valley just north of the City. In July 1998, a Union Pacific train derailment occurred with a spill of 4,000 gallons of hazardous fuel near Moreno Valley in San Timoteo Canyon. "Damage costs estimated at about $1.3 million, said Union pacific spokesman, Mike Furtney, who cited the high cost of repairing engines (Press Enterprise, 1998)." The Santa Fe is the second railroad that parallels our city along Interstate 215.

TRANSPORTATION – MAJOR AIRPLANE CRASH

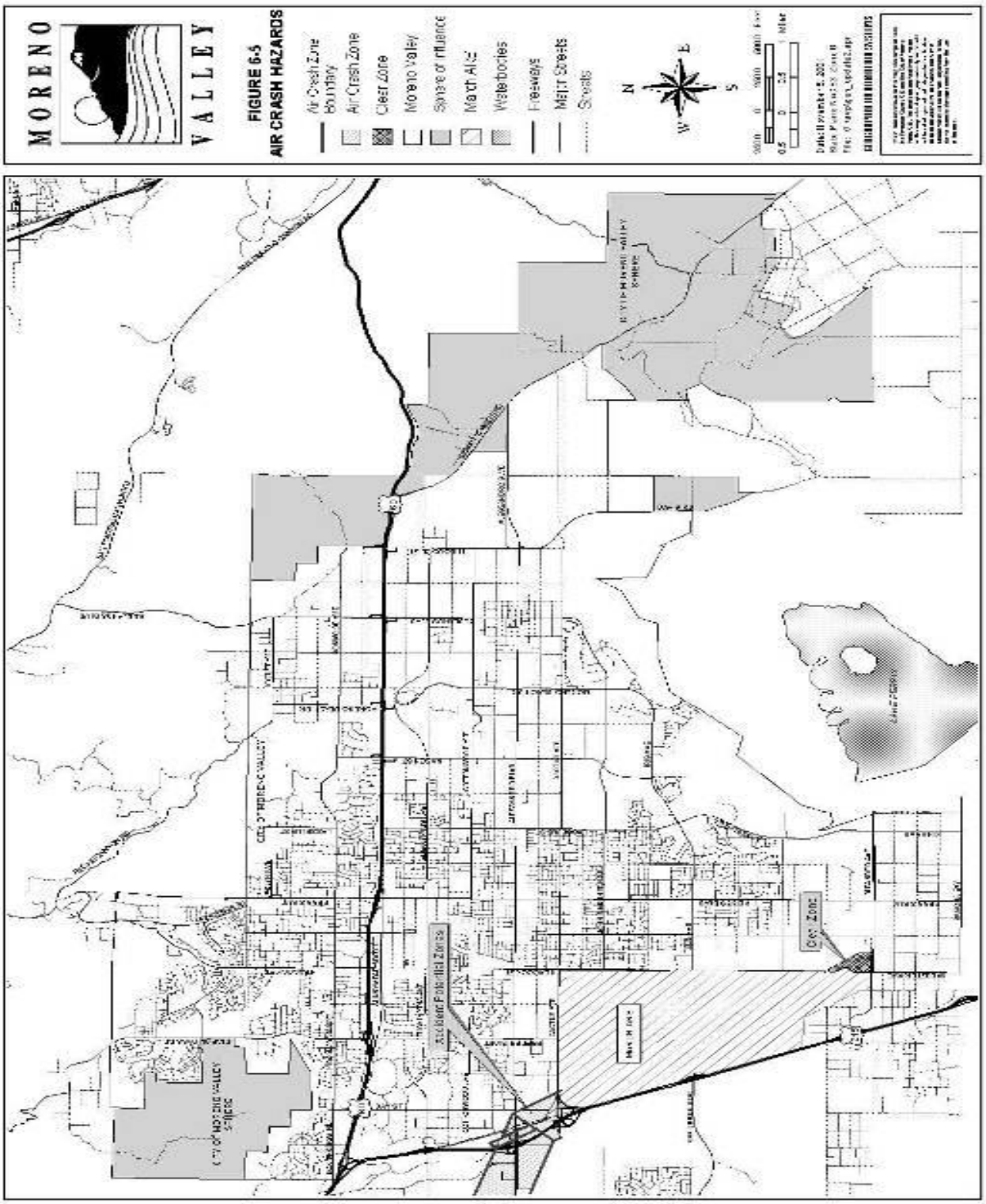
Major Airplane Crash

The concern for an airplane crash in the City of Moreno Valley is the potential for human casualties. A disabled aircraft striking the ground could result in explosions and fire. Our city would need to address the medical needs as well as the mental health needs of victims and their families.

Specific Information

The closest airfield to the City of Moreno Valley is operated by March Air Reserve Base and March Air Reserve Port Airport Authority, which is southwest of our city limits. The flight operations present a potential risk for air crashes. The risk is greatest immediately under the takeoff and landing zone located at either end of

the runway(s). Departing aircraft turn to the west shortly after takeoff. Air crash hazard areas (safety zones) are shown below.



THREAT ASSESSMENT 7 – CIVIL UNREST

Civil Unrest

History shows that civil unrest dates as far back as the Roman days with divisions between rich and poor, corrupt Roman officials stealing from poor land owners, and unemployment in the city. Nearby Los Angeles has a long history of civil unrest and in 1992, was heavily impacted by the Rodney King verdict. The impact of that verdict was felt all over the United States and caused civil unrest in other areas such as Las Vegas and San Francisco. There was massive destruction throughout the city that left more than 1200 businesses destroyed. In the last decade there has been a trend towards civil unrest at community sports events such as the 1992 championship game won by the Chicago Bulls which resulted in 1000 arrests, 95 injured police officers, and burned/looted buildings.

Los Angeles Riots - April 1992 (source: CNN)

Specific Information

The effects of civil unrest are based upon the scope of the disturbance. They could include illegal assemblies, transportation routes blocked, disruption of utilities, property damage, looting, injuries, and loss of life.

The City of Moreno Valley does not have a prior history of major civil unrest. Moreno Valley is, however, vulnerable to civil unrest. It could have a major impact on our transportation routes, our residential and commercial properties, as well as conducting normal city business.

THREAT ASSESSMENT 8 – POWER OUTAGES

Power Outages

Moreno Valley citizens are serviced by Southern California Edison and Moreno Valley Utilities.

Cal ISO

California Independent System Operator (Cal ISO) manages the flow of electricity along the long-distance, high-voltage power lines that make up the bulk of California's transmission system. The not-for-profit public-benefit corporation assumed the responsibility in March 1998, when California opened its energy markets to competition and the state's investor-owned utilities turned their private transmission power lines over to the Cal ISO to manage. The mission of Cal ISO is to safeguard the reliable delivery of electricity, facilitate markets and ensure equal access to a 12,500 circuit mile electron highway (Cal ISO, 2003). Below is a diagram of the current operational and regulatory interaction.

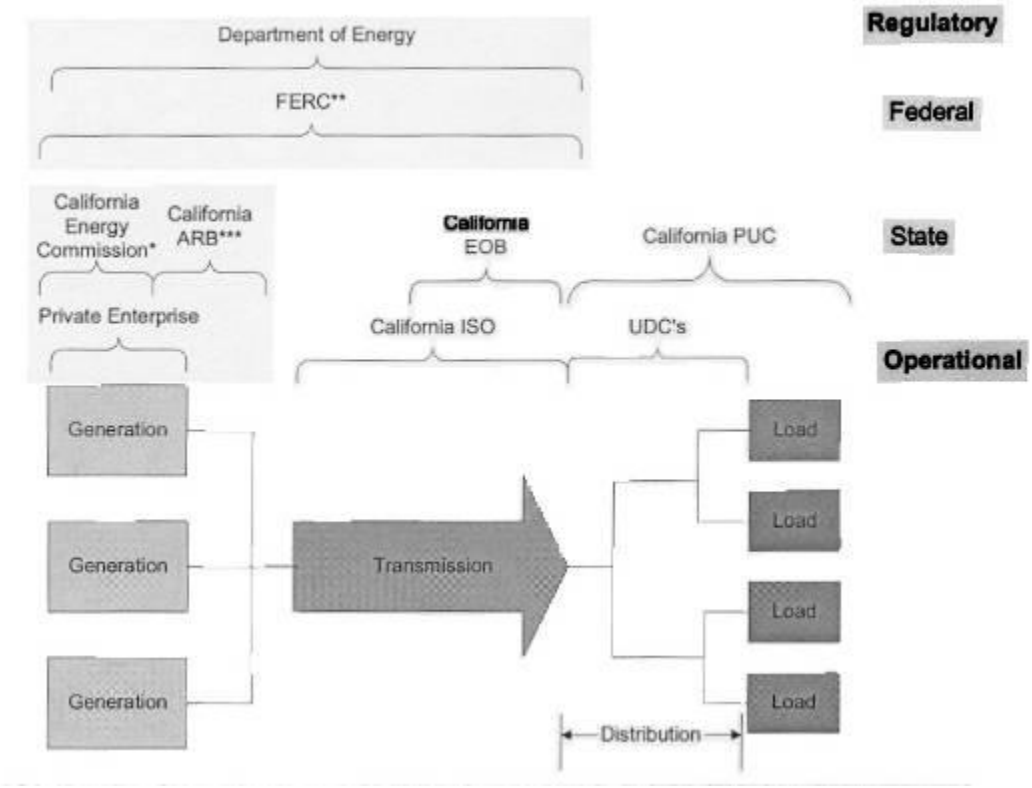


Figure 18: Cal ISO Operational Interaction (Source: Cal ISO)

Cal ISO Rolling Blackouts

When there is a problem such as a blackout, there are four factors, which can affect electricity—generation, transmission, distribution, and load. During normal conditions, there is enough generation to satisfy the load and enough transmission capacity to get the electricity from the generator to the load. In most cases, system deficiencies are caused by a combination of factors. That is, there may be insufficient generation (supply) combined with transmission congestion, which will cause more severe problems in some parts of the state than others will. This is the reason why northern California has been more affected by problems than southern California (Cal ISO, 2003).

The primary task of the Cal ISO is to maintain the integrity of the grid and keep the lights on. However, the situation is complex. The process of implementing firm load reduction (e.g. rolling blackouts) is a complex and dynamic, minute-to-minute decision making process. Cal ISO is in constant contact with all involved parties during this process. The flow chart below is a broad overview of the process.

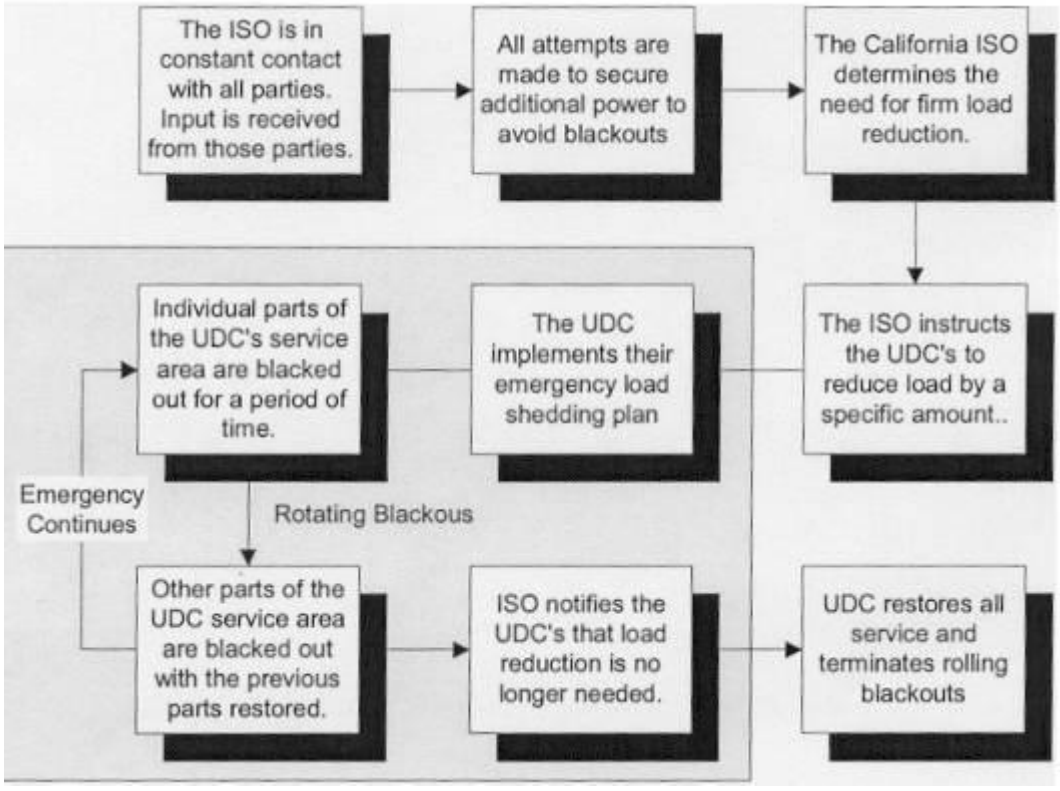


Figure 19: Cal ISO Rolling Blackout Flowchart (Source: Cal ISO)

Moreno Valley Utilities

Moreno Valley's new municipally owned utility - Moreno Valley Utilities - began servicing its first customers on February 6, 2004. These "first customers" are located in the Promontory Park subdivision built by Western Pacific Housing, located at Cactus Avenue and Moreno Beach Drive. Moreno Valley Utilities will service new commercial and residential developments, primarily on the east end of the City.

Specific Information

The Moreno Valley City Council, staff and expert consultants have reviewed, discussed and studied the prospect of operating an electric utility for more than two years. The City Council approved a 17-year contract with ENCO Utility Services Moreno Valley, LLC to provide electrical distribution services in Moreno Valley. ENCO will handle customer service, meter reading, billing, emergency response and other services related to the operation and management of the electrical utility.

The new utility will provide electrical service to Moreno Valley's "green fields" - new commercial and residential developments. Residents who are currently being served by Southern California Edison Company, will be unaffected by the rollout of Moreno Valley Utilities.

The City of Moreno Valley has been affected with power outages for various reasons such as high winds, storms, and damaged power poles. When a power outage occurs, every effort is made to contact affected residents and assure that those with special needs equipment (such as oxygen equipment) have a contingency plan.

Downed power pole causes power outage in Moreno Valley due to high winds January 2003 (source MVTV-3)

THREAT ASSESSMENT 9 – TERRORISM

Terrorism

Terrorism, as defined by the FBI is "the unlawful use of force against persons or property to intimidate or coerce a government, the civilian population or any segment thereof, in the furtherance of political or social objectives". The act of terrorism could involve biological agents, nuclear technology, incendiary devices, chemicals, or explosives.

Terrorism dates back as early as 1346 when plaque infested corpses were thrown into enemy areas. "After the American Civil War (1861 – 1865), defiant Southerners formed a terrorist organization called the Ku Klux Klan to intimidate others (Terrorismfiles.org 2003)."

From the destruction of the Los Angeles Times building in the 1910s to the truck bombs in Beirut in the 1980s and the Oklahoma City bombing in 1995, the murder of innocent citizens is ever more becoming a real threat (Nash & Evans, 1998).

On September 11, 2001, the World was dealt a devastating blow when terrorists attacked the World Trade Center, the Pentagon, and attempted to attack an unknown third target.

September 11, 2001 attack on the World Trade Center (Source: Anonymous)

Homeland Security Presidential Directive-3

Homeland Security Presidential Directive-3

The Homeland Security Presidential Directive-3 states that the Nation requires a Homeland Security Advisory System to provide a comprehensive and effective means to disseminate information regarding the risk of terrorist acts to Federal, State, and local authorities and to the American people. Such a system would provide warnings in the form of a set of graduated "Threat Conditions" that would increase as the risk of the threat increases. At each Threat Condition, Federal departments and agencies would implement a corresponding set of "Protective Measures" to further reduce vulnerability or increase response capability during a period of heightened alert.

This system is intended to create a common vocabulary, context, and structure for an ongoing national discussion about the nature of the threats that confront the homeland and the appropriate measures that should be taken in response. It seeks to inform and facilitate decisions appropriate to different levels of government and to private citizens at home and at work.

Homeland Security Advisory System

National Terrorism Advisory System (NTAS)

The Homeland Security Advisory System shall be binding on the executive branch and suggested, although voluntary, to other levels of government and the private sector. There are five Threat Conditions, each identified by a description and corresponding color. From lowest to highest, the levels and colors are:

Low = Green;
Guarded = Blue;
Elevated = Yellow;
High = Orange;
Severe = Red.

Figure 20: Homeland Security Advisory System

THREAT ASSESSMENT 10 – PUBLIC HEALTH EMERGENCY

Public Health Emergency

Since well before 430 BC, public health emergencies have made an impact on civilization. In the year 541 there was an outbreak of the bubonic plague which destroyed up to one quarter of the population of the eastern Mediterranean. The Black Death (bubonic plague) returned in the 1300's killing twenty million Europeans in six years. Cholera was another public health emergency to spread across the world, causing millions to die. In 1918 the Spanish Flu spread, killing 25 million in the course of six months. During wartime, the epidemic disease was typhus, sometimes called "camp fever", killing over 68,000. (Wikipedia, 2003).

In a Press Enterprise article written by Malcom Ritter on December 14, 2003, Dr. Greg Poland of the Mayo Clinic announced that a world-wide pandemic is coming, it's just a question of when. Dr. Poland said by hystorical pattern, its about time for another one. According to the World Health Organization, they predict the next pandemic is likely to send one million to 2.3 million people to the hospital and kill 280,000 to 650,000 (Ritter, 1998).

We know that during a public health emergency, state, local, and private stocks of medical supplies could be depleated quickly. A public health emergency or a large-scale natural disaster could require rapid access to large quantities of pharmaceuticals and medical supplies. Such quantities may not be readily available unless special stockpiles are created. Therefore, a national stockpile has been created as a resource for all.

In 1999 Congress charged the Department of Health and Human Services (HHS) and the Centers for Disease Control and Prevention (CDC) with the establishment of the National Pharmaceutical Stockpile (NPS). The mission was to provide a re-supply of large quantities of essential medical material to states and communities during an emergency within twelve hours of the federal decision to deploy.

The Homeland Security Act of 2002 tasked the Department of Homeland Security (DHS) with defining the goals and performance requirements of the Program as well as managing the actual deployment of assets. Effective on March 1, 2003, the NPS became the Strategic National Stockpile (SNS) managed jointly by DHS and HHS. The SNS Program works with governmental and non-governmental partners to upgrade the nation's public health capacity to respond to a national emergency. Critical to the success of this initiative is ensuring capacity is developed at federal, state, and local levels to receive, stage, and dispense SNS assets. (CDC, 2003).

National Stockpile

Strategic National Stockpile

Source: CDC

Specific Situation

Over the years, the County of Riverside has issued several public health alerts regarding Severe Acute Respiratory Syndrome (SARS), West Nile Virus, Multistate Monkeypox Outbreak, Mosquito Borne Encephalitis, and Influenza. Of those health alerts issued, in 2003, Riverside County was the first confirmed case of the West Nile Virus. There were many suspected cases of West Nile Virus; however, only two were confirmed in the State of California. The first confirmed case was in Riverside County. The second confirmed case was located in Imperial County. In 2005, there were 928 human West Nile Virus infections from 40 counties in California, including Riverside County.

The City of Moreno Valley and Riverside County does not have a history of large-scale public health emergencies. However, the possibility of a large-scale public health emergency exists and in order to prepare for such emergency, our City works very closely with Riverside County Public Health and our two Moreno Valley Hospitals, Riverside County Regional Medical Center and Kaiser Permanente Hospital. Together, we plan and practice for large-scale health emergencies on a regular basis. Each local hospital has a plan in place to respond to a large-scale public health emergency and have utilized available grant funding to increase their medical supplies. This, together with the National Stockpile capabilities will help in a large-scale public health emergency.

THREAT ASSESSMENT 11 – NUCLEAR

Nuclear incidents can occur wherever radioactive materials are used, stored, or transported. In addition to nuclear power plants, hospitals, universities, research laboratories, industries, major highways, railroads, or shipping yards could be the site of a nuclear transportation incident. Nuclear incidents might involve a nuclear power generating plant, a nuclear weapon, a "dirty bomb", or nuclear waste.

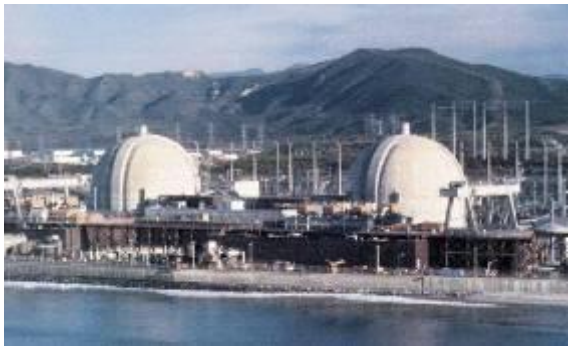
NUCLEAR INCIDENT – NUCLEAR POWER PLANT

Nuclear Power Plant

In California, there are two nuclear power plants: Diablo Canyon, which is located in San Luis Obispo County and San Onofre, which is located in northwestern corner of San Diego County.

For purposes of this plan, San Onofre will be discussed. San Onofre Nuclear Generating Station is a three-unit site, 10 miles south of San Clemente. Unit 1, which operated for 25 years, was shutdown in 1992. Units 2 and 3 are pressured water reactor designs and are capable of producing enough power to serve the needs of 2.75 million households (SCE.com).

SCE announced in June 2013 that it would retire San Onofre Units 2 and 3, and had begun the process to decommission the facility. SCE established core principles of safety, stewardship and engagement to guide decommissioning.



San Onofre Nuclear Generating System (SONGS), San Diego County
(Source: SCE.com)

Health Hazards

Because of the potential health hazard associated with this type of fuel, power plants are built with multiple physical barriers to prevent the escape of radioactive material. Still, the possibility exists for an accidental release of radiation into the atmosphere. People could breathe contaminated air and radioactive particles could be deposited on the ground, in water, on property and on agricultural crops. Food and dairy animals could graze on contaminated pasture, passing on the contamination to consumers through milk and meat.

The Nuclear Power Plant Emergency Response Plan establishes the State of California's emergency response organization and defines the roles of Office of Emergency Services as the coordinating agency for utility, local, state, federal and volunteer agency response to a nuclear power plant incident. A series of zones has been established around each plant to detail required activities in the event of an accident.

Emergency Planning Zone

The basic Emergency Planning Zone is the inner zone and is approximately a 10-mile radius around the plant and is defined as the plume exposure pathway. Plans are in place to protect people, property and the environment in that zone from the effects of radioactive contamination. Nearly three million Americans live within 10 miles of an operating nuclear power plant (FEMA, 2004).

Public Education Zone

The Public Education Zone is the middle zone and is approximately a 35-mile radius around the plant. In this zone, educational materials are distributed to inform the public about nuclear power plant operations, what to expect in the event of an accident, and what plans are in place for public protection.

Ingestion Pathway Zone

The Ingestion Pathway Zone is the outer zone and is approximately a 50-mile radius around the plant and plans are in place to mitigate the effects on agriculture, and food processing and distribution. People can be affected if they eat or drink contaminated food. Mitigation calls for removal of lactating dairy cows from contaminated pastures and substituting uncontaminated feed. For milk, a mitigation effort is to withhold contaminated milk from the market. For fruits and vegetables, washing, brushing, scrubbing, or peeling to remove surface contamination. For grains, mitigation includes milling and polishing. For drinking water, avoid use of surface water for human and animal consumption. Use bottled water and canned juices as water sources. For other food products, process to remove surface contamination. For meat and meat products, action is on a case-by-case basis. Mitigation efforts for fish and shellfish are to suspend fishing operations of commercial fish firms and charter fishing boats until resumption is recommended. The Department of Agriculture will isolate food containing radioactive material to prevent its introduction into commerce.

The City of Moreno Valley is located within the 50-mile Ingestion Pathway Zone (outer zone - see map below) for the San Onofre Nuclear Generating System (SONGS).

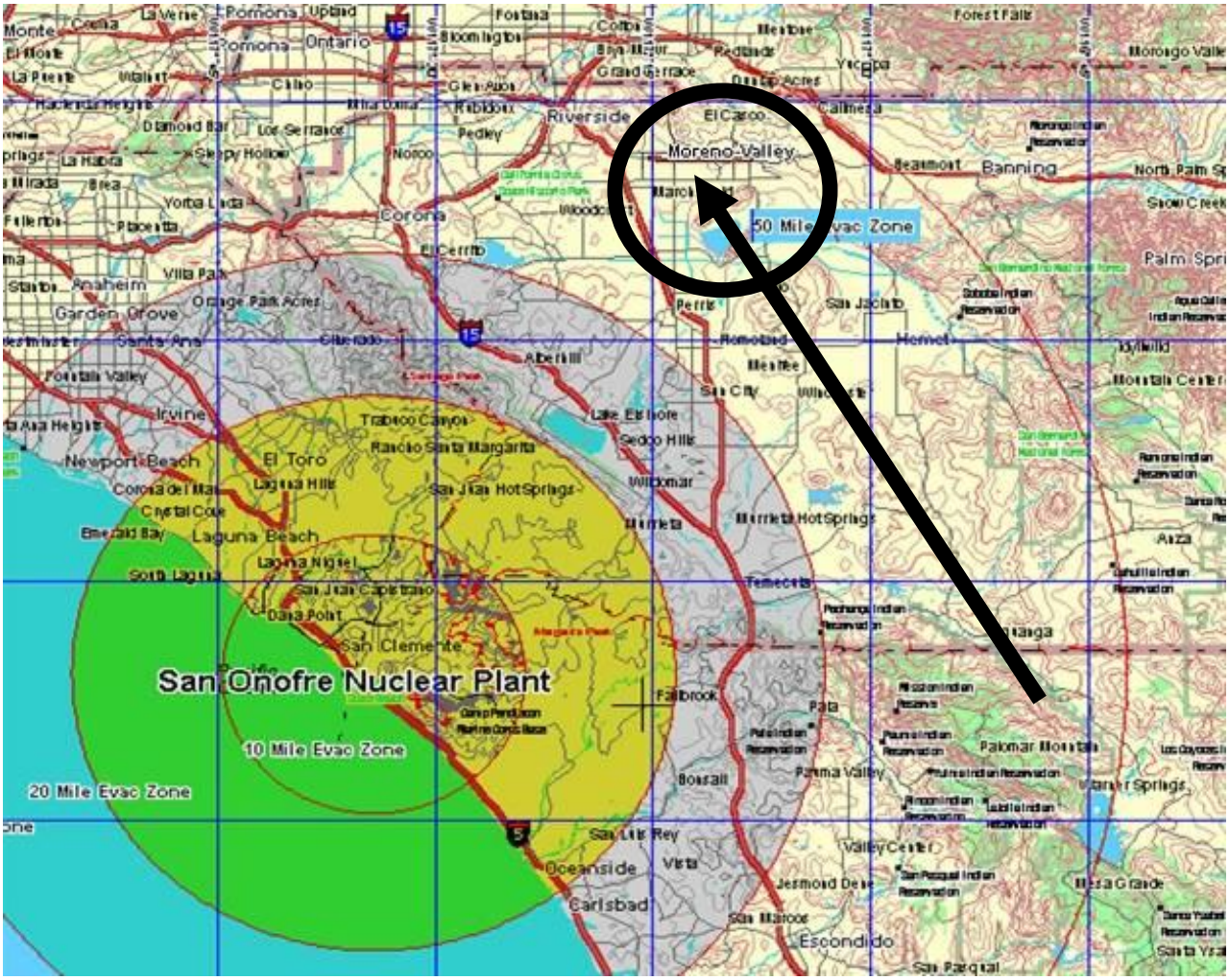


Figure 22: San Onofre Nuclear Zone Map (source SONGS)

Specific Situation

Following an incident at San Onofre Nuclear Generating System (SONGS), the public will be notified of precautions to take with food and water. Home grown or commercial fruits and vegetables should be washed, scrubbed and peeled to avoid contamination. For drinking water, bottled water or juices should be consumed. Avoid drinking water from the surface of lakes, streams, and water wells.

As of May 2004, there are no known commercial dairy farms located in Moreno Valley. There is one commercial chicken ranch within our boundaries. In order to avoid contamination, livestock owners will be notified to take precautions. Lactating cows should be removed from pastures and fed substituted, uncontaminated feed.

Nuclear Weapon

NUCLEAR INCIDENT – NUCLEAR WEAPON

The danger of a nuclear attack on the United States has been significantly reduced with the end of the Cold War and the collapse of the Soviet Union.

A nuclear warhead for US Air Force Peacekeeper Intercontinental ballistic missile.
(Source: Whitehouse.gov)

The concern has now shifted to other parts of the world, such as India, Pakistan, Kashmir, Iran, Peoples Republic of China and North Korea. As recent as January 10, 2003, North Korea withdrew from the Nuclear Non-Proliferation Treaty. This move has caused great concern. In late April 2003, North Korea told US officials that it possessed nuclear weapons and signaled its intent to reprocess the 1994-canned spent fuel for more nuclear weapons. On June 9, 2003, North Korea openly threatened to build a nuclear deterrent force.

An explosion from a nuclear weapon can cause deadly affects such as blinding light, intense heat (thermal radiation), initial nuclear radiation, blast, and firestorms with gale force winds.

15-kiloton nuclear blast took place in Nevada, 1953
(Source: US Dept of Energy)

Thermal Radiation

Nuclear weapons emit thermal radiation in large amounts and can cause burns and eye injuries. On a clear day, these types of injuries can occur well beyond the blast ranges. The ultraviolet light from the thermal radiation is so powerful; it can start fires that spread rapidly in the debris left by a blast, such as what happened in Hiroshima where a tremendous firestorm developed within 20 minutes after detonation.

Electromagnetic Pulse

When the blast occurs, an electromagnetic pulse moves throughout the air. The pulse is so powerful that most long metal objects act as antennas, generating high voltages. These high voltages could destroy unshielded electronics and many wires. The ionized air also disrupts radio traffic. You can shield ordinary radios and car ignition parts by wrapping them completely in aluminum foil to protect them from damage; however, the radios cannot operate when shielded, because broadcast waves cannot reach them.

Radiation

Radiation from a nuclear blast consists of 15% as nuclear radiation. About 5% of that is in the form of neutron and gamma radiation. About 10% of that is residual nuclear radiation. Residual nuclear radiation is the hazard in fallout. Fallout may occur miles from the point of detonation. With larger weapons, blast and thermal effects are so much greater in importance that radiation effects can be ignored.

Methods of Delivery

Strategic nuclear weapons are large weapons that could be used to destroy large targets, such as cities. Tactical nuclear weapons are smaller weapons used to destroy specific targets such as military, communications and infrastructure. Basic methods of delivery are bombers, ballistic missiles, cruise missiles, artillery shells and hand-held devices.

Specific

The chances of an attack from a nuclear weapon have significantly decreased due to the end of the cold war. However, one cannot discount the shifting concern from Russia to other countries such as Korea, who backed out of the proliferation treaty and admitted that they are producing nuclear weapons again. The City of Moreno Valley does not have sufficient fallout spaces for its residents. Therefore, residents will most likely be directed to shelter-in-place,

Situation

and if necessary evacuate and relocate to a safe area. The State of California no longer maintains a fallout shelter-identification program.

NUCLEAR INCIDENT – DIRTY BOMB

Dirty Bomb

According to the Environmental Protection Agency (EPA), the term "dirty bomb" commonly refers to a device that spreads radioactive material by exploding a conventional (non-nuclear) explosive, such as dynamite. Dirty bombs are sometimes called radiological dispersal devices. Dirty bombs are not traditional nuclear weapons and cannot cause mass devastation like a nuclear weapon or device. The use of a dirty bomb is considered far more likely than a conventional nuclear weapon. These types of devices are appealing because they require little technical knowledge to build and deploy compared to conventional nuclear weapons.

Dirty bombs are usually constructed using radioactive materials from medicine, agriculture, industry and research. These types of materials are readily available and easy to obtain compared to weapons grade uranium or plutonium. According to the U.S. Nuclear Regulatory Commission, there are over 21,000 organizations licensed to use such materials.

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In a Washington Post article written by Joby Warrick on May 4, 2002 called, "NRC (U.S. Nuclear Regulatory Commission) warns of missing radioactive materials." The article goes on to say that U.S. businesses and medical facilities have lost track of nearly 1500 pieces of equipment with radioactive parts since 1996. NRC acknowledged receiving reports of 1495 lost or stolen radioactive sources between October 1996 and September 2001. Robert Alvarez, a DOE (Department of Energy) senior adviser during the Clinton adminstration, says that tens of thousands of the agency's radioactive sources could not be fully accounted for, according to the article. The relatively easy access to radioactive material and bomb making supplies is worrysome.

Specific Situation

The chances of a dirty bomb being dispensed in the City of Moreno Valley is very small. However, Moreno Valley continues to train and prepare its employees and emergency responders to recognize and respond to these types of incidents.

NUCLEAR INCIDENT – NUCLEAR WASTE

Nuclear Waste

According to the U.S. Department of Energy, nuclear fuel is only good for about three or four years in a reactor. Therefore, the nuclear fuel is removed from the reactor and is now considered spent fuel. All nuclear reactors produce spent fuel. Currently, there are reactors at commercial power plants, at government research facilities, and on about 40 percent of the U.S. Navy's submarines and ships.

With the end of the Cold War, the United States has been working to close and clean up obsolete weapons plants and dispose of the nuclear weapons

materials. This has created a need to dispose of highly radioactive material associated with weapons production. This material is called high-level radioactive waste (U.S. Dept of Energy, 2004).

Managing Nuclear Waste

Since the mid-1940's, spent nuclear fuel and high-level radioactive waste have accumulated throughout the country. "Spent nuclear fuel and high-level radioactive waste are materials from nuclear power plants and government defense programs. These materials contain highly radioactive elements. Some of these elements will remain radioactive for a few years, while others will be radioactive for millions of years (U.S. Dept of Energy, 2004)." Scientists worldwide agree that the safest way to manage these materials is to dispose of them deep underground in what is called a geologic repository. When spent fuel is first removed from a reactor, it is placed in a special pool of water contained in a steel-lined concrete basin. The water cools the spent fuel and protects workers and the public from radiation. After it has cooled considerably, some commercial power plants and government facilities move the fuel to dry-storage containers made of steel and/or concrete to shield radiation.

Nuclear waste must be properly managed to minimize risk to the environment and to the health and safety of future generations. Spent nuclear fuel and high-level radioactive waste have accumulated throughout the country. Currently, they are stored in temporary facilities at some 131 sites in 39 states. In the United States today, over 161 million people reside within 75 miles of temporarily stored nuclear waste (U.S. Dept of Energy, 2004).

Yucca Mountain

Low-level radioactive waste is generated by facilities such as hospitals, labs, dental facilities, manufacturing plants, medical testing facilities, colleges, and universities. Low-level waste is shipped in containers designed to meet stringent Nuclear Regulatory Commission and Department of Transportation standards. Department of Transportation requires that these types of waste be transported using the safest routes and in Type A containers, which are able to withstand ordinary transportation conditions.

To properly dispose of nuclear waste, Federal officials have selected a permanent storage site at Yucca Mountain in southern Nevada, which should begin accepting shipments in 2010 or 2011. The Yucca Mountain facility estimates annual shipments of nuclear waste in the U.S. to be about 175. Transportation of waste will mostly be by rail, with some being transported by heavy-haul trucking. Department of Energy plans to provide 24 –hour armed escorts for all nuclear waste transportation to the facility. Federal officials will also track these shipments around the clock through a satellite-based tracking system and will require the 24-hour escort to report into a central transportation command facility every two hours (Yucca Mountain Environmental Impact Statement, 2004).

Specific Situation

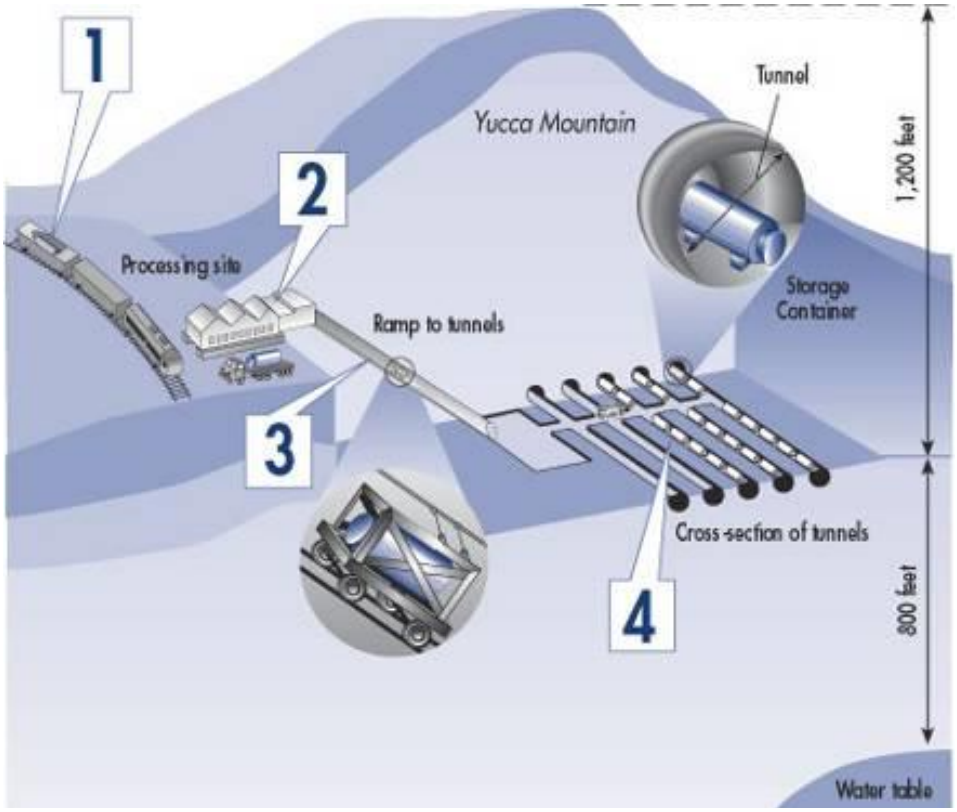

Figure 23: Yucca Mountain Conceptual Design (source: Nuclear Regulatory Commission)

The City of Moreno Valley has several facilities, such as hospitals, labs, and dental offices that have on-site radiological materials. These facilities will require shipment of radiological materials and will generate radioactive waste. At this time, we have no low-level radiological waste storage facilities. The transportation of spent fuel and highly radioactive nuclear waste to the permanent site at Yucca Mountain might have an effect on the City of Moreno Valley in that Union Pacific, which runs through San Timoteo canyon and Sante Fe that runs adjacent to Highway 215, might be utilized to transport nuclear material to the Yucca Mountain site. The exact routes have not been finalized as of this writing. All carriers of nuclear waste receive special training. In the event of a radiological emergency involving the transportation of nuclear waste, nuclear utilities have signed a nationwide agreement providing that the closest facility offer equipment and technical assistance regardless of who shipped the radioactive material. Emergency responders within the City of Moreno Valley are trained on a regular basis to respond to these types of emergencies.

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Local Authorities

Moreno Valley Ordinance

- No. 325 Emergency Management Organization and Functions

Moreno Valley Resolution

- 91-96 California Master Mutual Aid Agreement
- 95-33 Participation in Operational Area Organization
- 95-34 Adoption of Standardized Emergency Management System
- 2005-11 Riverside County Hazard Mitigation Plan
- 2006-69 Adoption of National Incident Management System
- 2007-96 Continuity of Government

State Authorities

California Government Code

- Section 8607 (a), Chapter 1 of Division 2 of Title 19 – SEMS Regulations
- Section 8630 Ch. 395, Sec. 1. (AB 2898)
- Chapter 7 of Division 1 of Title 2 - Emergency Services Act
- Chapter 7.5 of Division 1 of Title 2 - Natural Disaster Assistance Act

California Civil Code

- Chapter 9, Section 1799.102 - Health and Safety Code

California Health and Safety Code

- Division 20, Chapter 6.5, Sections 25115 and 25117, Chapter 6, 95, Sections 25500 et seq., Chapter 7, Sections 25600 through 25610, dealing with hazardous materials

California Disaster and Civil Defense Master Mutual Aid Agreement

Federal Authorities

Federal Civil Defense Act of 1950 (Public Law 920), as amended

Federal Communications Commission (FCC) Part 90, Rules and Regulations

NRT-1, Hazardous Materials Emergency Planning Guide and NRT-1A Plan Review Guide (Environmental Protection Agency's National Response Team)

Public Law 93-288 (as amended) Robert T. Stafford Disaster Relief and Emergency Assistance Act

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- California Emergency Resources Management Plan
- California Emergency Plan
- California Hazardous Materials Incident Contingency Plan
- California Law Enforcement Mutual Aid Plan
- California Fire and Rescue Master Mutual Aid Plan
- California Emergency Services Act
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APPENDIXES

APPENDIX A - GLOSSARY OF TERMS

Action Plan	A plan prepared for response and recovery to large emergencies that contains strategic objectives and goals to enable the jurisdiction(s) to work towards getting back to normal operations. Typically, an Action Plan is developed for each operational period (12 hours).
American Red Cross	A federally chartered volunteer agency that provides relief to individuals and families. Responsibilities include providing lodging, food, clothing, and registration and inquiry service.
Care and Shelter	A function that provides food, clothing, and housing needs for people on a mass care basis.
Concept of Operations	Methods that agencies use to organize their response to disasters.
Contamination	Deposits of radioactive or other toxic materials that occur on the surfaces of structures, areas, objects, people, flora, and fauna.
Contingency Plan	A supporting plan which deals with one specific type of emergency, its probable effect on the jurisdiction, and the actions necessary to offset these efforts.
Disaster Service Worker	Any persons registered with a disaster council to provide disaster services without pay. Disaster service workers include public employees, registered volunteers, and persons pressed into service during an emergency by persons authorized to command such services.
Egress	The act of coming or going out from or of leaving a place.
Emergency Operations Center	A centralized location from which emergency operations can be directed and coordinated.
Federal Assistance	Aid to disaster victims or state or local governments by federal agencies under the provisions of the Federal Disaster Relief Act and other statutory authorities of federal agencies.
Hazardous Material	A substance or combination of substances which, because of quantity, concentrations, physical, chemical, radiological, explosive, or infectious characteristics, poses a substantial present or potential danger to humans or the environment. Generally such materials are classified as explosives and blasting agents, flammable and nonflammable gases, combustible liquids, flammable liquids and solids, oxidizers, poisons, disease-causing agents, radioactive materials, corrosive materials, and other materials including hazardous wastes.
Hazardous	Any release of material is capable of posing a risk to health, safety, and

Materials Incident	property. Areas at risk include facilities that produce, process, transport, or store hazardous material, as well as sites that treat, store, and dispose of hazardous material.
Incident Command System (ICS)	The nationally used standardized on-scene emergency management concept specifically designed to allow its user(s) to adopt an integrated organizational structure equal to the complexity and demands of single or multiple incidents without being hindered by jurisdictional boundaries.
Joint Information Center	A Joint Information Center is a center that is activated when multiple agencies need to collaborate to provide timely, useful, and accurate information to the public.
Local Emergency	The duly proclaimed existence of conditions of disaster or of extreme peril to the safety of person and property within the territorial limits of a county, city and county, or city which are, or likely to be, beyond the control of the services, personnel, equipment, and facilities of that jurisdiction.
Mitigation	Pre-event planning and other actions which lessen the effects of potential disasters.
Mutual Aid Region	A subdivision of the State of California emergency services organization established to coordinate mutual aid and other emergency operations.
Operational Area	An intermediate level of the State of California emergency services organization consisting of a county and all its political subdivisions.
Political Subdivision	For California: Any city, city and county, county, district, or other local government agency or public agency authorized by law.
Public Information Officer	An official responsible for releasing information to the public through news media.
Standard Operating Procedures	A set of instructions covering those features of operations which lend themselves to a definite or standardized procedure. Standard operating procedures support an annex by indicating in detail how a particular task will be carried out.
Unified Command	A command structure which provides for all agencies or individuals who have jurisdictional responsibility (geographical or functional) to jointly manage an incident through a common set of objectives.

APPENDIX B - LIST OF ACRONYMS

ACES/RACES	Amateur Civil Emergency Services/Radio Amateur Emergency Services
AED	Automated External Defibrillator
Cal OES	California Office of Emergency Services
Cal ISO	California Independent System Operations
CALFIRE	California Fire
CALVET	California Veterans Affairs
CALTRANS	California Transportation
CBO	Community-Based Organization
CCC	California Citizen Corp
CCR	California Code of Regulations
CDC	Center for Disease Control
CERT	Community Emergency Response Team
CHP	California Highway Patrol
CISD	Critical Incident Stress Debriefing
CPR	Cardiopulmonary Resuscitation
DHS	Department of Homeland Security
DOC	Department Operating Center
DOE	Department of Energy
DOJ	Department of Justice
DSW	Disaster Service Worker
DWR	Department of Water Resources
EAS	Emergency Alert System
EMAC	Emergency Management Assistance Compact
EMMA	Emergency Managers Mutual Aid
EOC	Emergency Operations Center
EOP	Emergency Operations Plan
EPA	Environmental Protection Agency
ERF	Emergency Response Force
FBI	Federal Bureau of Investigation
FCC	Federal Communications Commission
FEMA	Federal Emergency Management Agency
HHS	Department of Human Health Services
HMGP	Hazard Mitigation Grant Program
HMB	Hazardous Materials Branch
HT	Handy Talkie
IA	Individual Assistance
IC	Incident Commander
ICP	Incident Command Post

ICS	Incident Command System
JIC	Joint Information Center
JIS	Joint Information System
MACS	Multi-Agency Coordination System
MHz	Megahertz
NDAA	Natural Disaster Assistance Act
NHTSA	National Highway Traffic Safety Administration
NIMS	National Incident Management System
NRC	U.S. Nuclear Regulatory Commission
NTSB	National Transportation Safety Board
OA	Operational Area
OASIS	Operational Area Satellite Information System
PA	Public Assistance
PDA	Preliminary Damage Assessment
PIO	Public Information Officer
REOC	Regional Emergency Operations Center
RIMS	Response Information Management System
SEMS	Standardized Emergency Management System
SNS	Strategic National Stockpile
SONGS	San Onofre Nuclear Generating Station
VOAD	Voluntary Organizations Active in Disaster