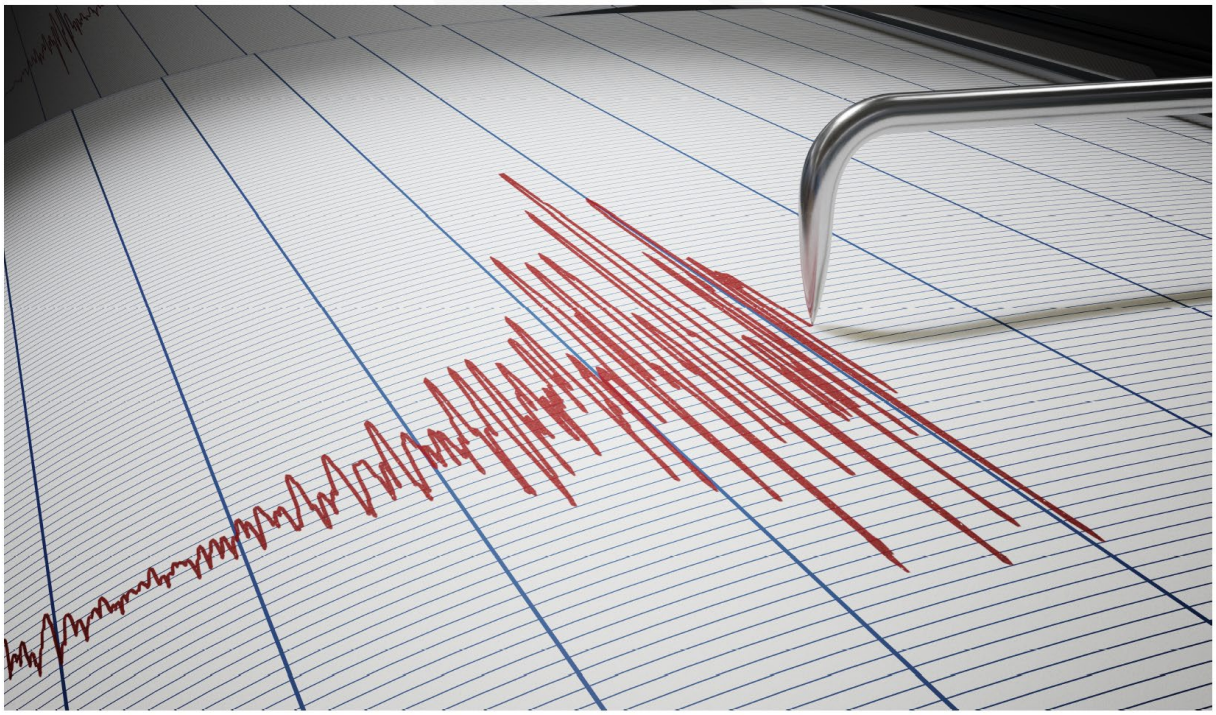
# Sonoma County Operational Area Emergency Operations Plan Annex:

## Hazard Specific Annex – Earthquake (HSA-3)

DEPARTMENT OF EMERGENCY MANAGEMENT



January 2026

EMERGENCY MANAGEMENT
SONOMA COUNTY

This document is an Annex to the Sonoma County Emergency Operations Plan. This document is subject to revision at any time.

Comments and suggestions should be directed to:

County of Sonoma
Department of Emergency Management
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# Record of Changes

| Change Number | Date of Change | Made By | Description of Change |
|---|---|---|---|
| 001 | 21/01/2026 | MA | Formatting to the 2025 plans/annex standard and TOC |
| 002 | 21/01/2026 | MA | Additon of 3.2.4 Reunification and Training |
| 003 | 21/01/2026 | MA | Minor additions and terminology updates concerning the updated EOP 2025 and ROP 2025. |
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# Plan Distribution

The County of Sonoma – Department of Emergency Management (DEM) is responsible for developing, maintaining and distributing the Earthquake Annex.

DEM will make the Earthquake Annex available to all County departments, Operational Area (OA) jurisdictions, California Office of Emergency Services (Cal OES) and other partner organizations as necessary and upon request in both English and Spanish. An electronic version is available through WebEOC. Hard copies are available at the Emergency Operations Center (EOC) and DEM staff have remote access to all plans and annexes.

## Disclosure Exemptions

Portions of this document may contain sensitive information pertaining to the deployment, mobilization, and operations of the County, OA and OA jurisdictions in response to emergencies. The majority of this plan is available for public review. However, portions that include personal privacy information or information with significant implications on County or regional security may be placed in attachments that are exempt from public disclosure under the provisions of the California Public Records Act §6254.

# 1 Introduction

## 1.1 Purpose

This annex to Sonoma County's Emergency Operations Plan (EOP) will ensure an effective and coordinated response to a significant earthquake event. It ensures interagency coordination among County departments, community groups and allied stakeholders in accordance with the County EOP, the California Emergency Services Act, the Standardized Emergency Management System (SEMS), and the National Incident Management System (NIMS).

This plan is designed to:

- Support development of additional, major incident plans by County departments and agencies.
- Provide an overview of the threats that earthquakes pose to the County and define the potential range of impacts.
- Provide the Emergency Operations Center with contextual information to guide initial response and recovery planning.

## 1.2 Scope

This annex has been developed in accordance with the County EOP. In keeping with the EOP's "all-hazards" approach to local emergency management, the response policies and protocols for an earthquake will align with those established in the EOP.

The annex supplements but does not change EOP policy and directions, such as for activating and managing the EOC. It does provide additional guidance that may be used to complement the EOP within the context of an earthquake event.

Many variables govern the specific effects of an earthquake, from the amount of energy released to its origin, to soil and rock quality. Given these variables, the complexity of earthquake effects, and the size and density of the Bay Area, no plan can possibly identify all considerations for a response. Consequently, this annex is not intended to describe detailed procedures for the tactical execution of response tasks. Instead, the plan provides broad considerations to guide the execution of response operations.

This annex is primarily focused on response and short-term recovery operations. Elements related to preparedness, long-term recovery, and mitigation are addressed in the Sonoma County Recovery Operations Plan (ROP), Threat Hazard Identification and Risk Assessment (THIRA), and Local Hazard Mitigation Plan, as well as the Federal Emergency Management Agency (FEMA) Bay Area Earthquake Plan.

This annex does not alter existing County department emergency response standard operating procedures (SOP), processes, or resources. Emergency response agencies will adhere to existing department SOPs in accordance with all legal requirements.

# 2 Situation and Planning Assumptions

## 2.1 Situation

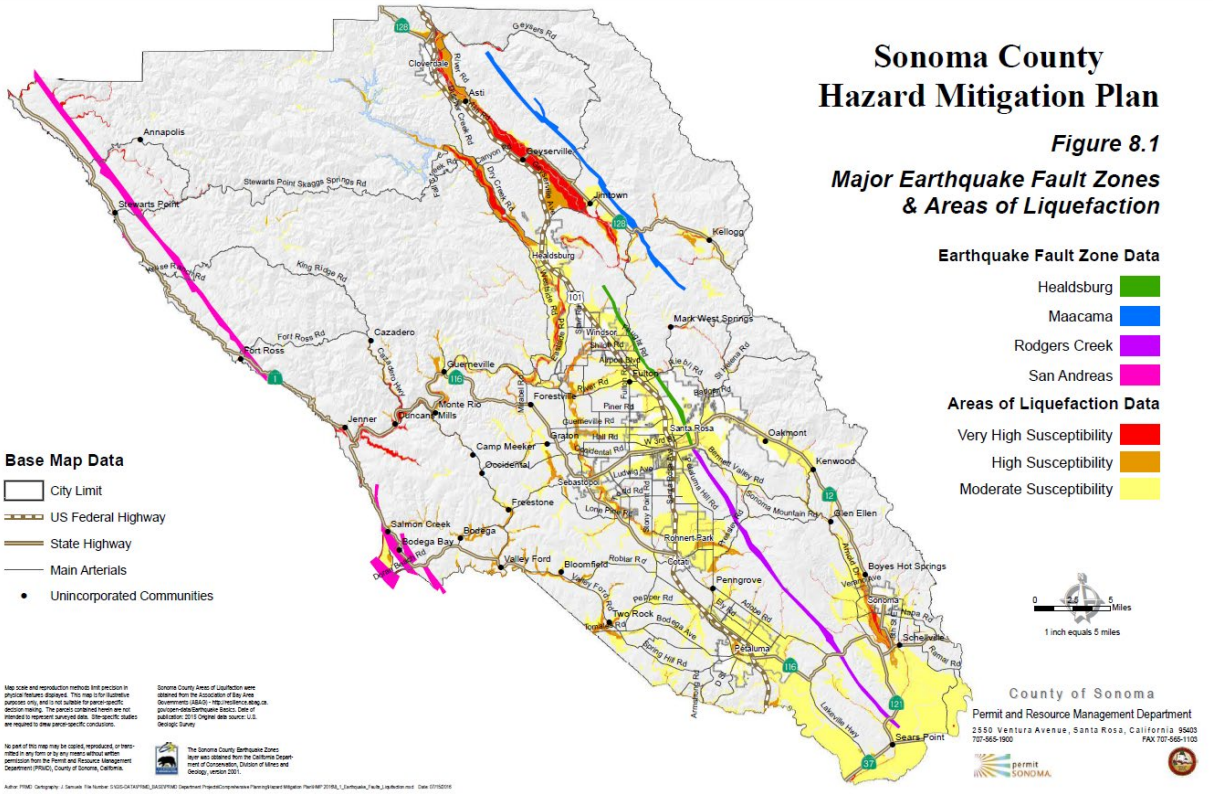
Earthquakes result from the release of seismic energy causing a shift in the layers of rock beneath the surface of the Earth, generally resulting in a shaking motion at the surface. These events are largely unpredictable, provide little to no warning, and vary in intensity and duration. California straddles the Pacific and North American plates and is permeated with faults. In Sonoma County alone, there are at least four known faults with the potential to impact the region:

- The San Andreas Fault, which runs north-south along the coast
- The Rodgers Creek Fault, which runs north-south through the lower, central portion of the County
- The Healdsburg Fault, running north-south beginning north of Santa Rosa.
- The Mayacamas Fault running north-south in the northeastern portion of the county, just parallel to the Healdsburg Fault

The San Andreas and Rodgers Creek Faults are the most active faults in the San Francisco Bay Area, and each have moved within the last 150 years.[1] The Rogers Creek Fault runs directly through the primary urban corridor of the County and poses the greatest risk of surface fault rupture in Sonoma in both likelihood and potential damage. See Figure 1.

[1] Sonoma County Hazard Mitigation Plan, 2021

*Figure 1: Major Earthquake Fault Zones & Areas of Liquefaction*

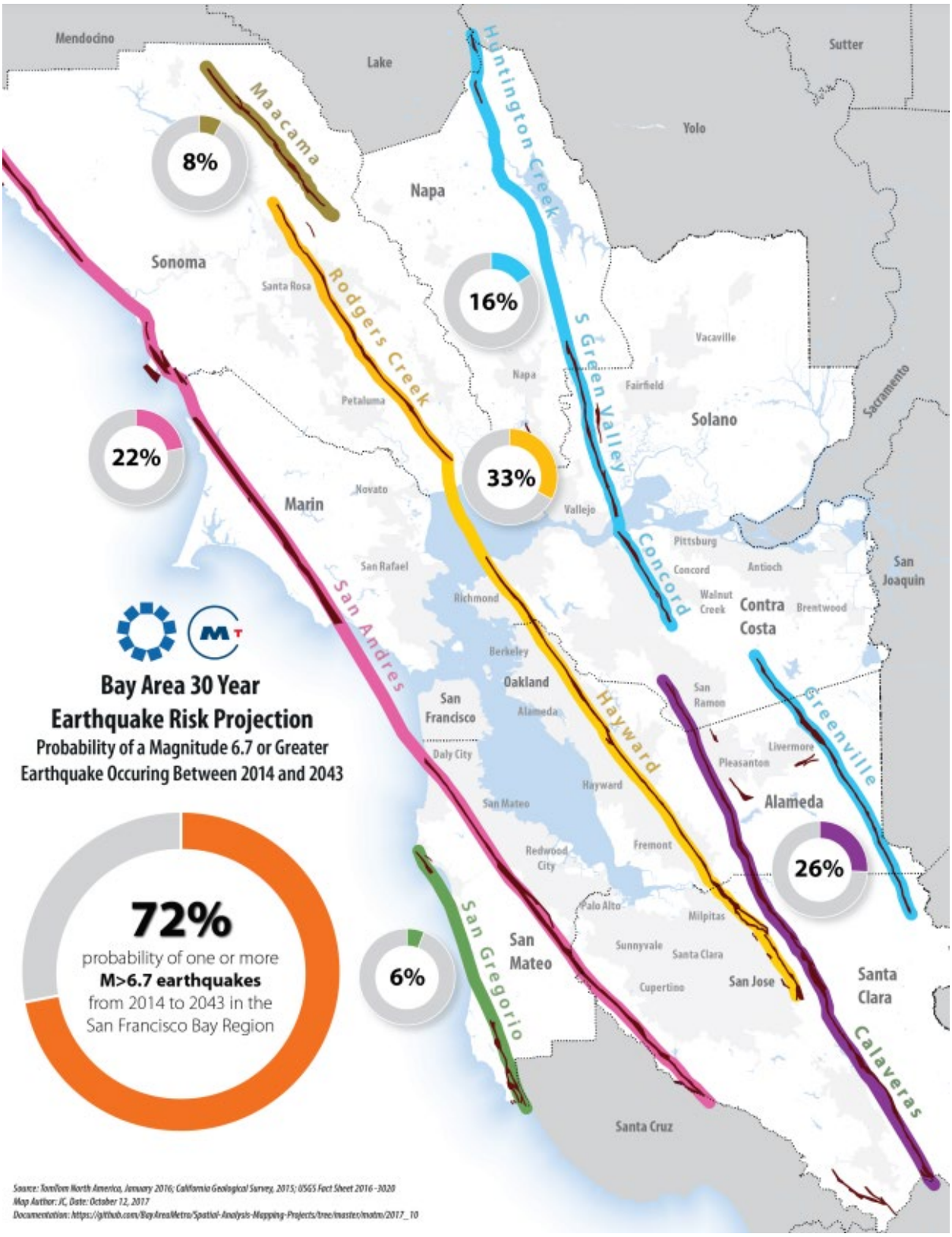



As illustrated in Figure 1, Sonoma County is at moderate to high risk of liquefaction caused by earthquakes. Notably, most urban areas face risk of liquefaction. Liquefaction takes place when loosely packed, water-logged sediments at or near the ground surface lose their strength in response to strong ground shaking. [2] Liquefaction is particularly threatening in Sonoma County due to the large number of dams across the operational area. There are 65 dams either within Sonoma County, or with inundation areas partially covering Sonoma County; 21 of these dams are of high or extremely high risk according to the Army Corps of Engineers' National Inventory of Dams.[3]

The United States Geological Survey reports a 72% probability of an earthquake measuring at least magnitude 6.7 over the next 30 years in the Bay Area; over the same period, there is a 33% chance for a similar magnitude earthquake, specifically on the combined Rodger's Creek-Hayward fault system. [4] See Figure 2.

*Figure 2: Bay Area 30 Year Earthquake Risk Projection*

[2] U.S. Geological Survey https://www.usgs.gov/faqs/what-liquefaction
[3] Army Corps of Engineers of Engineers' National Inventory of Dams https://nid.sec.usace.army.mil/#/
[4] A New Map of Rodgers Creek Fault in Sonoma County, California, July 2018 https://www.usgs.gov/programs/earthquake-hazards/science/new-map-rodgers-creek-fault-sonoma-county-california#:~:text=The%20two%20sides%20of%20the,%2Dyear%20period%202014%2D2043.



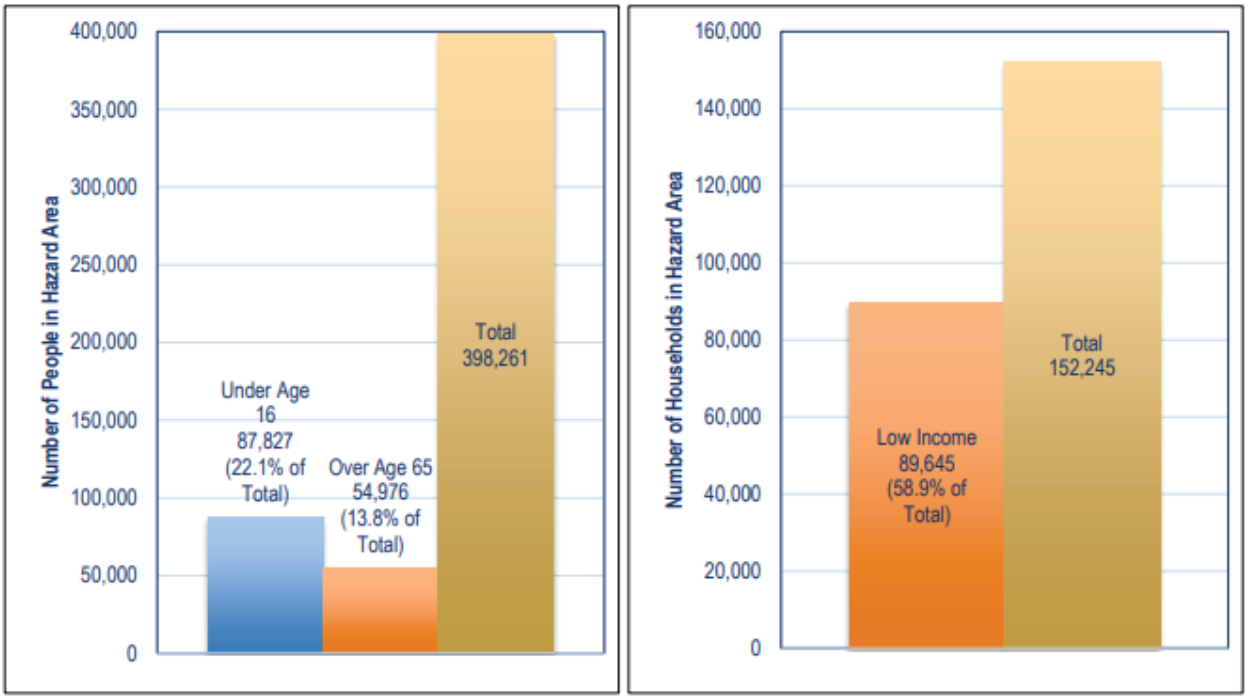

In addition to Dams, the following critical facilities in Sonoma County may be at risk from a seismic event:

- 5 water treatment facilities
- 20 wastewater treatment facilities
- 1,697 hazardous material sites
- hospitals
- 39 fire stations
- 8 police stations
- 206 school buildings
- 230 road bridges
- Port Facilities
- 3 Airports

Additionally, many of Sonoma County's largest facilities that are best equipped for Mass Care and Shelter lie on the Rodgers' Creek fault.

The entire population of the Sonoma County Operational Area is potentially exposed to direct damage from earthquakes, or indirect impacts such as road closures and loss of utilities. See Figure 2.

*Figure 3: Population in Hazard areas*




*Sonoma County Multi-jurisdictional Hazard Mitigation Plan 2021*

Earthquakes do not only cause damage themselves but also serve as a catalyst for many other hazards. Secondary effects include fires, hazardous materials releases, landslides, dam failures, transportation incidents, and damage to water/wastewater infrastructure. Additional information regarding seismic risk, ground shaking intensities, fault rupture, soil liquefaction, secondary hazards, and potential effects on buildings can be found in the Sonoma County Multi-jurisdictional Hazard Mitigation Plan.

## 2.2 Planning Assumptions

The following section is divided between assumptions about the impact of an earthquake event, and assumptions about the factors influencing a response to that event.

### 2.2.1 Impact Assumptions

This annex is based on an earthquake of at least 6.0 magnitude, either local to Sonoma County or part of a larger, regional event. It assumes little to no notice. Impacts will be determined by such variables as magnitude, location, shaking intensity, duration and time of the event. Impacts may include:

- **Severe structural damage due to shaking.** Structural damage is likely to be worse in areas of soft soils or unconsolidated fill. Some buildings may experience partial or total structural failure, and additional, nonstructural damage will be widespread, causing seemingly sound structures to be unusable. Depending on the magnitude of the earthquake, people may also be trapped in collapsed structures. Thousands of residents may require shelter because their dwellings are damaged, while shelter facilities may also be damaged. The demand for shelter facilities will likely exceed available, stable structures.

- **Immediate, simultaneous ignitions caused by the earthquake, including structure and wildland fires.**

- **A high number of fatalities and injuries.** If the earthquake occurs during midday, the number of casualties will likely be greater, as more of the working population is affected. Most fatalities will occur in the first 48 hours, but recovery of those buried in debris may continue for days.

- **Water, power, and gas service interruption.** Potable water shortages may occur due to pipeline breaks, loss of storage capacity, loss of power, or compromised water treatment. This may be a significant limiting factor for hospitals, medical care providers, 24-hour care facilities, and the business community and public. Services also may gradually decline due to leaks or as generators powering pumps run out of fuel or malfunction, and system restoration may take days (for electrical power) or weeks (for water and gas).

- **Voice and data communications systems disruption.** Many forms of communication may be damaged, oversubscribed or disrupted due to loss of power and may take several weeks to fully restore.

- **Major transportation facilities and systems disruption**. Transportation damage may affect major bridges and highways, mass transit rail and bus systems, streets and roads. Structural damage to these facilities may take weeks or months to repair.

- **Breaks in wastewater collection and disruption in treatment.** This may result in the disruption of vital services and uncontrolled releases of untreated sewage.

- **Damage to critical government facilities.** This may include OA emergency operation centers (EOCs) department operation centers (DOCs), fire and police stations, public works, and transit offices. Alternative facilities will need to be established to ensure continuity of operations.

- **Millions of tons of debris.** Initially, collapsed buildings and other structures may block roads and limit movement for evacuees and response personnel and vehicles. Clean-up may take weeks or months.

- **Multiple aftershocks.** These will occur regularly and may cause additional damage; some could be as large as the main shock. The frequency and magnitude of aftershocks will decrease over time. Their cumulative impact will cause additional structural damage and necessitate additional safety assessment inspections. Aftershocks will also have a cumulative effect on the feeling of well-being or safety of residents and responders.

### 2.2.2 Response Assumptions

Response operations will be affected by the impacts listed above, specifically there may be:

- **Regional competition for resources.** Large earthquakes will produce intense regional competition for resources. Local mutual aid in fire, EMS, and law enforcement resources will be limited as other jurisdictions face similar circumstances.

- **State and Federal assistance delay.** The state and federal governments will immediately begin mobilizing resources. However, it may take time for resources to arrive. For example, FEMA Urban Search and Rescue (USAR) teams may take 24 to 48 hours to arrive in the affected areas.

- **Disruption to communications.** Impact to communications infrastructure, overwhelmed first responders, and the overall magnitude of the situation may slow the initial situation assessment. Meanwhile, the demand for emergency public information will be immediate and sustained. Social and traditional media coverage will be extensive.

- **Loss of command-and-control facilities.** Damage to critical County facilities (ex. EOC, DOCs, fire stations) may require alternative arrangements for management of response services.

- **Limited first response resources.** Damage to water and communications systems may challenge fire-fighting operations. First response personnel may be unable to report for duty due to damage to infrastructure and personal impacts. Damage

and disruption may necessitate deployment of law enforcement resources to maintain public order, augment rescue operations, and secure dangerous sites.

- **High volume of need.** The number of people trapped in buildings may initially overwhelm capacity to respond. The demand for emergency shelter may initially exceed capacity to inspect buildings and provide the resources and staff required to open fully functional shelters. The capacity of shelter and care for displaced residents may be exceeded, forcing relocation to other areas outside the County.

- **Impacts to health infrastructure.** Local medical facilities may be damaged. Surviving hospital capacity may be inadequate to treat casualties and other medical emergencies, requiring that some severely injured patients be relocated to facilities outside Sonoma County. However, relocation may be limited by impacts to the transportation system.
- **Impacts to the economy.** The ability of residents to return to work or provide support will be affected by utility disruptions, infrastructure damage, affected transit systems, interrupted supplies of key commodities including fuel, closed schools, reduced childcare services, as well as other indirect impacts on social infrastructure.

- **Building Damage.** It may be necessary to quickly assess thousands of buildings (public and private) to determine whether they are safe for re-entry and occupancy. Damage in high-rise areas may cause fires on upper floors, trap people in elevators, trap people with mobility challenges, and cause injuries due to falling glass and other debris.

- **Debris.** Resources to remove debris will initially be limited as the County mobilizes its own forces and available contractors.

- **High volumes of donated goods and time.** Assistance in the form of spontaneous volunteers, donated goods, and monetary donations will begin to flow into the County. Although this may provide desperately needed resources, it will also create coordination and logistical support challenges.

# 3 Concept of Operations

The Concept of Operations guiding an earthquake response encompasses response and short-term recovery only, as issues related to preparedness and long-term recovery are addressed in the County EOP and ROP.

## 3.1 Response

### 3.1.1 Overview and Objectives

Immediately following a major earthquake, response is the priority of all County departments and agencies. All available County Disaster Service Workers will be directed to achieve the following objectives:

- Reduce immediate threats to life, public health and safety, and public and private property.
- Provide necessary care, shelter, and medical services to County residents and other members of the public.
- Restore the operations of facilities, whether public or privately owned, that are essential to the health, safety, and welfare of the community, including critical County facilities, utilities, and transportation infrastructure.
- Assess damage to infrastructure, public facilities, and the built environment.
- Expedite the restoration of services, the economy, and the community at large; and begin the process of recovery.
- Keep the public informed.

The County will conduct a phased response to coordinate operations in the initial hours and days following an earthquake (E), focusing on the first hours and days of a response. Each phase is explored in further detail below.

### 3.1.2 First 4 Hours (E+4)

At E+4 the objective is to respond to the community's immediate life safety needs. The priorities are:

- Directing immediate life-saving rescue operations.
- Activating Continuity of Operations Plans for County Departments as needed.
- Activating alert and warning to share critical situational information with the public, including about aftershocks, shelter in place or evacuation guidance, recommended personal protective actions, and the location of temporary evacuation points.
- Directing fire suppression for existing structure and wildland fires and anticipating fire spread based on conditions and historic precedent.
- Deploying law enforcement resources to support response activities and maintain law and order.
- Deploying EMS to major incidents.
- Establishing casualty collection points for initial treatment of the injured.

- Deploying hazardous materials response resources as needed.
- Activating the EOC and DOCs as needed.
- Establishing contact with the Sonoma County Operational Area and allied stakeholder agencies.
- Opening Temporary Evacuation Points to accommodate displaced populations while emergency shelters are being opened.
- Identifying, notifying, and evacuating at-risk populations as needed.
- Assessing critical facilities, the situation in areas not reporting, and the condition of emergency communications systems.
- Mobilizing County Disaster Service Workers.
- Completing an initial damage assessment of the County, identifying areas affected, major incidents, and operational status of critical services. Begin to establish Essential Elements of Information (EEI) - see Attachment 1.

### 3.1.3 First 12 hours (E+12)

At E+12 the objective is to assemble sufficient resources for a sustained response while providing basic mass care, shelter, and information services to the community. The priorities are:

- Assessing critical resource shortfalls, projected shortfalls for the next 14 days, and requesting support through mutual aid agreements.
- Assessing the condition of transportation systems and developing alternatives for moving critical resources.
- Developing a consolidated situation assessment and declaring a state of emergency.
- Establishing perimeter control around unsafe areas.
- Establishing security at critical buildings, incident sites, work locations, infrastructure, shelters, and resource centers.
- Initiating safety assessments of critical facilities.
- Safely opening Care and Shelter sites.
- Assessing conditions at designated emergency shelter sites to ensure continued building stability and sufficient beds, water, food, medical support, generators, sanitation, and security.
- Identifying residents with special support requirements and transferring them to appropriate care facilities.
- Designating primary routes to prioritize debris clearance, route recovery, and traffic control.
- Initiating a regular status reporting and resource requesting process between area commands (if established), major incident commands (if established), and state/federal counterparts offering coordinated assistance.
- Activating Joint Information Center (JIC).
- Establishing a curfew, as needed.

- Begin activation of the Backup Communication Annex to support operational communication.

### 3.1.4 Through 24 hours (E+24)

At E+24 the objective is stabilizing the system and securing sufficient resources to sustain emergency response operations. The priorities are:

- Supporting ongoing, on-scene incident management at major incidents and reinforcing any logistical support being requested.
- Coordinating the receipt and deployment of incoming resources to prioritized missions.
- Designating staging areas and planning to accommodate support personnel.
- Ensuring a system is in place to fuel and maintain generators providing power to critical facilities.
- Coordinating with Operational Area cities regarding the process of collecting and handling fatalities.
- Implementing elements of the County Continuity of Operations Plan (COOP) as needed.
- Initiating social and traditional media briefings to inform residents on County operations and available services, advises residents on protective actions, and control rumors. Refer to Sonoma County Crisis Communication Annex

### 3.1.5 Through 48 hours (E+48)

At E+48 the objective is increased support for affected areas, forecasting future resource requirements, and continuing damage assessments. The priorities are:

- Processing ongoing logistical resource requests for emergency services and mutual aid support.
- Implementing an emergency drinking water plan as needed.
- Establishing a distribution network for drinking water and food for persons who are not residing in mass care facilities but are without basic services.
- Initiating damage assessment of County facilities, prioritizing facilities critical to response operations.
- Conducting an ongoing review in the EOC of current situation reporting and resource requesting processes and revise as needed.

### 3.1.6 Through 72 hours (E+72)

At E+72 the objective is to begin transition from immediate response effort to sustained operations and to complete the damage assessment. Priorities are:

- Submitting the Cal OES Initial Damage Estimate (IDE).
- Supporting hospital and other medical facility re-supply efforts.
- Re-evaluating mass care needs considering any ongoing aftershocks and subsequent damage.
- Establishing plans for how to provide care for people with special support requirements that cannot be met in congregate care shelters.

- Coordinating with the Sonoma County Operational Area and consider establishing a JIC if not already established.
- Coordinating with Sonoma County Operational Area partners to facilitate volunteers and donations.
- Reviewing security plans to maintain public order and enhancing as needed.
- Beginning deliberate programs of home and business safety assessment.
- Reviewing incident status reports to prioritize incident commands that can begin suspending emergency response operations, and transition to sustained response and recovery operations.

### 3.1.7 Sustained Operations (E + 3 to 7 days)

At E+3 to7 days the objective is to sustain operations and begin the transition into short-term recovery. Priorities are:

- Beginning detailed damage assessments of all public infrastructure, such as public rights-of-way (roads and sidewalks), bridges, facilities, utilities, and retaining walls.
- Establishing teams to visit shelters to identify people who require special support and site modifications to better accommodate residents with sight, hearing, mobility or other access and functional needs.
- Locating and opening relief supply and food distribution points in addition to existing evacuation centers/shelters.
- Reinforcing cost tracking guidance for County responders.
- Coordinating with the Sonoma County Operational Area and establishing a responder mental health support program.
- Establishing portable toilet sanitation stations around the County and related cleaning and pumping programs.
- Establishing a debris management plan; begin gathering and transporting debris from critical sites or routes.
- Coordinating with the business community on activity resumption.
- Beginning widespread damage inspections of homes and businesses.
- Anticipating and supporting Preliminary Damage Assessment visits by state and federal officials seeking to confirm the scope and severity of damage, as well as immediate and long-term recovery needs of the County.
- Ensuring that air quality, hazardous materials spills, and other environmental situations are monitored, and associated risks addressed.
- Evaluating the need to design specific routes into the County for critical relief supplies. Designating specific lanes for express bus services should also be considered.
- Coordinating with the Sonoma County Operational Area to survey all licensed food establishments, including the emergency shelter/evacuation centers, feeding sites, and disaster kitchens to ensure there are no unsafe food handling or other sanitation or safety concerns.
- Planning for the relocation of displaced County staff and departments.
- Implementing a process to allow limited residential entry (where safe) for recovery of personal items.

- Coordinating with the Sonoma County Operational Area to provide prioritized community behavioral health services (for example, for those whose homes have been red-tagged, shelter residents, children, and individuals who have suffered significant loss).

## 3.2 Short Term Recovery

### 3.2.1 Overview and Objectives

The immediate response to a major earthquake will focus on saving lives, providing resources to sustain County residents, and stabilizing the situation. Shortly after the situation stabilizes, short-term recovery begins. Note: aftershocks may require a temporary transition back into response

- The objectives of short-term recovery are:
- Utility Restoration
- Debris Removal
- Interim Housing Coordination
- Disaster Assistance Programs
- State and Federal Early Damage Assessment

Given the level of damage to housing, business, and infrastructure; the direct impact on the population; and the effect on the regional economy, full recovery from a major earthquake may take years. Nonetheless, a rapid initiation of recovery operations is critical to restoring confidence in the community and ensuring a successful long-term recovery.

This section describes key issues for initiating short-term recovery operations, organized by objective. The magnitude and resources required to address these issues will likely require regional approaches with assistance from the state and federal governments.

### 3.2.2 Utility Restoration

Public and private utility providers, including Pacific Gas & Electric, Sonoma Water Agency, other water/wastewater providers and telecommunications providers such as AT&T, will coordinate with the EOC Operations Section and the Sonoma County Operational Area to assess damage and restore utility services within the County.

**Restoration of services may be affected by the following:**

- Critical emergency response facilities requiring backup power to continue operations on a temporary basis while utility service is being restored.
- Broken water transmission and distribution pipes. Water service will be disrupted within the first several hours and could take two to three months to be fully restored and will require continual monitoring.
- Disruption to electrical power, which may take 7 to 15 days or longer to restore.
- Debris, aftershocks, and damage to transportation infrastructure may render repair sites temporarily inaccessible.

- Aftershocks, which may cause additional damage or require re-inspecting facilities and equipment.

**Utility restoration strategies will include:**

Immediate damage assessments by service providers. Additionally, damage information will be provided to the EOC Planning/Intelligence section from DOCs, first responders, and other sources, which will then work with the Operations Section to provide information to and coordinate operations with service providers.

Prioritizing restoration of lifeline utility services in the first 1-7 days after the event. Additionally:

- Service providers may implement interim repairs and establish temporary delivery systems.
- Utility providers will restore services in accordance with their pre-established restoration priorities. The Utilities Branch of the EOC, under the planning section, will coordinate with Sonoma Water to convey incident-specific restoration priorities to all utility services providers, which will fold these priorities into their restoration plans.
- The Utilities Branch will identify priorities for restoring services to facilities and services necessary for emergency response operations, hospitals and healthcare facilities, and continuity of government, as well as restoration of service to the greatest number of people.
- Coordination between the Sonoma County Sherriff's Office (SCSO) and Sonoma County Public Infrastructure Department (PID) to provide utility workers with access to repair sites.
- Mutual assistance amongst utility service providers through pre-established agreements (for example, the Water Agency Response Network). The Logistics Section will facilitate the provision of resources from the County and through emergency services mutual aid when requested.

### 3.2.3 Debris Removal

Debris must be removed for services and business to resume and begin rebuilding.

**Debris removal strategies will include:**

- Removing material from damaged buildings and demolishing unsafe structures.
- Establishing procedures to expedite removal of unsafe structures, in accordance with County requirements, and FEMA requirements for reimbursement.
- Planning for debris transportation to staging sites; separating, reducing, and recycling debris; and trucking to a disposal site.
- Securing contracted or federal resources, such as the U.S. Army Corps of Engineers (USACE), to support long-term debris removal operations.
- Collaborating with the Sonoma County Operational Area and the region to address movement and disposal of debris in a region with limited landfill space.

### 3.2.4 Interim Housing

Emergency shelters are a short-term solution for the problem of displaced residents. Residents must quickly be transitioned to interim and, eventually, long-term housing arrangements.

**Interim Housing strategies will include:**

- A plan to determine interim and long-term housing needs, based in part on the needs of the shelter population.
- Utilizing County resources such as building inspectors to work with shelter residents to determine whether they can move back into their homes.
- Streamlining County processes for home repairs to expedite movement back to permanent residences.
- Establishing a housing recovery team to act as the lead for coordinating Sonoma County Operational Area and regional housing planning efforts and immediately begin a working dialogue with FEMA and other federal agencies engaged in housing issues.

### 3.2.5 Reunification and tracking

The Universal Disaster Intake Process (UDIP) is a standardized system designed to efficiently collect, manage, and share the data of community members accessing Sonoma County disaster services. It ensures a coordinated and equitable response to disaster relief efforts for individuals impacted by disasters in Sonoma County. The UDIP should be utilized to support short- and long-term sheltering. Refer to the Universal disaster Intake Process for more information.

### 3.2.6 Disaster Assistance Programs

Disaster assistance is available through a wide array of federal, state, local, and community programs that can be leveraged in the first 90 days to promote short- and long-term recovery.

**Disaster Assistance Program strategies will include:**

Working with the Sonoma County Operational Area and California Governor's Office of Emergency Services (Cal OES) to determine the appropriate number and location of local assistance centers (LACs) to provide residents with whatever recovery assistance is available.

Coordination with the Community Organizations Active in Disaster (COAD); inclusion of the COAD in appropriate disaster assistance program planning and delivery.

Establishing a lead department and procedures to ensure County residents are fully engaged in state and federal individual assistance programs, including:

- Disaster SNAP (food stamps) benefits.
- Disaster unemployment assistance benefits.

- Assistance to individuals and families, including temporary housing and grants for other uninsured disaster-related necessary expenses and serious needs.
- Engaging in the State Supplemental Grant Program (SSGP), which helps families and individuals who still have unmet needs after receiving assistance from the federal government.
- Crisis counseling.
- Social Security assistance.
- Small Business Administration (SBA) Disaster Loan Program, which provides low-interest loans for real estate repairs and costs for businesses.
- Integrating private nonprofit assistance programs, especially Sonoma COAD, into recovery activities. Some of these nonprofit agencies include, but are not limited to:
- The American Red Cross which offers emergency shelter, food, clothing, physical and mental health support, limited grants for household items, work-related and medical equipment, and minor home repairs following natural disasters. They also provide referrals to other local and national agencies that provide home clean-up, repair, and rebuilding assistance.
- Habitat for Humanity which assists with repairing and replacing housing for low-income disaster victims.
- Sonoma County Certified Emergency Response Team (CERT)
- The Salvation Army which provides emergency shelter, food, clothing, and household items.
- The Southern Baptist Convention Disaster Relief Program which provides assistance with food, home clean-up, and repairs.
- Team Rubicon which may provide volunteer assistance in incident management, damage assessment, mapping, and debris management.
- Catholic Charities, which provides case management and assistance to residents experiencing homelessness prior to, and after a disaster.
- Redwood Empire Food Bank
- Coordination between the County's Finance Department and Cal OES/FEMA for application of the Public Assistance Program. Under this program, FEMA provides funding to state and local governments for extraordinary costs associated with debris removal, emergency protective measures, and permanent repair or replacement of disaster-damaged facilities. Extensive coordination with County departments will be necessary to track costs, facilitate inspections of damaged sites, and secure reimbursement.
- Obtaining emergency relief funds from the Federal Highway Administration (FHWA). Under this program, FHWA provides funding through the California Department of Transportation (Caltrans) for costs to open and repair federal-aid routes.

### 3.2.7 Other Emergency Actions

- Additional emergency actions may be taken to address specific short-term recovery conditions such as:
- Suspension of evictions

- Requests for utilities to provide bill relief
- Waiver of permit fees for damage repairs
- Expedited permitting and inspection processes to support rapid repairs
- Occupancy waivers to support temporary housing and business space
- Changes or alterations to traffic patterns
- Implement the backup communication annex to support operational communication.

# 4 Roles and Responsibilities

The following sections identify County departments and agencies with roles in an Earthquake response. The County recognizes that an Earthquake response is a large operation and there may be more groups active in a response; this list is specific to government agencies.

## 4.1 Department of Emergency Management

The Sonoma County Department of Emergency Management (DEM) activates and manages the Sonoma County OA EOC when conditions meet appropriate criteria as defined in the OA EOP. DEM will:

- Develop and maintain the Earthquake Annex to the EOP
- Activate the Emergency Operations Center
- Maintain the Recovery Operations Plan
- Fill the EOC Director Position in an Earthquake response
- Support Public Information and Warning
- Community Development Commission
- The Community Development Commission (CDC) is the lead agency for housing and homeless programs. During an Earthquake emergency, they will:
- Assist in locating housing for displaced residents
- Advocate for simplified and streamlined building programs
- Procure temporary housing resources

## 4.2 Equity

- The Office of Equity will serve in an advisory capacity to ensure all response efforts and recovery efforts are provided justly and equitably. They will provide recommendations to EOC management on improvements to service delivery and recovery programs.

## 4.3 Finance - Auditor, Controller, Treasure, Tax Collector (ACTTC)

An earthquake will disrupt many platforms and systems used to track expenses. During an earthquake response especially, Finance's role in tracking expenditure will be critical. They will:

- Develop financial mechanisms, procurement vehicles, and contracts to support procurement
- Oversee staff time-keeping
- Provide fiscal oversight and track expenses
- Coordinate with Cal OES/FEMA for application of the Public Assistance Program
- Provide emergency procurement support for life-saving and emergency protective measures

- Provide resource support (facility space, office equipment/supplies, contracting services, etc.)
- Anticipate, obtain, and track resources for County staff, mutual aid resources, and volunteers

## 4.4 General Services

General Services will be a key player in restoring critical infrastructure and acquiring the resources needed to continue government services. They will:

- Acquire resources needed by County Emergency Response functions
- Conduct post-earthquake damage surveys and report results to dispatch
- Conduct infrastructure protection and emergency repair
- Conduct debris clearance and manage debris removal
- Coordinate restoration/recovery of energy infrastructure
- Lead Public Works Mutual Aid coordination
- Deploy and manage mutual aid resources
- Provide engineering services and construction management
- Support damage assessment efforts
- Manage County facilities and coordinate use of non-County facilities
- Conduct enhanced maintenance operations

## 4.5 Human Resources

In an Earthquake emergency, County staff will be as impacted as the general public and ensuring their safety and well-being is essential. Human Resources' role in staff tracking and care will play a major part in an effective response. They will:

- Account for all County staff
- Develop and coordinate human resources, including contractors
- Recruit, screen, and track volunteers
- Establish internal County staff communications
- Identify any employee needs (e.g., childcare, shelter)

## 4.6 Information Services

Given the high likelihood of impact to communications infrastructure, a rapid restoration of information service will be essential. Information Services will:

- Protect, restore, and sustain County information technology resources
- Oversee communications within the incident management and response structures
- Coordinate with telecommunications service providers
- Restore and repair telecommunications infrastructure
- Support maintenance of the Sonoma County Emergency Incident and recovery webpages.

## 4.7 Permit Sonoma

Given the high volume of property damage likely to result from a major earthquake, rebuilding efforts will need to be simplified and streamlined. Permit Sonoma will:

- Consider waivers of permit fees for damage repairs
- Expedite permitting and inspection processes to support rapid repairs
- Manage and conduct post-earthquake safety assessments for critical County facilities
- Coordinate and direct state-provided Safety Assessment Program (SAP) resources
- Lead damage assessment efforts
- Provide occupancy waivers to support temporary housing and business space

## 4.8 Transportation and Public Infrastructure

Some of the most impactful earthquake damage will fall on transportation infrastructure. To respond to, and mitigate the results of this damage, Transportation and Public Works will:

- Conduct post-earthquake damage surveys and report results to dispatch
- Conduct infrastructure protection and emergency repair
- Support evacuation operations including individuals requiring assistance
- Establish and support movement restrictions
- Conduct debris clearance and manage debris removal
- Coordinate restoration/recovery of energy infrastructure
- Lead Public Works Mutual Aid coordination
- Deploy and manage mutual aid resources
- Provide engineering services and construction management
- Support damage assessment efforts
- Support public transportation function
- Conduct enhanced maintenance operations on transportation resources

## 4.9 Health Services

An Earthquake will likely disrupt sanitation infrastructure and hygiene resources, increasing the likelihood of infections and communicable diseases. To mitigate this, Health Services will:

- Release frequent public health guidelines
- Enforce health protocols at County worksites, including shelters
- Coordinate with local, state and federal partners to implement public health protections

## 4.10 Human Services

Human services have multiple, critical roles during emergencies: Care and Shelter, benefit enrollment, and casework support. During an Earthquake, it is essential that the

acute response operation – Care and Shelter – functions alongside other, ongoing public support programs. Human Services will:

- Assess status of critical department facilities and potential shelter sites
- Coordinate safety assessments of potential shelter sites
- Manage emergency shelter and mass care operations (see Mass Care and Shelter Annex)
- Coordinate with the Sonoma County Operational Area for the care of unaccompanied minors
- Activation of the Universal Disaster Intake Process tracking platform
- Continue critical, steady-state (non-disaster) services

## 4.11 Sheriff

The Sheriff's Office is a key partner in County Operations. The County will support the Sheriff in:

- Activating emergency personal recall procedures
- Conducting law enforcement, public alert and warning, evacuation, and security operations
- Establishing field incident command as needed
- Running the Coroner's Unit
- Leading Law Enforcement Mutual Aid coordination
- Deploying and managing mutual aid resources
- Imposing curfews as needed
- Providing traffic control
- Providing support for access, traffic, and crowd control at mass care facilities

## 4.12 Sonoma County Water Agency

Sonoma's already fragile water infrastructure will be impacted to some degree by a major earthquake. This will likely exacerbate existing water-use issues including any ongoing droughts. The Water Agency will:

- Coordinate potable water system resources for prioritized public safety operations
- Monitor potable water quality and perform sampling/testing as needed
- Restore/maintain water and wastewater infrastructure
- Restore/maintain wastewater treatment plant operations
- Provide potable water in support of mass care operations as possible
- Support damage assessment efforts

# 5 Annex Maintenance, Training, and Exercises

## 5.1 Overview

This Earthquake Annex is a working document that will evolve in response to ever-changing threats. Ongoing exercises, training, evaluation, management and maintenance of this Annex will ensure that new hazards and changes in community demographics can be addressed. A well-developed training and exercise program is vital to ensuring overall readiness and preparedness. Training ensures personnel are prepared for their roles and responsibilities. Exercises test the capabilities, resources, and working relationships of responding agencies.

## 5.2 Plan Maintenance

The Earthquake Annex will be reviewed and revised every three years or as necessary following an actual incident or exercise to ensure plan contents are valid and current. The Department of Emergency Management in collaboration with the County of Sonoma Human Services Department will lead responsible departments and agencies in reviewing and updating their portions of the Annex as required based on identified deficiencies experienced in exercises or actual incidents.

## 5.3 Training and Exercises

At the County level, shelter training is provided by the Red Cross and the Sonoma County Human Services Department. Appropriate County and City staff will receive annual operational shelter training and awareness training on the policies and procedures in their respective care and shelter plans. Training will include both classroom training and exercises.

The Department of Emergency Management offers Care and Shelter Branch-specific training at the OA EOC. The training is designed for individuals who may staff a position within the Care and Shelter Branch during an exercise or activation of the Emergency Operations Center. Training includes an overview of the positions within the Care and Shelter Branch and their responsibilities. The training also includes hands-on practice for position specific roles and responsibilities.

Exercises can be accomplished in several ways. Tabletop exercises provide a convenient and low-cost method of introducing staff to problem situations for discussion and problem solving. Such exercises serve as a tool to identify whether adequate policies and procedures exist. Periodic tabletop exercises specific to short- and long-term sheltering operations within the OA are recommended. Exercises will also include the FAST, CSD/STC.

To the extent feasible and applicable, Care and Shelter operations will also be included in functional and full-scale exercises that simulate actual emergencies. This can be accomplished by including emergency notification procedures, transportation coordination elements and post-evacuation tasks such as access control and re-entry. In no circumstance will "actors" replace people with

disabilities during field-level drills and exercises. The participation of people with disabilities and the organizations that serve them both heightens the realism of exercise and strengthens partnerships.

# 6 Attachments

## 6.1 Attachment 1: ESSENTIAL ELEMENTS OF INFORMATION (EEIs)

Essential information that must be collected during the first 24-hour period:

- Earthquake epicenter, magnitude, shaking intensity and projected impact area.
- Number and locations of deaths and injuries.
- Location and extent of secondary events, including fires, landslides, and hazardous materials events.
- Location of severely damaged or collapsed structures.
- Location and estimated number of people trapped in collapsed structures.
- Requirements for major evacuations and estimated number of people displaced.
- Status of communication systems, including:
  - County and community voice and data networks
  - County emergency radio systems
  - E911 dispatch systems
- Damage to critical public buildings and other infrastructures, including:
  - Police and fire facilities
  - Hospitals and skilled nursing facilities
  - EOC & DOC facilities
  - Wastewater Treatment Plants
  - Dams
  - Schools
- Significant law enforcement, fire, EMS, search & rescue, and HazMat incidents.
- Critical resource shortfalls impacting public safety.
- Status (open, partial closure, or full closure) of roads, bridges, major surface streets, and public transportation systems.
- Status of and damage to major utility systems, including:
  - Water
  - Sewer
  - Power
  - Natural gas

- Results of preliminary safety assessments of critical County facilities and designated emergency shelters.
- Location and operational status of all DOCs.
- Status of County staff.