



---

# **Flood Preparedness Guide for Levee Maintaining Agencies**

Completed in compliance with the Flood Emergency Action Team (FEAT): Initiative Number 3

Governor's Executive Order W-156-97

Approved by the Standardized Emergency Management System (SEMS) Advisory Board on November 21, 1997

**Arnold Schwarzenegger**, Governor  
State Of California

**Henry R. Renteria**, Director  
Governor's Office of Emergency Services

The contents of this document have not been changed from the original document; however, the guidelines have been reformatted to meet the Americans with Disabilities Act (ADA) 508 standards.

# Table of Contents

Purpose .....	4
System Overview.....	4
SEMS .....	4
Organizational Levels of SEMS.....	4
Flood Fight Preparedness .....	4
Levee Maintaining Agencies (LMAs): .....	5
Local Government: .....	5
Department of Water Resources: .....	6
U.S. Army Corps of Engineers .....	6
National Weather Service (NWS) .....	6
Governor’s Office of Emergency Services (OES):.....	6
Local Coordination.....	7
Mutual Aid Region I: .....	7
Mutual Aid Region II: .....	7
Mutual Aid Region III: .....	7
Mutual Aid Region IV:.....	7
Mutual Aid Region V:.....	7
Mutual Aid Region VI:.....	7
California Data Exchange Center (CDEC):.....	8
Planning .....	9
Resources .....	10

## Purpose

To provide an emergency planning guide for local levee maintaining agencies to utilize in developing their local emergency plans in compliance with the Governor's Executive Order W-156-97, Initiative number three.

## System Overview

The Standardized Emergency Management System (SEMS) is the system required by Government Code § 8607(a) established to provide improved coordination of state and local emergency response in California. SEMS encompasses the use of the Incident Command System (ICS), the Master Mutual Aid Agreement, existing mutual aid systems, the operational area concept, and multi-agency or inter-agency coordination.

## SEMS

The law stipulates that all state agencies, local governments, and special districts **must** use SEMS in responding to emergencies involving multiple jurisdiction/agencies in order to be eligible for state funding of response-related personnel costs. The use of SEMS is intended to improve the mobilization, deployment, utilization, communication, tracking and demobilization of needed mutual aid resources in an emergency event.

## Organizational Levels of SEMS

There are five organizational levels of SEMS:

**State** - Statewide resource coordination integrated with federal agencies.

**Regional** - Manages and coordinates information and resources among operational areas.

**Operational Area** - Manages and coordinates all local governments within the geographic boundary of a county.

**Local** - County, city or special district.

**Field** - On-scene responders.

## Flood Fight Preparedness

Levee Maintaining Agencies are responsible for natural disaster emergency preparations, including training and stockpiling of flood fight supplies. Cities and counties are available to assist with flood fighting if the levee maintaining agency exhausts and cannot obtain necessary materials to continue the flood fight. During severe storms or other potential flooding conditions, the Department of

Water Resources Chief of Flood Operations is responsible for declaring a flood alert. When a flood alert warning is issued, the Flood Operations Center is activated in accordance with SEMS. The Department of Water Resources can upon request, provide technical flood fighting assistance to levee maintaining agencies.

The following sections explain in detail the responsibilities of various entities in a flood fight.

### **Levee Maintaining Agencies (LMAs):**

Responsibilities include but are not limited to:

- Restoring services that LMAs normally provide.
- Procurement and payment of flood fight supplies (sandbags, visquine, lumber, person power, etc.) needed for maintaining flood control structures.
- Coordination of LMA actions affecting the safety of communities and property with DWR, the Operational Area, local government entities, and the DWR Flood Operations Center.
- Containment of floodwaters.
- Notifying DWR when they have or may potentially exhaust on-hand resources or are no longer able to procure flood fight materials.
- Communicating to DWR any identified structural concerns or failures of flood control structures.
- During high water events: 1) begin levee patrols, 2) contact both DWR and the Operational Area to advise of on-going levee status, 3) request technical assistance for evaluating and maintaining levee integrity.
- Participate in any established emergency command.

### **Local Government:**

Responsible for public safety and emergency management in their jurisdiction. Counties and cities will establish an emergency command to coordinate all emergency response activities. Entity responsible for declaring a local emergency.

## **Department of Water Resources:**

- Provide flood fight technical assistance/advice and training to LMAs and local agencies in the Operational Area.
- Provide technical assistance/advice on flood control structures under the jurisdiction of DWR. Provide supervision of maintenance to flood control structures during storms or high water events.
- Prepare action plans for responding to flood control structural damage within their jurisdiction.
- Evaluate meteorological conditions, river flows, and other factors to issue flood alerts to impacted LMAs.
- Establish emergency commands to facilitate flood fight decisions.
- Coordinate the activation of Public Law 84-99 for emergency assistance from the U.S. Army Corps of Engineers.

## **U.S. Army Corps of Engineers**

In instances when the nature of the disaster exceeds the capabilities of state and local interests, the Corps of Engineers may provide help to save human life, prevent immediate human suffering or mitigate residential and commercial property damage. Assistance provided by the Corps includes: provides flood fighting materials; inspection of flood control works and advice on needed maintenance; establishes contracts for levee stabilization; clearance of drainage channels or blocked structures; technical assistance for development of plans; upon request, inspection of non-Federal dams and flood control projects. Criteria for the Corps of Engineers assistance requires written request from the governor for flood response activities.

## **National Weather Service (NWS)**

As major storm systems approach California, the National Weather Service (NWS) in coordination with the Department of Water Resources (DWR) monitor weather conditions; forecast the amount and timing of expected precipitation; and make initial river forecasts. When storm events raise streams/ivers to threatening levels, NWS issues official forecasts as public bulletins.

## **Governor's Office of Emergency Services (OES):**

OES will coordinate the emergency activities of all state agencies. When requested by Operational Areas, OES will direct (through the assignment of mission numbers) those state agency resources necessary to support flood fight operations. OES shall request, as directed by the Governor, a Presidential Emergency and/or a major disaster declaration.

## **Local Coordination**

To determine the local government agencies that an LMA should work with before and during an emergency they should call:

### **Mutual Aid Region I:**

Encompasses the counties of San Luis Obispo, Santa Barbara, Ventura, Los Angeles, and Orange Telephone: (562) 795-2900

### **Mutual Aid Region II:**

Encompasses the counties of Del Norte, Humboldt, Mendocino, Lake, Sonoma, Napa, Marin, Solano, San Francisco, Contra Costa, San Mateo, Alameda, Santa Cruz, Santa Clara, Monterey, San Benito Telephone: (510) 286-0895

### **Mutual Aid Region III:**

Encompasses the counties of Siskiyou, Modoc, Trinity, Shasta, Lassen, Tehama, Plumas, Glenn, Butte, Sierra, Colusa, Sutter, Yuba Telephone: (916) 224-4835

### **Mutual Aid Region IV:**

Encompasses the counties of Nevada, Placer, Yolo, El Dorado, Sacramento, Amador, Calaveras, Alpine, San Joaquin, Stanislaus, Tuolumne Telephone: (916) 262-1772

### **Mutual Aid Region V:**

Encompasses the counties of Merced, Mariposa, Madera, Fresno, Kings, Tulare, Kern Telephone: (209) 445-5672

### **Mutual Aid Region VI:**

Encompasses the counties of Mono, Inyo, San Bernardino, Riverside, San Diego, Imperial Telephone: (562) 795-2900

## **California Data Exchange Center (CDEC):**

The Center provides a telephone bank of flood information and specialists available to answer flood related questions based on their operational hydrologic database.

To Obtain Access to CDEC:

- Send a letter containing the following information:
- reason for requesting access
- user's name
- user's employer
- number of users who will use this username
- address
- telephone number
- primary access method (Intranet, Worldwide Web)
- Send your request letter by:

Mail: California Department of Water Resources  
California Data Exchange Center  
Attn.: CDEC Access  
P.O. Box 219000  
Sacramento, CA 95821-9000  
Fax: (916) 574-2767

### **CDEC Access Methods:**

Worldwide Web <http://cdec.water.ca.gov>  
Intranet Dial Up (916) 574-1777

### **Additional Assistance Numbers**

CDEC Help Desk (916) 574-1777  
State-Federal Flood Operations Center (800) 952-5530  
DWR Chief Hydrologist (916) 574-2625  
State Meteorologist (916) 574-2614  
Flood Forecasting (916) 574-2612

## Planning

Advanced planning for emergencies is the key to preparedness. It is recommended that each LMA develop an emergency plan for their area of responsibility. The following are points of consideration which you may find useful in preparing your emergency plan. This list is only a sampling of items that need to be identified and addressed in your emergency plan.

- Do you, on a regular basis, confer with your city or county emergency manager for training and participation in flood fight exercises ?
- Have you developed a contingency plan which stipulates what actions will be taken to deal with: levee boils, overtopping, sluffing, seepage, need and location of relief cuts ?
- What public infrastructures (roads, bridges, schools, public utilities, sanitation systems, transportation facilities and military installations) exist in your area and what do you need to do to protect them ? Have you considered evacuation plans for livestock ?
- What type of private facilities (businesses, housing subdivisions, industrial plants, shopping malls, etc.) exist in your area and what do you need to do to protect them?
- Do you have agriculture land and livestock which may be endangered ? How do you plan on protecting them ?
- Are your responders trained in flood fighting techniques ?
- How many responders do you need to schedule for different levels of emergency response?
- Do you have a list of emergency contacts including phone numbers established for your emergency responders; have copies of these lists been provided to field responders ?
- Where are stockpiles of flood fighting material stored ? What condition are the flood fighting materials in? Do you have a contact person for access to the stored supplies ?
- Do you have an adequate list of vendors for additional flood fighting materials ? Have you considered pre-agreements and/or contacts for acquiring additional needed supplies ?
- Have you coordinated with your city or county emergency manager to pre-plan for people evacuations?

- Have you made plans and schedules for levee patrols ? Do you have an adequate number of responders identified and know how to locate them quickly ?
- Are there hazardous or toxic materials in your area and how do you plan on minimizing the public health risks should the materials leak/spill ?
- Have you made a schedule for maintenance? Have you planned for: vegetation control, fireguarding, channel clearing, rodent control, and inspection of weirs, gates, barricades, signs, diversion structures, and pumping stations?
- Do you regularly test the communication systems and emergency equipment for functional capabilities?

## Resources

The Department of Water Resources (DWR) recommends stockpiling of the following items for flood fight activities. This list of materials is suggested per every 5 to 6 miles of levee.

- visquine plastic 10 rolls (@100'x20'x10mil)
- sandbags 5,000
- twine @ 200 lb. Test 8 boxes
- wooden stakes 200
- tie buttons 1,000

## Tools needed:

- Lineman pliers 8 each
- sledge hammers 8 each
- shovels 10 each
- life jackets All personnel

To expedite flood fight activities and preparedness, each LMA should locate and identify where stockpiles of supplies in your area are stored and a contact number for the person(s) who have access to acquiring the supplies. You may use the following guide to complete this information as a handy reference.

**Location:**

**Contact Person:**

**Telephone Number:**