



**Cal OES**

GOVERNOR'S OFFICE  
OF EMERGENCY SERVICES

# **Emergency Drinking Water Procurement & Distribution Planning Guidance**

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# PREFACE

One of California's most relied upon resources is the water that provides life sustainment for over 38 million people in the State. Water is essential for sustaining agriculture, providing electricity, and ensuring the survival of fish and other species. Water is also critical to the overall health of California's economy and yet, it is one of our most vulnerable resources. Whether the threat to our water resources is due to natural disasters such as an earthquake or drought or manmade due to hazardous material contamination, it is essential that emergency managers plan ahead for the eventuality of a drinking water emergency.

Recent disasters have shown impacted drinking water systems present emergency managers with enormous challenges. The 1994 Northridge Earthquake provided emergency managers with lessons learned that resulted in the development in 1996 of the initial version of the *Multi-Agency Emergency Response Procedures for Potable Water Procurement & Distribution*. In the aftermath of Hurricane Katrina, a group of San Francisco Bay Area water utilities (the Bay Area Security Information Collaborative or BASIC) convened several multi-agency workshops and meetings to review how the various agencies and utilities could manage the delivery of potable drinking water to the general public after a major earthquake in the bay area. The effort provided emergency managers an opportunity to evaluate and improve the *Multi-Agency Emergency Response Procedures for Potable Water Procurement & Distribution* by integrating the Standardized Emergency Management System (SEMS) and the National Incident Management System (NIMS).

In the past several years, the State's water picture has seen a decreasing trend in water resources availability. In 2013 the entire State of California faced water shortfalls due to the driest year in recorded state history, for which Governor Edmund G. Brown Jr. proclaimed a State of Emergency on January 17, 2014. In the proclamation, the Governor directed state officials to take all necessary actions to prepare for statewide drought conditions. As a result, a Drought Task Force was formed which would help coordinate the resources and response among agencies, partners, and stakeholders.

Significant changes have occurred to the structure of California's state government organization, and rapid advances in systems, science, and technology have helped emergency managers improve coordination, forecasting, and situational awareness. Because of these changes, the *Multi-Agency Emergency Response Procedures for Potable Water Procurement & Distribution* document has been replaced by this document entitled *Emergency Drinking Water Procurement and Distribution Planning Guidance*. An important note about the State Drinking Water Program described in this document indicates that it is part of the California Department of Public Health (CDPH). As of July 1, 2014, the program is part of the State Water Resources Control Board (SWRCB).

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California Conservation Corps  
California Department of Forestry and Fire Protection  
Alameda County Water District  
San Jose Water Company  
Water and Waste Water Emergency Response Organization of Orange County (WEROC)  
Water Emergency Response of Los Angeles County (WERLAC)

## INTRODUCTION

This guidance document was created with the intent to clarify the roles and responsibilities of the stakeholders involved in locating, procuring, and delivering emergency drinking water<sup>1</sup> to populations in California. The guidance follows the concepts and protocols outlined in California's Standardized Emergency Management System (SEMS), the National Incident Management System (NIMS), the California State Emergency Plan (SEP), and the California Emergency Services Act (ESA). The guidance document also identifies activities to be considered by the water utilities and the five SEMS organizational levels (field, local, operational area, region and state). Concepts covered include evaluating the emergency situation, identifying sources of drinking water and procuring the necessary resources to obtain and distribute emergency drinking water. This document also identifies state level programs and resources available to assist with emergency drinking water procurement and distribution.

This guidance provides a framework for agencies and organizations to work together that will enhance preparedness.

### **Purpose**

This guidance:

- Provides general information on the Standardized Emergency Management System
- Provides a response concept of operations including stakeholders' roles and responsibilities resource management and the descriptions of Task Force and Multi Agency Coordination (MAC) Group Utilization
- Provides emergency drinking water procurement and distribution planning process guidance
- Assists local utilities and emergency response organizations to develop local plans for activating a Task Force for the distribution emergency drinking water
- Identifies state level programs and resources related to emergency drinking water

### **Assumptions**

The local water utility and local emergency response organizations understand the SEMS components including:

- Incident Command System (ICS)
- Multi Agency Coordination System (MACS) including the operation of a MAC Group consistent with the California Statewide Multi-Agency System Guide (CSMACS)
- California Disaster and Civil Defense Master Mutual Aid Agreement (MMAA)
- Operational Area (OA) Concept
  
- The local water utility and response organizations have a SEMS-compliant emergency operations plan

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<sup>1</sup> For the purpose of this document, "alternate emergency drinking water", or "emergency drinking water" refers to drinking water that is supplied from an alternate source and/or delivery system.

### **Implementing the Guidance**

Organizations at all SEMS levels are encouraged to:

- Integrate and coordinate the emergency response activities of the involved local water utilities and jurisdictions served
- Establish a Water Sector Specific Position (WSSP), Drinking Water Coordinator, or technical specialist within the Emergency Operations Center (EOC) at each level of SEMS and to work with all water providers to staff the position with trained individuals from local utilities or with California Utilities Emergency Association (CUEA) as needed.
- Establish the standards, guidelines, and protocols necessary to promote effective and efficient coordination between the utility and other response agencies
- Document how priorities for resources and other requirements would be determined
- Identify affected partners and stakeholders
- Activate a Task Force specific to the issue of emergency drinking water, as needed  
Facilitate Task Force workshops or meetings to discuss plans and protocols
- Utilize the CSMACS Guidance and its associated tools
- Develop pre-incident operational procedures related to procurement and distribution of emergency drinking water
- Regularly train and exercise operational procedures

## **CHAPTER 1**

# **RESPONSE CONCEPT OF OPERATIONS**

The response concept of operations summarizes nine key elements of the (1) SEMS overview, (2) operational goals, priorities and strategies, (3) direction, control and coordination, (4) alert and warning, (5) intelligence gathering and situation reporting, (6) public information, (7) mutual aid and assistance, (8) public health and medical system coordination, and (9) the sequence of events during disasters.

### **1) SEMS/NIMS Overview**

SEMS is the cornerstone of California's emergency response system and the fundamental structure for the response phase of emergency management. SEMS is required by the ESA for managing multiagency and multijurisdictional responses to emergencies in California. SEMS unifies all elements of California's emergency management community into a single integrated system and standardizes key elements. SEMS incorporates the use of ICS, MAAA, the OA concept and multiagency or inter-agency coordination. State agencies are required to use SEMS and local government entities must use SEMS in order to be eligible for any reimbursement of response-related costs under the state's disaster assistance programs.

There are five SEMS organization levels:

- **Field** – The Field Level is where emergency response personnel and resources, under the command of responsible officials, carry out tactical decisions and activities in direct response to an incident or threat
- **Local Government** – The Local Government level includes cities, counties and special districts. Local governments manage and coordinate the overall emergency response and recovery activities within their jurisdiction. Local governments are required to use SEMS when their EOC is activated or a local emergency is declared or proclaimed in order to be eligible for state reimbursement of response-related costs
- **Operational Area (OA)** – An OA is the intermediate level of the state's emergency management organization which encompasses a county's boundaries and all political subdivisions located within that county, including special districts. The OA facilitates and/or coordinates information, resources and decisions regarding priorities among local governments within the OA. The OA serves as the coordination and communication link between the Local Government level and the Regional level. State, federal and tribal governments within the OA's (county's) boundaries, however, may have separate and specific statutory authorities
- **Region** – The Regional Level manages and coordinates information and resources among OAs within the mutual aid region and also between the OA and the state level. The Regional Level also coordinates overall state agency support for emergency response activities within the region. California is divided into three Cal OES Administrative Regions – Inland, Coastal and Southern – which are further divided into six mutual aid regions. The Regional Level operates out of the Regional Emergency Operations Center (REOC)

- State – The state level of SEMS prioritizes tasks and coordinates state resources in response to the requests from the Regional level 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 emergency response system. The state level requests assistance from other state governments through the Emergency Management Assistance Compact (EMAC) and similar interstate compacts/agreements which coordinates with the Federal Emergency Management Agency (FEMA) when federal assistance is requested. The state level operates out of the State Operations Center (SOC)

While NIMS recognizes the various levels of response within a state, each state's governance is different, NIMS does not provide the detailed reporting relationship as required by the five SEMS levels. This is one of the few places where NIMS varies from SEMS.

Finally, SEMS and NIMS adapted the five standard functions of ICS which are common to all five SEMS organizational response levels. These functions are:

- Management (referred to as Command at Field Level)
- Operations
- Planning/Intelligence
- Logistics
- Finance and Administration

### **Utility/SEMS Integration**

The various sizes of the distribution or delivery systems of the thousands of water utilities in the State of California do not fit neatly into the five SEMS levels. Some utilities serve more than a city, some serve multiple counties and others move or distribute water across multiple counties and even states.

### **Multi-Agency Coordination<sup>2</sup>**

Multi-agency coordination means the participation of agencies and disciplines involved at any level of the SEMS organization working together in a coordinated effort to facilitate decisions for overall emergency response activities, including the sharing of critical resources and the prioritization of incidents. Local and state agencies utilize multi-agency coordination as part of the SEMS to coordinate multiple jurisdiction or multiple agency operations. Multi-agency coordination occurs at an EOC when multiple agencies are working together to support incident needs. A **Multi-Agency Coordination Group** may be convened by an EOC Director or other authority to establish priorities among multiple competing incidents, provide coordinated decision making for resource allocation among cooperating agencies, harmonize agency policies, and offer strategic guidance and direction to support incident management activities. For more detailed information regarding the MACS and MAC Group functions see the *California Statewide Multi-Agency Coordination (CMACS) Guidance 2013*.

Multi-agency coordination is essential when multiple water utilities or local jurisdictions are affected by the disaster. A MAC Group or Task Force specific to drinking water may be established depending on whether the utility involved is a public water system or private water system.

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<sup>2</sup> Based upon the California Statewide Multi-Agency Coordination System Guide

If the water utility is a public system a MAC Group may be established. If the water utility is a private system a task force may be established.

## **Task Forces**

ICS, a component of SEMS, defines a task force as a combination of single resources assembled for a particular tactical need, with common communications and a leader. The use of task forces can optimize the use of resources, and is convened to address a specific need or solve a specific problem.

## **California Emergency Functions**

The California Emergency Functions (EFs) were first introduced by the *2009 California State Emergency Plan (SEP)* and designed to bring together discipline-specific stakeholders at the state level of government to collaborate and function within the four phases of emergency management. The EFs consist of an alliance of state agencies, departments and other stakeholders with similar functional responsibilities. This grouping will allow each EF to collaboratively mitigate, prepare for, cohesively respond to and effectively recover from an emergency. Each EF represents an alliance of stakeholders who possess common interests and share a level of responsibility for emergency management.

A single state agency is assigned to lead each of the 16 EFs based on its authorities, resources and capabilities. Each EF member agency is responsible to assist in coordinating the state's response to emergencies, including provision of mutual aid and the allocation of essential supplies and resources. For the purposes of this document, only three EFs will be used (EF7-Resources, EF8-Health and Medical, and EF12-Utilities).

Local governments and OAs are not required to implement the EF concept unless they choose to do so. Instead, they should organize consistent with local resources and established SEMS regulations and guidelines.

## **2) Operational Priorities, Goals, and Strategies**

During the Response Phase, emergency managers prioritize actions, set goals, and outline operational strategies. The following is a broad overview of those goals, priorities and strategies and describes what should occur during each step, when and at whose direction.

### **• Operational Priorities:**

#### **1. Save Lives:**

The preservation of life is the top priority of emergency managers and first responders and takes precedence over all other considerations

#### **2. Protect Health and Safety:**

Measures should be taken to mitigate the emergency's impact on public health and safety

#### **3. Protect Property:**

All feasible efforts must be made to protect public and private property and resources, including critical infrastructure, from damage during and after an emergency

**4. Preserve the Environment:**

All possible efforts must be made to preserve California’s environment and protect it from damage during an emergency

• **Operational Goals:**

- Mitigate Hazards
- Meet Basic Human Needs
- Address Needs of People with Disabilities and Older Adults
- Restore Essential Services
- Support Community and Economic Recovery

• **Operational Strategies:**

- **Mitigate Hazards:**  
As soon as practical, suppress, reduce or eliminate hazards and/or risks to persons and property during the disaster response. Lessen the actual or potential effects or consequences of future emergencies
- **Meet Basic Human Needs:**  
All possible efforts must be made to supply resources to meet basic human needs, including food, drinking water, shelter, medical treatment and security during the emergency. Afterwards provisions will be made for temporary housing, food stamps and support for re-establishing employment after the emergency passes
- **Address Needs of People with Disabilities and Older Adults:**  
People with disabilities and older adults are more vulnerable to harm during and after an emergency. The needs of people with disabilities and the elderly must be considered and addressed
- **Restore Essential Services:**  
Power, drinking water, sanitation, transportation and other essential services must be restored as rapidly as possible to assist communities in returning to normal daily activities
- **Support Community and Economic Recovery:**  
All members of the community should collaborate to ensure that recovery operations are conducted efficiently, effectively and equitably, promoting expeditious recovery of the affected areas

**Field Level (Local Water Utility)**

**The first priority of the local water utility is to ensure that the people they serve have access to drinking water while repairing and restoring its water system infrastructure.** The utility is responsible for the procurement and distribution of emergency drinking water. When the water utility’s ability to procure and distribute emergency drinking water is insufficient to meet the demand or exceeds, or is anticipated to exceed the utility’s to do so, the utility should contact the appropriate SEMS level EOC for assistance.

**Local Government Level (City, County and Special Districts)**

**The first priority of the City/County or Special District water utility is to ensure the people they serve have access to drinking water while repairing and restoring its water system infrastructure.** The local government is responsible for the procurement and distribution of emergency drinking water when the water utility is part of the local government.

The city or county may also need to coordinate assistance for privately owned water systems or water districts in addition to restoring its own water system. When the demand for procuring and distributing emergency drinking water exceeds or is anticipated to exceed its ability to do so, the local government/special district should contact the OA EOC for assistance.

### Operational Area Level

As needed, the OA EOC assists the local water utility or local government in the procurement and distribution of emergency drinking water. When the demand for procuring and distributing emergency drinking water exceeds or is anticipated to exceed its ability to do so, the OA EOC should contact the REOC for assistance.

### Regional Level

When the demand for procuring and distributing emergency drinking water exceeds or is anticipated to exceed its ability to do so, the REOC should contact the SOC for assistance.

### State Level

The SOC will coordinate with unaffected REOCs and, if necessary, state agencies to provide support to field level operations. If the emergency response requires resources beyond the capability of the State, Cal OES may request resources from the Federal Emergency Management Agency (FEMA), Emergency Management Assistance Compact (EMAC), public/private partnerships, or other sources.

## 3) Direction, Control, and Coordination

Responsibility for emergency response is based on statutory authority. The emergency response is coordinated under SEMS, which provides a flexible, adaptable and expandable response organization to address all-hazards of varying magnitude and complexity. A drinking water emergency presents a unique set of circumstances because stakeholders may not typically interact with each other on a day to day basis so it is vital that coordination and information sharing take place early on at all SEMS levels.

### Public Water Systems

Public Water Systems take actions to restore service when an unusual event or emergency causes a Public Water System to fail a drinking water standard or creates a service outage. The Public Water System manages the incident and should:

- Activate emergency plans and procedures, (e.g., Emergency Response Plan, Emergency Water Supply Treatment Procedures, and/or Water Quality Emergency Notification Plans)
- Notify:
  - Local and State regulatory agencies in accordance with statutory and regulatory requirements and local policies and procedures (e.g., State Drinking Water Program District Engineer or Local Primacy Agency (LPA))
  - Local health department (LHD)/ Environmental Health Department (EHD) within the affected jurisdiction if public health is threatened.
  - Other agencies (e.g., public safety and local emergency management) and entities (e.g., corporate headquarters) in accordance with local policies and procedures

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- Issue notices to the public (e.g., Boil Water Notices) in coordination with regulatory and public health agencies according to notification protocols
- Manage the incident in accordance with emergency response plans, policies and procedures (e.g., implement the Incident Command System or activate a Department Operations Center (DOC)/ EOC)
- Coordinate with response partners and integrate into the emergency response structure, (e.g., field-level Incident Command or DOC/EOCs if established) as required by the type and scope of the emergency
- Provide situational information to the local and/or State regulatory agencies and other agencies in accordance with policies and procedures

### **State Drinking Water Program, Local Primacy Agencies (LPA) or Other Regulatory Agency**

The State Drinking Water Program, LPA, or appropriate regulatory agency may become directly involved in the response upon request from the Public Water System or affected jurisdiction, or if there is a public health concern. The regulatory agency should:

- Notify:
  - Other regulatory agencies
  - LHD/EHD
  - California Department of Public Health (CDPH) Duty Officer Program (or Medical Health Coordination Center (MHCC) if activated)
- Contact the affected Public Water System and/or send a representative to assess impact upon notification that the Public Water System has experienced an unusual occurrence or emergency
- Provide technical assistance to the affected Public Water System and/or local jurisdictions
- Coordinate remotely with the affected jurisdiction or send an Agency Representative, depending on staff availability and the needs of the emergency, to the appropriate location (e.g., Incident Command Post, Area Command, LHD DOC, OA EOC, or REOC)

### **Local Health Department (LHD), Environmental Health Department (EHD) and Local Emergency Medical Services Authority (LEMSA)**

- Notify
  - Local and State agencies in accordance with statutory and regulatory requirements and local policies and procedures
  - Medical Health Operational Area Coordinator (MHOAC) Program
  - LHD and EHD only: CDPH Duty Officer Program (either directly or via the MHOAC Program) or MHCC if activated
- Provide situational information to the MHOAC Program in accordance with local policies and procedures

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- If medical and health resource requests cannot be filled within the local government jurisdiction or through existing agreements, request resources through the MHOAC Program in accordance with local policies and procedures
- Local policies and procedures will determine the appropriate contact within the MHOAC Program, since MHOAC Program functions are typically shared between the LHD and LEMSA. Include required logistical support (“wrap around services”) such as food, lodging and fuel as part of the resource request. If non-medical and health resources are needed, request resources through the appropriate local agency in accordance with local policies and procedures and inform the MHOAC Program
- Coordinate with affected field-level entities, LEMSA, MHOAC Program, Incident Command and DOCs/EOCs in accordance with local policies and procedures

### **Medical Health Operational Area Coordinator (MHOAC) Program**

- Notify:
  - Regional Disaster Medical Health Coordinator (RDMHC) Program
  - CDPH and/or Emergency Medical Services Authority (EMSA) Duty Officer Programs (either directly or via the RDMHC Program)
  - Emergency management agency for the Operational Area (or the Operational Area EOC if activated)
- Prepare a Medical and Health Situation Report containing the minimum data elements. The initial Medical and Health Situation Report may be provided verbally to the RDMHC Program under pressing circumstances
- Within two hours of incident recognition, submit the initial Medical and Health Situation Report to the
  - RDMHC Program
  - CDPH and EMSA Duty Officer Programs (or MHCC if activated)
  - Emergency management agency for the Operational Area (or the Operational Area EOC if activated) and other agencies in accordance with local policies and procedures
- Provide updated Medical and Health Situation Reports as follows
  - Once during each operational period at agreed upon times
  - When there are changes in status, prognosis or actions taken
  - In response to State/Regional agency request as communicated by the RDMHC Program
- Coordinate with the affected field-level entities, LHD, EHD, LEMSA, and CDPH and/or EMSA Duty Officer Programs (or MHCC if activated) to share situational information
- Coordinate with the RDMHC Program to obtain information, policy-level decisions for response activities, and guidance developed by State-level programs and coordinated through the MHCC
- Attempt to fill resource requests within the Operational Area or by utilizing existing agreements (including day-to-day agreements, memoranda of understanding, or other emergency assistance agreements)

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- If requested resources cannot be met within the Operational Area or through existing agreements, prepare a Resource Request
  - Medical and Health that includes the minimum information (see Resource Management chapter and Appendix D), including the need for logistical support (“wrap around services”) such as food, lodging, and fuel. Submit the resource request to the RDMHC Program, which will begin to coordinate the resource acquisition process. Confirm receipt
  - Emergency management agency for the Operational Area (or Operational Area EOC if activated). Confirm receipt and entry in RIMS or other resource tracking system
- Ensure that situational information is provided to the RDMHC Program, emergency management agency for the Operational Area (or Operational Area EOC if activated), and CDPH and EMSA Duty Officers (or MHCC if activated) to support the requested resources. A Medical and Health Situation Report should be submitted with the resource request or as soon as possible
- Notify the requestor of the outcome of the request and delivery details if the request is filled
- Support the Medical and Health Branch of the Operational Area EOC if activated

### **Regional Disaster Medical Health Coordinator (RDMHC) Program**

- Notify and coordinate with the CDPH and/or EMSA Duty Officer (or MHCC if activated)
- Notify and coordinate with emergency management agencies in accordance with policies and procedures, including the Cal OES Regional Duty Officer (or REOC if activated)
- Confirm that the MHOAC Program submitted the Medical and Health Situation Report to the CDPH and/or EMSA Duty Officer Programs (or MHCC if activated); if not, submit immediately
- Confirm that the MHOAC Program submitted the Medical and Health Situation Report to the emergency management agency for the Operational Area (or Operational Area EOC if activated); if not, submit immediately
- Confirm that the Cal OES Regional Duty Officer (or REOC if activated) received the information contained in the Medical and Health Situation Report; if not, submit immediately
- If resources are requested, immediately begin the process of filling the resource request by coordinating with unaffected Operational Areas within the Mutual Aid Region
- Coordinate with the Cal OES Regional Duty Officer (or REOC if activated) to ensure proper tracking and fulfillment of the resource request
- Notify the CDPH and/or EMSA Duty Officers (or MHCC if activated) that a resource request is being processed
- Notify the requesting MHOAC Program, CDPH and/or EMSA Duty Officers (or MHCC if activated), and Cal OES Regional Duty Officer (or REOC if activated) of the outcome of the request and delivery details if the request is filled within the Mutual Aid Region

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- Coordinate with the MHCC to ensure that information, policy-level decisions for response activities, and guidance developed by State-level programs are distributed to the MHOAC Program(s)
- Coordinate with CDPH and EMSA to support the Medical and Health Branch of the REOC if activated

### **CDPH Duty Officer**

- Notify and share information with local and State agencies, including LHD/EHDs, CDPH Programs, State Water Board's (SWB) Drinking Water Program, MHOAC Programs, RDMHC Programs, EMSA and Cal OES. If the MHCC is activated, activities related to the specific incident are coordinated through the MHCC

### **EMSA Duty Officer**

- Notify and share information with local and State agencies, including the LEMSA, RDMHC Programs, MHOAC Programs, CDPH and Cal OES. If the MHCC activates, activities related to the specific incident are coordinated through the MHCC

### **Medical Health Coordination Center (MHCC) (if activated)**

The MHCC activates during emergencies to coordinate the State-level response of CDPH, EMSA and the Department of Health Care Services. The MHCC functions as a central point of coordination between the involved State programs and RDMHC Programs, MHOAC Programs, LHD/EHDs, and LEMSAs. The MHCC will:

- Send an alert through the California Health Alert Network (CAHAN) that the MHCC has activated, including MHCC contact information and hours of operation. (Note that the CDPH Duty Officer Program and/or EMSA Duty Officer Program are the official points-of-contact outside MHCC operational hours.)
- Distribute State-level policy decisions, key information and guidance to the RDMHC Programs, MHOAC Programs, LHD/EHDs and LEMSAs, and support requests for State-level program information
- Prepare the statewide Medical and Health Situation Report and distribute in accordance with policies and procedures
- Monitor medical and health resource requests in RIMS, determine if State resources are needed, and fill resource requests as necessary

## **4) Alert and Warning**

Each jurisdiction within the state is responsible for preparing for a disaster including establishing methods for alerting and warning the public, mobilizing resources and initiating protective actions

## 5) Intelligence Gathering and Situation Reporting

To avoid duplication of efforts and to expedite procurement and distribution of emergency drinking water to affected populations, it is critical that information regarding the situation be transmitted through SEMS. During the initial hours following an emergency it is important to determine the scale of the emergency and the areas where the existing drinking water supply and distribution system has been impacted. Situational information will help facilitate decisions on whether and when to activate the applicable SEMS level.

Within the Cal Emergency Operations Center (Cal EOC) information management system water system/utility and jurisdictional information and resource needs should be reported utilizing situation reports and/or resource request forms. Where access to Cal EOC is not available, established local procedures for reporting situation status and requesting resources should be followed.

## 6) Public Information

During an emergency, responsible jurisdictions disseminate information about the emergency to keep the public informed about what has happened, protective actions they should take to safeguard their health, the actions of emergency response agencies and to summarize the expected outcomes of those emergency actions.

- **Local Government Responsibilities:** Water utilities will provide immediate and critical emergency public information to their water system users on the status of their drinking water and any emergency measures required rendering it safe to consume
- **State Government Responsibilities:** Cal OES will coordinate the state's emergency public information efforts and provides support to other state agencies to ensure that the state government issues a timely, clear, concise, consistent message. The State Drinking Water Program provides oversight of Public Water Systems and ensures that water utilities issue emergency public information to their water system users. If a water-advisory is issued by the water utility, local government or the Drinking Water Program, only the State Drinking Water Program or Local Primacy Agency (LPA) may rescind that advisory
- **State Assistance to Local Officials:** State assistance may be required when:
  - The means of dispersing public information at the local government level is damaged or overwhelmed
  - Critical information needs to be disseminated to victims, responders, recovery personnel and members of the media
  - Multiple response agencies and levels of government need to work cooperatively to provide consistent emergency information
  - A large area is impacted in a drinking water emergency requiring the issuance of an area-wide unsafe water advisory

## 7) Resource Management

Incident management requires carefully managed resources to meet critical incident needs.

Resource management must be flexible and scalable in order to support any incident and be adaptable to real-time changes in incident size and scope. Efficient, effective deployment of resources requires that resource management spans the lifecycle of an incident.

Resources may be requested from other local agencies or jurisdictions, private-sector and non-governmental organizations, state agencies (possibly including resources from other States), and federal agencies (possibly including military support of domestic incidents). Incident resources may include personnel, teams, facilities, equipment, supplies, and funding streams.

Resources may support field and command operations through the incident command post (ICP), or function within the multi-agency coordination systems, serving at an emergency operations center or similar site. The Cal EOC information management system should be used for submitting resource requests. Where access to Cal EOC is not available, established local procedures for requesting resources should be followed.

It is the policy of the State that contracts and agreements for emergency response and disaster repair and restoration should be entered into and executed by the lowest level of government possible. When local resources are exhausted and additional resources are required, resource requests will follow an established process for ordering, tracking, mobilizing and demobilizing. Depending on the scale of the emergency, limited resources may need to be allocated or controlled.

**Resource Ordering:**<sup>3</sup> All resource requests, at each level, must include the following:

- Clearly describe the current situation
- Describe the requested resources
- Specify the type or nature of the service the resource(s) will provide
- Provide delivery location with a common map reference
- Provide local contact at delivery location with primary and secondary means of contact
- Provide the name of the requesting agency and/or OA Coordinator contact person
- Indicate time frame needed and an estimate of duration
- Resource requests involving personnel and/or equipment with operators will need to indicate if logistical support is required, (i.e. food, shelter, fuel and reasonable maintenance)

**Resource Directories:** Each state agency and local government entity should identify sources for materials and supplies internally and externally. The SOC and REOC maintain a list of state agencies, their roles and responsibilities as outlined in the State Emergency Plan (SEP) and the common resources available from each.

#### **Requesting Emergency Assistance<sup>4</sup>**

Water systems/utilities have multiple methods of requesting assistance from other utilities:

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<sup>3</sup> For more information on resource ordering, refer to the *SEMS Resource Ordering and Tracking: A Guide for State and Local Government* on the Cal OES Website.

<sup>4</sup> Appendix H provides additional forms of emergency assistance.

- **Mutual Response Agreements**

Utilities may enter into automatic response agreements between neighboring utilities or utilities of like size and system dynamics located in other parts of the state that can provide resources. The resources could be provided by public and private resources. Examples of these groups include CUEA, the Member Agency Response System (MARS), Water and Wastewater Emergency Response of Orange County (WEROC), Water Agencies Emergency Collaborative (WAEC) and, the Emergency Response Network of the Inland Empire (ERNIE)

- **California Water/Wastewater Agency Response Network**

Utilities in California established the California Water/Wastewater Agency Response Network (CalWARN) to improve the flow of mutual aid/assistance among the signatory utilities throughout the state. Resources may be requested directly from one utility to another and do not require a declaration of an emergency; however, members are encouraged to coordinate through the CalWARN Region Section Chairs when multiple jurisdictions are impacted. Public and private resources are available through the system

- **California Disaster and Civil Defense Master Mutual Aid Agreement (MMAA)**

The MMAA is an agreement made and entered into by and between the State of California, its various department and agencies, and the various political subdivisions, municipal corporations, and other public agencies of the State of California

Cities, counties and special districts who adopt MMAA may access resources through the State OES mutual aid coordination system.

- **California Utilities Emergency Association (CUEA)**

Utilities have automatic response agreements between neighboring utilities or utilities of like size and system dynamics located in other parts of the state, and out of state, that can send resources immediately to assist. This aid would provide needed specialized resources to the affected utilities. The resources could include public and private resources

- **State Water Procurement Contracts (bottle and bulk water)<sup>5</sup>**

The California Department of General Services has instituted both bottled water and a bulk water contracts that will allow local governments to simply purchase off the state contracts. This will reduce the time and expense incurred by local governments in acquiring bottled or bulk water supplies

## **8) Public Health and Medical System Coordination**

The following describes the role of EF 8 (Public Health and Medical) and Public Health and Medical System Coordination in effective emergency management<sup>6</sup>.

Within the OA, the Medical Health Area Coordination (MHOAC) Program coordinates the functions identified in Health and Safety Code §1797.153 (see Appendix A). Within each OA, the Health and Safety Code authorizes the county health officer and local emergency medical services administrator to jointly act as the MHOAC or appoint another individual to fulfill the responsibilities. The MHOAC Program coordinates public health and medical response with the OA EOC.

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<sup>5</sup> DGS Contracts – Appendix D and E

<sup>6</sup> Taken from California Public Health and Medical Emergency Operations Manual

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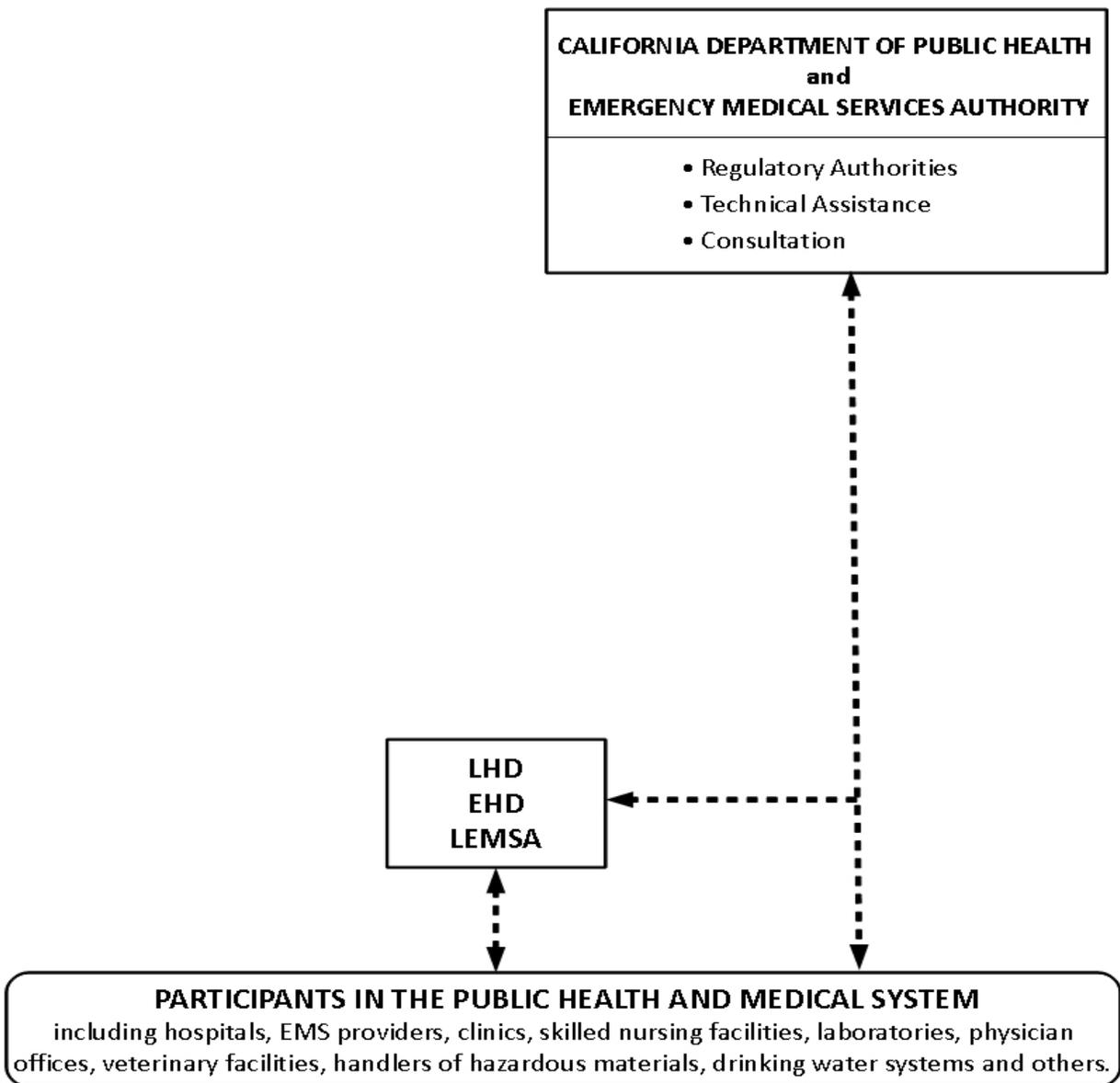
Within the Mutual Aid Region, the Regional Disaster Medical Health Coordination (RDMHC) Program coordinates the functions identified in Health and Safety Code §1797.152 (see Appendix B). At the state level, state agencies coordinate their activities to support emergency response. The RDMHC Program coordinates public health and medical response with their respective REOC.

Both references to the Health and Safety Code include “assurances of drinking water safety”.

Cal OES maintains and operates three REOCs and the SOC. Within each REOC and the SOC a Medical Health Branch (or EF 8) may be activated to coordinate and support public health and medical activities.

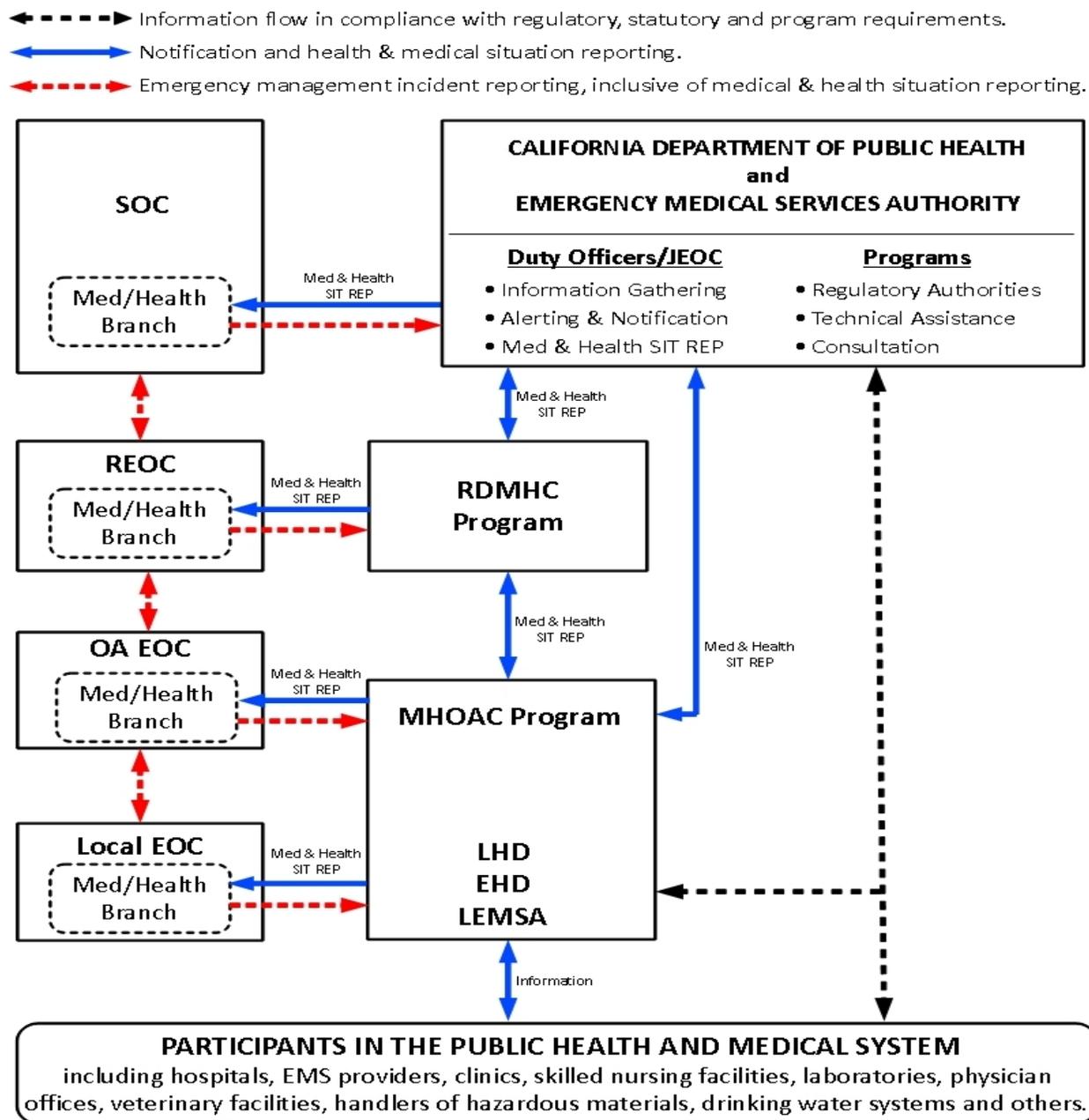
**FIGURE 2. Information Flow during Day-to-Day Activities**

← - - - → Information flow in compliance with regulatory, statutory and program requirements.



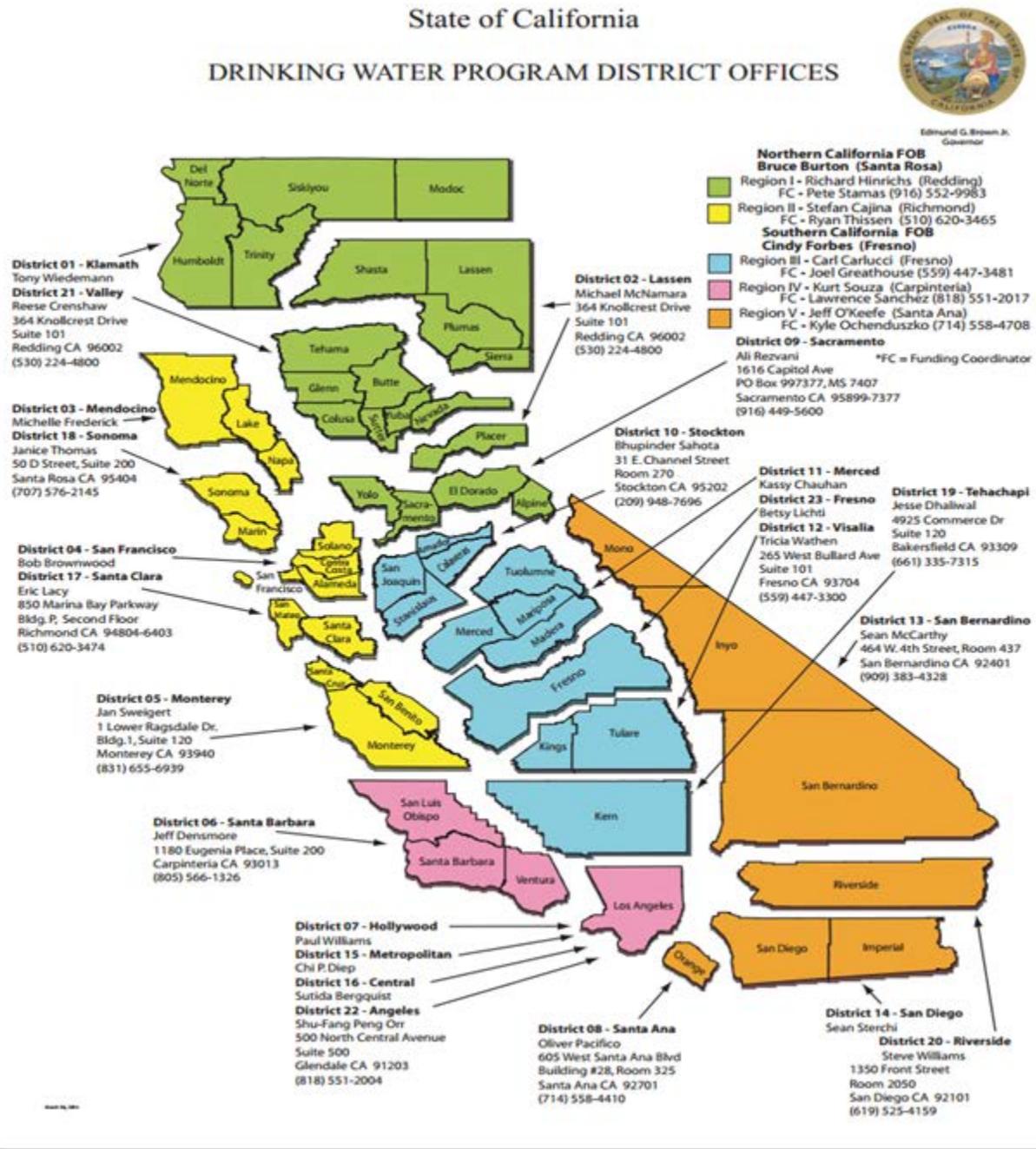
Information routinely flows between public health and medical system partners, including, but not limited to, local health departments (LHDs), local environmental departments (EHDs), local emergency medical services agencies (LEMSAs), health care facilities, drinking water systems/utilities and state and federal agencies in accordance with statutory and regulatory requirements. When an operational problem occurs (i.e., need for emergency water) in the course of ordinary day-to-day activities, relevant information should be reported to the appropriate local and state agencies in accordance with statutory and regulatory requirements and local policies and procedures. See Figure 2.

**FIGURE 3. Information Flow during Emergency System Activation**



For the purpose of this Guidance, emergency system activation occurs when an incident leads to activation of incident command posts (ICPs), department operations centers (DOCs), and/or emergency operations centers (EOCs). See Figure 3. Emergency system activation should trigger an enhanced level of information sharing to support the needs of the incident. Situation reporting provides the foundation for support and coordination and facilitates resource acquisition. A Medical and Health Situation Report should be completed and submitted in accordance with the guidance provided in the California Public Health and Medical Emergency Operations Manual.

**Figure 4. Contact Information for SWB Drinking Water District Engineers**



If your water system is experiencing a water outage, contact your District Engineer or Local Regulatory Agency immediately. For water systems experiencing diminishing water supply, please stay in contact with your District Engineer or Local Regulatory Agency. Funding may be available for short term, emergency water projects.

## **Sequence of Events During Disasters**

- **Before Impact**

- **Routine Monitoring for Alerts, Watches and Warnings:** Emergency officials constantly monitor events and the environment to identify specific threats that may affect their jurisdiction and increase awareness level of emergency personnel and the community when a threat is approaching or imminent
- **Increased Readiness:** Sufficient warning provides the opportunity for response agencies to increase readiness, which are actions designed to increase an agency's ability to effectively respond once the emergency occurs. This includes, but is not limited to
  - Briefing government officials
  - Reviewing plans and procedures.
  - Preparing and disseminating information to the community
  - Updating resource lists
  - Testing systems such as warning and communications systems
  - Precautionary activation of Emergency Operations Centers
- **Pre-Impact:** When a disaster is foreseen as highly likely, action is taken to save lives and protect property. During this phase, warning systems are activated, evacuation begins and resources are mobilized

- **Immediate Impact**

During this phase, emphasis is placed on control of the situation, saving lives and minimizing the effects of the disaster.

- Alert and Notification
- Resource Mobilization
- Incident Response
- Establishing Incident Command
- Activation of the Multiagency Coordination System
- Local EOC Activation
- Communications between Field and the EOC
- OA EOC Activation
- REOC Activation
- SOC Activation
- Joint Information Center (JIC) Activation
- Department Operations Center (DOC) Activation
- FEMA Regional Response Coordination Center (RRCC) Activation

- **Sustained Operations**

As the emergency situation continues, further emergency assistance is provided to victims of the disaster and efforts are made to reduce the likelihood of secondary damage. If the situation demands, mutual aid is provided, as well as search and rescue of, shelter and care for and identification of victims

- **Transition to Recovery**

As the initial and sustained operational priorities are met, emergency management officials consider the recovery phase needs. Short-term recovery activities include returning vital life-support systems to minimum operating standards. Long-term activity is designed to return to normal activities. Recovery planning should include reviews of ways to avert or mitigate future emergencies. During the recovery phase, damage is assessed, local assistance centers and disaster recovery centers are opened and hazard mitigation surveys are performed.

- **Local Assistance Centers:** Local Assistance Centers (LACs) are opened by local governments to assist communities by providing a centralized location for services and resource referrals for unmet needs following a disaster or significant emergency. The LAC is normally staffed and supported by local, state and federal agencies, as well as non-profit and voluntary organizations. The LAC provides a single facility at which individuals, families and businesses can access available disaster assistance programs and services. As more federal resources arrive, a state-federal Disaster Recovery Center (DRC) may be collocated with the LACs
- **Joint Field Office:** The state coordinates with FEMA as necessary to activate a JFO to coordinate federal support for the emergency. The state will appoint a State Coordinating Officer (SCO) to serve as the state point of contact. A Federal Coordinating Officer (FCO) is appointed upon a Presidential Declaration of an Emergency or Major Disaster
- **Demobilization:** As resources are no longer needed to support the response, or the response activities cease, resources are demobilized. Demobilization includes provisions to address and validate the safe return of resources to their original location and include processes for resource tracking and ensuring applicable reimbursement. Where applicable, the demobilization should include compliance with mutual aid and assistance provisions

## CHAPTER 2

### ROLES AND RESPONSIBILITIES

The following table describes stakeholder functions as related to their SEMS response levels during an emergency that disrupts the availability of drinking water through the local water utility distribution system. Each stakeholder listed below may participate in a Task Force and/or MAC Group established to address emergency drinking water needs of the affected jurisdiction(s).

**Table 2: Roles and Responsibilities**

Stakeholder	SEMS Levels	Functions
Water Utility (public or private)	Field/Local/Operational Area (OA)/Region	<ul style="list-style-type: none"> <li>• Private water utilities are generally investor-owned and operated. While private utilities are not required to comply with SEMS, most have chosen to follow SEMS protocols.</li> <li>• Public water utilities can be part of a city or county agency, or the utility can be an independently governed special district, not affiliated with a city or county. To be eligible for state and federal preparedness grants and reimbursement for response related costs following a declared disaster, public water utilities must comply with SEMS.</li> <li>• If the local utility is, or part of, a city or county department, the utility may establish a department operations center and/or report directly into the appropriate city or county or Operational Area Emergency Operations Center (OA EOC).</li> <li>• Special districts may activate an EOC, and depending on the number of cities or counties served, the utility may report directly into a city or county EOC, an OA EOC, or the State OES Regional Emergency Operations Center (REOC).</li> <li>• During an emergency that impacts the drinking water distribution system, the local water utility is responsible for procuring and distributing emergency drinking water for its users provided that emergency drinking water sources are available and the local utility resources are available to lead and/or assist in coordination.</li> </ul>

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Stakeholder	SEMS Levels	Functions
		<ul style="list-style-type: none"> <li>• When the local water utility's capacity to maintain lead responsibility for drinking water supplies is exceeded, utility management may request the support of the city, OA or regional EOC to establish a Task Force and/or MAC Group to coordinate the delivery of emergency drinking water.</li> </ul>
Tribal Governments	Local/OA	<ul style="list-style-type: none"> <li>• Tribal Governments are sovereign nations who may coordinate directly with the federal government, state, or county government during an emergency.</li> </ul>
Local Primacy Agency/ Environmental Health Department	Local/OA	<ul style="list-style-type: none"> <li>• Environmental Health Specialists</li> <li>• Provide regulatory oversight of smaller systems               <ul style="list-style-type: none"> <li>○ Unsafe Water Advisories (e.g. Boil Water Notice)</li> <li>○ Corrective actions/ mitigation measures</li> </ul> </li> <li>• Provide technical assistance</li> </ul>
State DWP District Office	Local/OA/Region/ State	<ul style="list-style-type: none"> <li>• District Engineers</li> <li>• Provide regulatory oversight of Public Water Systems               <ul style="list-style-type: none"> <li>○ Unsafe Water Advisories (e.g. Boil Water Notice)</li> <li>○ Corrective actions/ mitigation measures</li> </ul> </li> <li>• Provide technical assistance</li> </ul>
Cities/Counties/ Special Districts	Local Government/OA	<ul style="list-style-type: none"> <li>• During an emergency, Local Governments operate local EOCs to coordinate resources and operations within the jurisdiction. This may include the distribution of emergency drinking water to affected populations.</li> <li>• Local Governments may assist the local water utility in procuring and distributing emergency drinking water for population(s) within its jurisdiction, provided emergency drinking water sources are available and Local Government response resources are available that can be dedicated to this responsibility.</li> <li>• Local Governments provide situational assessment on the need for emergency drinking water to an OA EOC.</li> </ul>

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Stakeholder	SEMS Levels	Functions
		<ul style="list-style-type: none"> <li>• If necessary, Local Governments may request the OA to establish a Task Force to facilitate emergency drinking water requests</li> </ul>
OA EOC	Operational Area	<ul style="list-style-type: none"> <li>• An OA EOC may be activated to coordinate the emergency response actions of all jurisdictions within the boundary of the county</li> <li>• Upon request or when local water distribution disruption becomes a priority for the OA, staff may be identified to help coordinate resources within the OA and assist cities, special districts, and local utilities in providing emergency drinking water to the affected population(s). This may include procurement and distribution of emergency drinking water</li> <li>• If necessary, the OA may request the REOC to establish a Task Force to facilitate requests specific to emergency drinking water</li> </ul>
Medical and Health Operational Area Coordination (MHOAC) Program	Operational Area	<ul style="list-style-type: none"> <li>• EF-08 Public Health/Medical Mutual Aid Coordination</li> <li>• Supports OA EOC activation</li> <li>• Assurance of drinking water safety</li> <li>• Prepare a Medical and Health Situation Reports</li> <li>• Notifies RDMHC Program; CDPH and EMSA Duty Officer Programs (or MHCC if activated); Emergency management agency for the Operational Area (or the Operational Area EOC if activated) and other agencies in accordance with local policies and procedures</li> <li>• Coordinates with the affected field-level entities, LHD, EHD, LEMSA, DWP, and CDPH and/or EMSA Duty Officer Programs (or MHCC if activated) to share situational information</li> <li>• Coordinate with the RDMHC Program to obtain information, policy-level decisions for response activities, and guidance developed by State-level programs and coordinated through the MHCC</li> <li>• Attempt to fill resource requests within the Operational Area or by utilizing existing agreements</li> </ul>

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Stakeholder	SEMS Levels	Functions
		<ul style="list-style-type: none"> <li>• If requested resources cannot be met within the Operational Area or through existing agreements, prepare a Resource Request</li> <li>• Support the Medical and Health Branch of the Operational Area EOC if activated</li> </ul>
REOC	Region	<ul style="list-style-type: none"> <li>• The REOC coordinates information and resources among the OAs within the mutual aid region</li> <li>• The REOC coordinates state agency support</li> </ul>
State Drinking Water Program	Region	<ul style="list-style-type: none"> <li>• EF-08 Public Health/Medical Mutual Aid Coordination</li> <li>• Assists DGS/OES EF-07 Resources coordination</li> <li>• Coordinates with EF 12</li> <li>• Collect drinking water system situational status information</li> <li>• Contacts the affected Public Water System and/or send a representative to assess impact upon notification that the Public Water System has experienced an unusual occurrence or emergency</li> <li>• Provides technical assistance to the affected Public Water System and/or local jurisdictions</li> <li>• Coordinates remotely with the affected jurisdiction or send an Agency Representative, depending on staff availability and the needs of the emergency, to the appropriate location (e.g., Incident Command Post, Area Command, LHD DOC, Operational Area EOC, or Regional Emergency Operations Center (REOC))</li> </ul>
Regional Disaster Medical Health Coordination Program (RDMHC)	Region	<ul style="list-style-type: none"> <li>• EF-08 Public Health/Medical Mutual Aid Coordination</li> <li>• Supports REOC activation</li> <li>• Coordinate with the DWP, CDPH and/or EMSA Duty Officer (or MHCC if activated).</li> <li>• Confirm that the MHOAC Program submitted the Medical and Health Situation Report to the emergency management agency for the Operational Area (or Operational Area EOC if activated); if not, submit immediately.</li> </ul>

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Stakeholder	SEMS Levels	Functions
		<ul style="list-style-type: none"> <li>• If resources are requested, immediately begin the process of filling the resource request by coordinating with unaffected Operational Areas within the Mutual Aid Region.</li> <li>• Coordinate with the Cal OES Regional Duty Officer (or REOC if activated) to ensure proper tracking and fulfillment of the resource request.</li> <li>• Coordinate with the MHCC to ensure that information, policy-level decisions for response activities, and guidance developed by state-level programs are distributed to the MHOAC Program(s).</li> </ul>
State Operations Center (SOC)	State	<ul style="list-style-type: none"> <li>• The SOC coordinates mutual aid and resources among the mutual aid regions including emergency drinking water</li> <li>• EF 8 and EF 12 representatives coordinate drinking water issues at the SOC</li> </ul>
Department of General Service (DGS)	State	<ul style="list-style-type: none"> <li>• Lead agency for EF-07 Resources Coordination</li> <li>• Develop the State Bottled Water Contract</li> <li>• Develop the State Bulk Water Contract</li> <li>• Facilitate/Chair “Critical Asset Workgroup”</li> <li>• Coordinator of the Cal-EOC – Resources Module/Directory</li> </ul>
California Department of Public Health (CDPH)	State	<ul style="list-style-type: none"> <li>• Co-lead department for EF-08 Public Health and Medical Coordination</li> <li>• Activate Medical and Health Coordination Center (MHCC) to support requests</li> <li>• Distribute State-level policy decisions, key information and guidance to the RDMHC Programs, MHOAC Programs, LHD/EHDs and LEMSAs, and support requests for State-level program information</li> <li>• Prepare the statewide Medical and Health Situation Report and distribute in accordance with policies and procedures</li> <li>• Monitor medical and health resource requests in RIMS, determine if State resources are needed, and fill resource requests as necessary</li> </ul>

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Stakeholder	SEMS Levels	Functions
		<ul style="list-style-type: none"> <li>• Monitors drinking water situational information</li> <li>• FDB maintains lists of licensed water haulers, bottlers and distributors that could provide drinking water to affected areas</li> </ul>
<b>CDPH Drinking Water and Radiation Laboratory Branch (DWRLB)</b>	State	<ul style="list-style-type: none"> <li>• Analyzes human specimens for toxic substances as a Level 1 laboratory in the Laboratory Response Network – Chemical (LRN-C). Analyzes water samples to ensure that drinking water is free of harmful substances and suitable for human consumption. Analyzes environmental samples for radioactive material. California Mutual Aid Laboratory Network (CAMAL Net) provides additional laboratory surge capacity</li> </ul>
California National Guard (CNG)	State	<ul style="list-style-type: none"> <li>• Provide assistance/assets including drinking water treatment and storage equipment</li> </ul>
California Highway Patrol (CHP)	State	<ul style="list-style-type: none"> <li>• Provide security</li> </ul>
California Conservation Corps (CCC)	State	<ul style="list-style-type: none"> <li>• Provide assistance/assets</li> </ul>
California Department of Forestry and Fire Prevention (CALFIRE)	State	<ul style="list-style-type: none"> <li>• Provide assistance/assets</li> </ul>
Federal Emergency Management Agency (FEMA)	Federal	<ul style="list-style-type: none"> <li>• Bottled Water Distribution</li> </ul>
United States Army Corps of Engineers (US ACE)	Federal	<ul style="list-style-type: none"> <li>• ESF-03</li> <li>• Public Law 84-99 Drought Assistance</li> </ul>
Indian Health Service (IHS)	Federal	<ul style="list-style-type: none"> <li>• Support Tribal Governments with drinking water requests</li> </ul>
GSA	Federal	<ul style="list-style-type: none"> <li>• Support States and Tribal Governments with government water contracts</li> </ul>
CalWARN	Network	<ul style="list-style-type: none"> <li>• Provides drinking water resource</li> <li>• Provides drinking water resource support</li> </ul>

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Stakeholder	SEMS Levels	Functions
		<ul style="list-style-type: none"> <li>• CalWARN has available locally trained personnel in the G-611 course to fill the Water Sector Specific Position (WSSP) within an EOC. Approximately 200 of the 8,000 Public Water Systems maintain mutual aid and assistance agreements and contracts as part of CalWARN. CalWARN provides emergency resources, supplies, equipment and support, including surge capacity water testing and specialized water testing to detect and identify unknown contaminants</li> </ul>
CUEA	Association	<ul style="list-style-type: none"> <li>• Provides drinking water resources and state mutual aid</li> </ul>

## **CHAPTER 3**

# **PROCUREMENT AND DISTRIBUTION PLANNING**

Successful procurement and distribution of emergency drinking water involves a review of the (1) Emergency Drinking Water Procurement considerations, (2) Emergency Drinking Water Distribution considerations, (3) Emergency Drinking Water Distribution Checklist, (4) Water Sector, Drinking Water Coordinator or Technical Specialist

### **1) Emergency Drinking Water Procurement Considerations**

The Federal Emergency Management Agency (FEMA)<sup>7</sup> and Centers for Disease Control and Prevention (CDC)<sup>8</sup> recommend 1 gallon of water per person per day as a minimum planning requirement. Additional water is recommended for pets, cooking and bathing. Critical infrastructure including health care facilities (e.g. hospitals, skilled nursing facilities, etc.) requires larger amounts of water to maintain operations within the community and should be considered.

Note: All specific local legal, regulatory, financial and emergency system coordination processes and constraints must be considered as emergency planners develop emergency drinking water procurement and distribution plans.

Procurement options include:

- Treatment of Available Water
  - The State Drinking Water Program<sup>9</sup> or County Health Department should be consulted prior to the execution of any emergency drinking water supply plan to ensure compliance with all applicable regulations
  - When there is a “Boil Water” advisory, refer to the CDPH website for specific instructions
  - If there is a “Do Not Drink” or “Do Not Use” unsafe water advisory in affect, in-home treatment should not be advised
  - Commercial portable water treatment systems are available to connect to a non-approved water source. The State Drinking Water Program or County Health Department must approve the water source and/or treatment unit to ensure that the treatment is sufficient to deal with the level of source water contamination
- Packaged or Bottled Water
  - Water in one gallon plastic containers or cases of individual bottles can be stored or purchased from local retail stores, community based organizations, and/or government agencies. Also major bottlers and distributors may be another source of bottled water
  - Commercial beverage and water vendors may provide bottled water. A list of approved commercial bottled water vendors is maintained by the CDPH, Food and Drug Branch (FDB) and can be found at <http://www.cdph.ca.gov/programs/Pages/fdbBVW.aspx>.
  - Distribution points or methods will be needed if packaged water is to be distributed to residents

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<sup>7</sup> [www.ready.gov](http://www.ready.gov)

<sup>8</sup> [www.emergency.cdc.gov](http://www.emergency.cdc.gov)

- Bulk/Hauled Drinking Water Deliveries
  - Bulk/hauled water is moved by tanker truck. Bulk/Hauled drinking water tankers may be used as distribution points for residents who bring a container to be filled or connected to a building such as a hospital or other critical infrastructure in need of a water supply. CDPH-FDB maintains a list of licensed Drinking Water Haulers, which can be found at: <http://www.cdph.ca.gov/programs/Pages/fdbBVW.aspx>
  - Portions of the existing drinking water system, or nearby systems, may continue to have drinking water available in their distribution systems. If water quality can be verified and approved by CDPH FDB, these sources may be used as a source for bulk water haulers. Bulk transportation of these resources will require planning and coordination
  - The California National Guard (CNG) maintains water buffaloes (500 gallon storage tanks on trailers) that may be available in limited numbers and due to their small capacity should only be used to support evacuation efforts and immediate crisis situations. The small volume necessitates that water tanker trucks keep water buffaloes supplied
  - Some water utilities have procured water hauling vehicles and portable water storage vessels such as bladders that can be moved via flatbed truck. These may also be available via a mutual aid request from and coordination with those water utilities
  - Bulk/Hauled drinking water tankers may be used as distribution points
- Emergency Interties with Neighboring Water Systems
  - A temporary connection to a neighboring water system with drinking water that may be possible via above or below ground piping
- Statewide Water Contracts: Bottled and Bulk Water
  - The California Department of General Services has established a Statewide Bottled-Water Contract and a Statewide Contract for Bulk Water Delivery
  - Local government agencies will have the same rights and privileges under the terms of the contract. For purposes of these contracts, local government agencies are defined as “any city, county, city and county, district, or other governmental body or corporation, in the State of California, empowered to expend public funds for the acquisition of products”
  - The bottled water contract will have multiple suppliers established within the Cal OES’ six mutual aid regions. Products available to purchase will consist of bottled water packaged in various sizes including but not limited to 16.9 ounces, 1 liter, 1 gallon and 2.5 gallon plastic bottles. The products will be available for three delivery categories with varying timelines: Emergency, Urgent, or Standard. Requests for Emergency Delivery will be fulfilled within 12 hours of the receipt of order. Prices will be fixed and delivery is prepaid by the contractor to the ordering organization’s receiving point
  - The bulk water delivery contract will have three task options for State and Local Agencies
    - The first option will be for a straight purchase order and delivery of potable water
    - The second will be a transportation only option to allow for water transfers or hauling between districts or sources if required
    - The final option would have the contractor supply bulk potable water and storage capability at the receiving point
  - The contracts will also include user instructions for locals to access the contracts. See DGS website for updates and additional details

- Other Options
  - Hydrant tapping: If safe water is in sufficient supply within an existing water system, but cannot be distributed, the water may be accessed at fire hydrants or other locations within the functioning system for direct distribution to residents or filling bulk water tankers. This action requires coordination with the water utility and appropriate regulatory agency
  - There may be other options for emergency drinking water supply, such as drilling new wells, but those are longer term options that need more evaluation, discussion, and permitting

## **2) Considerations for an Emergency Drinking Water Distribution**

Emergency drinking water distribution planning includes determining the status of local drinking water system/utility infrastructure.

- Operational drinking water distribution systems: Planning considerations for the utilization of water systems that remain operational post-incident include
  - The configuration of the water system in the impacted area
  - Accessibility of neighboring pipelines (interconnectivity) for accessing drinking water
  - Availability of valve control options for isolating impacted system areas
  - Re-routing water
  - Identification of potential water hauler connection/access points
- Non-operational water distribution systems (e.g. damaged, under unsafe water advisories or unapproved source): These conditions will require the provision of emergency drinking water and may include the coordination of water transport and water distribution sites. It may be possible to transport water from operational to non-operational water systems

The logistics of distributing emergency drinking water to affected populations may pose significant challenges

- Storage: Packaged water requires transporting and warehousing prior to moving it to distribution sites. In some cases, water from existing treated water reservoirs can be pumped into tankers or packaged on-site to meet customer needs. Logistical concerns include planning for forklifts and other equipment required to transfer water into tankers or loading pallets on/off trucks
- Point of Distribution: Water utilities/local governments and other organization that provide emergency drinking water should identify the locations for emergency water distribution and negotiate agreements for location/facility use. Special care should be taken to avoid jurisdictional conflicts and competing uses. Before entering into an agreement, determine that it meets all of the needs of the emergency water distribution function. Items to consider<sup>10</sup> include
  - Size (minimum of 200ft X 200ft)
  - Openness
  - Proximity to emergency shelters and schools
  - Proximity to fire hydrants

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<sup>10</sup> Based on CalOES – Mobilization Centers: A Standardized Emergency Management System Guide for

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- Sufficient lighting and power supply
- Back-up power supply (e.g. generators)
- Phone service or other communications system availability
- Road access, including access by water delivery tankers
- Accessibility by public including people with disabilities
- Easily identified ingress and egress routing
- Central to the community
- Public transportation accessible
- Clear planning around the location of sites (geographic area served and appropriate serviceability to expected population)
- Delivery and storage of water (e.g. arrival of commodities before public-distribution capabilities are established)
- Co-location with other bulk commodity distribution: food, ice, clothing, etc.
- Over-ordering commodities and surpassing distribution capability or actual public consumption
- Plan for equipment necessary, type of facility (e.g. does it have truck loading availability, types of forklifts needed for offloading)
- Adequate sanitation facilities
- Indoor rest and recreation area for staff not on duty or sleeping
- Security
- Staffing

**3) Water Utility/Local Government Emergency Drinking Water Distribution Checklist**

- Review existing jurisdiction Emergency Drinking Water Distribution Plan
- Alert and notify all impacted stakeholders of the incident
- Provide situational assessment to appropriate stakeholders
  - Contact regulatory authority
    - State Drinking Water Program
    - Local Primacy Agency/County Environmental Health
  - Coordinate with emergency management
  - Notify public/environmental health
- Evaluate actions required to support the jurisdictions efforts to acquire and distribute emergency drinking water
- Assess emergency drinking water distribution need and parameters by reviewing the following and considering a minimum of 1 gallons per person per day
  - Estimated duration of system outage
  - Geographic area affected
  - Size and demographics of affected population
- Assess emergency drinking water distribution needs for critical facilities
  - Health care facilities (hospitals, skilled nursing facilities)
  - Prisons/Jails
  - Others
- Determine the preferred method of emergency drinking water distribution with the impacted jurisdiction. Distribution method may include the use of point of distribution (POD) sites or delivery of water to identified critical facilities, depending upon the water sources and forms of packaging (e.g. bottled, bulk,)
- Identify and coordinate resource staging areas
- Coordinate the procurement and delivery of water to identified staging areas
- Identify staff resources and equipment needed to operate identified water distribution method
  - Assess jurisdiction's ability to provide these resources

- Request the additional needed resources through the EOC Logistics Section
- Use the Joint Information System (JIS) to coordinate public information regarding emergency drinking water distribution
- Consult the State Water Program on the need for unsafe water advisories based upon method of distribution
  - For instance, if residents are utilizing their own containers for water collection a Boil Water Notice may be advised
- Monitor the emergency drinking water distribution process and coordinate with stakeholders as needed
- Continue coordination until the impacted water system is/are restored to normal operations

#### **4) Water Position-Drinking Water Coordinator or Technical Specialist**

As the emergency requires, each SEMS level EOC may staff a WSSP Drinking Water Coordinator or Technical Specialist for drinking water issues. The position may be assigned a role in the Management, Operations, Planning/Intelligence or Logistics section of the EOC. The specific assignment should be noted in the local emergency operations plan. Training on the Water Sector Specific Position is available, has been conducted statewide, and is a recognized California Specialized Training Institute (CSTI) course identified as G-611.

Staff for this position may be provided by CUEA, CalWARN, or other qualified water providers through Emergency Management Mutual Aid (EMMA).

At each level of response the WSSP or Drinking Water Coordinator could be staffed by an EOC trained individual from a non-impacted water utility, an individual from a non-utility who has experience working with water utilities, and or an individual who has significant experience in EOC operations and the delivery of bulk resources. For example, at the local level, the WSSP could be staffed by an EOC trained individual from any department, public works or water utility personnel with technical knowledge or State Drinking Water Program personnel.

The WSSP duties may include:

- Serving as the primary EOC contact for all drinking water procurement and distribution matters
- Coordinating conference calls with WSSPs from multiple SEMS levels or contacts to assess drinking water needs. This may include the participation in a MAC Group for drinking water to assess and/or prioritize emergency drinking water resources for the affected jurisdictions
- Obtaining consolidated situation information compiled by the **Planning and Intelligence Section** and other sources including the WSSP within the EOC. This information would include
  - Water system status information
  - Cause and extent of water system damage
  - Estimated duration of system outage
  - Geographical area affected
  - Population size/critical infrastructure affected
  - Actions taken to respond to the service disruption
  - Resources needed to restore system
  - Emergency drinking water needs (quantity and prioritized areas)
- Work with the affected utilities, prioritize distribution locations and make recommendations to **Planning/Intelligence Chief**

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- Identify and secure drinking water resources with assistance from the **Logistics Section, Procurement** personnel
- Identify transportation and equipment needs and secure required resources through the **Logistics Section, Procurement** personnel
- Coordinate with the State Drinking Water Program, water utilities, and **EOC Public Information Officer** for appropriate public information announcements and Media interface
- Document all information related to expenditures, resource commitments, contracts, and other costs related to procurement and distribution of drinking water and provide such information to the **Finance and Administration Section**

NOTE: More information regarding the Water Sector Specific Position is available through CSTI.

## Chapter 4

# STATE LEVEL PROGRAMS AND RESOURCES

### California Department of Public Health (CDPH)

Public Water Systems (systems with 15 or more service connections or that serve more than 25 individuals) manage and maintain watersheds, collection facilities, treatment facilities, and water distribution systems. Public Water Systems protect drinking water supplies and militate against, respond to, and recover from natural, technological, and human-caused emergencies. In coordination with regulatory agencies, Public Water Systems must quickly restore affected water service and deliver a safe and potable supply of drinking water to the public during an emergency. This may include the procurement and distribution of alternative sources of water to customers during prolonged service interruptions. If the Public Water System does not have the resources to procure and distribute drinking water during an emergency, alternative supplies of drinking water are requested through the Standardized Emergency Management System (SEMS) resource request process described in the Resource Management chapter of this manual.

The agency that regulates a Public Water System may be the State Drinking Water Program, Local Primacy Agency, or the LHD, depending on the type and size of the Public Water System. Local Primacy Agencies are LHDs or EHDs that have applied for and been granted regulatory authority over a portion of the Public Water System in their county. Small Water Systems have between 5 and 14 service connections and do not regularly serve more than 25 individuals for over 60 days per year. The regulatory responsibilities for these systems are delegated to the local health officer or to a local agency designated by the local health officer.

The table below provides a summary of system types and the associated regulatory agency for that system:

WATER SYSTEMS		
Type	Definition	Regulatory Agency
<b>Public Water System</b>	System with 15 or more service connections or that serves more than 25 individuals.	State Drinking Water Program or Local Primacy Agency in 35 counties
<b>Small Water System</b>	System with 5-14 service connections that does not regularly serve more than 25 individuals.	Local Health Officer or Agency Designated by Local Health Officer

## California Department of Public Health (CDPH) Food and Drug Branch (FDB)

FDB issues specific licenses and guidance for a variety of water-processing activities including:

- **Bottled water** is water sold or distributed to consumers in sealed containers for drinking, culinary, or other purposes involving a likelihood of being ingested by humans. Bottled water must be bottled only at a licensed water bottling plant
- **Vended water** is water dispensed by a water vending machine, retail water facility (or store), water from a private water source, or water delivered by a water hauler for drinking, culinary, or other purposes involving a likelihood of being ingested by humans. Vended water does not include bottled water
- **Water bottling plant:** a facility in which bottled water is produced
- **Retail water facility:** a facility where water is processed, sold, and placed into containers. The water containers may be brought by the consumer or may be sold or given to consumers by the facility
- **Potable water hauler:** a person who hauls water in bulk (capacities of 250 gallons of water or greater) where there is a likelihood that the water will be used for drinking, culinary or other purposes
- **Water vending machine:** a water-connected vending machine designed to dispenses drinking water
- **Private water source operator:** a privately owned source of water that is used for bottled or vended water
- **Bottled water distributor:** a person who is not an employee of a water bottling plant that delivers bottled water directly to customers

Water Bottlers, Haulers, Distributors, and Vendors are regulated by California Law and federal regulations.

For information about license applications and procedures contact the FDB Water Licensing Desk at (916) 650-6500. Additional information regarding food safety may be found at the [Food Safety Program](#) web page.

## California Environmental Protection Agency (Cal EPA)

The California Environmental Protection Agency is charged with developing, implementing and enforcing the state's environmental protection laws that ensure clean air, clean water, clean soil, safe pesticides and waste recycling and reduction.

## Department of General Services (DGS)

During a drinking water emergency, DGS may develop and implement emergency acquisition tools to support emergency procurement services. DGS is also designated as the lead for EF 7 by the Business Consumer Services and Housing Agency.

- Establish and maintain a Statewide Water Contract for bulk water delivery available for use by State and Local Governments
- Establish and maintain Statewide bottled water contract available for use by State and Local Governments
- As needed, provide procurement training and assistance to community water districts/systems, local jurisdictions, and special districts
- As needed, assist in the distribution/delivery operations to the affected populations, through coordination with state fleet, private sector vendors, and rental agencies
- As needed, coordinate with EF 8 (CDPH), on acceptable water standards and quality

### **California Governor’s Office of Emergency Services (Cal OES)**

Cal OES is responsible for the state’s emergency and response services for natural, technological, or manmade disasters or emergencies including responsibility for activities necessary to prevent, respond to, recover from, and mitigate the effects of emergencies and disasters to people and property<sup>11</sup>.

During a state of war emergency, a state of emergency, or a local emergency, the director shall coordinate the emergency activities of all state agencies in connection with that emergency, and every state agency and officer shall cooperate with the director in rendering all possible assistance.<sup>12</sup>

### **California Emergency Utilities Association (CUEA)**

Serves as the Utilities branch for the state REOC’s and SOC and staff’s the Utilities Operations Center (UOC) in the SOC per established MOU with OES. CUEA provides water and all utility resources (Energy, Gas, Communication and Waste/Water) and state and intra-state mutual assistance.

Utilities have automatic response agreements (California Utilities Emergency Association Master Mutual Assistance Agreement) between neighboring utilities or utilities of like size and system dynamics located in other parts of the state, and out of state, that can send resources immediately to assist. This aid would provide needed specialized resources to the affected utilities resulting in quick system recovery time. The resources could include public and private resources

### **State Water Board (SWB)**

The Water Boards regulate wastewater discharges to surface water (rivers, ocean, etc.) and to groundwater (via land). The Water Boards also regulate storm water discharges from construction, industrial, and municipal activities; discharges from irrigated agriculture; dredge and fill activities; the alteration of any federal water body under the 401 certification program; and several other activities with practices that could degrade water quality.

### **California National Guard (CNG)**

The CNG can haul, store, and purify water in a limited capacity. The resources possessed by the CNG can provide water for 95,000 people with 3 gallons of purified water per day. The CNG can distribute purified water once a local public health official certifies that the water is safe for consumption. The CNG would require a noncompetitive waiver to produce these services as they are commercially available.

The CNG maintains a working relationship with Nevada and other states that are able to augment CNG capabilities. The table below details the capacity of the CNG to store, purify, and transport water to the requested area:

<b><u>Resource provided</u></b>	<b><u>Capacity</u></b>
Water Transport	85,000 Gallons (321,300L)
Water Storage	48,000 Gallons (181,440L)
Water Purification	285,000 Gallons / Day (1,033,300L / Day)

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<sup>11</sup> *Government Code § 8585 (e)*

<sup>12</sup> *Government Code § 8587 (a)*

In order to purify water for 95,000 people the equipment requirements are: 9 generators, 9 Reverse Osmosis Water Purification Units (ROWPU), 9 ROWPU chemical sets (only one exists), and 6 Lightweight Water Purification System (LWPS). The CNG does not have the capability to bottle any of the water it purifies.

### **Department of Water Resources (DWR)**

The Department of Water Resources (DWR) is responsible for managing and protecting California's water. DWR works with other agencies to benefit the state's people, and to protect, restore and enhance the natural and human environments. Through a myriad of programs, DWR ensures the reliability of water supply, the quality of water, and ecosystem restoration:

- **State Water Project**  
The California State Water Project is a water storage and delivery system of reservoirs, aqueducts, power plants and pumping plants. Its main purpose is to store water and distribute it to 29 urban and agricultural water suppliers in Northern California, the San Francisco Bay Area, the San Joaquin Valley, the Central Coast, and Southern California. Of the contracted water supply, 70 percent goes to urban users and 30 percent goes to agricultural users.
- **Surface Storage Investigations**  
The Department of Water Resources' Land and Water Use Program is tasked with collecting land use data and developing water use estimates required for statewide water planning. It accomplishes this by conducting surveys of agricultural, urban and environmental land uses, collecting weather and other data required to make crop and landscape water use estimates, and developing annual estimates of land and water uses on a regional basis. The information developed also provides the basis for the projection of future water use, the evaluation of water use efficiency measures, the development of groundwater models, and water transfers.
- **California Water Plan**  
The **California Water Plan** provides a collaborative planning framework for elected officials, agencies, tribes, water and resource managers, businesses, academia, stakeholders, and the public to develop findings and recommendations and make informed decisions for California's water future.

The plan, updated every five years, presents the status and trends of California's water-dependent natural resources; water supplies; and agricultural, urban, and environmental water demands for a range of plausible future scenarios. The **California Water Plan** also evaluates different combinations of regional and statewide resource management strategies to reduce water demand, increase water supply, reduce flood risk, improve water quality, and enhance environmental and resource stewardship.

The evaluations and assessments performed for the plan help identify effective actions and policies for meeting California's resource management objectives in the near term and for several decades to come.

- **Office of Water Quality**  
**Mission Statement:** The mission of the Office of Water Quality (OWQ) is to meet the overall water quality needs of the Department, and to provide a central focal point for the collection and dissemination of water quality information for the Department and stakeholders.

This is accomplished through comprehensive water quality monitoring, analysis, and assessment; applied research; implementation of a rigorous quality assurance and control program; and, data management and dissemination.

While its geographic focus is the Sacramento-San Joaquin Delta and the State Water Project, the Office also provides support to other departmental organizations and stakeholders throughout the State in meeting their water quality-related needs. This includes providing water quality data and information in support of such activities as long-range planning, regulatory compliance, project operations, scientific research and policy development.

There are three main areas of focus for the OWQ: 1) Municipal Water Quality (Drinking Water Quality), 2) Environmental Water Quality, and 3) Operational Water Quality (SWP).

**1) Municipal Water Quality Objective**

To determine and examine the sources of constituents that effect drinking water quality of the Sacramento-San Joaquin Delta, and to provide information necessary for planning Delta water quality improvements. This objective is met through implementation of the Municipal Water Quality Investigations Program.

**2) Environmental Water Quality Objective**

To document the environmental water quality conditions effected by operation of the SWP and the federal Central Valley Project through the monitoring and assessment of various physical, chemical and biological constituents throughout the Delta. This objective is met through implementation of the Bay-Delta Environmental Monitoring Program and the Interagency Ecological Program and the various water quality programs carried out through the department's district offices.

**3) Operational Water Quality Objective**

Provide the water quality information necessary for operational needs of both the SWP and the State Water Contractors, and to identify opportunities to provide the best water quality possible for our customers. This objective is met through the SWP Water Quality Program in the Division of Operations and Maintenance.

## APPENDIX A

### MEDICAL HEALTH OPERATIONAL AREA COORDINATOR

#### Health and Safety Code Section 1797.153

In each operational area the county health officer and the local emergency medical services agency administrator may act jointly as the medical health operational area coordinator (MHOAC). If the county health officer and the local EMS agency administrator are unable to fulfill the duties of the MHOAC they may jointly appoint another individual to fulfill these responsibilities. If an operational area has a MHOAC, the MHOAC in cooperation with the county office of emergency services, local public health department, the local office of environmental health, the local department of mental health, the local EMS agency, the local fire department, the regional disaster and medical health coordinator (RDMHC), and the regional office of the Governor's Office of Emergency Services, shall be responsible for ensuring the development of a medical and health disaster plan for the operational area. The medical and disaster plans shall follow the Standard Emergency Management System and National Incident Management System. The MHOAC shall recommend to the operational area coordinator of the Office of Emergency Services a medical and health disaster plan for the provision of medical and health mutual aid within the operational area.

For purposes of this section, "operational area" has the same meaning as that term is defined in subdivision (b) of Section 8559 of the Government Code.

The medical and health disaster plan shall include preparedness, response, recovery, and mitigation functions in accordance with the State Emergency Plan, as established under Sections 8559 and 8560 of the Government Code, and, at a minimum, the medical and health disaster plan, policy, and procedures shall include all of the following:

- 1) Assessment of immediate medical needs
- 2) Coordination of disaster medical and health resources
- 3) Coordination of patient distribution and medical evaluations
- 4) Coordination with inpatient and emergency care providers
- 5) Coordination of out-of-hospital medical care providers
- 6) Coordination and integration with fire agencies personnel, resources, and emergency fire pre-hospital medical services
- 7) Coordination of providers of non-fire based pre-hospital emergency medical services
- 8) Coordination of the establishment of temporary field treatment sites
- 9) Health surveillance and epidemiological analyses of community health status
- 10) Assurance of food safety
- 11) Management of exposure to hazardous agents
- 12) Provision or coordination of mental health services
- 13) Provision of medical and health public information protective action recommendations
- 14) Provision or coordination of vector control services
- 15) Assurance of drinking water safety
- 16) Assurance of the safe management of liquid, solid, and hazardous wastes
- 17) Investigation and control of communicable disease

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In the event of a local, State, or federal declaration of emergency, the medical health operational area coordinator shall assist the OES Operational Area Coordinator in the coordination of medical and health disaster resources within the Operational Area, and be the point of contact in that Operational Area, for coordination with the RDMHC, the OES, the regional office of Cal OES, and the State Department of Public Health.

Nothing in this section shall be construed to revoke or alter the current authority for disaster management provided under either of the following: (1) The State Emergency Plan established pursuant to Section 8560 of the Government Code and (2) The California standardized emergency management system established pursuant to Section 8607 of the Government Code.

## **APPENDIX B**

### **REGIONAL DISASTER MEDICAL AND HEALTH COORDINATOR**

#### **Regional Disaster Medical and Health Coordinator**

##### **Health and Safety Code Section 1797.152**

The Emergency Medical Services Authority (EMSA) Director and the Director of Public Health may jointly appoint a regional disaster medical and health coordinator for each mutual aid region of the State. A regional disaster medical and health coordinator shall be a county health officer, a county coordinator of emergency services, an administrator of a local emergency medical services agency, or a medical director of a local emergency medical services agency. Appointees shall be chosen from among persons nominated by a majority vote of the local health officers in a mutual aid region.

In the event of a major disaster which results in a proclamation of emergency by the Governor, and in the need to deliver medical or health mutual aid to the area affected by the disaster, at the request of the authority, the State Department of Public Health, or the Governor's Office of Emergency Services, a regional disaster medical and health coordinator in a region unaffected by the disaster may coordinate the acquisition of requested mutual aid resources from the jurisdictions in the region.

A regional disaster medical and health coordinator may develop plans for the provision of medical or public health mutual aid among the counties in the region.

No person may be required to serve as a regional disaster medical and health coordinator. No state compensation shall be paid for a regional disaster medical and health coordinator position, except as determined appropriate by the State, if funds become available.

## APPENDIX C

### SAMPLE LOCAL DRINKING WATER DISTRIBUTION PLAN

#### Provided by L.A. COUNTY FIRE DEPARTMENT

*The following is an actual Drinking Water Distribution Program implemented by the Los Angeles County Fire Department in response to the Northridge Earthquake of January 17, 1994. The strategies and procedures outlined below are offered as an example for local jurisdictions to use in developing their own emergency drinking water distribution programs. Emergency drinking water distribution programs may vary dependent on the severity of the emergency situation and local conditions.*

#### **BACKGROUND:**

The Northridge earthquake of January 17, 1994 inflicted severe damage to the water distribution grids and the major water supply system serving the Santa Clarita Valley. It would take three weeks to fully restore the quantity and quality of water to the community. Approximately 150,000 people were under orders to boil water, if they had service at all. While recovery efforts were well under way, people needed a reliable supply of safe drinking water in order to travel to work, and send their children to school. All other efforts to recover from the devastation were at risk without dependable water service.

Under the direction of County Chief Administrative Officer, and Fire Chief, the Drinking Water Distribution Group was formed. A team of four Fire Prevention Inspectors from Special Units, their Captain and a Battalion Chief were dispatched to organize and manage this unusual mission. Over the next eighteen days, the group worked around the clock to develop a team of two hundred people who provided bottled water from up to twenty-three distribution sites. Over an eighteen day mission, the group distributed nearly two million gallons of bottled drinking water to the citizens of the Santa Clarita Valley. This guideline reflects the skills learned during that mission.

#### **A. TACTICAL GUIDELINES:**

1. Establish staff positions:
  - a. Group Supervisor
  - b. Water Company Coordinator
  - c. Community Coordinator
  - d. Water Staging Manager
  - e. Water Distribution Manager
  - f. Distribution Site Managers
  - g. Camp Crew Coordinators and crews
  - h. Planning Section (for independent operation)
  - i. Logistics Section (for independent operation)

2. Determine water resources needed and secure resources.

Is the community in need of water for domestic use, personal hygiene and sanitation, as well as for drinking? Drinking water tenders will, supply water for domestic uses, minimizing the requirement for bottled water. Order the type and volume of resources needed, including, but not limited to:

- a. Bottled water
- b. Drinking water tenders
- c. Drinking tanks and piping
- d. Water purification units
- e. Cross connections to other water systems

3. Establish a water staging area that will accommodate the resources ordered.

4. Order the equipment needed to support the mission of the group, including, but not limited to:

- a. Portable radios with batteries and chargers
- b. Tactical radio frequencies
- c. Cellular telephones with batteries and chargers
- d. Flat-bed trailers with tractors and drivers
- e. Forklifts with operators
- f. Fuel for equipment
- g. Word processing computer
- h. Fax machine with phone line
- i. Photo-copy machine
- j. Plans or communications trailer

5. Assure proper documentation of events at all levels of the operation.

6. Assure proper reporting of situation, progress and needs to the Incident Commander, the Fire Department Communications Center, the Fire Department Emergency Command Center, the County Emergency Operations Center, and any community or city Emergency Operations Centers.

7. Establish a schedule for relief to assure a maximum working shift of twelve hours for all personnel assigned to the unit.

**B. STRATEGIC GUIDELINES:**

The operation of the distribution process, once the organization is established, and product has been ordered, is outlined below:

1. Truckloads of bottled water are delivered to the staging area by contract vendors
2. Trucks are immediately unloaded by forklift to allow them to return for another load without delay
3. Pallets of water are stored on the ground in staging
4. Pallets of water are loaded by forklift onto flatbed trucks
5. When orders are received, the flatbed trucks filled with pallets of water are dispatched by the Staging Manager to the distribution sites

6. One Camp Crew is dispatched concurrently to unload the truck at the distribution sites. Moving the forklifts was not practical. Many sites did not have enough room to work.
7. The Distribution Site Crew loads one box (six gallons) of water in the vehicles as they pass through the site. More was given upon request. The lines moved faster by keeping people in their cars.

**C. FACILITIES:**

1. Establish a receiving and distribution point for water. A Water Receiving and Distribution Point shall be opened in or near an established incident base. Priorities for choosing a Water Receiving and Distribution Point include:
  - a. 200' by 200' minimum
  - b. Paved surface
  - c. Access restricted by curbs
  - d. Electricity and phone service, if possible
  - e. Location accessible to major routes of transportation into the area, and into the community
  - f. Lot with clear access to tractor-trailer rigs
  - g. Large parking lots of shopping areas, schools, or recreational facilities may work well
2. Establish Water Distribution Sites as needed. Priorities for choosing Water Distribution Sites include:
  - a. 100' by 100' minimum
  - b. Surface: Paved
  - c. Access restricted by curbs
  - d. Electricity and phone service preferred
  - e. Central and accessible to the community in need
  - f. Parking lots of schools and recreation facilities work best; shopping areas are less desirable
  - g. Location near public safety facilities such as fire stations, medical and law enforcement installations is discouraged. The operational efficiency of these facilities is reduced by people in line to receive their water
3. Criteria for selection of Distribution Site locations:
  - a. Safety of Staff (Protection from traffic hazards and any hostile environment)
  - b. Areas of population density in need of water
  - c. Proximity to elder population
  - d. Geographically remote areas
  - e. Areas isolated by disaster
  - f. Sites shall be accessible to delivery trucks

## **APPENDIX D**

### **DGS CONTRACT – BULK WATER**

**Contract under development**

## APPENDIX E

### DGS CONTRACT – BOTTLED WATER

#### **Bottled drinking water contract 1-14-89-200:**

The Department of General Services has issued a non-mandatory contract for bottled drinking water. The contract is available to every public entity in the State, including State, county, city, county-city, district, or other local government units (PCC § 1100). Ordering entities are responsible for initiating the purchase order and payment to the contractor. It is advised that ordering entities should have detailed directions to where the bottled water is to be delivered and any access limitations to the delivery sight prior to ordering.

State departments must adhere to all applicable State laws, regulations, policies, best practices, and purchasing authority requirements, as applicable. Local governmental agency use is optional. While the State makes this contract available to local governmental agencies, each local governmental agency should determine whether the contract is consistent with its procurement policies and regulations.

A variety of bottle sizes are currently available (between 16.9 oz and 1 gallon). There is currently one vendor at this time (ABC Ventures LLC). Prices range from \$279.40 a pallet, F.O.B. (see pricing on [page 2, below]). An abbreviated User Guide is now available.

Pricing depends on lead time and delivery quantity. The best pricing is for delivery quantities of a full truckload. Deliveries for less than the minimum delivery quantity (see below) may be accepted at the discretion of the vendor, and may include a delivery surcharge.

- For **Emergency** (12 hours after receipt of order) or **Urgent** (up to 5 calendar days after receipt of order) Delivery – the minimum delivery is 10 pallets. Discounts apply to full truckloads (included on cost sheets).
- For **Standard Delivery** (15 calendar days after receipt of order) – the minimum delivery is 5 pallets. Discounts apply to half and full truckloads (included on cost sheets).

**ORDERING INSTRUCTIONS:** Orders should be placed via email to [water@abcvllc.com](mailto:water@abcvllc.com). Confirmations will include initial contact information and upon shipment, a shipping reference number.

#### **CUSTOMER SERVICE CONTACTS:**

Guy Corr, ABC Ventures (Primary)

Office: 916-941-9655

Cell: 916-605-518

Email: [guy@corr.org](mailto:guy@corr.org)

Adam Clingerman, ABC Ventures

Office: 925-837-7400

Cell: 925-351-6148

Email: [adam@abcvllc.com](mailto:adam@abcvllc.com)

#### **STATE CONTRACT ADMINISTRATORS:**

Ashley Lockwood, DGS/Procurement  
Division

Office: (916) 375-4575

Fax: (916) 375-4439

Email: [ashley.lockwood@dgs.ca.gov](mailto:ashley.lockwood@dgs.ca.gov)

Robert Ullrey, DGS/Procurement Division

Office: (916) 375-4431

Cell: (916) 825-2156

Email: [robert.ullrey@dgs.ca.gov](mailto:robert.ullrey@dgs.ca.gov)

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All prices are F.O.B. destination; freight prepaid by the contractor, to the ordering organization's receiving point. Prices do not include CRV. Detailed ordering instructions, pricing, and specifications are available in the User Guide.

Bottle Size	Cap	Count/ Pack	Emergency / Urgent - 10 Pallet	per pallet	Full Truckload	per pallet
			Standard - Half Truckload			
500mL (16.9oz)	Flat	24 pk/loose	\$ 5.0589	\$ 394.59	\$ 5.0078	\$ 390.61
500mL (16.9oz)	Flat	35 pk/loose	\$ 7.2270	\$ 390.26	\$ 7.1540	\$ 386.32
700mL (23.6oz)	Sport	24 pk/loose	\$ 8.2467	\$ 371.10	\$ 8.1634	\$ 367.35
1 Liter (33.8oz)	Flat	15 pk/loose	\$ 8.4645	\$ 423.23	\$ 8.3790	\$ 418.95
1 Liter (33.8oz)	Sport	15 pk/loose	\$ 9.2070	\$ 460.35	\$ 9.1140	\$ 455.70
1.5 Liter (50.7oz.)	Flat	12/loose	\$ 7.6032	\$ 395.37	\$ 7.5264	\$ 391.37
1 Gal (3.79L)	Flat	6/loose	\$ 6.1776	\$ 296.52	\$ 6.1152	\$ 293.53
1 Gal (3.79L)	Flat	288/Pallet/ 72 bottles per 4 layers	\$ 282.2688	\$ 282.27	\$ 279.4176	\$ 279.42

**Figure 1: Price list for contract 1-14-89-200.** A more detailed Price List with specifications is available in the User Guide.

## APPENDIX F

### ACRONYMS

The following acronyms are commonly used throughout this guidance and related appendices.

Cal EOC	California Emergency Operations Center (formerly known as RIMS).
Cal EPA	California Environmental Protection Agency
Cal OES	Governor's Office of Emergency Services
CalWARN	California Water/Wastewater Agency Response
CNG	California National Guard
CDPH	California Department of Public Health
CSTI	California Specialized Training Institute, Training Branch of Cal OES
CSMACS	California Statewide Multi-Agency Coordination System Guidance
CUEA	California Utilities Emergency Association
DWP	State Drinking Water Program
EF	California Emergency Functions
EMAC	Emergency Management Assistance Compact
EMSA	Emergency Medical Services Authority
EOC	Emergency Operations Center
EOM	California Public Health and Medical Emergency Operations Manual
EHD	Environmental Health Department
ESA	Emergency Services Act
ERNIE	Emergency Response Network of the Inland Empire
FEMA	Federal Emergency Management Agency
FDB	Food and Drug Branch (a Branch of CDPH)
ICP	Incident Command Post
ICS	Incident Command System
LEMSA	Local Emergency Medical Services Authority
LPA	Local Primacy Agency
MAC	Multi-Agency Coordination
MAC Group	Multi-Agency Coordination Group
MACS	Multi-Agency Coordination System
MARS	Metropolitan Water District of Southern California's Member Agency Response System
MHCC	Medical and Health Coordination Center
MHOAC	Medical and Health Operational Area Coordination Program
MMAA	California Disaster and Civil Defense Master Mutual Aid Agreement
NIMS	National Incident Management System
NGO	Non-Governmental Organization
NRF	National Response Framework
OA	Operational Area
OA EOC	Operational Area Emergency Operations Center (i.e. county and its' political subdivisions and special districts)
PIO	Public Information Officer
RDMHC	Regional Disaster Medical Health Coordination Program
REOC	Regional Emergency Operations Center
ROWPUs	Reverse Osmosis Water Purification Units
SEMS	Standardized Emergency Management System (i.e. Government Code §8607 and Title 19, §2400-2450 of the California Code of Regulations)

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SEP	State of California Emergency Plan
SOC	Governor's Office of Emergency Services "State Operations Center"
SWB	State Water Board
UOC	Utilities Operations Center
WAEC	Water Agencies Emergency Coordinators; San Diego based coordination group
WEROC	Water/Wastewater Emergency Response Organization of Orange County
WERLAC	Water Emergency Response of Los Angeles County
WSSP	Water Sector Specific Position – position within the EOCs that is a subject matter expert and trained on how to work within the EOC as through the CSTI recognized G-611 course. WSSP functions can include drinking water/wastewater coordinator or technical specialist.

## APPENDIX G

### Glossary

Access and Functional Needs	Those actions, services, accommodations, and programmatic, architectural, and communication modifications that a covered entity must undertake or provide to afford individuals with disabilities a full and equal opportunity to use and enjoy programs, services, activities, goods, facilities, privileges, advantages, and accommodations in the most integrated setting. These actions are in light of the exigent circumstances of the emergency and the legal obligation to undertake advance planning and prepare to meet the disability-related needs of individuals who have disabilities as defined by the Americans with Disabilities Act Amendments Act of 2008, P.L. 110-325, and those associated with them.
Black water	Water from flushing toilets or kitchen sink; should not be reused for home irrigation
Boil Water Notice	Declaration by water district, Department of Public Health, or county health department that water might not be safe to drink straight from the tap and must be boiled before consumption.
Courses of Action	A course of action is defined as the pre-identified task/function to be performed by a combination of government agencies/departments and other stakeholders responsible for its performance.
Disability	According to the Americans with Disabilities Act, the term “individual with a disability” refers to “a person who has a physical or mental impairment that substantially limits one or more major life activities, a person who has a history or record of such impairment, or a person who is regarded by others as having such impairment.” The term “disability” has the same meaning as that used in the Americans with Disabilities Act Amendments Act of 2008, P.L. 110-325, as incorporated into the Americans with Disabilities Act. See <a href="http://www.ada.gov/pubs/ada.htm">http://www.ada.gov/pubs/ada.htm</a> for the definition and specific changes to the text of the Americans with Disabilities Act. State laws and local ordinances may also include individuals outside the Federal definition.
Do Not Drink Notice	Declaration by water district, California Department of Public Health, or county health department that water cannot be made safe by boiling or adding chlorine and should not be consumed or used for washing.
Do Not Use Notice	Declaration by water district, California Department of Public Health, or county health department that water cannot be used for any purpose.
Emergency Operations Center (EOC)	The physical location at which the coordination of information and resources to support incident management (on-scene operations) activities normally takes place. An Emergency Operations Center may be a temporary facility or may be located in a more central or permanently established facility, perhaps at a higher level of organization within a jurisdiction. Emergency Operations Centers may be organized by major

	functional disciplines (e.g., fire, law enforcement, medical services), by jurisdiction (e.g., Federal, state, tribal, regional, city, county), or by some combination thereof.
Faith Based Organization (FBO)	Religious organizations and other charitable organizations affiliated or identified with one or more religious organizations.
Grey water	Water that has been used in a shower or washing machine; often used for home irrigation, not always appropriately.
Incident Command System (ICS)	A standardized on-scene emergency management construct specifically designed to provide an integrated organizational structure that reflects the complexity and demands of single or multiple incidents, without being hindered by jurisdictional boundaries. The Incident Command System is the combination of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure and designed to aid in the management of resources during incidents. It is used for all kinds of emergencies and is applicable to small, as well as large and complex, incidents. The Incident Command System is used by various jurisdictions and functional agencies, both public and private, to organize field-level incident management operations.
Joint Information System (JIS)	The Joint Information System provides the public with timely and accurate incident information and unified public messages. This system employs Joint Information Centers and brings incident communicators together during an incident to develop, coordinate, and deliver a unified message. This will ensure that Federal, state, tribal, and local levels of government are releasing the same information during an incident.
Jurisdiction	Jurisdiction has more than one definition. Each use depends on the context: <ul style="list-style-type: none"> <li>•A range or sphere of authority. Public agencies have jurisdiction at an incident related to their legal responsibilities and authority. Jurisdictional authority at an incident can be political or geographical (e.g., city, county, tribal, state, or Federal boundary lines) or functional (e.g., law enforcement, public health).</li> <li>•A political subdivision (e.g., Federal, state, county, parish, municipality) with the responsibility for ensuring public safety, health, and welfare within its legal authorities and geographic boundaries.</li> </ul>
Local primacy agency	“Local primacy agency” means a local health officer that has applied for and received primacy delegation from the department pursuant to Section 116330.
Non-governmental Organization (NGO)	An entity with an association that is based on the interests of its members, individuals, or institutions. It is not created by a government, but it may work cooperatively with government. Such organizations serve a public purpose and are not for private benefit. Examples of nongovernmental organizations include faith-based charity organizations and the American Red Cross.

Emergency Drinking Water Procurement & Distribution  
 Planning Guidance

Non-drinking water	Water that does not meet water quality standards for drinking water.
Drinking water	Water that meets all water quality standards for drinking water.
Recycled water	Product of sewage treatment plant that has been through tertiary treatment and can be used for large-scale irrigation; should not be used where human contact is likely.
Service Animal	Any guide dog, signal dog, or other animal individually trained to assist an individual with a disability. Service animals' jobs include, but are not limited to: <ul style="list-style-type: none"> <li>•Guiding individuals with impaired vision</li> <li>•Alerting individuals with impaired hearing (to intruders or sounds such as a baby's cry, the doorbell, and fire alarms)</li> <li>•Pulling a wheelchair</li> <li>•Retrieving dropped items</li> <li>•Alerting people of impending seizures</li> <li>•Assisting people who have mobility disabilities with balance or stability.</li> </ul>
VOAD	Volunteer Organizations Active in a Disaster

## APPENDIX H

### Forms of Emergency Assistance

#### **California Disaster and Civil Defense Master Mutual Aid Agreement:**

Signed in 1950 by all counties and most cities, provides for the basis for the concept of “mutual aid” in California. It operates on the premise of providing assistance in times of “local peril” without expectation of reimbursement. Through legislation (CA Government code 8607) and regulation (CCR 2400) the MMAA has been incorporated into SEMS and the Emergency Services Act.

#### **Local Mutual Aid:**

Are agreements between local jurisdictions (typical day to day application). Mutual aid under this plan is provided without expectation of reimbursement but reimbursement may occur under specific circumstances.

#### **Automatic Aid:**

An agreement based upon the concept that the closest resource to an incident responds (applied in first response situations). This usually involves providing assistance for a limited period of time at no cost to the receiving party.

#### **Assistance by Hire:**

Is a process where the jurisdiction responding hires responders.

#### **Local Direct Protection Agreement:**

Jurisdiction agrees to contract services for another jurisdiction on a permanent basis.

#### **Memorandums of Understanding:**

MOUs define a relationship between departments or agencies for the use of resources or facilities.

#### **Emergency Management Assistance Compact:**

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

#### **Federal Assistance:**

The Federal Emergency Support Functions and FEMA Incident Management Teams assist in obtaining the usage of Federal resources in coordination with Cal OES.