

9.11 APPENDIX K – Hazards Specific to the OA

The following list identifies specific hazards impacting the OA. Individual agencies/jurisdictions should have SOPs and annexes identifying its response actions to each specific hazard. The OA takes an “all-Hazards” approach responding to hazards. For additional hazard specific information, please refer to the OA All Hazards Mitigation Plan. As a rule there are general commonalities in our response activities for all hazards. These include but are not limited to:

- Alerts, warnings, and notifications
- Public Information
- Safety/Damage assessments
- Mass Care and Shelter
- Prioritization of incidents
- Identification and allocation of resources
- Mass casualty management
- Search and rescue
- Evacuation

Response activities for specific hazards can be located in individual agencies/jurisdictions SOPs and response plans.

Earthquake

Situation

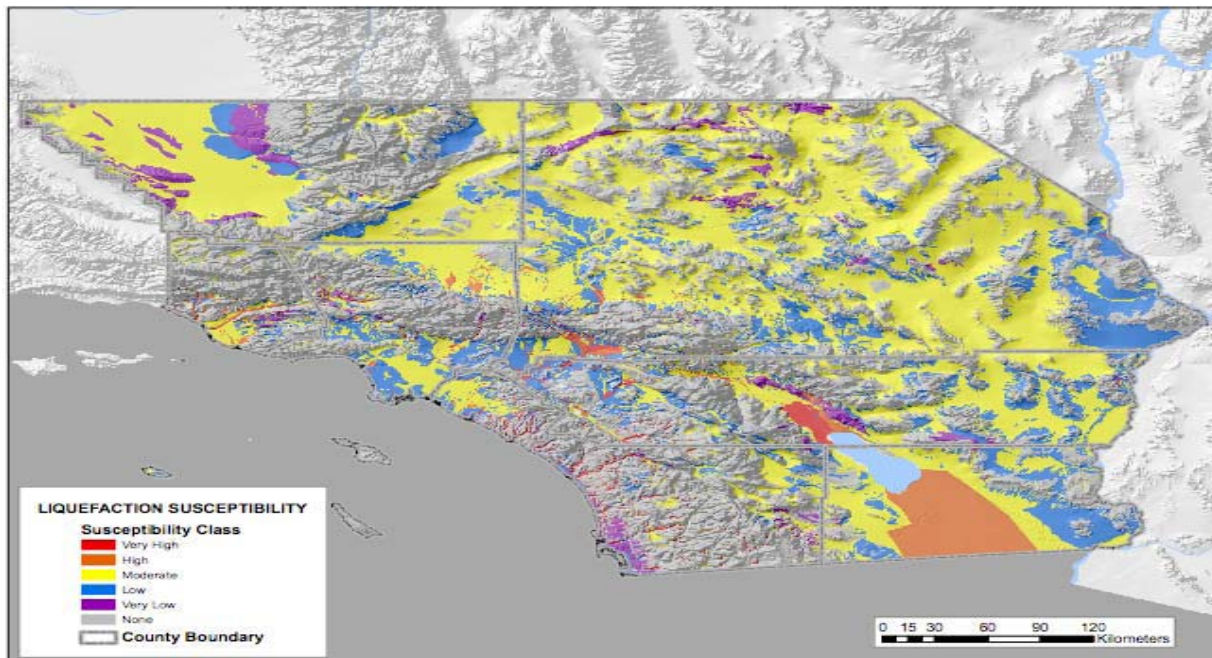
An earthquake may cause significant social disruption and damage to buildings and infrastructure due to severe ground shaking. A large earthquake, catastrophic in its effect upon the population, could exceed the response capabilities of the individual cities and the OA. Response and disaster relief support would be required from other local governmental and private organizations, and from the State and Federal governments.

The extent of damage from an earthquake is determined by the magnitude of the earthquake, distance from the epicenter, and characteristics of surface geology. This hazard is the primary cause of the collapse of buildings and other structures.

The OA is prone to earthquakes from seismic faults, specifically the San Andreas Fault, and dozens of other faults throughout the OA (For a specific listing of earthquake faults maps please refer to the All-Hazards Mitigation Plan).



Appendix K: Figure 9-2: Earthquake Fault Map (Slip along the San Andreas Fault, as modeled is shown by the height of the red “fence” along the fault.)



Appendix K, Figure 9-3: Liquefaction Map

Wildland Fire

Situation

A wildfire may cause significant social disruption and damage to buildings and infrastructure. The combination of population density, weather and encroaching residential and commercial development in the OA presents a virtually year-round threat of conflagration.

Vast portions of the Malibu area and the Santa Monica and San Gabriel Mountains are classic examples of the “chaparral-urban interface,” where steadily increasing development meets wildland areas in an area prone to fire danger.

Terrorism

Situation

Terrorism remains a constant threat within the United States. A variety of political, social, religious, cultural and economic factors underlie terrorist activities. Terrorists occasionally target civilian targets to spread their message or communicate dissatisfaction with the status quo. The OA is home to many business and government agencies, transportation infrastructure, and cultural facilities which are vulnerable to terrorist attack. The media interest generated by terrorist attacks makes this a high visibility threat.

The potential for incendiary, chemical, biological, radiological, nuclear or explosive (ICBRNE) is a plausible scenario necessitating detailed contingency planning and preparation of emergency responders to protect the civilian populace in major urban centers such as the OA.

The Federal Bureau of Investigation (FBI) closely coordinates this activity with local government. These efforts are the primary responsibility of agencies/jurisdictions within the OA and require close coordination.

Utility Loss

Situation

Utility (electrical) disruptions create a great potential for disruption of equipment/systems dependent on reliable sources of electrical power including: computer systems, rail and automotive traffic control systems, building elevators, health maintenance devices, and others. Normal emergency response may be impacted by power outages. There is a potential for a large number of power outage incidents to occur simultaneously. 911 systems, local law, fire, and emergency medical dispatch systems may become congested due to multiple, simultaneous power outage-related events.

The CEOC will activate if a wide scale power outage occurs.

Flooding

Situation

Floods are generally classed as either slow-rise or flash floods. Slow-rise floods in the OA may be preceded by a warning period of hours or days. Evacuation and sandbagging for slow-rise floods have often effectively lessened flood-related damage. Conversely, flash floods are most difficult to prepare for due to extremely limited, if any, advance warning or preparation time.

Areas of the OA subject to slow-rise flooding are not associated with overflowing rivers, aqueducts, canals or lakes. Slow-rise flooding is generally the result of one or a combination of the following factors: extremely heavy rainfall, saturated soil, areas recently burned in wild fires with inadequate ground cover growth, heavy coastal tide and wave action or heavy rainfall with runoff from melting mountain snow.

Downtown Los Angeles averages fifteen inches of rain a year, some peaks in the San Gabriel mountains may receive more than forty inches of precipitation annually. Inland and coastal areas are subject to slow-rise flooding. Desert and mountainous areas are subject to flash flooding.

Dam Failure

Situation

Dam failures can result from a number of natural or man-made causes. A dam failure may cause loss of life, damage to property and other ensuing hazards as well as the displacement of persons residing in the inundation path. Evacuation of the inundation areas may be required to save lives.

There are several reservoirs in the OA which have a capacity greater than 50,000 acre feet. County DPW maintains an inventory of the dams impacting OA or contract cities.

Dam Inundation Maps are at the CEOC/OAEOC. The County Dam Failure Plan is currently being developed.

Drought

Situation

A severe and long-lasting drought could affect the entire population of the OA either directly or indirectly, through damage, economic impact and water shortages.

California's extensive system of water supply infrastructure -- its reservoirs, groundwater basins, and inter-regional conveyance facilities -- mitigates the effect of short-term dry periods for most water users. To support water needs during drought periods local government agencies may implement water reduction programs limiting water use and consumption.

Biological/Health

Situation

Agencies/jurisdictions work collaboratively to conduct rapid, coordinated epidemiologic investigations or health needs assessments while providing technical assistance to response partners in the mitigation of public health emergencies including Chemical, Biological, Radiological, Nuclear, and Explosive (CBRNE) events, natural and manmade disasters, and other large-scale infectious disease outbreaks.

The County of Los Angeles Fire Department is designated as the Administering Agency for hazardous materials response for the County (County of Los Angeles Code, Title 12 Environmental Protection, Chapter 12.64, Section 12.64.020). Title 12 complies with, and relies on, the County's hazardous materials response plan as required by NRT1-A. The County has a Hazardous Materials Response Plan by reference.

Water and Waste Water

Situation

Water

Our groundwater basins are over-drafted and our existing surface storage cannot meet water demands. Additional external water sources are relied upon to supplement the OA water needs. Water shortages may cause significant social disruption and hamper the ability to provide critical response capabilities. At the same time, growers, manufactures and businesses and the population are demanding a greater volume of water. Water systems throughout the OA are aging infrastructures.

Wastewater

Nature has the ability to cope with small amounts of water waste and pollution. However, it can be overwhelmed if there is damage or malfunction to the wastewater systems. If waste water is not properly treated, human health and the environment can be negatively impacted. In addition, spills and overflows can happen when wastewater systems have not been upgraded to facilitate new growth, and sewer pipes have not been replaced in time to avert a main break.

Economic Disruption

Situation

The OA is susceptible to a wide range of natural and human caused risks that could negatively impact the local community. This may affect agencies/jurisdictions ability to provide local services to residents. The OA identifies that economic disruption plans are a critical part of a comprehensive OA recovery plan. The need to develop a comprehensive OA recovery plan has been identified.

The OA Coordinator will collaborate with agencies/jurisdictions on economic recovery strategies.

Data Telecommunications

Situation

The OA depends upon information systems and communications networks to carry out nearly all aspects of day to day business. Risk Management plays a critical role in protecting our information assets, and our missions.

Cyber crime is a clear and present threat. Criminals are stealing intellectual property and committing fraud, unleashing viruses which compromise and may damage telecommunication systems. Agencies/jurisdictions within the OA have implemented some or all of these security practices:

- Creating computer security policies
- Managing computer security at multiple levels brings many benefits. Initiate Risk Management and Risk Assessment processes
- Preparing for Contingencies and Disasters
- Implement an effective computer security awareness and training program
- Maintain a record of system activity by system or application processes

Civil Unrest

Situation

The OA has a diverse population. Occasionally, group or mob violence erupts as the result of underlying intergroup tensions, or as a consequence of mob behavior at large gatherings such as sports events or political demonstrations. This group violence, known as civil unrest, is characterized by rioting, looting, arson fires, and attacks on public safety personnel.

A coordinated response from agencies/jurisdictions within the OA will be mobilized. Positive government action, including containing and isolating the disorder, dispersing participants, and arresting offenders is essential to control the spread of minor disturbances into large-scale civil disorder. Should a large disturbance or State of civil disorder occur, steps must be taken to ensure the rapid restoration of order, protection of life and property, and the preservation of the environment. The OA has occasionally experienced both small and large-scale incidents of civil disorder. Civil unrest may cause a disruption to transportation infrastructure, businesses and government activities.

Agencies/jurisdictions must rapidly and accurately assess the situation and concentrate their activities on protecting life and property.

The OA Coordinator will work with agencies/jurisdictions support the enactment of emergency ordinances to contain the spread of a disorder. Such measures include curfews, closing areas, restricting the sale of dangerous goods (i.e., gasoline outside of appropriate containers, etc..)