



CITYGATE ASSOCIATES, LLC  
MANAGEMENT CONSULTANTS

MONTEREY COUNTY, CA

# VOLUME 1: MAIN REPORT WINTER STORM RESPONSE PLAN MAY 10, 2019



CITYGATE ASSOCIATES, LLC

[WWW.CITYGATEASSOCIATES.COM](http://WWW.CITYGATEASSOCIATES.COM)

600 COOLIDGE DRIVE, SUITE 150  
FOLSOM, CA 95630

PHONE: (916) 458-5100  
FAX: (916) 983-2090



*This page was intentionally left blank*

## TABLE OF CONTENTS

| <b><u>Section</u></b>  | <b><u>Page</u></b> |
|--|--------------------|
| <b><u>VOLUME 1 of 2 – Main Report (this volume)</u></b>                |                    |
| <b>Section 1—Plan Introduction .....</b>                               | <b>1</b>           |
| 1.1 Purpose of Plan .....  | 1                  |
| 1.2 Scope of Plan .....  | 1                  |
| <b>Section 2—Concept of Operations .....</b>                           | <b>3</b>           |
| 2.1 Situation Overview .....   | 3                  |
| 2.1.1 Areas Subject to Flooding.....                                   | 3                  |
| 2.2 General Approach to Seasonal Flood Operations .....                | 6                  |
| 2.2.1 Monitoring .....   | 8                  |
| 2.2.2 Analysis and Initial Response .....                              | 8                  |
| 2.2.3 Alerting and Activation .....                                    | 9                  |
| 2.3 Public Notification of Flood Threats.....                          | 9                  |
| 2.3.1 Initial Notifications .....                                      | 9                  |
| 2.4 Stage Definitions for Floods .....                                 | 10                 |
| 2.5 Flood/Threat Operations .....                                      | 10                 |
| 2.5.1 Phase I: Preparedness .....                                      | 10                 |
| 2.5.2 Phase II: Increased Readiness .....                              | 11                 |
| 2.5.3 Phase III: Activation / Emergency Response.....                  | 12                 |
| 2.5.4 Phase IV: Initial Recovery .....                                 | 14                 |
| 2.5.5 Federal and State Emergency and Disaster Assistance .....        | 15                 |
| <b>Section 3—Organization and Assignment of Responsibilities .....</b> | <b>17</b>          |
| 3.1 General Organization and Responsibilities .....                    | 17                 |
| 3.1.1 Levee Flood Control Operations.....                              | 17                 |
| 3.1.2 Operational Area Flood Control Operations .....                  | 17                 |
| 3.1.3 Mutual Aid Regions and Regional Support .....                    | 17                 |
| 3.1.4 State Flood Control Operations .....                             | 17                 |
| 3.1.5 Federal Flood Control Operations .....                           | 17                 |
| <b>Section 4—Direction, Control, and Coordination .....</b>            | <b>19</b>          |
| 4.1 Chief Executive.....   | 19                 |
| 4.2 Incident Commander (IC) .....                                      | 19                 |
| 4.3 Support Personnel .....  | 19                 |
| 4.4 Plan Activation.....   | 19                 |
| 4.5 Standardized Emergency Management System (SEMS) Structure.....     | 19                 |
| 4.6 Public Notification .....  | 23                 |
| 4.6.1 Notification Protocols .....                                     | 24                 |
| 4.7 Resources .....  | 24                 |
| 4.7.1 Staffing .....   | 24                 |
| 4.7.2 Integration with Police and Fire Responders .....                | 24                 |
| 4.7.3 Obtaining and Training Volunteers .....                          | 25                 |
| 4.7.4 Cal OES and DWR Assistance .....                                 | 25                 |

**Monterey County**  
*Winter Storm Response Plan*

---

|                   |   |           |
|-------------------|---|-----------|
| 4.8               | Disaster Intelligence.....                                    | 26        |
| 4.8.1             | Information Needed and Resources .....                        | 26        |
| 4.9               | Buildings Used to Provide Essential Services.....             | 27        |
| <b>Section 5</b>  | <b>Communications.....</b>                                    | <b>29</b> |
| 5.1               | Communications Organization.....                              | 29        |
| 5.2               | Public Alerting Systems.....                                  | 29        |
| 5.2.1             | ALERT Monterey County .....                                   | 29        |
| 5.2.2             | Nixle .....   | 29        |
| 5.2.3             | Social Media .....  | 30        |
| 5.2.4             | Wireless Emergency Alerts (WEA).....                          | 30        |
| 5.2.5             | Emergency Alert System (EAS) .....                            | 30        |
| 5.3               | Local Emergency Communication Systems.....                    | 31        |
| 5.3.1             | Radio Communication Systems.....                              | 31        |
| 5.3.2             | Consolidated Public Safety Communications System (CPSCS)..... | 32        |
| 5.3.3             | Local Communications Support Resources .....                  | 32        |
| 5.3.4             | Telephone Systems .....                                       | 33        |
| 5.3.5             | Weak Links .....  | 33        |
| 5.4               | Protocols for Communications with Levee Patrols .....         | 34        |
| 5.4.1             | Other Communications Protocols .....                          | 34        |
| 5.5               | Integration and Interoperability .....                        | 34        |
| 5.6               | Media Interface .....   | 35        |
| <b>Section 6</b>  | <b>Administration, Finance, and Logistics .....</b>           | <b>37</b> |
| 6.1               | Master Mutual Aid Agreement .....                             | 37        |
| 6.2               | Record Keeping .....  | 37        |
| 6.3               | Resource Tracking .....                                       | 37        |
| 6.4               | Flood Fight Equipment .....                                   | 38        |
| 6.5               | Flood Fight Supplies .....                                    | 38        |
| 6.6               | Staging Areas .....   | 40        |
| 6.7               | Evacuation Centers .....                                      | 40        |
| <b>Section 7</b>  | <b>Plan Development and Maintenance .....</b>                 | <b>41</b> |
| 7.1               | Plan Development.....   | 41        |
| 7.2               | Plan Review and Maintenance .....                             | 41        |
| 7.3               | Training and Exercises.....                                   | 42        |
| 7.4               | Evaluation .....  | 42        |
| <b>Section 8</b>  | <b>Authorities and References.....</b>                        | <b>43</b> |
| 8.1               | Federal Authorities and References .....                      | 43        |
| 8.2               | State Authorities and References .....                        | 43        |
| 8.3               | Local Authorities and References .....                        | 43        |
| <b>Appendix A</b> | <b>Communications Support.....</b>                            | <b>45</b> |
| A.1               | Communications Support.....                                   | 45        |
| A.1.1             | California Office of Emergency Services (Cal OES) .....       | 45        |
| A.1.2             | Mobile Satellite Communications Units .....                   | 45        |
| A.1.3             | Operational Area Satellite Information System (OASIS).....    | 45        |
| A.1.4             | Mobile Command and Communication Facilities .....             | 45        |

**Monterey County**  
*Winter Storm Response Plan*

---

|                                      |   |           |
|--------------------------------------|---|-----------|
| A.1.5                                | Portable Radio Caches .....                                       | 46        |
| A.2                                  | State Radio Systems .....   | 46        |
| A.2.1                                | California Law Enforcement Mutual Aid Radio System (CLEMARS)..... | 46        |
| A.2.2                                | California Law Enforcement Radio System (CLERS) .....             | 46        |
| A.2.3                                | California Emergency Services Radio System (CESRS).....           | 46        |
| A.2.4                                | OES Fire (and Rescue Radio Network) .....                         | 46        |
| A.3                                  | Emergency Contact Directory .....                                 | 46        |
| A.4                                  | Sample Media Releases .....                                       | 47        |
| <b>Appendix B—Levee Patrol .....</b> |   | <b>55</b> |
| B.1                                  | Purpose.....  | 55        |
| B.2                                  | Program Elements .....  | 55        |
| B.2.1                                | Component I – Training.....                                       | 56        |
| B.2.2                                | Component II – Equipment Procurement and Maintenance .....        | 56        |
| B.2.3                                | Component III – Levee Patrols .....                               | 57        |
| B.2.4                                | High Water Staking Procedures.....                                | 59        |
| B.3                                  | Augmenting Staff.....   | 59        |
| <b>Appendix C—Flood Fight.....</b>   |   | <b>61</b> |
| C.1                                  | Trigger(s) .....  | 61        |
| C.2                                  | Prioritization .....  | 61        |
| C.3                                  | Activation and Dispatch.....                                      | 62        |
| C.4                                  | Personnel.....  | 62        |
| C.4.1                                | Resource Agencies.....  | 62        |
| C.4.2                                | Mission Tasking.....  | 63        |
| C.4.3                                | Tasking Criteria .....  | 63        |
| C.4.4                                | Costs/Reimbursement .....   | 63        |
| C.4.5                                | Request Procedures.....   | 63        |
| C.4.6                                | Fire Mutual Aid .....   | 64        |
| C.4.7                                | State Agency Voluntary Response.....                              | 64        |
| C.5                                  | Hazardous Materials Locations.....                                | 64        |
| C.6                                  | Flood Fight Equipment and Materials.....                          | 65        |
| C.7                                  | Public Flood Fight Supplies .....                                 | 65        |
| C.8                                  | Logistics Procedures .....  | 68        |
| C.9                                  | Training in Flood Fight Procedures and Techniques .....           | 68        |
| C.10                                 | Utilities.....  | 68        |
| <b>Appendix D—Evacuation .....</b>   |   | <b>69</b> |
| D.1                                  | Evacuation Considerations .....                                   | 69        |
| D.2                                  | Public Notification .....   | 69        |
| D.2.1                                | ALERT Monterey County .....                                       | 70        |
| D.2.2                                | Nixle .....   | 70        |
| D.2.3                                | Social Media .....  | 70        |
| D.2.4                                | Wireless Emergency Alerts (WEA).....                              | 71        |
| D.2.5                                | Emergency Alert System (EAS) .....                                | 71        |
| D.2.6                                | Emergency Digital Information Service (EDIS).....                 | 72        |
| D.2.7                                | Vehicle Loudspeaker Systems .....                                 | 72        |

**Monterey County**  
*Winter Storm Response Plan*

---

|   |   |           |
|---|---|-----------|
| D.3   | Operations .....  | 73        |
| D.4   | Maps.....   | 73        |
| <b>Appendix E—Flood Water Removal .....</b> |   | <b>75</b> |
| E.1   | Priorities .....  | 75        |
| E.1.1                                       | Alternative 1 – No Immediate Dewatering Needed .....                        | 75        |
| E.1.2                                       | Alternative 2 – Close Breach; No Water Removal .....                        | 75        |
| E.1.3                                       | Alternative 3 – Repair Breach and Remove Water by Pumping .....             | 76        |
| E.1.4                                       | Alternative 4 – Repair Breach and Remove Water by Making a Relief Cut ..... | 76        |
| E.1.5                                       | Environmental Considerations .....  | 76        |
| E.2   | Contractors and Vendors.....  | 76        |

**Table of Tables**

|   |    |
|---|----|
| Table 1—Monterey County Watersheds .....  | 5  |
| Table 2—Monterey County Levees.....   | 6  |
| Table 3—Flood Response Criteria .....   | 6  |
| Table 4—Monitor / Initial Action Criteria .....                                     | 11 |
| Table 5—Flood Stage Criteria.....   | 13 |
| Table 6—Summary of Critical Flood Emergency Management Responsibilities .....       | 23 |
| Table 7—FCC Monterey County EAS Plan .....  | 31 |
| Table 8—Monterey County Radio Communication Systems.....                            | 31 |
| Table 9—Flood Fight Equipment Inventory – Monterey County Public Works Yards .....  | 38 |
| Table 10—Flood Fight Supply Locations .....   | 38 |
| Table 11—Staging Areas.....   | 40 |
| Table 12—Flood Fight Equipment Inventory – Monterey County Public Works Yards ..... | 57 |
| Table 13—Flood Fight Equipment Inventories .....                                    | 65 |
| Table 14—Flood Fight Supplies.....  | 65 |
| Table 15—FCC Monterey County EAS Plan .....   | 72 |

**Table of Figures**

|   |    |
|---|----|
| Figure 1—Monterey County Special Flood Hazard Areas .....   | 4  |
| Figure 2—Warning Stages .....                               | 7  |
| Figure 3—Monterey County EOC Organization Chart .....       | 21 |
| Figure 4—Winter Storm Response Plan Maintenance Cycle ..... | 41 |
| Figure 5—Pajaro River Levee Patrol Area .....               | 58 |
| Figure 6—Key Monterey County Critical Facilities .....      | 74 |

**VOLUME 2 of 2 – Map Atlas (separately bound)**

**Monterey County**  
*Winter Storm Response Plan*

---

**Abbreviations and Acronyms**

|          |  |
|----------|--|
| Cal OES  | California Office of Emergency Services  |
| CAL FIRE | California Department of Forestry and Fire Protection  |
| Cal/OSHA | California Division of Occupational Safety and Health  |
| CB       | Citizens' Band   |
| CCC      | California Conservation Corps  |
| CDEC     | California Data Exchange Center  |
| CERT     | Community Emergency Response Team  |
| CESRS    | California Emergency Services Radio System   |
| CLEMARS  | California Law Enforcement Mutual Aid Radio System   |
| CLERS    | California Law Enforcement Radio System  |
| CNG      | California National Guard  |
| CNRFC    | California-Nevada River Forecast Center  |
| CPSCS    | Consolidated Public Safety Communications System   |
| DWR      | California Department of Water Resources   |
| EAS      | Emergency Alert System   |
| EDIS     | Emergency Digital Information Service  |
| EMS      | Emergency Medical Services   |
| EOC      | Emergency Operations Center  |
| FCC      | Federal Communications Commission  |
| FEMA     | Federal Emergency Management Agency  |
| FOC      | Flood Operations Center  |
| FSP      | Flood Safety Plan  |
| GPS      | Global Positioning System  |
| IC       | Incident Commander   |
| ICP      | Incident Command Post  |
| ICS      | Incident Command System  |
| JIC      | Joint Information Center   |
| JIS      | Joint Information System   |
| LMA      | Local Maintaining Agency   |
| MCWRA    | Monterey County Water Resources Agency   |
| MECU     | Mobile Emergency Coordination Unit   |
| NWS      | National Weather Service   |
| OA       | Operational Area (County)  |
| OASIS    | Operational Area Satellite Information System  |
| OES      | Office of Emergency Services   |
| PIO      | Public Information Officer   |
| PL 84-99 | Public Law No. 84-99 (1984) gives the Corps of Engineers authority for emergency management activities |
| PSAP     | Public Safety Answering Point  |
| RACES    | Radio Amateurs Civil Emergency Services  |
| RD       | Reclamation District   |
| REOC     | Regional Emergency Operations Center   |
| SEMS     | Standardized Emergency Management System   |
| SOC      | State Operations Center  |
| USACE    | U.S. Army Corps of Engineers   |
| USBR     | U.S. Bureau of Reclamation   |
| WSRP     | Winter Storm Response Plan   |

*This page was intentionally left blank*



## **SECTION 1—PLAN INTRODUCTION**

### **1.1 PURPOSE OF PLAN**

---

This Winter Storm Response Plan (WSRP) outlines Monterey County's (County) planned response to flood emergencies in or affecting Monterey County.

The purpose of the plan is to provide information, policies, and procedures that will guide and assist Monterey County in efficiently dealing with winter storm and flood emergencies. The plan addresses flood preparedness, levee patrol, flood fight, evacuation procedures, floodwater removal, and other related subjects. This plan allows implementation of the California Standardized Emergency Management System (SEMS). When used in conjunction with the *California Emergency Plan* and other local emergency plans, it will facilitate multi-agency and multi-jurisdictional coordination, particularly among Monterey County and local governments, special districts, and State agencies in flood emergency operations.

Although this is a public document, appendices to this WSRP contain specific procedures to be followed in flood response. The appendices contain sensitive material, such as personal contact information. Therefore, they are not public documents in their complete forms; they are subject to restricted-use handling procedures. Edited copies of the WSRP deleting restricted data may be obtained from the Monterey County Office of Emergency Services (OES) (<http://www.co.monterey.ca.us/government/departments-a-h/administrative-office/office-of-emergency-services>).

### **1.2 SCOPE OF PLAN**

---

The Monterey County WSRP:

- ◆ Establishes the emergency management organization to respond to a flood emergency affecting Monterey County
- ◆ Identifies policies, responsibilities, and procedures required to protect the health and safety of Monterey County communities from the effects of flood emergencies
- ◆ Establishes operational concepts and procedures associated with field response to flood emergencies and the recovery process
- ◆ Identifies policies for after-action analyses and follow-on activities
- ◆ Is an Annex to the Monterey County Emergency Operations Plan

*This page was intentionally left blank*

## SECTION 2—CONCEPT OF OPERATIONS

### 2.1 SITUATION OVERVIEW

---

Located on the north-central coast of California, Monterey County encompasses 3,324 square miles, including 100 miles of Pacific Ocean coastline. State and local protective facilities, such as dams, bypasses, and levees, afford a level of flood protection; however, flood events of 1983, 1995, 1998, 2008, 2010, and 2011 demonstrate that there is still a significant flood threat in the County.

#### 2.1.1 Areas Subject to Flooding<sup>1</sup>

Monterey County is vulnerable to a number of flooding sources including high tides, wave run-up, river floods, levee failures, drainage pump failure, and dam failure. These may produce large losses to public infrastructure and private property. Slightly more than seven percent (232.9 square miles) of the total County area is subject to flooding, and more than 10 percent of the County's population resides within a Federal Emergency Management Agency (FEMA) defined Special Flood Hazard Area (SFHA) as illustrated in Figure 1. These SFHAs include 10,802 people, 3,341 residential buildings (valued at \$630.2 million), 440 non-residential buildings (valued at \$624.4 million), and 11 critical facilities (valued at \$237 million). Approximately 41.3 miles of highway, 15.5 miles of railway, and 84 bridges (aggregate value of \$485 million) are also located within these SFHAs. Based on previous flood history, Monterey County can generally expect a serious flood event to occur approximately every four years.

---

<sup>1</sup> Reference: Monterey County Multi-Jurisdictional Hazard Mitigation Plan (2015) and Monterey County Water Resources Agency *Storm Monitoring Reference Manual* (June 2018)

**Figure 1—Monterey County Special Flood Hazard Areas**



**Monterey County**  
*Winter Storm Response Plan*

Localized flooding may occur outside of recognized drainage channels or delineated floodplains due to a combination of locally heavy precipitation, increased surface runoff, and inadequate facilities for drainage and storm water conveyance. Such events frequently occur in flat areas and in urbanized areas with large impermeable surfaces. Local drainage may result in “nuisance flooding,” in which streets or parking lots are temporarily closed and minor property damage occurs. Table 1 describes the eight Monterey County watersheds.

**Table 1—Monterey County Watersheds**

| <b>Watershed</b>               | <b>Location</b>              | <b>Description</b>  |
|--------------------------------|------------------------------|---|
| <b>Alisal – Elkhorn Slough</b> | Northwestern Monterey County | Includes the Elkhorn, Moro Cojo, and Gabilan-Tembladero-Alisal watersheds that drain into the Monterey Bay via Elkhorn Slough and Moss Landing Harbor   |
| <b>Arroyo Seco</b>             | West-central Monterey County | Includes Arroyo Seco River which feeds into the Salinas River south of the City of Soledad  |
| <b>Big Sur</b>                 | West-central Monterey County | Drains a small portion of the western Santa Lucia mountains. Includes the Big Sur River, which drains into the Pacific Ocean at Andrew Molera State Park  |
| <b>Carmel River</b>            | West-central Monterey County | Includes the Carmel River which drains into the Pacific Ocean near the city of Carmel-By-The-Sea  |
| <b>Nacimiento River</b>        | Southwestern Monterey County | Includes the Nacimiento River which feeds into Nacimiento Reservoir before feeding into the Salinas River near Bradley  |
| <b>Pajaro River</b>            | Northern Monterey County     | Only a small percentage of this watershed is located in Monterey County, including a portion of the Pajaro River, which is also the geographic boundary between Monterey and Santa Cruz Counties                                |
| <b>Salinas River</b>           | Central Monterey County      | Includes the Salinas River and tributary waterways including the Estrella River, Nacimiento River, San Antonio River, San Lorenzo Creek, and the Arroyo Seco River. The Salinas River drains into Monterey Bay near Castroville |
| <b>San Antonio River</b>       | Southwestern Monterey County | Originates in the Santa Lucia range and feeds into San Antonio Reservoir before feeding into the Salinas River near Bradley   |

Source: Monterey County Water Resources Agency *Storm Monitoring Reference Manual* (June 2018)

**Monterey County**  
*Winter Storm Response Plan*

## **2.2 GENERAL APPROACH TO SEASONAL FLOOD OPERATIONS<sup>2</sup>**

The Monterey County Water Resources Agency (MCWRA) is responsible for the following levee segment. The County has no responsibility for any drainage facilities or flood control structures.

**Table 2—Monterey County Levees**

| Facility Name      | River  | Location                        | Maintenance Responsibility             |
|--------------------|--------|---------------------------------|--|
| Pajaro River Levee | Pajaro | Monterey/Santa Cruz County Line | Monterey County Water Resources Agency |

Flood response levels for Monterey County will be based on the following criteria:

**Table 3—Flood Response Criteria**

| Waterway          | Gage Location                   | Monitor Stage Criteria (Feet) | Flood Stage Criteria (Feet) |
|-------------------|---------------------------------|-------------------------------|-----------------------------|
| Arroyo Seco River | Near Soledad                    | 12.0                          | 14.0                        |
| Big Sur River     | Near Big Sur                    | 8.5                           | 10.0                        |
| Carmel River      | Robles Del Rio                  | 7.5                           | 8.5                         |
|                   | Carmel River Lagoon             | 8.7                           | N/A                         |
| Nacimiento River  | Below Sapaque                   | N/A                           | 30.0                        |
|                   | Nacimiento Reservoir            | 787.75                        | 800.0                       |
| Pajaro River      | San Benito River at Highway 156 | 8.0                           | 10.0                        |
|                   | Chittenden                      | 25.0                          | 32.0                        |
| Salinas River     | Bradley                         | 12.0                          | 14.0                        |
|                   | Soledad                         | 16.0                          | 18.0                        |
|                   | Spreckels                       | 20.0                          | 23.0                        |
|                   | Salinas River Lagoon            | 5.0                           | N/A                         |
| San Lorenzo Creek | Below Bitterwater               | 14.0                          | 16.0                        |
|                   | King City Golf Course           | 7.0                           | 8.0                         |
| San Antonio River | Near Lockwood                   | 12.0                          | 14.0                        |

Source: Monterey County Water Resources Agency *Storm Monitoring Reference Manual* (June 2018)

<sup>2</sup> Reference: Monterey County Water Resources Agency *Storm Monitoring Reference Manual* (June 2018)

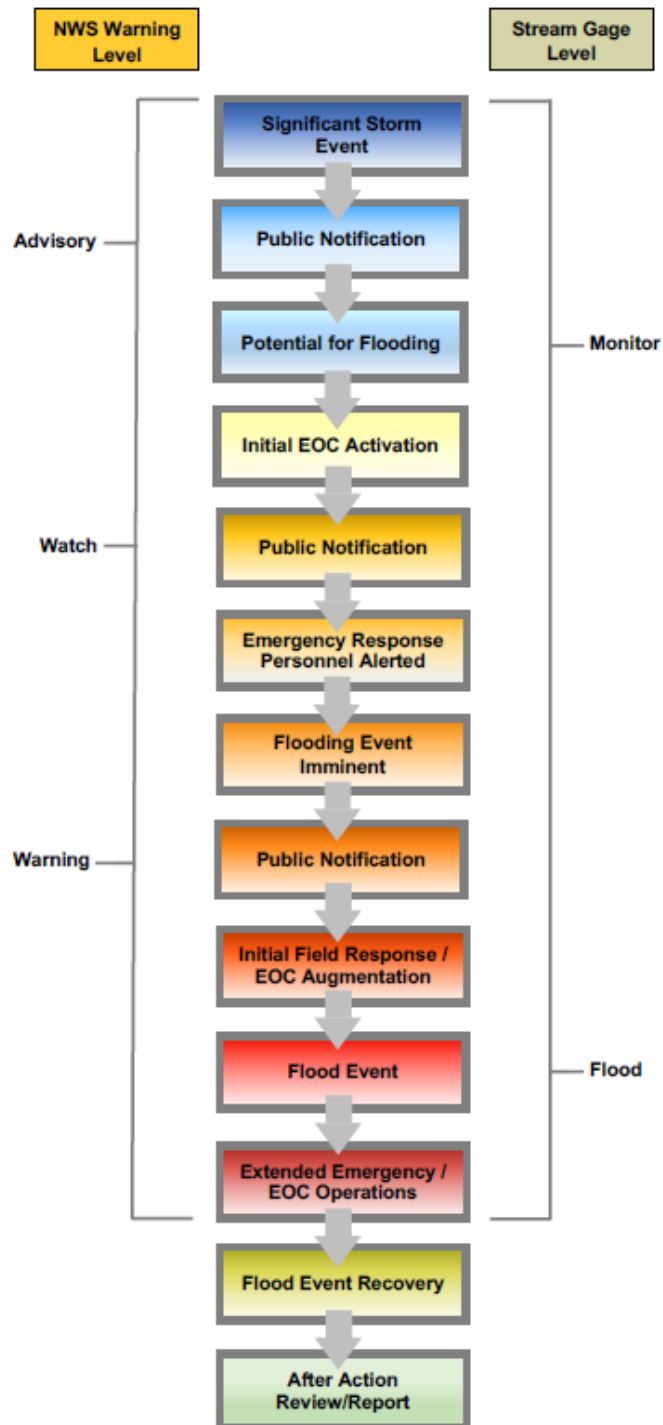


**Monterey County**  
*Winter Storm Response Plan*

---

The following diagram shows, in general, how resources are mobilized, and various actions initiated as a function of river stage. **Section 2.2** defines the specific level of commitment by Monterey County for specific triggers.

**Figure 2—Warning Stages**



### **2.2.1 Monitoring**

Monterey County's flood stage monitoring is comprised of observing the readings from specific, real-time, telemetered stream gages that report the conditions on water courses that affect potential flooding in the County. For each gage location on a stream or water course, stages or flows have been categorized into two levels: monitoring stage, and flood stage.

The real-time gages can be accessed through the internet through the California Data Exchange Center (CDEC) within the California Department of Water Resources (DWR) website ([www.water.ca.gov](http://www.water.ca.gov)). CDEC includes links to the National Weather Service (NWS) and links to satellite photos. CDEC provides information on all the California rivers and reservoirs. This allows direct monitoring of outflows at key dams affecting Monterey County. The following dams may affect Monterey County:

- ◆ Los Padres Dam
- ◆ Nacimiento Dam
- ◆ San Antonio Dam

Critical stream gage data for Monterey County can also be found at: [https://waterdata.usgs.gov/ca/nwis/current/?type=flow&huc\\_cd=18060011,18060002,18060005,18060004,18060012,18060006](https://waterdata.usgs.gov/ca/nwis/current/?type=flow&huc_cd=18060011,18060002,18060005,18060004,18060012,18060006).

### **2.2.2 Analysis and Initial Response**

After compiling monitoring and surveillance information, Monterey County decides if it is necessary to begin flood operations or direct flood fight resources to specific areas where flooding is occurring or may occur soon. Monterey County emergency personnel also monitor the flood stage information or monitoring system and are in constant communication with flood control staff throughout a storm episode. Agency coordination is facilitated through the Monterey County Operational Area Emergency Operations Center (MCOA EOC).

The MCWRA initiates levee patrols on the Pajaro River to monitor conditions when triggering events occur.

#### ***Patrol Trigger***

The MCWRA initiates patrols on the Pajaro River levees when the water level reaches 25.0 feet at Chittenden. If conditions exceed the capabilities of this levee system, the MCWRA can contact the DWR for technical assistance. The DWR Flood Operations Center (FOC) may also request support from the U.S. Army Corps of Engineers (USACE) under PL 84-99.



### **2.2.3 Alerting and Activation**

As operations continue, local jurisdictions will brief their administrators, and coordination will occur through the Operations Section at the MCOA EOC. Depending on the extent of the flooding situation, the MCOA EOC will be activated to coordinate OA response with other agencies and jurisdictions.

The DWR FOC may also be operational. The MCOA EOC remains operational until the threat from flooding is contained and controlled.

## **2.3 PUBLIC NOTIFICATION OF FLOOD THREATS**

---

### **2.3.1 Initial Notifications**

Initial notification is often limited in detail. For example, a flood watch may be issued by the NWS for a general area or location where there is a threat to the public. Some emergency actions might be needed, but not enough to warrant a full MCOA EOC activation. A follow-up call from the MCOA EOC to the notifying party or agency can be made to obtain further detail.

- ◆ **A Flood Watch** – Flood watches inform the public of hydrometeorological conditions which may cause flooding when the flooding is neither certain nor imminent. Flood watches provide advance notice and up-to-date information on the possibility of flooding within the ensuing 36 hours.
- ◆ **A Flood Warning** – Flood warnings are issued for any high flow, overflow, or inundation not covered by flash flood warning products. There are two general types of flood warnings—areal flood warnings and river flood warnings issued for specific forecast points. Flood warnings for forecast points usually include information on the impacts of expected flooding at locations upstream and/or downstream from covered forecast point(s) on a river or stream. Areal flood warnings are issued for areas along rivers and streams not associated with a forecast point, or for counties or portions of counties (with the areas covered described in the same way as for flash flood warnings).
- ◆ **A Flash Flood Warning** – Flash flood warnings are issued when flooding is imminent. This product will be reserved for those short-term events which require immediate action to protect lives and property, such as dangerous small stream flooding or urban flooding, and dam or levee failures. Flash flood warnings may cover counties, portions of counties, well-known geographical areas (e.g., deserts, valleys), or river basins.
- ◆ **Urban and/or Small Stream Advisories** – Flood statements issued to provide information on elevated river/stream flows or ponding of water in urban or other

areas when such events warrant notification of the public in a product less urgent than a warning.

The local EOC may receive direct warning from NWS. The MCWRA will advise regarding significant releases or significant changes in releases. The County is responsible for warnings in unincorporated areas. The Monterey County Sheriff's Department and various incorporated areas have responsibility for evacuation notification of the public within their jurisdictions. They and the Monterey County Office of Emergency Services are also responsible for activating their own emergency response plans for the flooding threat.

## **2.4 STAGE DEFINITIONS FOR FLOODS**

---

The following information describes the preparedness activities and flood watch operations used by the MCWRA.

In riverine flooding, river stages generally dictate the phase as follows:

**PHASE I: Preparedness** – Below Monitor Stage on any monitored waterway

**PHASE II: Increased Readiness** (Monitor / Preliminary Action) – At or above Monitor Stage, but below **Flood Stage**, as shown in Table 3

**PHASE III: Activation / Emergency Response** – At or above Flood Stage, as shown in Table 3

**PHASE IV: Initial Recovery**

## **2.5 FLOOD/THREAT OPERATIONS**

---

Some floods will be preceded by a buildup period, providing advance warning to those who might be affected. Others occur without advance warning, requiring mobilization and commitment of the emergency organization after the onset of the emergency. Monterey County emergency response agencies must be prepared to respond promptly and efficiently. In all flood situations, this plan will be implemented in several phases. In the case of slow rise flood threats, the phases are initiated based on various river water elevations.

### **2.5.1 Phase I: Preparedness**

Agencies and/or departments having emergency responsibilities assigned in this WSRP should prepare service support plans, operating procedures, and checklists detailing the use and disposition of their resources in an emergency. Such plans and procedures include coordination and communication lines with other departments and jurisdictions.

The MCWRA coordinates with the DWR Flood Management Division to provide flood fight training as needed or requested, and conducts annual coordination and plans review meeting(s) with allied Monterey County agencies/departments.

The procedural checklist shall be reviewed periodically and updated where necessary by MCWRA, including river monitor and flood stages as appropriate.

### **2.5.2 Phase II: Increased Readiness**

This phase begins with *monitoring* when conditions exist that could result in a flood, such as continuing and excessive rainfall or rising rivers. Initial actions, such as increased stream monitoring, levee/river patrols, etc., are triggered at the specific stream gage readings listed in Table 4.

**Table 4—Monitor / Initial Action Criteria**

| <b>Waterway</b>   | <b>Gage Location</b>            | <b>Monitor Stage Criteria (Feet)</b> |
|-------------------|---------------------------------|--------------------------------------|
| Arroyo Seco River | Near Soledad                    | <b>12.0</b>                          |
| Big Sur River     | Near Big Sur                    | <b>8.5</b>                           |
| Carmel River      | Robles Del Rio                  | <b>7.5</b>                           |
|                   | Carmel River Lagoon             | <b>8.7</b>                           |
| Nacimiento River  | Nacimiento Reservoir            | <b>787.75</b>                        |
| Pajaro River      | San Benito River at Highway 156 | <b>8.0</b>                           |
|                   | Chittenden                      | <b>25.0</b>                          |
| Salinas River     | Bradley                         | <b>12.0</b>                          |
|                   | Soledad                         | <b>16.0</b>                          |
|                   | Spreckels                       | <b>20.0</b>                          |
|                   | Salinas River Lagoon            | <b>5.0</b>                           |
| San Lorenzo Creek | Below Bitterwater               | <b>14.0</b>                          |
|                   | King City Golf Course           | <b>7.0</b>                           |
| San Antonio River | Near Lockwood                   | <b>12.0</b>                          |

Source: Monterey County Water Resources Agency *Storm Monitoring Reference Manual*  
(June 2018)

As this situation develops, the Monterey County Administrative Officer, Emergency Services Director or Deputy, or Office of Emergency Services Manager will evaluate information, decide upon necessary action, and initiate appropriate response. Generally, this means to initiate the emergency response plan into limited operation. This includes alerting key personnel, ensuring

readiness of essential resources, and preparing to move resources to the threatened area when required. The MCOA EOC will coordinate with County cities and the Cal OES Coastal Region EOC as appropriate.

At this phase, the MCOA EOC will generally be activated to either Level 3 or Level 2. The extent of activation is event-driven and at the discretion of the EOC Director.

The MCOA EOC monitors communications; receives information on field situations, weather, river, and reservoir stages; directs response; coordinates with adjacent and local agencies; provides and coordinates resources and assets; provides information; arranges for State, federal, and volunteer resources; requests mutual aid from adjacent agencies; and plans, organizes, controls, and documents actions during the flood event.

State and federal actions in this phase include the following: DWR FOC monitors flooding situations on a daily operational schedule. If local agencies begin to encounter extensive problems, the FOC extends hours to 24-hour operations and increases coordination efforts for State support of flood fight operations. Typically, the Cal OES State Operations Center (SOC) and the Cal OES Regional Operations Center for the Coastal Region (REOC), the FOC, and the Dam Management Center operated by USACE are all activated to some degree as flood threats increase. Adjacent counties and cities decide when and at what level they will activate their EOCs.

### **2.5.3 Phase III: Activation / Emergency Response**

This phase begins when an evaluation of the situation indicates it is a matter of “when” rather than “if” emergency conditions will exist. This situation would exist when one or more rivers are expected to reach or exceed ***Flood Stage*** criteria, as summarized in Table 5.

**Table 5—Flood Stage Criteria**

| Waterway          | Gage Location                   | Flood Stage Criteria (Feet) |
|-------------------|---------------------------------|-----------------------------|
| Arroyo Seco River | Near Soledad                    | 14.0                        |
| Big Sur River     | Near Big Sur                    | 10.0                        |
| Carmel River      | Robles Del Rio                  | 8.5                         |
|                   | Carmel River Lagoon             | N/A                         |
| Nacimiento River  | Nacimiento Reservoir            | 800.0                       |
|                   | Below Sapague                   | 30.0                        |
| Pajaro River      | San Benito River at Highway 156 | 10.0                        |
|                   | Chittenden                      | 32.0                        |
| Salinas River     | Bradley                         | 14.0                        |
|                   | Soledad                         | 18.0                        |
|                   | Spreckels                       | 23.0                        |
|                   | Salinas River Lagoon            | N/A                         |
| San Lorenzo Creek | Below Bitterwater               | 16.0                        |
|                   | King City Golf Course           | 8.0                         |
| San Antonio River | Near Lockwood                   | 14.0                        |

Source: Monterey County Water Resources Agency *Storm Monitoring Reference Manual* (June 2018)

The nature of response operations is dependent upon the characteristics and requirements of the situation, and the emergency organization will be mobilized as appropriate to manage/mitigate each specific situation. Each service, when mobilized, will operate according to the provisions of this WSRP. Priority will be given to activation and response operations as follows:

- ◆ Activating appropriate response resources to control/mitigate current and projected situation
- ◆ Activating the MCOA EOC to the appropriate level to coordinate and support anticipated multi-agency response operations
- ◆ Notifying the Monterey County Chief Administrative Officer or assigned delegate
- ◆ Establishing and maintaining contact with the OES with ongoing information relative to the type of threat, its imminence, potential severity, area affected, and associated problems. Reports will include action being planned or taken as well as possible deficiencies of critical emergency resources (unmet needs)

- ◆ Ensuring that ALL local agencies are promptly notified of the emergency. This may also prompt immediate public notification as required by the nature of the threat
- ◆ Preparing to request, receive, and support mutual aid resources as needed when local-agency resources are insufficient to manage/control the situation
- ◆ Mobilization, allocation, and positioning of personnel and materials for patrolling and flood fighting operations
- ◆ Establishing of staging areas for personnel, supplies, and equipment
- ◆ Establishing evacuation centers as needed to aid in managing the movement of people from flood areas
- ◆ Producing and disseminating emergency information and advice to other city or jurisdictional EOCs when a Joint Information Center is not operational
- ◆ Protecting, controlling, and allocating vital resources
- ◆ Restoring or activating essential facilities and systems

All the preceding actions are based on extensive local coordination of plans and response. In addition, there are daily briefings at the MCOA EOC involving all parties. When local resources are committed to the maximum and additional resources/personnel are required to control or alleviate the emergency, requests for mutual aid will be initiated through the EOC.

#### **2.5.4 Phase IV: Initial Recovery**

Monterey County will identify and address initial recovery needs. Initial recovery activities shall be initiated as soon as possible to minimize any adverse impacts of the flood event. Initial recovery activities include, but are not limited to:

- ◆ Debris removal
- ◆ Clearance of roadways
- ◆ Demolition of unsafe structures
- ◆ Re-establishment of public services and utilities
- ◆ Provision of care and welfare for the affected population, including temporary housing for displaced persons
- ◆ Care of animals and disposal of carcasses

**The Initial Recovery phase has three primary objectives:**

1. *Reinstatement of family autonomy and the provision of essential public services*

2. *Permanent restoration of public property along with reinstatement of public services*
3. *Performance of research to identify residual hazards, to advance knowledge of disaster phenomena, and to provide information to improve future flood operations*

### **2.5.5 Federal and State Emergency and Disaster Assistance**

State and federal support during the Activation / Emergency Response phase:

- ◆ Monterey County will consider requesting Cal OES and/or DWR support during the Activation / Emergency Response phase. California Mutual Aid and USACE assistance are available when resources beyond local capability are needed for flood fight operations

Emergency phase support following flooding:

- ◆ If the County proclaims a local emergency, the Governor may support it by proclaiming a State of Emergency and then requesting that the President make a National Disaster Declaration for the affected area
- ◆ If the President declares the area a national disaster, assistance from the FEMA can be requested
- ◆ If residential flooding occurs, regardless of the declaration, USACE can provide federal funds for recovery operations for up to 30 days following the incident
- ◆ USACE assistance can also be requested to repair eroded and damaged levees following high flows. Requests for this authority must be made in a timely manner (30 days)

*This page was intentionally left blank*



## **SECTION 3—ORGANIZATION AND ASSIGNMENT OF RESPONSIBILITIES**

### **3.1 GENERAL ORGANIZATION AND RESPONSIBILITIES**

---

#### **3.1.1 Levee Flood Control Operations**

The MCWRA has responsibility for the levees within its jurisdiction. MCWRA has an Engineer on staff to assist with flood fight responsibilities during flood emergencies. The MCWRA can also request mutual aid and coordinate with the MCOA during flooding episodes.

#### **3.1.2 Operational Area Flood Control Operations**

Flood operations occurring within the MCOA are coordinated through the MCOA EOC. The MCOA EOC ensures proper communication and coordination among all entities responding to the flood.

#### **3.1.3 Mutual Aid Regions and Regional Support**

Mutual aid requests go to the Coastal Region REOC and then are passed to other counties in the region. Other counties will only supply what they can without endangering their own response capability. The REOC may then request resources from the SOC, DWR, and USACE.

#### **3.1.4 State Flood Control Operations**

DWR is responsible for State flood control operations through its FOC, Division of Flood Management, other divisions, and its flood management and flood fight technical experts. DWR coordinates with USACE, USBR, and other agencies. DWR also operates CDEC, which monitors rainfall, stream flow, river stages, and reservoir releases across the State. DWR will work with other State agencies as needed during flood emergencies.

#### **3.1.5 Federal Flood Control Operations**

The USACE and the USBR have responsibilities for federal flood activities in California. The USACE has a major responsibility for overseeing reservoir releases and supporting the State's effort in maintaining the levees and structures associated with the State Plan of Flood Control. The USACE can support emergency work as requested by the State under Public Law 84-99, which includes levee flood fighting. The USBR has responsibility for its dam releases and reservoir operations.

*This page was intentionally left blank*

## SECTION 4—DIRECTION, CONTROL, AND COORDINATION

### 4.1 CHIEF EXECUTIVE

---

The Monterey County Chief Administrative Officer / Emergency Services Director establishes overall policies and priorities, providing direction for local flood response. Responsibility for managing emergency response within these policies and priorities is delegated to the MCOA EOC Manager and, on scene, to the Incident Commander (IC), who reports to the MCOA EOC Operations Section Chief. The MCOA EOC supports incident response by supplying resources, equipment, and supplies. Where supplies are limited, the MCOA EOC establishes priorities for allocation.

### 4.2 INCIDENT COMMANDER (IC)

---

The IC at the flood fight scene is responsible for all resources responding to that emergency site. The IC may assign missions to flood fight crews acquired under mutual aid from other governmental agencies, tasking them to perform specific tasks to facilitate the response. Based on these missions, the crews' normal supervisors will direct State and federal crews.

### 4.3 SUPPORT PERSONNEL

---

Flood fight crews responding from other areas pursuant to mutual aid—and contractors hired to undertake repairs—receive work assignments from the organization that requested or hired them. Organized crews will work under the immediate control of their own supervisors in response to missions assigned by the IC.

### 4.4 PLAN ACTIVATION

---

The following person(s) have authority to activate this plan based on the previously identified stages.

- ◆ MCOA EOC Manager or delegated Duty Officer
- ◆ MCWRA General Manager or delegated Duty Officer

### 4.5 STANDARDIZED EMERGENCY MANAGEMENT SYSTEM (SEMS) STRUCTURE

---

Under SEMS, common structure and terminology combine to ensure smoother communication and better coordination of interjurisdiction and interagency response to flood emergencies. The five sections that follow have uniform responsibilities throughout California—whether the governmental level is a special district, city, county, or the State.

**Monterey County**  
*Winter Storm Response Plan*

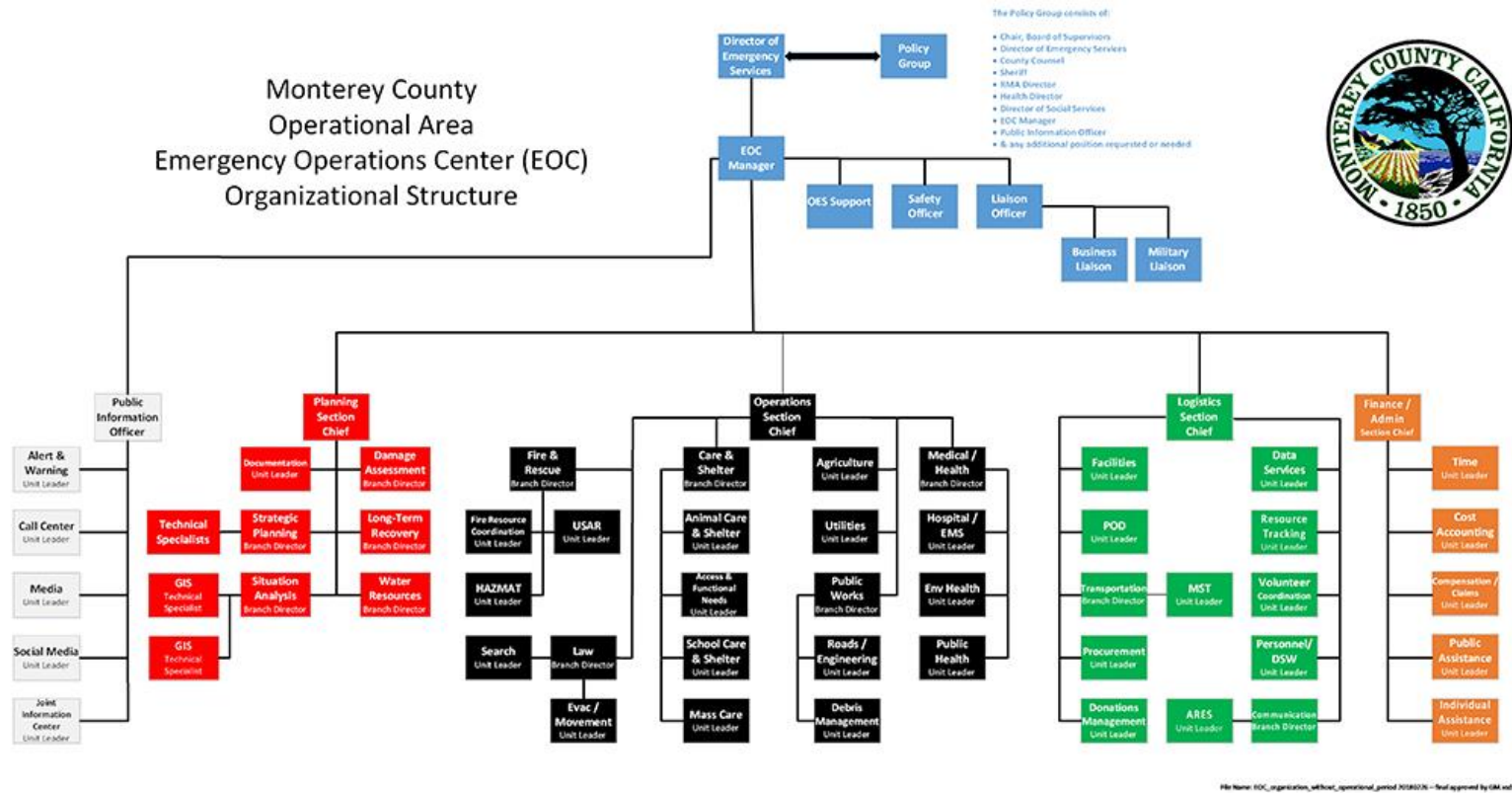
---

- ◆ Command Staff
- ◆ Operations
- ◆ Planning and Intelligence
- ◆ Logistics
- ◆ Finance and Administration

Figure 3 shows the organizational structure of the Monterey County EOC when fully-activated.

Monterey County  
Winter Storm Response Plan

**Figure 3—Monterey County EOC Organization Chart**



**OPERATIONS**

**Law Branch**

Search Unit  
Evacuations/Movement Unit

**Fire and Rescue Branch**

Fire Resource Coordination Unit  
Hazmat Unit  
Urban Search and Rescue Unit

**Care and Shelter Branch**

Animal Care and Shelter Unit  
Access and Functional Needs Unit  
School Care and Shelter Unit  
Mass Care and Shelter Unit

**Medical/Health Branch**

Hospital/EMS Unit  
Environmental Health Unit  
Public Health Unit

**Public Works Branch**

Roads/Engineering Unit  
Debris Management Unit

**Agriculture Unit**

**Utilities Unit**

**PLANNING and INTELLIGENCE**

**Situation Analysis Branch**

**Damage Assessment Branch**

**Strategic Planning Branch**

**Water Resources Branch**

**Long-Term Recovery Branch**

**Documentation Unit**

**LOGISTICS**

**Communications Branch**

ARES Unit

**Transportation Branch**

MST Unit

**Facilities Unit**

**Procurement Unit**

**Resource Tracking Unit**

**Data Services Unit**

**Volunteer Coordination Unit**

**Personnel/DWS Unit**

**Donations Management Unit**

**Points of Distribution Unit**

**FINANCE and ADMINISTRATION**

**Time Unit**

**Cost Accounting Unit**

**Compensation/Claims Unit**

**Public Assistance Unit**

**Individual Assistance Unit**

**PUBLIC INFORMATION**

**Alert and Warning Unit**

**Call Center Unit**

**Media Unit**

**Social Media Unit**

**Joint Information Unit**

Table 6 summarizes critical emergency management responsibilities, indicating those elements of the SEMS structure having primary responsibility for leadership in those functions and those elements providing support.

**Table 6—Summary of Critical Flood Emergency Management Responsibilities**

P= Primary S= Support

|                                   | Public Information / Outreach | Define Emergency Phase | Alerting and Warning | Activation of EOC/ICP | Flood Management | Monitoring and Surveillance | Levee Patrols | Flood Fight Operations | Evacuations* | Care and Shelter | Critical Infrastructure Protection | Recovery | Incident Action Planning |
|-----------------------------------|-------------------------------|------------------------|----------------------|-----------------------|------------------|-----------------------------|---------------|------------------------|--------------|------------------|------------------------------------|----------|--------------------------|
| <b>Chief Executive</b>            | S                             |                        | S                    | S                     |                  |                             |               |                        |              |                  |                                    |          |                          |
| <b>EOC Manager/ IC</b>            | S                             | S                      | S                    | P                     |                  |                             |               |                        | S            | S                |                                    | S        | S                        |
| <b>Public Information Officer</b> | P                             | S                      | S                    |                       |                  |                             |               |                        | S            | S                |                                    | S        | S                        |
| <b>Operations Section</b>         |                               | S                      | P                    | S                     | P                | P                           | P             | P                      | P            | P                | P                                  | S        | S                        |
| <b>Plans and Intelligence</b>     | S                             | P                      | S                    | S                     | S                |                             | S             | S                      | S            | S                | S                                  | S        | P                        |
| <b>Logistics</b>                  | S                             |                        | S                    | S                     | S                | S                           | S             | S                      | S            | S                | S                                  | S        | S                        |
| <b>Finance and Administration</b> |                               |                        |                      | S                     |                  |                             |               |                        |              | S                | S                                  | P        | S                        |

\* Local law enforcement, part of Operations in the EOC, has responsibility for this task in accordance with its Standard Operating Procedures.

## 4.6 PUBLIC NOTIFICATION

Public notification and awareness are extremely important during an emergency. In the case of a potential flood, the public must be kept informed of:

- ◆ Water levels and their implications for a flood event
- ◆ Levee conditions
- ◆ Short- and long-term weather forecasts
- ◆ Any other flood related threat that might exist

In an incident, like a case where a levee has already failed, early alert and notification is crucial. Monterey County is committed to notifying the public regarding the conditions of area levees, rivers, and tributaries that threaten flooding, and initiating evacuation warnings due to a threat, rather than waiting until flooding has commenced.

A well-informed public is likely to respond well in the face of an actual disaster. Monterey County utilizes the following methods to provide emergency information and notifications to the public:

- ◆ ALERT Monterey County
- ◆ Reverse 9-1-1 System
- ◆ Nixle
- ◆ Facebook, Twitter, and Instagram
- ◆ Local Broadcast Media (Radio and Television)
- ◆ Wireless Emergency Alerts (WEA)
- ◆ Emergency Alert System (EAS)
- ◆ Emergency Digital Information System (EDIS)
- ◆ Emergency Vehicle Loudspeakers

#### **4.6.1 Notification Protocols**

The Public Notification System can be activated by the Monterey County OES Duty Officer or an authorized Monterey County public safety official to provide emergency information and instructions to residents and businesses. All media outlets must be notified of the emergency as soon as possible for them to provide public alert announcements. The verbal or written messages that will be distributed—whether through the media or other messaging systems—are the responsibility of the Public Information Officer (PIO), the MCOA EOC, and the Joint Information Center when it is open. Sample notices are included in **Appendix A.4**.

In case of an evacuation, Monterey County will notify the area’s special needs care providers of the emergency to the extent that contact information is available. These providers will be asked to notify their clients in the affected area and give instructions to their clients.

### **4.7 RESOURCES**

---

#### **4.7.1 Staffing**

Some Monterey County staff have assigned responsibilities as emergency responders. Additional flood emergency response staffing comes from other Monterey County agencies and non-government organizations.

#### **4.7.2 Integration with Police and Fire Responders**

SEMS creates a system of personnel, policies, procedures, facilities, and equipment that is integrated into a common organizational structure designed to improve emergency response



operations of all types and levels of complexity. SEMS creates a flexible, scalable response organization providing a common framework within which people can work together effectively. These people may be drawn from multiple agencies that do not routinely work together. Thus, SEMS provides standard response and operational procedures to reduce problems and potential miscommunications on such incidents.

#### **4.7.3 Obtaining and Training Volunteers**

One of the most important aspects of flood response is the myriad of government and non-government agencies, organizations, and local businesses that partner with Monterey County. Volunteer groups can provide critical personnel and resources.

Several local Monterey County jurisdictions provide or support a Community Emergency Response Team (CERT) Program. CERT educates people about disaster preparedness for hazards that may affect their area and trains them in basic disaster response skills. Using the training learned in the classroom and during exercises, CERT members assist others in their neighborhood or workplace during an event when professional responders are not immediately available to help. CERT members also support emergency response agencies by taking a more active role in emergency preparedness projects in their community. Each Monterey County jurisdiction with a CERT Program has registered its CERT members as Disaster Service Workers. The Community Emergency Response Volunteers (CERV) of the Monterey Peninsula is a non-profit 501 (c) (3) organization with a mission to support local Monterey County CERT programs, build public awareness about emergency preparedness, and promote the community's capacity to respond to natural disasters and man-made emergencies. CERV supports local CERT programs and community preparedness through networking, grant writing, workshops, collaborating with local businesses and other organizations, and co-sponsorship of community events.

#### **4.7.4 Cal OES and DWR Assistance**

During emergency response to flooding or storms, Monterey County may require assistance with sand bagging, emergency debris clearance, and similar activities to save lives and protect the public. These activities often require the use of trained crews to augment local personnel. In accordance with SEMS, once local resources are depleted or reasonably committed, mutual aid is accessed and coordinated within the OA. If MCOA resources are not sufficient or timely, then the request is forwarded to the Cal OES Coastal REOC. The REOC evaluates and fulfills requests by coordinating mutual aid from unaffected OAs, tasking a State agency, or accessing federal assistance. Due to the nature of the need and the resource, requests for crews are usually tasked to a State agency. Details for acquiring additional resources are contained in **Appendix C**.

## **4.8 DISASTER INTELLIGENCE**

---

Disaster intelligence refers to the tools and techniques Monterey County uses to identify, collect, analyze, and disseminate information on the current and future extent and consequences of the flood.

### **4.8.1 Information Needed and Resources**

#### *Weather Forecasts*

The advent of satellite imagery and sophisticated computer models has significantly improved the ability to forecast times and intensities of rainfall. Managing flood response requires knowledge and understanding of the implications of weather predictions for other parts of the watershed as well as the local area. The NWS provides daily briefings on upcoming weather as part of its role in the DWR FOC. The NWS office in Monterey also provides local Monterey County spot weather forecasts upon request in support of Monterey County emergency response agencies, including the EOC.

#### *River Forecasts and Levels*

In addition to precipitation forecasts, the emergency manager also must know how resulting runoff will affect reservoir storage, releases from dams, and ultimately the amount of water flowing in a river. Hydrologists for DWR work with the NWS in the California-Nevada River Forecast Center (CNRFC) to provide twice-daily forecasts of river height at various points. These forecasts are issued as “River Bulletins” and Monterey County subscribes to DWR’s email distribution system. In addition, Monterey County regularly reviews the website of the CDEC, which provides data on reservoirs, rivers, and rainfall. (<http://cdec.water.ca.gov/>)

More specifically, CDEC provides information on precipitation, river forecasts, river stages, snowfall, and reservoir storage. The information is presented as tables but is also available in graphical format that compares current conditions to historical data.

Critical stream gage data for Monterey County can also be found at: [https://waterdata.usgs.gov/ca/nwis/current/?type=flow&huc\\_cd=18060011,18060002,18060005,18060004,18060012,18060006](https://waterdata.usgs.gov/ca/nwis/current/?type=flow&huc_cd=18060011,18060002,18060005,18060004,18060012,18060006).

#### *Flood-Related Events, such as Levee Slumps or Boils*

As important as it is to anticipate a potential situation, it is equally vital to be aware of current conditions and sudden shifts in those conditions. Monterey County maintains regular contact with MCWRA staff and other field responders. This ensures quick awareness of any changes in the situation, facilitating a prompt response.

### ***Traffic Information***

Similarly, Monterey County maintains regular contact with local and State law enforcement, Department of Transportation, Caltrans, and other agencies to ensure situational awareness of local traffic issues. The Monterey County EOC coordinates with the County Public Works Department to ensure awareness of flooded intersections due to storm drains being clogged.

### ***Maps of Staging Areas and Stockpiles***

Monterey County has tasked the EOC Administration/Finance Branch with maintaining an inventory of flood response materials, supplies, and locations. Details are contained in **Section 6**.

## **4.9 BUILDINGS USED TO PROVIDE ESSENTIAL SERVICES**

---

If occupants are expected to be essential service providers, it is Monterey County policy that new buildings shall be required to be located outside an area that may be flooded in the event of any levee failure, or that they will be designed to be operable shortly after the floodwater is removed. They shall be constructed to minimize and resist flood hazards, either through location outside likely flooded areas or through design. It is also Monterey County policy that the structural systems and details set forth in working drawings and specifications are carefully reviewed by local responsible agencies using qualified personnel, and that the construction process is carefully and completely inspected.

It is further Monterey County policy that the nonstructural components vital to the operation of essential services buildings shall also be able to resist, insofar as practical, the effects of flooding. Monterey County recognizes that certain nonstructural components housed in essential services buildings, including, but not limited to, communications systems, main transformers and switching equipment, and emergency backup systems, are essential to facility operations and that these nonstructural components should be given adequate consideration during the design and construction process to assure, insofar as practical, continued operation of the building after a flood.

“Essential Services Buildings” consist of any building used (or designed to be used), or any building that a portion of which is used (or designed to be used), as a hospital, fire station, police station, or jail. These buildings would also include sheriff’s offices, emergency operations centers, and emergency communications centers.

*This page was intentionally left blank*

## **SECTION 5—COMMUNICATIONS**

This section provides an overview of available communications systems. Supporting State communications resources are listed in **Appendix A**.

### **5.1 COMMUNICATIONS ORGANIZATION**

---

The fully staffed Communications Organization consists of a Communications Chief (PIO), available Communications Technicians, Message Center Operators, and Messengers (as needed). Personnel for these positions come from Monterey County, other local jurisdictions, and non-government organization staff. Additional personnel are available through the local Radio Amateurs Civil Emergency Services (RACES) organization and from State agencies through mutual aid.

### **5.2 PUBLIC ALERTING SYSTEMS**

---

#### **5.2.1 ALERT Monterey County**

ALERT Monterey County is a system that delivers voice recorded, text, email, and TTY messages in English and Spanish languages to a database of landline telephones and mobile devices in a specific geographic area affected by a disaster or emergency as selected by the local government agency with the following limitations: The telephone database utilizes the existing 9-1-1 residential and yellow pages landline databases. Cellular telephone and email notifications use a database created by individuals registering these devices on the County's website at: [www.alertmontereycounty.org](http://www.alertmontereycounty.org).

ALERT Monterey County messaging can be initiated by the MCOA EOC Manager or Monterey County OES Duty Officer, and designated Monterey County public safety officers.

#### **5.2.2 Nixle**

Nixle is a Community Information Service dedicated to helping people stay connected to the information that matters most to them depending on their physical location. People can stay connected to their local police department, their children's schools, their local community agencies and organizations, and the important information from other locations throughout the country that are relevant to them. Each user's account can be customized so they receive only the information that matters most to them, whether it is where they live, work, or have friends or family throughout the country. Only authenticated agencies and community organizations can securely publish information on Nixle. There are four types of messages; Alerts (many would refer to this as an emergency type alert), Advisories (less urgent need-to-know information), Community Information (day-to-day neighborhood to community-level information), and Traffic (very localized traffic information).

### 5.2.3 Social Media

The OES utilizes the following social media platforms to disseminate and receive emergency incident information:

- ◆ Facebook
- ◆ Twitter
- ◆ Instagram
- ◆ Monterey County OES Website

### 5.2.4 Wireless Emergency Alerts (WEA)

WEAs are made available through the FEMA Integrated Public Alert and Warning System (IPAWS) infrastructure as just one of the ways public safety officials can quickly and effectively alert and warn the public about serious emergencies.

#### *Integrated Public Alert and Warning System (IPAWS)*

IPAWS is a modernization and integration of the Nation's existing and future alert and warning systems, technologies, and infrastructure. IPAWS is the latest version of a long list of warning systems the U.S. Government has had in place since the 1950s. IPAWS is administered by FEMA and incorporates various forms of alerting and warning systems into one. It is intended to incorporate new technologies as they become available in the future.

### 5.2.5 Emergency Alert System (EAS)

The Emergency Alert System (EAS) is a network of public and private broadcast stations and interconnecting facilities. The system is authorized by the Federal Communications Commission (FCC) to operate in a controlled manner during a war, state of public peril or disaster, or other national emergency. Table 7 lists the interconnected broadcast facilities in Monterey, San Benito, and Santa Cruz counties for information dissemination under the EAS format. Access to EAS is coordinated through the OES. More information is provided in **Appendix D**.

**Table 7—FCC Monterey County EAS Plan**

| Monitoring Station   |           |            | Stations Monitored |             |                      |
|--|-----------|------------|--------------------|-------------|----------------------|
| Station ID   | Frequency | Location   | Station ID         | Frequency   | Location             |
| KTOM-FM  | 100.7 MHz | Salinas    | KCBS               | 740 KHz     | San Francisco        |
|  |           |            | NWR                | 162.550 MHz | Santa Cruz Mountains |
|  |           |            | CLERS              | 453.875 MHz | Fremont Peak         |
|  |           |            | KPIG-FM            | 107.5 MHz   | Watsonville          |
| KPIG-FM  | 107.5 MHz | Santa Cruz | KTOM-FM            | 100.7 MHz   | Salinas              |
|  |           |            | NWR                | 162.550 MHz | Santa Cruz Mountains |
|  |           |            | CLERS              | 453.875 MHz | Fremont Peak         |
| All other stations and CATV control points must monitor TWO of the following |           |            | KTOM-FM            | 100.7 MHz   | Salinas              |
|  |           |            | KTOM-FM            | 100.9 MHz   | Salinas              |
|  |           |            | KPIG-FM            | 107.5 MHz   | Watsonville          |
| Recommended additional, but not replacement monitoring                       |           |            | NWR                | 162.550 MHz | Santa Cruz Mountains |
|  |           |            | CLERS              | 453.875 MHz | Fremont Peak         |

Reference: Monterey Bay Area FCC Local Area EAS Plan (December 2002)

### 5.3 LOCAL EMERGENCY COMMUNICATION SYSTEMS

The following **local** emergency communications systems operate within Monterey County.

#### 5.3.1 Radio Communication Systems

Monterey County utilizes radio communications systems as summarized in Table 8.

**Table 8—Monterey County Radio Communication Systems**

| Agency / Department                    | Radio Communications System      |
|--|----------------------------------|
| Sheriff's Department                   | 700/800 MHz Digital / VHF Analog |
| Public Works Department                | VHF Analog                       |
| Water Resources Agency                 | VHF Analog                       |
| Monterey County Regional Fire District | VHF Analog/Digital               |
| North Monterey County Fire District    | VHF Analog/Digital               |
| South Monterey County Fire District    | VHF Analog                       |
| Amateur Band (RACES)                   | UHF, VHF, HF                     |

### **5.3.2 Consolidated Public Safety Communications System (CPSCS)**

The Monterey County Emergency Communications Department (ECD) serves as the primary 9-1-1 PSAP for all unincorporated areas of the County and for most of the cities. In addition, the County operates the CPSCS, which provides 24-hour-a-day dispatch services to County agencies and most law enforcement and fire agencies.

In addition to the locally available dispatch frequencies, the ECD can also communicate with most other local, State, and federal law enforcement, fire and rescue, and EMS agencies that are not officially part of the CPSCS, including but not limited to:

- ◆ California State University Monterey Bay
- ◆ National Park Service
- ◆ Bureau of Land Management
- ◆ U.S. Forest Service
- ◆ CAL FIRE
- ◆ California Department of Fish and Wildlife
- ◆ Presidio of Monterey Police and Fire
- ◆ Fort Hunter Liggett Police and Fire
- ◆ Naval Support Activity Monterey Police
- ◆ United State Coast Guard Station Monterey

### **5.3.3 Local Communications Support Resources**

This section describes locally available communications resources.

#### ***Mobile Emergency Communications/Command Unit (MCC)***

The City of Salinas Fire Department maintains a fully equipped mobile emergency communications/command unit (MCC) that may be used to support or enhance existing emergency communications anywhere in the County. The MCC is totally self-contained and possesses public safety and local government radio dispatch capabilities for use during emergency situations. The MCC is stationed at Salinas Fire Station #5. Requests for use of the MCC by any local government agency should be made directly through the ECD, or through the MCOA EOC when activated.

#### ***Radio Amateur Civil Emergency Services (RACES)***

The RACES network operates on amateur radio frequencies (UHF, VHF, HF) by authority of the FCC in support of emergency communications operations. RACES can augment existing public



radio systems, substitute for damaged or inoperable systems, and establish communications links with otherwise inaccessible areas. RACES capabilities also include the transmission of data and video signals by means of sophisticated communications relays and data processing equipment.

The MCOA EOC has an assigned volunteer Auxiliary Communications Support Officer who functions as the District Emergency Coordinator, with a contingent of locally based volunteers assigned to each municipality within the County. Monterey County maintains a separate RACES communications post within the MCOA EOC. In addition, several cities and public non-profit organizations within the County maintain similar RACES communications capabilities. These are highly dynamic capabilities provided by skilled volunteers. Capabilities included multi-channel amateur radios, radio-transmitted electronic data systems, and the ability to transmit and receive remote video.

All RACES volunteers serve as Disaster Service Workers when officially activated. Some cities may also have established amateur radio organizations assigned to support their local EOC operations. When the MCOA EOC is activated, local RACES networks coordinate with the RACES Coordinator stationed at the MCOA EOC.

#### ***Citizens' Band Radio (CB)***

The FCC permits CB radio operations in emergency services activities on a voluntary basis under the direction of emergency services authorities. However, uncontrolled frequency use, overloading, and poor transmission quality limit the usefulness of this system. The ECD and MCOA EOC do not normally monitor CB channels.

### **5.3.4 Telephone Systems**

#### ***Common Carrier Telephone Service (Landline Service)***

Common carrier landline phone service is available throughout most of the OA to support all emergency systems. A directory of emergency contacts is found in **Appendix A**.

#### ***Cellular Telephone Service***

Cellular telephone service in Monterey County is provided by multiple service providers, including AT&T, Sprint, T-Mobile, and Verizon, with service available in most inhabited areas of the County.

### **5.3.5 Weak Links**

Telecommunications are composed of many subsystems, each interconnected and interdependent. A radio network, for example, may use a combination of telephone lines, microwave circuits, satellite interfaces, underground and overhead cables, and secondary radio paths. The failure of any link in this electronic “chain” can disable a large portion of the system.

Monterey County's solution to these communications weaknesses has been to develop a fault-tolerant system, including a recent complete redesign and upgrade of the County radio and data communications systems. In this system, a failure of one weak link can be addressed by redundant capacity elsewhere in the system.

### ***Loss of Electrical Power***

Loss of electrical power has been the primary cause of communications failure in past emergencies. Monterey County's solution to electrical power loss has been to ensure proper installation and maintenance of emergency standby generators or backup APUs at all critical communications facilities. Monterey County regularly tests and maintains its emergency standby generators and has established procedures to maintain uninterrupted fuel supplies for these generators during long-term electrical power outages.

---

## **5.4 PROTOCOLS FOR COMMUNICATIONS WITH LEVEE PATROLS**

---

Communications with Levee Patrol Team(s) shall be in accordance with established MCWRA procedures. In general, communications with Levee Patrol Teams will be through the MCWRA Duty Officer who will maintain communication and coordination with the OA EOC Operations Chief.

### **5.4.1 Other Communications Protocols**

All other communications shall be in accordance with the Incident Communications Plan, as documented on ICS forms ICS 204 and ICS 205.

---

## **5.5 INTEGRATION AND INTEROPERABILITY**

---

Communication system interoperability is essential to effective emergency management during flood response. At the most basic level, interoperability allows two or more parties to exchange information directly. First responders at the scene can instantly connect and communicate with each other, make the contacts needed to bring in additional resources, coordinate rescue missions, and provide other forms of response to threats and emergencies.

The most practical solution is to link radio communications systems together. The way radio systems are linked will depend on variables such as existing communication infrastructures, population density, and geographic features. The goal is to find the most cost-effective means to link first responder radio communications systems.

The Salinas Fire Department MECU has cross-band repeaters that can connect differing radio communication frequencies and has a cache of portable radios that can be deployed to ensure emergency incident interoperability. In addition, portable radio caches are available through CAL FIRE and Cal OES to ensure flood incident interoperability.

## **5.6 MEDIA INTERFACE**

---

The MCOA EOC will establish a Joint Information Center and designate a PIO during flood incidents. A PIO is a spokesperson responsible for developing and releasing information about the incident to the news media, to incident personnel, and to other agencies and organizations. Only one PIO will be assigned for each incident, including incidents operating under Unified Command and multi-jurisdiction incidents. The PIO may have Assistant PIOs as necessary, and the Assistant PIO may also represent assisting agencies or jurisdictions. An Assistant PIO may be assigned to help an IC on scene.

The Bay Area Urban Area Security Initiative (BAUASI) has recently developed the Bay Area Joint Information System (JIS) that is comprised of the twelve operational areas. The JIS is a network of individuals with responsibilities to support emergency public information and warning. Members come together from a broad spectrum of agencies, disciplines, and jurisdictions throughout the Bay Area to work together to coordinate public information and warning efforts before, during, and after emergencies.

*This page was intentionally left blank*

## SECTION 6—ADMINISTRATION, FINANCE, AND LOGISTICS

### 6.1 MASTER MUTUAL AID AGREEMENT

---

The foundation of California’s emergency planning and response is a Statewide mutual aid system. Mutual aid is designed to ensure that adequate resources, facilities, and other support are provided to jurisdictions whenever their own resources prove inadequate to cope with a situation. The basis for the system is the California Disaster and Civil Defense Master Mutual Aid Agreement, as provided for in the California Emergency Services Act. It creates a formal structure, within which each jurisdiction retains control of its own personnel and facilities but can give and receive help when needed. State government, on the other hand, is obligated to provide available resources to assist local jurisdictions in emergencies.

Monterey County has developed and maintains a current Emergency Operations Plan compatible with the California Disaster and Civil Defense Master Mutual Aid Agreement. This WSRP is a component of that plan and is designed to apply local resources in meeting flood response requirements of the immediate community or its neighbors. This WSRP is coordinated with those of neighboring jurisdictions to ensure mutual compatibility.

### 6.2 RECORD KEEPING

---

Monterey County tracks, records, and reports on all Monterey County flood response personnel time. Monterey County also collects and maintains documentation on all emergency information needed for reimbursement by Cal OES or FEMA. Monterey County is aware of the requirement to retain these records for audit purposes for three years after receiving the final FEMA close out letters.

### 6.3 RESOURCE TRACKING

---

Comprehensive resource management is a key emergency management principle. It implies that all assets and personnel during an event need to be tracked and accounted for. It ensures maintenance of accountability of all resources. Thus, these resources can be moved quickly to support preparation and response to an incident and ensure a fluid demobilization.

Resource management involves coordinating and overseeing the acquisition and deployment of tools, supplies, equipment, and personnel during a flood incident. The objective of resource management is to (1) maximize resource utilization effectiveness while maintaining cost-efficiency and resource safety, (2) consolidate control of single resources to reduce communications activity, and (3) ensure resource accountability. Resource management enhances the benefit of mutual aid agreements and improves interoperability.

**Monterey County**  
*Winter Storm Response Plan*

---

Flood response resources include: (1) personnel or equipment to perform a specific operation, and (2) supplies and facilities to support on-scene incident operations. The SEMS Logistics Section typically orders supply items (e.g., food) and facilities (e.g., equipment staging). The SEMS Finance/Administration Section tracks the use of and maintains records of the resources assigned to flood response.

#### **6.4 FLOOD FIGHT EQUIPMENT**

---

The following table shows a list of flood fight equipment maintained and stored at each of the Monterey County Public Works Yards on San Miguel Canyon Road and Carmel Valley Road.

**Table 9—Flood Fight Equipment Inventory – Monterey County Public Works Yards**

| No.    | Equipment Description                           |
|--------|---|
| 54     | Plastic, visquine (100'x20'x10 millimeter roll) |
| 12,000 | Sand bags (18" x 30" x 10 ounces)               |
| 100    | Stakes, wood (1" x 3" x 24")                    |
| 1      | Twine, 200-pound test (case)                    |
| 1,400  | Buttons, tie-down                               |

Source: MCWRA

#### **6.5 FLOOD FIGHT SUPPLIES**

---

Stockpiles of flood fight supplies are available at the following locations.

**Table 10—Flood Fight Supply Locations**

| Location |              | Address  | Flood Fight Supplies      |
|----------|--------------|--|---------------------------|
| 1        | Aromas       | Aromas Fire Station - 492 Carpinteria Road     | Sandbags only             |
| 2        | Arroyo Seco  | Arroyo Seco Road at Mile Post 4.6              | Sand / 12 tons            |
| 3        | Big Sur      | Across from Pfeiffer Ridge Road                | Sand / 20 tons            |
| 4        | Big Sur      | Big Sur Fire Brigade Fire Station @ Post Ranch | Sandbags only             |
| 5        | Bolsa Knolls | Russel Road at Eisenhower Street               | Sand / 25 tons            |
| 6        | Bolsa Knolls | Salinas Fire Station #6 - 45 E. Bolivar Street | Sandbags only             |
| 7        | Bradley      | Landfill north end of town                     | Sand / 25 tons            |
| 8        | Bradley      | CAL FIRE Station                               | Sand / 25 tons + Sandbags |
| 9        | Cachagua     | Cachagua Road at Tassajara Road                | Sand / 20 tons            |
| 10       | Cachagua     | Cachagua Fire Station on Nason Road            | Sandbags only             |

**Monterey County**  
*Winter Storm Response Plan*

| Location |                    | Address   | Flood Fight Supplies      |
|----------|--------------------|---|---------------------------|
| 11       | Carmel             | Oliver Road west of Highway 1                   | Sand / 20 tons            |
| 12       | Carmel             | MCRFPD Fire Station - 73 Rancho San Carlos Road | Sandbags only             |
| 13       | Carmel             | Rio Road Fire Station - 3775 Rio Road           | Sandbags only             |
| 14       | Carmel Highlands   | Carmel Highlands Fire Station - 73 Fern Canyon  | Sand / 3 tons + Sandbags  |
| 15       | Carmel Valley      | MCRFPD Fire Station - 26 Via Contenta           | Sandbags only             |
| 16       | Carmel Valley      | Garland Park                                    | Sand / 25 tons            |
| 17       | Carmel Valley      | MCRFPD Fire Station - 8445 Carmel Valley Road   | Sand / 25 tons + Sandbags |
| 18       | Carmel Valley      | Carmel Valley Road at Mile Post 34.1            | Sand / 25 tons            |
| 19       | Castroville        | Salinas Street at McDougall                     | Sand / 25 tons            |
| 20       | Castroville        | NCFPD Fire Station #1 - 11200 Speegle Street    | Sandbags only             |
| 21       | Chualar            | Chualar River Road at Foletta Road              | Sand / 35 tons            |
| 22       | Chualar            | MCRFPD Fire Station - 24581 Washington Street   | Sandbags only             |
| 23       | Greenfield         | 41801 Elm Avenue                                | Sand / 45 tons            |
| 24       | Greenfield         | Greenfield Fire Station - 308 Oak Avenue        | Sandbags only             |
| 25       | Highway 68         | MCRFPD Fire Station - 31 Laureles Grade Road    | Sandbags only             |
| 26       | King City          | Pine Canyon Fire Station                        | Sand / 25 tons            |
| 27       | King City          | CAL FIRE Station - 401 Canal Street             | Sandbags only             |
| 28       | Las Lomas          | NCFPD Fire Station #3 - 301 Elkhorn Road        | Sandbags only             |
| 29       | Lockwood           | CAL FIRE Station                                | Sand / 25 tons + Sandbags |
| 30       | Pajaro             | San Juan Road at Brooklyn Street                | Sand / 25 tons            |
| 31       | Palo Colorado Cyn. | Palo Colorado Road at Mile Post 4               | Sand / 25 tons            |
| 32       | Parkfield          | CAL FIRE Station                                | Sand / 25 tons + Sandbags |
| 33       | Prunedale          | Ralph Lane at end of Cul-de-Sac                 | Sand / 25 tons            |
| 34       | Prunedale          | NCFPD Fire Station #2 - 17639 Pesante Road      | Sandbags only             |
| 35       | Public Works Yard  | San Miguel Canyon Road ¼-mile east of Hall Road | All + Sand / 25 tons      |
| 36       | Public Works Yard  | Carmel Valley Road @ Pacific Meadows Lane       | All + Sand / 25 tons      |
| 37       | San Ardo           | South end of Bernardo Road                      | Sand / 25 tons            |
| 38       | San Ardo           | San Ardo Fire Station                           | Sand / 25 tons + Sandbags |
| 39       | Sycamore Flats     | Sycamore Flat Road ¼-mile south of Arroyo Seco  | Sand / 12 tons            |

**Monterey County**  
*Winter Storm Response Plan*

---

| Location |           | Address                                   | Flood Fight Supplies |
|----------|-----------|---|----------------------|
| 40       | Toro Park | Reservation Road west of Portola Drive    | Sand / 12 tons       |
| 41       | Toro Park | MCRFPD Fire Station - 19900 Portola Drive | Sandbags only        |

Source: Monterey County Resource Management Agency

## **6.6 STAGING AREAS**

---

Monterey County has identified the following sites for use as Staging Areas for incoming emergency response resources.

**Table 11—Staging Areas**

| Staging Area |                          | Location                                     | Emergency Contact Information                   |                |
|--------------|--------------------------|--|---|----------------|
| 1            | Manzanita County Park    | 17100 Castroville Blvd.<br>Prunedale         | Monterey County Parks<br>Admin. Operations Mgr. | (831) 755-8912 |
| 2            | Toro Regional Park       | South side of Highway<br>68 at Portola Drive | Monterey County Parks<br>Admin. Operations Mgr. | (831) 755-8912 |
| 3            | San Lorenzo County Park  | 1160 Broadway<br>King City                   | Monterey County Parks<br>Admin. Operations Mgr. | (831) 755-8912 |
| 4            | Oak Park                 | 42603 Elm Avenue<br>Greenfield               | Monterey County Parks<br>Admin. Operations Mgr. | (831) 755-8912 |
| 5            | Andrew Molera State Park | 45500 Highway 1<br>Big Sur                   | State Parks Public<br>Safety Superintendent     | (831) 649-2842 |

## **6.7 EVACUATION CENTERS**

---

The Monterey-San Benito-Santa Cruz Chapter of the American Red Cross (ARC) maintains a list of current available emergency evacuation shelter sites throughout Monterey, San Benito, and Santa Cruz Counties. The ARC provides a liaison to serve as the Mass Care Unit Leader in the EOC, who will coordinate the activation/opening of appropriate shelter site(s) in the event of a flood.

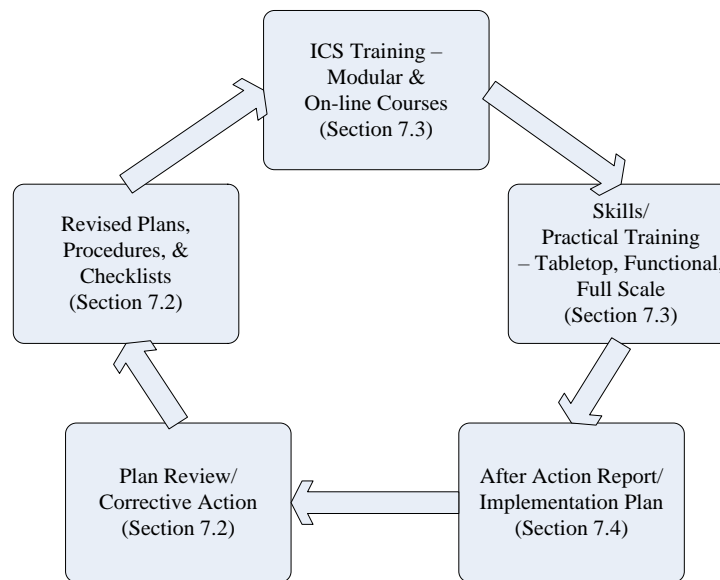


## SECTION 7—PLAN DEVELOPMENT AND MAINTENANCE

### 7.1 PLAN DEVELOPMENT

The MCOA OES has primary responsibility for developing, reviewing, and updating this WSRP on a regular basis. MCOA OES will solicit input from individuals, jurisdictions, and agencies having responsibilities under this plan. Figure 4 shows the Monterey County Winter Storm Response Plan maintenance cycle.

**Figure 4—Winter Storm Response Plan Maintenance Cycle**



### 7.2 PLAN REVIEW AND MAINTENANCE

Agencies and individuals providing emergency response will review this plan at least annually. In addition, this plan may be modified as a result of post-incident analyses and/or post-exercise critiques:

- ◆ Proposed changes shall be submitted in writing to the Monterey County OES Manager
- ◆ Changes shall be published and distributed to jurisdictions and agencies holding this plan

Every four years, this plan will be reviewed in its entirety, updated, republished, and redistributed. This plan also may be modified whenever responsibilities, procedures, laws, rules, or regulations pertaining to emergency management and operations change.

- ◆ Jurisdictions and agencies having assigned responsibilities under this plan are obligated to inform the Monterey County OES Manager when changes occur or are imminent
- ◆ These changes will be incorporated into this plan, published, and re-distributed to jurisdictions and agencies holding this plan

---

### **7.3    *TRAINING AND EXERCISES***

---

All Monterey County emergency responders are strongly encouraged to take advantage of FEMA’s online training. In addition, Monterey County OES will notify holders of this plan of training opportunities or scheduled exercises associated with flood emergency management and operations, such as DWR’s annual flood fight sessions. Individual jurisdictions and agencies are responsible for maintaining appropriate training records. This plan will be exercised regularly. Monterey County OES will conduct emergency preparedness exercises in accordance with an annual exercise plan and schedule. Jurisdictions and agencies having assigned responsibilities under this plan must ensure assigned personnel are properly trained to carry out these responsibilities. See **Appendix C.9** for specific Levee Patrol and flood fight information.

Following approval of this WSRP, Monterey County OES will schedule and conduct a tabletop exercise. A tabletop is a problem-solving or brainstorming session. Problems are tackled one at a time and talked through without stress. A session like this gives planners an opportunity to review the proposed decision and determine if changes are needed.

---

### **7.4    *EVALUATION***

---

Monterey County OES will coordinate and facilitate post-incident analyses following emergencies and exercises. An After-Action Report and Implementation Plan will be prepared by the OES Manager and distributed to those jurisdictions and agencies involved in the emergency or exercise.

## **SECTION 8—AUTHORITIES AND REFERENCES**

The following sources provide authorities for planning, conducting, and/or supporting flood emergency operations.

### **8.1 FEDERAL AUTHORITIES AND REFERENCES**

---

- ◆ Federal Civil Defense Act of 1950 (Public Law 920, as amended)
- ◆ Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988 (Public Law 93-288, as amended)
- ◆ Army Corps of Engineers Flood Fighting (Public Law 84-99)

### **8.2 STATE AUTHORITIES AND REFERENCES**

---

- ◆ California Emergency Services Act (Chapter 7, Division 1 of Title 2 of the Government Code)
- ◆ Standardized Emergency Management System (SEMS) Regulations (Chapter 1 of Division 2 of Title 19 of the California Code of Regulations) and (California Government Code §8607 et seq)
- ◆ Hazardous Materials Area Plan Regulations (Chapter 4 of Division 2, Title 19, Article 3, §2720-2728 of the California Code of Regulations) and (California Health and Safety Code, Division 20, Chapter 6.95, Section 25503.5)
- ◆ California Department of Water Resources Flood Control (California Water Code §128)

### **8.3 LOCAL AUTHORITIES AND REFERENCES**

---

- ◆ Adoption of the Monterey County Winter Storm Response Plan on January 27, 2009 by the Monterey County Board of Supervisors
- ◆ Adoption of the Monterey County Emergency Operations Plan (EOP) on March 11, 2014 by the Monterey County Board of Supervisors

*This page was intentionally left blank*

## APPENDIX A—COMMUNICATIONS SUPPORT

### A.1 COMMUNICATIONS SUPPORT

---

The following are sources of communications support available to local emergency operations, with support being dependent upon the type and magnitude of the emergency.

#### A.1.1 California Office of Emergency Services (Cal OES)

Cal OES maintains several communications support capabilities available for use by local governments during major emergencies. Note: All requests for Cal OES communications support will be processed through the MCOA EOC, or the County ECD if the EOC is not activated. Technical advice also is available by contacting the Cal OES Warning Center at (916) 845-8911.

#### A.1.2 Mobile Satellite Communications Units

Cal OES maintains and operates several mobile satellite communications units that can be driven, transported by trailer, or airlifted to any location in the State to provide dedicated voice and data satellite transmission capability. These mobile units are positioned throughout the State and may be sent into local jurisdictions to support emergency communication needs. The mobile satellite communications units are part of the Statewide Operational Area Satellite Information System (OASIS) network.

#### A.1.3 Operational Area Satellite Information System (OASIS)

There are independent OASIS locations available within the OA, allowing for rapid, reliable communications with Regional/State and OA Command Centers. Locations include the EOC and in the Monterey County ECD.

#### A.1.4 Mobile Command and Communication Facilities

Cal OES maintains two mobile command facilities available for use during major emergencies. These mobile command complexes consist of integrated communications and command vans and appropriate support vehicles and equipment.

The primary purpose of these mobile command units is to provide initial field communications information until more sophisticated communications are established and/or restored. Each of the complexes is equipped for operations on each of the major State radio systems, the OASIS, mutual aid radio systems, and amateur radio (RACES) frequencies. Radio operators must be provided by the responsible agency.

### **A.1.5 Portable Radio Caches**

Cal OES also maintains caches of portable radios capable of operating on selected Statewide law enforcement and fire and rescue mutual aid frequencies. These radios are available to local governments upon request.

## **A.2 STATE RADIO SYSTEMS**

---

Several public safety radio networks are operated and maintained by the State of California for the purpose of coordinating interagency public safety communications.

### **A.2.1 California Law Enforcement Mutual Aid Radio System (CLEMARS)**

CLEMARS interconnects law enforcement agencies of all counties and numerous cities. This system is microwave-interconnected to provide Statewide coverage. There are CLEMARS frequencies in each public safety radio band (except the 220-222 MHz band). CLEMARS is used for on-scene law enforcement communications. The Nationwide law enforcement frequency of 155.475 is included in the CLEMARS plan.

### **A.2.2 California Law Enforcement Radio System (CLERS)**

CLERS—various frequencies in 150 and 450 MHz bands—is the law enforcement “dispatcher-to-dispatcher” mutual aid network and consists of 26 “cells” covering the State. CLERS also serves as the State’s distribution network for EAS program feeds and is occasionally used by California Highway Patrol aircraft to coordinate with its operations bases.

### **A.2.3 California Emergency Services Radio System (CESRS)**

CESRS—153.755 MHz [154.980 input]—is a local government system that serves all Cal OES facilities, a number of State agencies other than Cal OES, and County-level emergency management agencies participating in the system. This system is also microwave-interconnected for Statewide coverage.

### **A.2.4 OES Fire (and Rescue Radio Network)**

OES Fire—154.160 and 154.220 (with a combination of 33 and 159 MHz inputs)—serves fire support equipment. Radio equipment on this network is located with fire service agencies in 52 counties. The network employs mountaintop mobile relays and interconnects to the State Microwave System to provide Statewide coverage.

## **A.3 EMERGENCY CONTACT DIRECTORY**

---

The MCOA EOC maintains a current roster of emergency contact information for key flood response personnel. In addition, the MCWRA Storm Monitoring Reference Manual contains

emergency contact information for both MCWRA and Monterey County Public Works and Facilities Division personnel.

#### **A.4 SAMPLE MEDIA RELEASES**

---

The following Sample Media Releases are based on templates provided by the DWR.

### ***Sample Media Release – Flood Preparedness***

#### **MEDIA RELEASE: Winter Storm Awareness Week and Family Preparedness Planning**

Monterey County has issued a proclamation designating October 12-19 as Winter Storm Awareness Week. The week is designed to focus attention on the flood threat and to increase public awareness. People in potentially vulnerable areas should consider actions they would need to take if a flood threatened Monterey County directly. The public should monitor the local news media, especially people in low-lying areas. People in potentially vulnerable areas should:

- **Review evacuation plans:** Residents living in vulnerable areas and those living in mobile homes that might be flooded should make plans now should an evacuation become necessary. Become familiar with evacuation routes, which are marked with special signs. Options include: a hotel, motel, or friend's home that is outside the vulnerable area or an American Red Cross shelter. Hotels and motels fill up quickly and out-of-county evacuations take time. The earlier you leave a potentially flooded area, the less time you will spend on the road.
- **Fuel cars, keep supplies in vehicles, secure important documents:** Individuals and families should fill up their cars with gas. Road maps, nonperishable snack foods, a first-aid kit that includes a supply of your family's prescription medications, and convenience items such as diapers should be available in the car. Secure important documents in waterproof packaging.
- **Obtain supplies to protect the home:** If residents are ordered to evacuate, there will be little time to protect their homes from a flood.
- **Consider the safety of pets:** Pets may not be allowed in Red Cross shelters. Individuals and families should plan to board pets with veterinarians, kennels, or other facilities in non-vulnerable areas. Identification and rabies tags should be attached to the pets' collars.
- **Register for special medical care:** Residents with special medical needs who may require transportation or medical care should contact their local emergency management office if they have not already done so. Special medical needs shelters require advance registration.

## ***Sample Media Release – Flood Advisory***

### **MEDIA RELEASE: Monterey County Monitors Storm; Citizens Should Review Plans**

Monterey County is paying close attention to forecast winter storms. As a result of the storms' projected precipitation, key agencies have been notified to be ready to respond if the need arises. The Monterey County Emergency Operations Center will be staffed daily from 6:00 a.m. to 9:00 p.m. Personnel representing key response agencies were notified and are on call if they are needed.

People in potentially vulnerable areas should review their plans and consider actions they would need to take if the flooding occurs. The public should monitor local news media, especially people in low-lying areas.

People in potentially vulnerable areas should:

- **Review evacuation plans:** Residents living in vulnerable areas and those living in mobile homes must make plans now should an evacuation later become necessary. Become familiar with evacuation routes and select a possible destination. Options include: a hotel, motel, or friend's home that is outside the vulnerable area or an American Red Cross shelter. Hotels and motels fill up quickly and out-of-county evacuations take time. The earlier you leave, the less time you will spend on the road.
- **Fuel cars, keep supplies in vehicles, secure important documents:** Individuals and families should fill up their cars with gas. Road maps, nonperishable snack foods, a first-aid kit that includes a supply of your family's prescription medications, and convenience items such as diapers should be available in the car. Secure important documents in waterproof packaging.
- **Consider the safety of pets:** Pets may not be allowed in Red Cross shelters. Individuals and families should plan to board pets with veterinarians, kennels, or other facilities in non-vulnerable areas. Identification and rabies tags should be attached to the pets' collars.
- **Register for special medical care:** Residents with special medical needs who may require transportation or medical care should contact their local emergency management office if they have not already done so.



## ***Sample Media Release – Flood Alert***

### **MEDIA RELEASE: Citizens Should Prepare for Flooding**

The public should monitor local news media, especially people in low-lying areas. Now is the time for people to prepare their homes, gather supplies, review their plans, and prepare for possible evacuation.

Forecasters currently show the storm on a track that could cause heavy rainfall. As a precautionary measure in anticipation of probable flooding, Monterey County has instituted levee patrols and other proactive measures. The Monterey County Emergency Operations Center is activated and key response agencies are on call if needed.

If you live in a highly vulnerable area you should be prepared to leave immediately.

- **Prepare to evacuate if ordered to do so:** Residents living in vulnerable areas and those living in mobile homes must plan their evacuation now. Select a destination, such as a hotel, motel, or friend's home that is outside the vulnerable area or an American Red Cross shelter. Hotels and motels fill up quickly and evacuation out of the County takes additional time.
- **Fuel cars, keep supplies in vehicles, secure important documents:** Individuals and families should fill up their cars with gas. Road maps, nonperishable snack foods, a first-aid kit that includes a supply of your family's prescription medications, and convenience items such as diapers should be available in the car. Secure important documents in waterproof packaging.
- **Consider the safety of pets:** Pets may not be allowed in Red Cross shelters. Individuals and families should plan to board pets with veterinarians, kennels, or other facilities in non-vulnerable areas. Identification and rabies tags should be attached to the pets' collars.
- **Register for special medical care:** Residents with special medical needs who may require transportation or medical care should contact their local emergency management office if they have not already done so. Special medical needs shelters require advance registration.

## ***Sample Media Release – Flood Warning***

### **EAS MESSAGE: Voluntary Evacuation**

The Monterey County Emergency Operations Center is requesting that tourists, visitors, and residents in (describe affected areas by landmarks when possible) voluntarily leave in response to potential flooding. This is a very dangerous situation that is capable of severe damage. The EOC is strongly recommending voluntary evacuation to safeguard human life in the area.

The EOC Manager said that if the situation remains the same, he will call for a mandatory evacuation of low-lying areas or along rivers and streams.

American Red Cross shelters will be open (Location) (Day) (Time).

There are (#) law enforcement officers on duty to help with the evacuation. In addition, these officers will secure the property of residents who evacuate and will enforce the law in evacuation zones. In inland counties, anyone living in mobile homes or vulnerable structures should consider relocating to more substantial locations.

### **EAS MESSAGE: Mandatory Evacuation**

Monterey County is requesting activation of the Emergency Alert System at the direction of the County Administrative Officer. The CAO has ordered a mandatory evacuation of all persons located in (describe affected areas by landmarks when possible.)

Law enforcement personnel may be posted along evacuation routes to help people move as safely and quickly as possible. The CAO has ordered the mandatory evacuation to safeguard human life in Monterey County.

## ***Sample Media Release – Flooded Area Re-Entry***

The Monterey County EOC has lifted the mandatory evacuation order for (describe affected areas), allowing residents to return to the counties at the discretion of their local officials.

All Red Cross Shelters were closed at (Time). The shelters housed (#) people and provided (#) meals. Schools that are closed include: (List closings)

### **MEDIA RELEASE: Exercise Precautions When Returning Home**

The Monterey County Administrative Officer rescinded the mandatory evacuation order for (describe affected areas), clearing the way for residents to return home. Residents should keep the following precautions in mind.

- Do not return home until local authorities say it is okay to do so. The health and safety of you and your family should be your first concern after a disaster.
- Be on the lookout for new hazards created by the flood, such as washed out roads, contaminated buildings, contaminated water, gas leaks, broken glass, downed power lines or damaged wiring, and slippery floors.
- Be aware of exhaustion. Resist the tendency to do too much at once. Set your priorities and pace yourself. Create a manageable schedule.
- Watch for signs of stress and fatigue. Talk about the situation with others to release tensions. Encourage others to talk about their concerns. Get professional crisis counseling if necessary.
- Encourage children to talk about their feelings. Explain how you plan to deal with the situation. Involve them in cleanup activities. Being part of the recovery process will help them cope. Keep the family together.
- Drink plenty of clean water. Try to eat well and get enough rest.
- Wear sturdy work boots and gloves and wash your hands thoroughly with soap and clean water often when working in debris.
- Inform local authorities about health and safety hazards, including downed power lines, washed out roads, smoldering insulation, or dead animals.

When returning to a damaged home:

- Keep a battery-powered radio with you so you can listen for emergency updates.
- Wear sturdy work boots and gloves.

- Before going inside, walk carefully around the outside of your home and check for loose power lines, gas leaks, and structural damage. Do not enter if flood water remains around the building. If you have doubts about safety, have your home inspected by a professional before entering.
- Use a battery-powered flashlight for light. DO NOT use oil, gas lanterns, candles, or torches. Leaking gas or other flammable materials may be present. Do not smoke. Do not turn on the lights until you are sure they're safe to use.
- Watch out for animals, especially poisonous snakes. Use a stick to poke through debris.
- Enter the building carefully and check for damage.
- Check for gas leaks, starting at the hot water heater. If you smell gas or hear a hissing or blowing sound, open a window and leave immediately. Turn off the main gas valve from the outside, if you can. Call the gas company from a neighbor's house. If you shut off the gas supply at the main valve, you will need a professional to turn it back on.
- Check the electrical system. If you see sparks, broken or frayed wires, or if you smell hot insulation, turn off the electricity at the main fuse box or circuit breaker if you are not wet and can do so without standing in water. If you have any doubts about your ability to turn off the electricity safely, leave the house and call a professional.
- Check appliances. If appliances are wet, turn off the electricity at the main fuse box or circuit breaker. Then unplug appliances and let them dry out. Have appliances checked by a professional before using them again.
- Check the water and sewage systems. If pipes are damaged, turn off the main water valve.
- Clean up spilled medicines, bleaches, and gasoline. Open cabinets carefully. Be aware of objects that may fall.
- Look for valuable items, such as jewelry and family heirlooms, and protect them.
- Try to protect your home from further damage. Open windows and doors to get air moving through. Patch holes.
- Clean and disinfect everything that got wet. The mud left behind by floodwaters can contain sewage and chemicals.
- Check with local authorities before using any water; it could be contaminated. Wells should be pumped out and the water tested before drinking.
- Throw out fresh food that has come into contact with flood waters. Check refrigerated food for spoilage. Throw out flooded cosmetics and medicines.

**Monterey County**  
*Winter Storm Response Plan*

---

- Call your insurance agent. Take pictures of damages. Keep good records of repair and cleaning costs.
- Tune to local radio and television stations and read local newspapers for information regarding financial assistance, emergency housing, food, first aid, and clothing.

*This page was intentionally left blank*

## APPENDIX B—LEVEE PATROL

### B.1 PURPOSE

---

The purpose of levee patrols is to have qualified personnel visually evaluate the performance of the Monterey County levee system. Their intent is to determine the condition of the levee and to identify potential and existing problems:

- ◆ Threats
- ◆ Instabilities
- ◆ Seepage conditions
- ◆ Erosion points
- ◆ Freeboard

Implementation of this procedure will ensure that each member of a Levee Patrol Team is capable of participating in precautionary actions and emergency response that may occur within the MCWRA levee system.

This program will predominantly be undertaken by MCWRA, with operational support from other Monterey County departments and agencies. The major objectives of this procedure are to:

- ◆ Develop a training program to ensure qualified personnel are available for use
- ◆ Ensure materials, equipment and supplies are available to implement this procedure and are maintained in a serviceable condition to meet the needs of Monterey County
- ◆ Ensure action levels are established and in place to manage potential challenges
- ◆ Prepare members to recognize the interface between allied agencies should escalating events require large-scale operations
- ◆ Prepare members to patrol levees to locate potential problems (including vandalism or terrorism), to alert the EOC, and to actively coordinate work, using flood fight and other methods, to resolve problems and minimize adverse consequences

### B.2 PROGRAM ELEMENTS

---

The levee patrol program has three basic components – Training, Equipment Procurement and Maintenance, and Levee Patrols.

### **B.2.1 Component I – Training**

All participants will complete the following training prior to assignment for levee patrol.

- ◆ Classroom (3 hours)
  - Basic levee design
  - Recognizing potential problem characteristics
  - Notification/warning system
  - Specific levee patrol assignments
  - Command structure
  - Safety considerations
- ◆ Practical Training (3 hours)
  - Filling and use of sandbags
  - Patching of boils
  - Safety precautions

Upon completion of both the classroom and practical functions, a member will remain qualified for 12 months from the final date of training. During flood emergency response conditions, it may be infeasible to provide new volunteers with the “Practical” training session. Instead, they will be partnered with experienced patrol personnel who will help and instruct them.

### **B.2.2 Component II – Equipment Procurement and Maintenance**

The Monterey County Public Works and Facilities Division is responsible to ensure that the following equipment is staged in an approved location and is in serviceable condition. Table 12 lists the flood fight equipment and supplies maintained at both the Monterey County Public Works San Miguel Canyon Road and Carmel Valley Road maintenance yards.



**Table 12—Flood Fight Equipment Inventory – Monterey County Public Works Yards**

| No.    | Equipment Description                           |
|--------|---|
| 54     | Plastic, visquine (100'x20'x10 millimeter roll) |
| 12,000 | Sand bags (18" x 30" x 10 ounces)               |
| 100    | Stakes, wood (1" x 3" x 24")                    |
| 1      | Twine, 200-pound test (case)                    |
| 1,400  | Buttons, tie-down                               |

Source: MCWRA

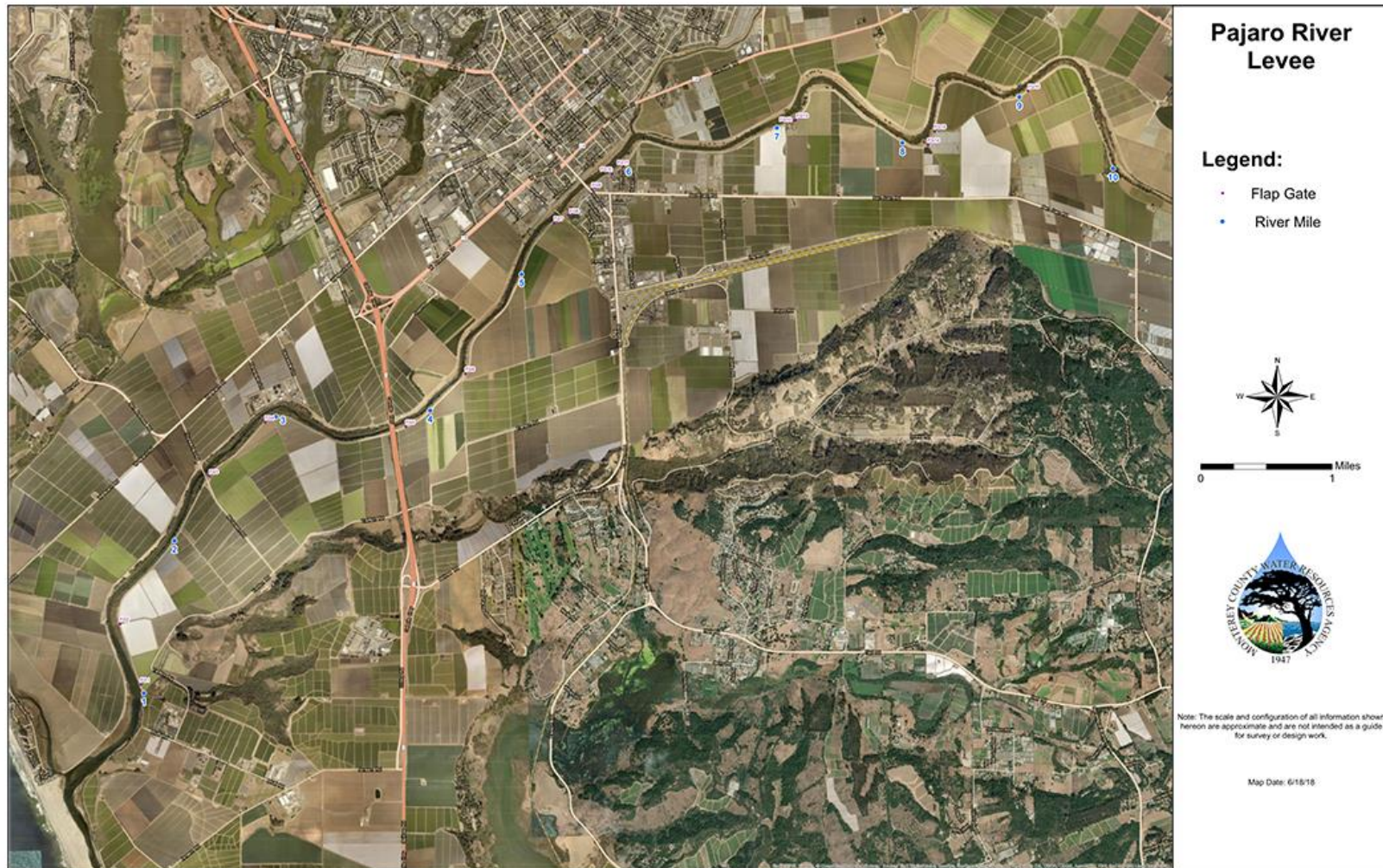
### **B.2.3 Component III – Levee Patrols**

- ◆ The Levee Patrol Division Supervisor will create routes that ensure complete coverage and, wherever possible, overlapping coverage
- ◆ The Levee Patrol Division Supervisors will physically account for all personnel working under their control on an hourly basis
- ◆ All members will receive a safety briefing prior to commencing patrols and will use all provided safety gear

#### ***Motor Patrols***

- ◆ A levee motor patrol will be initiated on the Pajaro River when slow rise flood waters reach 25 feet at Chittenden, or at the direction of the MCWRA Duty Officer. The levee motor patrol will consist of the following:
  - Two four-wheel drive vehicles with mobile radio capabilities
  - Two trained and currently qualified observers per vehicle
  - Patrol areas are shown on the following map
  - Patrol crews will be rotated at least every 12 hours
  - Completion of a Division Activity Log (ICS Form 214) will be required for each shift
  - All members will receive a safety briefing and utilize appropriate safety clothing/equipment

**Figure 5—Pajaro River Levee Patrol Area**



#### **B.2.4 High Water Staking Procedures**

- ◆ High water staking: Record the extent of high water by placing markers (stakes) periodically as the event progresses
- ◆ Reference those high-water locations with suitable surveying or GPS locations
- ◆ Provide that information to MCWRA and DWR upon request

#### **B.3 AUGMENTING STAFF**

---

When local personnel resources are depleted or reasonably committed, mutual aid may be requested and coordinated within the OA. If OA resources are not sufficient or timely, the request is then forwarded to the REOC. The REOC evaluates and fills requests by (1) staff from unaffected OAs, (2) tasking a State agency, or (3) accessing federal assistance. See **Appendix C.4** for Procedures.

*This page was intentionally left blank*

## **APPENDIX C—FLOOD FIGHT**

### **C.1 TRIGGER(S)**

---

At the Monitor Stage, or upon notification of a potential problem by a levee patrol, establish necessary staging areas for supplies, equipment, and personnel. Monterey County has ensured that the designated staging areas are a safe distance from other emergency facilities, such as evacuation centers, shelters, and Incident Command Posts. Commence filling sandbags as required by the situation.

### **C.2 PRIORITIZATION**

---

MCWRA will use available resources and personnel to address boils, rising water/loss of freeboard, slumps, and sloughs to the full extent of its training and capability. Flood fight priorities will include evaluation of opportunities for delaying or containing the spread of flood waters after a breach and develop reasonably detailed plans to accomplish the same (such as using an elevated roadway or rail line as a second line of defense, plugging culverts and underpasses) for various levee breach locations. In most cases, relief cuts should be evaluated and planned to be made immediately after a levee breach to limit flooding in the area with specific location, length, depth, equipment required, contractors, and evacuation rates.

Based on input received from levee patrols and other informed observers, the responding emergency agencies will establish an Incident Command Post (ICP) or Unified Command to set priorities for flood fight operations. All ICs will participate in an Initial Unified Command Meeting. This meeting provides responsible agency officials with an opportunity to discuss and concur on important issues prior to joint incident action planning. The agenda for the command meeting includes the following:

- ◆ Set jurisdictional/agency priorities and objectives
- ◆ Present jurisdictional limitations, concerns, and restrictions
- ◆ Develop a collective set of incident objectives
- ◆ Establish and agree on acceptable priorities
- ◆ Adopt the overall strategy or strategies to accomplish objectives
- ◆ Agree on the basic organization structure
- ◆ Designate the most qualified and mutually-acceptable Operations Section Chief (the Operations Section Chief will normally be from the jurisdiction or agency that has the greatest involvement in the incident, although that is not essential)



- ◆ Agree on General Staff personnel assignments and planning, logistics, and finance agreements and procedures
- ◆ Agree on the resource ordering process to be followed and cost-sharing procedures
- ◆ Agree on informational matters, designating one official to act as the Unified Command spokesperson

The members of the Unified Command must be authorized to decide and act on behalf of the jurisdiction or agency they represent. Such decisions/actions may include ordering of additional resources in support of the Incident Action Plan, possible loaning or sharing of resources to other jurisdictions, and agreeing to financial cost-sharing arrangements with participating agencies.

---

### **C.3    *ACTIVATION AND DISPATCH***

---

The Monterey County Administrative Officer, or designated delegate, has the authority to activate this Plan. Dispatch of flood fight teams shall be in accordance with priorities set by the MCOA EOC.

---

### **C.4    *PERSONNEL***

---

Designated MCWRA and Monterey County Public Works and Facilities Division personnel are trained to respond to flood events. Additional flood emergency response staffing comes from other Monterey County departments, agencies, and/or volunteers.

When additional personnel are needed for sand bagging, emergency debris clearance, diking, and similar activities to save life and protect the public, assistance may come from trained crews to augment local personnel. In accordance with SEMS, when local resources are depleted or reasonably committed, mutual aid is requested and coordinated within the Monterey County OA. If OA resources are not sufficient or timely, the request is then forwarded to the REOC. The REOC evaluates and fills requests by coordinating mutual aid from unaffected OAs, tasking a State agency, or accessing federal assistance. Due to the nature of the need and the resource, requests for hand crews are usually tasked to a State agency.

#### **C.4.1    Resource Agencies**

The California Conservation Corps (CCC) has trained civilian crews. The California Department of Forestry and Fire Protection (CAL FIRE) supervises crews from the California Department of Corrections and California Youth Authority. The California National Guard (CNG) also has personnel available. Both CCC and CAL FIRE have contract services for various types of projects. CNG is only available through State tasking. In addition to crews, CNG and CAL FIRE have mobile kitchens and similar support resources available. CAL FIRE can also provide trained section leaders for ICS and SEMS organizations.

## **C.4.2 Mission Tasking**

Cal OES controls missions and mission assignments for State resources and coordinates requests for federal resources. If Cal OES receives a request for crews that meets the criteria for State agency tasking and if an agency has the capability, Cal OES will issue a mission number authorizing the agency to respond. Once tasked, that agency will work directly with the requesting agency and provide the resource within the definition and limits of the mission authorization.

## **C.4.3 Tasking Criteria**

For all missions (1) there must be actual or imminent danger to life or public safety, and (2) locally available resources, including private sector contracting, must be inadequate or untimely.

Maintenance or recovery activities should be dealt with by contract and will not be authorized by Cal OES. Ex post facto mission numbers will not be authorized unless it can be clearly demonstrated that properly coordinating the request would have caused an inordinate delay and that such delay would have resulted in severe injury or loss of life.

## **C.4.4 Costs/Reimbursement**

State agencies tasked under a Cal OES mission number respond at no cost to the local agency or jurisdiction, except for any required support costs such as food, fuel, supplies, restroom/shower/sleep accommodations, etc. These support facilities, services, and supplies are usually paid for or provided *by the requesting agency* unless otherwise agreed to at the time of the request.

## **C.4.5 Request Procedures**

Following coordination within the Monterey County OA, the MCOA EOC will forward unfilled requests to the Coastal REOC Operations Section. The REOC will follow up with the MCOA EOC to resolve any questions and to monitor resource delivery.

- ◆ Requests should be completed using the Response Information Management System (RIMS) on a RIMS Mission Request/Tasking form. If RIMS is unavailable, a hard copy of the form should be faxed to the Coastal REOC via the State Warning Center. If faxing is infeasible, phone in the request using the RIMS format. All requests made by RIMS or fax must be confirmed by phone.
- ◆ Requests must contain a clear description of the mission to be performed and the number of personnel needed.
- ◆ Requests must not specify the agency from which the crew is being requested (i.e., three California Conservation Corps crews). This allows Cal OES to make mission tasking based upon availability and need and avoids over-tasking of a single

agency. If there are operational reasons to specify an agency, please explain them in the mission statement of the request form.

- ◆ The MCOA EOC must take special care not to duplicate requests with any request possibly made via another mutual aid system. Accordingly, EOC Branches must coordinate their requests closely. ***In particular, crews for flood fight should not be requested via fire mutual aid channels*** (see **Appendix C.4.6**).

#### **C.4.6 Fire Mutual Aid**

Unlike procedures for other types of emergencies, crews supervised by CAL FIRE for flood fight operations are ***not*** accessible under the Fire and Rescue Mutual Aid Plan. All requests for crews for flood fight operations must follow emergency services channels, regardless of the requesting agency. In view of the natural tendency for requests made by fire agencies to remain in fire channels, it is critical that the MCOA Fire and Rescue Branch Director and the MCOA Public Works Branch Director communicate closely to avoid confusion and delay.

#### **C.4.7 State Agency Voluntary Response**

During non-emergency conditions or non-proclaimed emergencies, State agencies may respond to requests as a locally available resource. Such responses do not receive mission numbers and may not be covered under mutual aid and provisions of the Emergency Services Act. Further, all costs are born by the State agency and/or the requesting agency pursuant to any agreement or understanding between them. Resources committed under such responses may be redirected to higher priority missions during emergencies.

### **C.5 HAZARDOUS MATERIALS LOCATIONS**

---

The Monterey County Environmental Health Division, acting as the designated local Certified Unified Program Agency (CUPA) for Monterey County, is responsible for administering the following programs related to the use and storage of hazardous materials:

- ◆ Hazardous Materials Business Plan Requirements
- ◆ Hazardous Waste Generator Requirements
- ◆ Underground Storage of Hazardous Substances
- ◆ Above-Ground Petroleum Storage
- ◆ California Accidental Release Prevention Program (CalARP)
- ◆ Uniform Fire Code Hazardous Materials Management Plan



The Monterey County Environmental Health Division Hazardous Materials Management Services (HMMS) Section maintains a current inventory of locations that generate, store, or use reportable quantities of hazardous materials. The MCOA EOC has HMMS emergency contact information to obtain hazardous materials information during flood operations.

## **C.6 FLOOD FIGHT EQUIPMENT AND MATERIALS**

---

The DWR provides caches of flood fight equipment and materials throughout the State, including the Monterey County Public Works and Facilities Division San Miguel Canyon Road and Carmel Valley Road maintenance yards. For Monterey County. Each cache includes the following equipment and supplies.

**Table 13—Flood Fight Equipment Inventories**

| No.    | Equipment Description                           |
|--------|---|
| 54     | Plastic, visquine (100'x20'x10 millimeter roll) |
| 12,000 | Sand bags (18" x 30" x 10oz.)                   |
| 100    | Stakes, wood (1" x 3" x 24")                    |
| 1      | Twine, 200-pound test (case)                    |
| 1,400  | Buttons, tie-down                               |

Source: MCWRA

## **C.7 PUBLIC FLOOD FIGHT SUPPLIES**

---

Monterey County has placed supplies of sand and sandbags at strategic sites as listed in the following table. Citizens affected or threatened by flooding may secure sand and sandbags at these locations.

**Table 14—Flood Fight Supplies**

| Location |             | Address   | Flood Fight Supplies | Emergency Contact Number               |
|----------|-------------|---|----------------------|--|
| 1        | Aromas      | Aromas Fire Station<br>492 Carpinteria Road       | Sandbags only        | (831) 726-3130<br>Aromas FPD           |
| 2        | Arroyo Seco | Arroyo Seco Road at Mile Post<br>4.6              | Sand/12 tons         | (831) 902-8315 Carl<br>MCDPW           |
| 3        | Big Sur     | Across from Pfeiffer Ridge Road                   | Sand/20 tons         | (831) 277-2648 Art<br>MCDPW            |
| 4        | Big Sur     | Big Sur Fire Brigade Fire Station<br>@ Post Ranch | Sandbags only        | (831) 667-2113<br>Big Sur Fire Brigade |

**Monterey County**  
*Winter Storm Response Plan*

| Location |                  | Address  | Flood Fight Supplies      | Emergency Contact Number              |
|----------|------------------|--|---------------------------|---------------------------------------|
| 5        | Bolsa Knolls     | Russel Road at Eisenhower Street                 | Sand/25 tons              | (831) 915-8027 Bill MCDPW             |
| 6        | Bolsa Knolls     | Salinas Fire Station #6<br>45 E. Bolivar Street  | Sandbags only             | (831) 758-7261<br>Salinas Fire Dept.  |
| 7        | Bradley          | Landfill north end of town                       | Sand / 25 tons            | (831) 320-6508 Dave MCDPW             |
| 8        | Bradley          | CAL FIRE Station                                 | Sand / 25 tons + Sandbags | (805) 472-2244<br>CAL FIRE            |
| 9        | Cachagua         | Cachagua Road at Tassajara Road                  | Sand / 20 tons            | (831) 277-2648 Art MCDPW              |
| 10       | Cachagua         | Cachagua Fire Station<br>Nason Road              | Sandbags only             | (831) 659-7700<br>Cachagua Fire Dept. |
| 11       | Castroville      | Salinas Street at McDougall                      | Sand / 25 tons            | (831) 915-8027 Bill MCDPW             |
| 12       | Castroville      | NCFPD Fire Station #1<br>11200 Speegle Street    | Sandbags only             | (831) 633-2578<br>North County Fire   |
| 13       | Carmel           | Oliver Road west of Highway 1                    | Sand / 20 tons            | (831) 277-2648 Art MCDPW              |
| 14       | Carmel           | MCRFPD Fire Station<br>73 Rancho San Carlos Road | Sandbags only             | (831) 624-7334<br>MCRFPD              |
| 15       | Carmel           | Rio Road Fire Station<br>3775 Rio Road           | Sandbags only             | (831) 624-4511<br>Cypress FPD         |
| 16       | Carmel Highlands | Carmel Highlands Fire Station<br>73 Fern Canyon  | Sand / 3 tons + Sandbags  | (831) 624-2374<br>Highlands FPD       |
| 17       | Carmel Valley    | MCRFPD Fire Station<br>26 Via Contenta           | Sandbags only             | (831) 659-4604<br>MCRFPD              |
| 18       | Carmel Valley    | Garland Park                                     | Sand / 25 tons            | (831) 277-2648 Art MCDPW              |
| 19       | Carmel Valley    | MCRFPD Fire Station<br>8445 Carmel Valley Road   | Sand / 25 tons + Sandbags | (831) 659-2021<br>MCRFPD              |
| 20       | Carmel Valley    | Carmel Valley Road at Mile Post 34.1             | Sand / 25 tons            | (831) 277-2648 Art MCDPW              |
| 21       | Chualar          | Chualar River Road at Foletta Road               | Sand / 35 tons            | (831) 902-8315 Carl MCDPW             |
| 22       | Chualar          | MCRFPD Fire Station<br>24581 Washington Street   | Sandbags only             | (831) 679-2323<br>MCRFPD              |
| 23       | Greenfield       | 41801 Elm Avenue                                 | Sand / 45 tons            | (831) 902-8315 Carl MCDPW             |

**Monterey County**  
*Winter Storm Response Plan*

| Location |                      | Address   | Flood Fight Supplies         | Emergency Contact Number                   |
|----------|----------------------|---|------------------------------|--|
| 24       | Greenfield           | Greenfield Fire Station<br>308 Oak Avenue                     | Sandbags only                | (831) 674-5484                             |
| 25       | Highway 68           | MCRFPD Fire Station<br>31 Laureles Grade Road                 | Sandbags only                | (831) 484-1197<br>MCRFPD                   |
| 26       | King City            | Pine Canyon Fire Station<br>Pine Canyon Road @ Oak Hills Road | Sand / 25 tons               | (831) 902-8315 Carl<br>MCDPW               |
| 27       | King City            | CAL FIRE Station<br>401 Canal Street                          | Sandbags only                | (831) 385-6437<br>CAL FIRE                 |
| 28       | Las Lomas            | NCFPD Fire Station #3<br>301 Elkhorn Road                     | Sandbags only                | (831) 728-4134<br>North County Fire        |
| 29       | Lockwood             | CAL FIRE Station  | Sand / 25 tons +<br>Sandbags | (831) 385-4443<br>CAL FIRE                 |
| 30       | Pajaro               | San Juan Road at Brooklyn Street                              | Sand / 25 tons               | (831) 915-8027 Bill<br>MCDPW               |
| 31       | Palo Colorado Canyon | Palo Colorado Road at Mile Post 4                             | Sand / 25 tons               | (831) 277-2648 Art<br>MCDPW                |
| 32       | Parkfield            | CAL FIRE Station  | Sand / 25 tons +<br>Sandbags | (805) 463-2330<br>CAL FIRE                 |
| 33       | Prunedale            | Ralph Lane at end of Cul-de-Sac                               | Sand / 25 tons               | (831) 915-8027 Bill<br>MCDPW               |
| 34       | Prunedale            | NCFPD Fire Station #2<br>17639 Pesante Road                   | Sandbags only                | (831) 633-5480<br>North County Fire        |
| 35       | Public Works Yard    | San Miguel Canyon Road<br>¼-mile east of Hall Road            | All + Sand / 25 tons         | (831) 915-8027 Bill<br>MCDPW               |
| 36       | Public Works Yard    | Carmel Valley Road @ Pacific Meadows Lane                     | All + Sand / 25 tons         | (831) 277-2648 Art<br>MCDPW                |
| 37       | San Ardo             | South end of Bernardo Road                                    | Sand / 25 tons               | (831) 320-6508 Dave<br>MCDPW               |
| 38       | San Ardo             | San Ardo Fire Station   | Sand / 25 tons +<br>Sandbags | (831) 809-3880 Scott<br>San Ardo Vol. Fire |
| 39       | Sycamore Flats       | Sycamore Flat Road ¼-mile south of Arroyo Seco                | Sand / 12 tons               | (831) 902-8315 Carl<br>MCDPW               |
| 40       | Toro Park            | Reservation Road west of Portola Drive                        | Sand / 12 tons               | (831) 277-2648 Art<br>MCDPW                |
| 41       | Toro Park            | MCRFPD Fire Station<br>19900 Portola Drive                    | Sandbags only                | (831) 455-1721<br>MCRFPD                   |

## **C.8 LOGISTICS PROCEDURES**

---

The MCOA EOC Resource Tracking Unit tracks the rate of consumables used. When the approximate date of complete consumption approaches the date of reasonable delivery, the Logistics Section Chief shall be informed, and the Logistics Section shall initiate procurement in consultation and coordination with the Finance/Administration Section. The Logistics Section Chief will notify the Operations Section Chief.

If the Operations Section Chief is concerned about possible loss of essential consumables, the Operations Section Chief may request procurement from the Logistics Section Chief. In no case will any member of the Operations Section initiate procurement. In no case will the Logistics Section begin procurement without advising the Finance/Administration Section.

## **C.9 TRAINING IN FLOOD FIGHT PROCEDURES AND TECHNIQUES**

---

Designated Monterey County emergency response personnel participate in DWR flood fight training, which DWR provides annually. Also, emergency response personnel can access the DWR Flood Fight Manual online at: [http://www.water.ca.gov/floodmgmt/docs/flood\\_fight\\_methods.pdf](http://www.water.ca.gov/floodmgmt/docs/flood_fight_methods.pdf)

## **C.10 UTILITIES**

---

In general, coordination with utilities will be the responsibility of the OA EOC. When on-scene coordination is needed, a Utilities Unit representative becomes part of the IC's technical staff. In principal, the Utilities Unit gives advice to the IC; in practice the Utilities Unit representative often works directly with the Operations Section Chief.

## APPENDIX D—EVACUATION

### D.1 EVACUATION CONSIDERATIONS

---

- ◆ Where do evacuees go if local shelters will or might be flooded, or are otherwise inadequate?
- ◆ What Evacuation Centers will the County and ARC use to house the evacuees?
- ◆ Which directions will evacuees go and which routes will be above water—even water across the road?
- ◆ How will evacuees obtain food, water, and medical care?
- ◆ Do critical care facilities within the County, including hospitals, jails, and the EOC, meet Essential Services Building criteria and can they remain in operation?
- ◆ Evacuation planning should evaluate an array of scenarios at various locations, including depth of flooding versus time throughout the flood area, and plan the evacuation routes accordingly.

### D.2 PUBLIC NOTIFICATION

---

The decision to evacuate rests with the IC or the MCOA EOC; the instructions to be given to the public are the responsibility of the PIO, the Joint Information Center, and the MCOA EOC.

Public awareness is extremely important during an emergency. In fact, it is the key to a successful evacuation. In the case of a potential flood, the public must be kept informed of water levels and their implications for a flood event, levee conditions, short- and long-term weather forecasts, and any other threat that might exist. Monterey County is committed to notifying the public about conditions that cause a flood threat and starting evacuations due to the threat without waiting until an actual disaster has commenced.

A well-informed public will respond better to an emergency. Monterey County uses multiple platforms/systems to disseminate emergency information to the public, including:

- ◆ ALERT Monterey County
- ◆ Reverse 9-1-1 System
- ◆ Nixle
- ◆ Facebook, Twitter, and Instagram
- ◆ Local Broadcast Media (Radio and Television)

- ◆ Wireless Emergency Alerts (WEA)
- ◆ Emergency Alert System (EAS)
- ◆ Emergency Digital Information System (EDIS)
- ◆ Emergency Vehicle Loudspeakers

### **D.2.1 ALERT Monterey County**

ALERT Monterey County is a system that delivers voice recorded, text, and TTY messages in English and Spanish languages to a database of landline telephones and mobile devices in a specific geographic area affected by a disaster or emergency as selected by the local government agency with the following limitations: The telephone database utilizes the existing 9-1-1 residential and yellow pages landline databases. Cellular telephone, Voice over Internet Protocol (VoIP) phone, and email notifications use a database created by individuals registering these devices on the County's website at: [www.alertmontereycounty.org](http://www.alertmontereycounty.org).

ALERT Monterey County messaging can be initiated by the MCOA EOC Manager or Monterey County OES Duty Officer, and designated Monterey County public safety officers.

### **D.2.2 Nixle**

Nixle is a Community Information Service dedicated to helping people stay connected to the information that matters most to them depending on their physical location. People can stay connected to their local police department, their children's schools, their local community agencies and organizations, and the important information from other locations throughout the country that are relevant to them. Each user's account can be customized so they receive only the information that matters most to them, whether it is where they live, work, or have friends or family throughout the country. Only authenticated agencies and community organizations can securely publish information on Nixle. There are four types of messages; Alerts (many would refer to this as an emergency type alert), Advisories (less urgent need-to-know information), Community Information (day-to-day neighborhood to community-level information), and Traffic (very localized traffic information).

### **D.2.3 Social Media**

The OES utilizes the following social media platforms to disseminate and receive emergency incident information:

- ◆ Facebook
- ◆ Twitter
- ◆ Instagram

◆ Monterey County OES Website

#### **D.2.4 Wireless Emergency Alerts (WEA)**

WEAs are made available through the FEMA Integrated Public Alert and Warning System (IPAWS) infrastructure as just one of the ways public safety officials can quickly and effectively alert and warn the public about serious emergencies.

##### ***Integrated Public Alert and Warning System (IPAWS)***

IPAWS is a modernization and integration of the Nation's existing and future alert and warning systems, technologies, and infrastructure. IPAWS is the latest version of a long list of warning systems the U.S. Government has had in place since the 1950s. IPAWS is administered by FEMA and incorporates various forms of alerting and warning systems into one. It is intended to incorporate new technologies as they become available in the future.

#### **D.2.5 Emergency Alert System (EAS)**

The EAS is a network of public and private broadcast stations and interconnecting facilities. The system is authorized by the FCC to operate in a controlled manner during a war, state of public peril or disaster, or other national emergency. Table 15 lists the interconnected broadcast facilities in Monterey, San Benito, and Santa Cruz counties for information dissemination under the EAS format. Access to EAS is coordinated through the OES.

**Table 15—FCC Monterey County EAS Plan**

| Monitoring Station   |           |            | Stations Monitored |             |                      |
|--|-----------|------------|--------------------|-------------|----------------------|
| Station ID   | Frequency | Location   | Station ID         | Frequency   | Location             |
| KTOM-FM  | 100.7 MHz | Salinas    | KCBS               | 740 KHz     | San Francisco        |
|  |           |            | NWR                | 162.550 MHz | Santa Cruz Mountains |
|  |           |            | CLERS              | 453.875 MHz | Fremont Peak         |
|  |           |            | KPIG-FM            | 107.5 MHz   | Watsonville          |
| KPIG-FM  | 107.5 MHz | Santa Cruz | KTOM-FM            | 100.7 MHz   | Salinas              |
|  |           |            | NWR                | 162.550 MHz | Santa Cruz Mountains |
|  |           |            | CLERS              | 453.875 MHz | Fremont Peak         |
| All other stations and CATV control points must monitor TWO of the following |           |            | KTOM-FM            | 100.7 MHz   | Salinas              |
|  |           |            | KTOM-FM            | 100.9 MHz   | Salinas              |
|  |           |            | KPIG-FM            | 107.5 MHz   | Watsonville          |
| Recommended additional, but not replacement monitoring                       |           |            | NWR                | 162.550 MHz | Santa Cruz Mountains |
|  |           |            | CLERS              | 453.875 MHz | Fremont Peak         |

Reference: Monterey Bay Area FCC Local Area EAS Plan (December 2002)

### **D.2.6 Emergency Digital Information Service (EDIS)**

EDIS is California’s state-of-the-art method for emergency public information alerting, informing, and reassuring the public. Distributed to the public by television or radio, a message can be text, image, or sound. EDIS is an advanced tool that enables local, State, federal, and allied agencies to distribute public information instantly to the public and the media. EDIS is a service of Cal OES in partnership with private, local, State, and federal organizations. Monterey County OES has access to EDIS through the Monterey County OES Manager or delegated Duty Officer.

### **D.2.7 Vehicle Loudspeaker Systems**

All Fire and Police vehicles have loudspeaker systems. The loudspeakers are very useful for neighborhood actions, directing traffic, and warning people not to enter areas. Loudspeakers are especially useful for persons without a radio, television, or phone, or during late night hours when most of the public is likely in bed and away from media (for EAS alerts) or their phones (for ALERT Monterey County notifications).

In the case of emergencies, these vehicles can drive through a neighborhood and make announcements; they can also make an all-clear announcement once the emergency is over. To ensure consistent information and best use of resources, the IC must coordinate messages and activities with the MCOA EOC. All vehicles must be transmitting the same message via the



loudspeakers to avoid confusion. Messages must be direct and simple. Those needing detailed information may call the Monterey County 2-1-1 number for more information or check the EAS TV or radio sources.

Monterey County has a website on which to post maps, evacuation routes, open shelter locations, city operator telephone numbers, and any other numbers that might be useful during the evacuation emergency. The website is maintained by the Monterey County web master. All emergency information that goes on the website needs approval by the OES Manager.

---

### **D.3 OPERATIONS**

---

The decision to evacuate rests with the IC or the MCOA EOC. Operational responsibility rests with local law enforcement, possibly assisted by local fire personnel. If it appears that an evacuation may be necessary due to conditions in the field, the IC will provide that recommendation to the MCOA EOC. If the need to evacuate is extremely urgent, the Flood Fight IC or Operations Chief may communicate directly with their law enforcement counterpart in the field and advise the MCOA EOC. The MCOA EOC will advise nearby communities and reception centers.

Buses and drivers for mass evacuation can be obtained through Monterey-Salinas Transit (MST) and/or the various city/County school districts. Helicopters are available through the California Highway Patrol (CHP) or mutual aid through the MCOA EOC. Local law enforcement agencies are responsible for post-evacuation security and patrols.

---

### **D.4 MAPS**

---

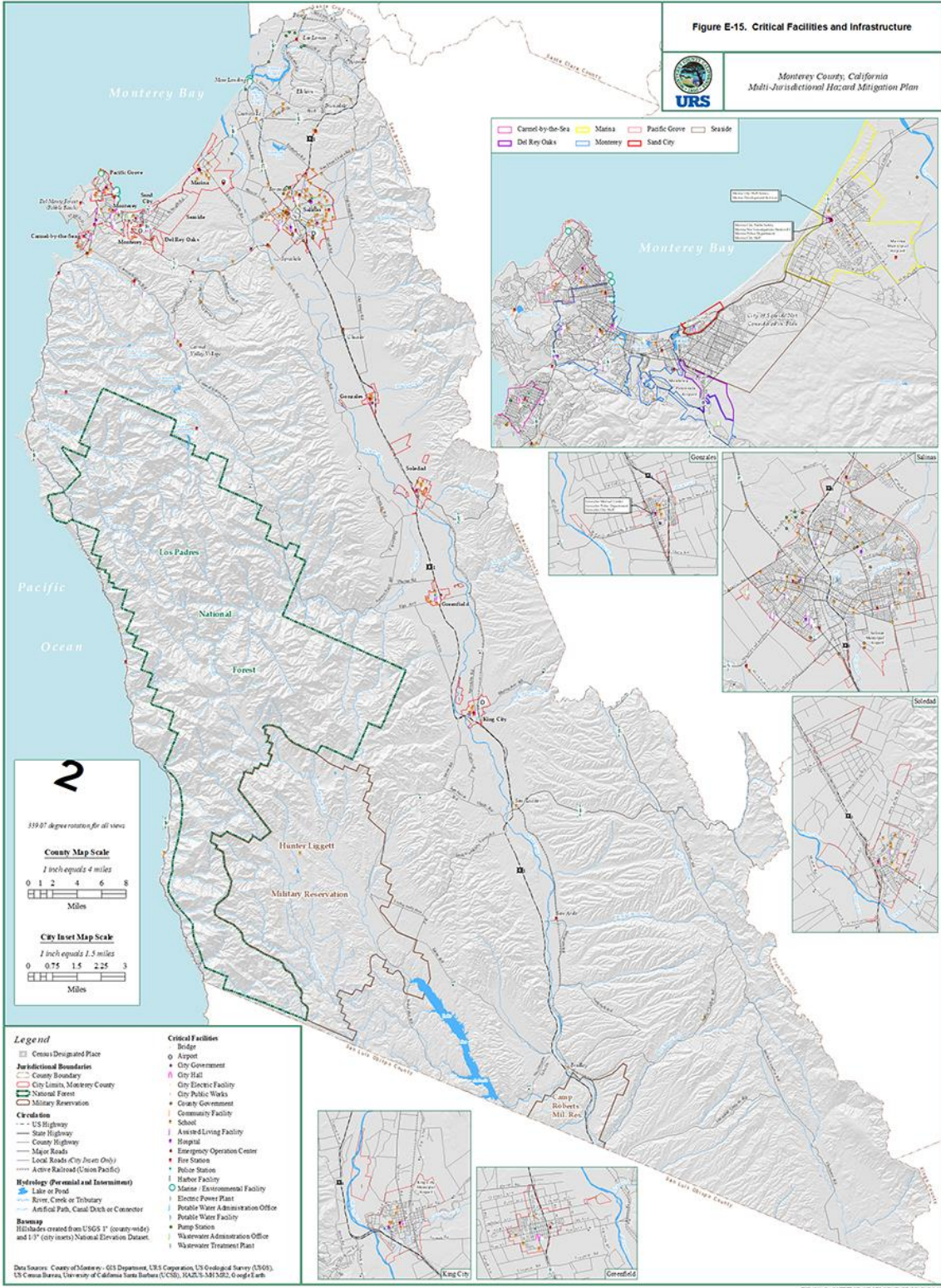
Figure 6 shows Critical Facilities and Infrastructure within Monterey County, including airports, government facilities, schools, hospitals, utilities, etc. Addresses and/or geocoordinates of these facilities are maintained in a Monterey County database, and available to designated EOC staff during emergency operations. The OA maintains a list of other special needs populations, including areas where demographics indicate a need for contact in a language other than English.

**Volume 2** of this plan is an atlas of maps showing the boundaries of the various FEMA flood hazard zones by category within Monterey County, and building locations within and adjacent to those flood hazard areas. These maps are intended for use in evacuation planning by EOC staff and/or emergency response personnel for flood events.

In addition, a Monterey County Information Technology Department GIS Technician is assigned to the MCOA EOC during Level 1/2 activations to provide GIS mapping support, including dynamic mapping displays of relevant data as needed during EOC operations.

© 2014 Pearson Education, Inc. or its affiliate(s). All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or by any information storage or retrieval system, without permission in writing from Pearson Education, Inc.

### **Figure 6—Key Monterey County Critical Facilities**



## APPENDIX E—FLOOD WATER REMOVAL

With overtopping or failure of a levee flood protection system, the lands protected by the levee system may become partially or fully inundated. Depending on the situation, there may be an immediate need to dewater that area to prevent further flooding or to protect the overall integrity of the flood protection system, or to remove the water to recover the area to pre-flood conditions. Flood water removal is an integral part of flood emergency response and needs to be considered in flood planning.

A plan for flood water removal should describe alternatives to dewater areas protected by a jurisdiction's levees. It should address how this will be carried out, where activities will occur, and who will be responsible for carrying out those activities.

### **E.1 PRIORITIES**

---

A dewatering plan(s) is dependent upon the characteristics of the flooded area and Monterey County's evaluation of risk and available resources. Considerations include:

- ◆ Number of people that are affected by the flooding
- ◆ Use(s) and value of the flooded area
- ◆ Longer-term consequences and ramifications of the flooding

#### **E.1.1 Alternative 1 – No Immediate Dewatering Needed**

Based on the situation, it may be advisable to take no immediate action. For example, an inundated agricultural area with no threat to life and property may be left flooded until waters naturally recede. Due to public perception and expectations, this may be a difficult decision to reach, albeit logical. For some areas, this choice can be made in advance of a flood event. Local governments, DWR, USACE, and Cal OES must work together to ensure everyone understands the reasoning and supports the choice.

#### **E.1.2 Alternative 2 – Close Breach; No Water Removal**

Closing the opening in a failed levee is generally the first step of any levee breach repair. It may be necessary to wait for the inflow to slow before initiating this action. Rock and suitable materials must be available to armor the ends of the break before closing the opening with additional suitable material. After the breach is closed, it may be cost-effective to simply let the ground dry out on its own depending on the extent of flooding. Equipment and contractors must be mobilized, the ends of the breach must be able to be accessed, and material for the closure must be available.

### **E.1.3 Alternative 3 – Repair Breach and Remove Water by Pumping**

After the breach is closed, this alternative would remove water using available on-site or portable pumps. For large flooded areas, the time and expense for this can be extensive.

### **E.1.4 Alternative 4 – Repair Breach and Remove Water by Making a Relief Cut**

The situation may warrant excavating a second breach in a levee system to allow flood waters to drain from behind the land side of a levee. This effort may also limit the depth of those flood waters behind the levee and prevent further flooding of areas within the basin and may be employed under emergency conditions.

### **E.1.5 Environmental Considerations**

Flood Water Removal projects are generally exempt from CEQA. Statutory exemptions include “emergency projects such as actions required to restore damaged facilities or mitigate an emergency” (*CEQA Guidelines Section 15269*) [http://ceres.ca.gov/topic/env\\_law/ceqa/guidelines/art18.html](http://ceres.ca.gov/topic/env_law/ceqa/guidelines/art18.html)). Nevertheless, Monterey County will consult legal counsel before making a final decision.

## **E.2 CONTRACTORS AND VENDORS**

---

The MCOA EOC maintains an Emergency Resource Directory (ERD) list available private-sector suppliers of pumps, excavation equipment and materials, and other flood fight equipment and supplies.

In addition, the San Benito-Monterey CAL FIRE Unit also maintains an extensive ERD list available emergency incident support equipment.