



# COUNTY OF SAN MATEO



## EMERGENCY OPERATIONS PLAN FLOOD ANNEX



SAN MATEO COUNTY SHERIFF'S OFFICE  
HOMELAND SECURITY DIVISION  
OFFICE OF EMERGENCY SERVICES

07/20/2018

County of San Mateo  
Sheriff's Office  
Homeland Security Division and  
Office of Emergency Services  
400 County Center  
Redwood City, CA 94063  
650-363-4790  
[www.smcsheriff.com](http://www.smcsheriff.com)





## Flood:

“A general and temporary condition of partial or complete inundation of normally dry land areas from overflow of inland or tidal waters or from the unusual and rapid accumulation of surface runoff from any source”.  
(National Flood Insurance Program)

### RECORD OF CHANGES

The purpose of this page is to note changes made to the San Mateo County Operational Area’s Emergency Operations Plan, Flooding Plan Annex. Once a change has been received from SMC-OA, and is incorporated into your copy of the plan, complete your entry on this page and send a copy of it by facsimile, or mail it, to the San Mateo County Operational Area OES.

Change Number	Date of Change	Section #, Header and Page #	Brief Description of Change	Initiated by (Department/Agency)
1	07/20/18	Appendix-F Page 37	Added Flood Threat Analysis	OES
2				
3				
4				
5				
6				
7				
8				
9				
10				

# CONTENTS

**1 – EOC CHECKLIST FOR INITIAL RESPONSE..... 1**

**2 - CONCEPT OF OPERATIONS..... 9**

**3 – ROLES & RESPONSIBILITIES..... 10**

**4 - ACTIVATION OF THE OA EOC..... 13**

**5 - RECOVERY OPERATIONS ..... 16**

**Appendix A: Conference Call Agenda..... 21**

**Appendix B: Glossary..... 23**

**Appendix C: Acronyms ..... 26**

**Appendix D: Checklists ..... 27**

**Appendix E: References..... 35**

**Appendix F: Flood Threat Analysis ..... 37**

# 1 – EOC CHECKLIST FOR INITIAL RESPONSE

## A. Field Response Situation Assessment

- a. Establish Command via radio to Public Safety Dispatch
  - i. “This is Incident Commander Smith, establishing Bayshore Command”
  - ii. Give the location of the Incident Command Post and ingress cross street
  - iii. Request that Dispatch assign the Sheriff’s OES Duty Officer to the incident
  - iv. Assign a Public Information Officer
- b. Determine type, size and location of emergency
- c. Determine number of people and animals affected
- d. Determine assistance required for vulnerable populations
- e. Determine ingress and egress

## B. Infrastructure Assessment

- a. Conduct critical infrastructure assessment
- b. Transportation
- c. Communications
- d. Utilities

## C. Evacuation Planning

- a. Identify areas to be evacuated
- b. Identify transportation means and routes to use
- c. Inform California Highway Patrol and Cal Trans
- d. Identify vulnerable populations and animals that need transportation assistance

## D. Community Alert or Warning for Evacuation

- a. Determine if thresholds for alert and warning have been reached
- b. Consider announcing precautionary alert for vulnerable populations (hospitals, nursing homes/care facilities, schools, special event facilities.
- c. Activate SMC Alert or Mass Notification System
- d. Issue public advisory / notifications through the media
- e. Advise Operational Area (if city) / REOC (if county) of situation. Advise affected jurisdictions, agencies, facilities of public ev a c u a t i o n s

## E. Public Information

- a. Issue precautionary warnings and instruction for affected populations.
- b. Publish evacuation instructions to the public when received
- c. Issue situation reports to all media agencies

## F. Mass Care Operational Criteria

- a. Identify sheltering needs and compare to capabilities
- b. Implement unified command
- c. Implement existing agreements with American Red Cross, Salvation Army, and non-governmental community based non-profit organizations.
- d. Designate shelter and coordinate the information with County/Operational Area EOC

## CHECKLIST FOR GENERAL EVACUATION

The checklist is based upon information in the Federal Emergency Management Agency's Guide for All-Hazard Emergency Operations Planning, September 1996; the State and Federal Local Guide (SLG) 101; California Legal Guidelines for Flood Evacuation, dated 21 November 1997.

There is no mandatory evacuation authority in California, but the Governor, Mayors and County Boards of Supervisors are provided emergency powers through the California Emergency Services Act and local ordinances. **Evacuations should be the last option exercised** as they can be complicated activities difficult to manage properly on the opening end of the crisis and then must be repeated in reverse to undo them on the closing end of the crisis. Shelter-in-place should be considered first.

The Governor, local governing body, and certain statutorily designated law enforcement officers have the authority to order an evacuation. For entities that may exercise authority for evacuation in the event of a flood emergency or disaster are discussed below. They include the:

- local governing body of the county, or whomever is authorized to act on their behalf;
- local governing body of cities, or whomever is authorized to act on their behalf;
- Statutorily designates Law Enforcement Officers; and the Governor.

The local governing body, or whomever the local governing body has authorized to issue the evacuation order, is primarily responsible for ordering an evacuation. This authorization can be in the form of an ordinance, resolution, or order that the local governing body has enacted for the crisis.

The information below covers the broad range of issues to consider when contemplating ordering an evacuation.

## SITUATION ASSESSMENT

Identify the following to gauge the response and recovery measures to be implemented. This information will help determine the number of people to be evacuated, time available in which to effect the evacuation, and the time and distance of travel necessary to ensure movement to safety:

- Location of the emergency and degree of ease of access
- Size of involved area, actual and potential (e.g. one building or one trailer park or one neighborhood block, etc.)
- Emergency conditions that could occur and that would require evacuation
- Characteristics of the hazard or threat
  - Magnitude
  - Intensity
  - Speed of onset
  - Duration
  - Impact on local community
- Weather conditions and any expected changes
- Particular areas or facilities which will not require evacuation because of their location or similar circumstances
- Areas potentially subject to evacuation due to local characteristics or terrain features
- Type of area (business, residential, industrial, hillside, low areas, trailer park, remote)
- Population groups requiring assistance during evacuation, including the identification of medical / health issues such as persons using wheelchairs, walkers, medical monitors, et cetera during the move and at destination.
- Develop a plan for evacuating the medically fragile or those in surgical recovery, including those in special care facilities whose staff should receive a precautionary warning prior to general evacuation announcements
- Number of affected residents
- Number and type of casualties/injuries
- Direction of movement of evacuees (all to the same destination or different locations?)
- Ingress / egress routes for large sized emergency vehicles
- Location of staging area to serve the evacuation as needed
- Emergency assistance required (ambulance, fire, public utility, heavy equipment)
- Awareness of the effort required to reverse the evacuation process and restore evacuees to a normal situation after the crisis ends

**INFRASTRUCTURE ASSESSMENT**

Identify facilities presenting high risk or necessary to protect for public services:

- Damage to structures; bridges and their approaches; critical emergency facilities
- Hospitals; command & communications centers; other emergency response facilities
- Airports, marine terminal-docks and other transportation centers
- Roadways, elevated freeways, railways, bridge over / under passes
- Dams, reservoirs, aqueducts, and water storage tanks and pipes; flood control devices
- Schools and other locations of high population density
- Steep hillsides containing homes and vulnerable to landslide
- Telephone facilities, electrical relay stations, and high-voltage power lines
- Sensitive areas like refineries, radioactive storage areas, financial banks
- High-rise buildings, factories, and large-scale apartment structures



## EVACUATION PROCESSES PLANNING

Identify areas and structures to be evacuated and difficulties of execution (e.g. older multi-level buildings without elevators);

Identify sheltering needs and capabilities to assist the following special populations:

- children in school at time of the event
- medically fragile individuals in personal home-care settings
- very young children in day care centers and nursing home residents (long-term)
- persons with disabilities (hearing, sight, mental capacity, mobility-impaired)
- non-English speaking people
- institutionalized individuals (hospitals, mental health facilities, nursing homes)
- incarcerated residents (jails, juvenile facilities, drug treatment centers)
- transient populations ('street' people, motel and hotel guests, seasonal workers)

Ensure that vulnerable populations receive a precautionary warning prior to a general evacuation announcement including such details as the dispositions of pets of any kind.

Develop procedures for the perimeter and interior security of the evacuated area by law enforcement, including such things as resident identification requirements by ordinary driver's licenses with affected local address or temporary resident passes; and anti-looting patrols

Contact American Red Cross and County Human Services Agency to bolster facility staffing and shelter management giving verified information as is known at the time of the request.

Alert any supporting organizations such as law enforcement, fire services, and transportation services including buses, trains and ambulances of the intended evacuation plans.

Continue to assess evacuation areas as conditions may change quickly.

Identify destination of evacuees and options for method of evacuation

Develop evacuation movement control procedures (e.g. who is to be moved first and how etc.).

Develop an approach for controlling the flow of evacuees from threatened area such as specified travel routes. Close or control roads or other pathways as necessary.

Identify means / specific modes to transport evacuees without their own transportation and operating times for pick up point or choosing safe assembly areas for picking up passengers

## **ALERT AND WARNING / NOTIFICATION FOR EVACUATION**

Determine if thresholds for sending alert and warning bulletins have been reached.

Identify whether the emergency affects life and property.

Identify communication contacts.

Ensure that vulnerable populations have received a precautionary warning.

Identify means to be used to keep evacuees and general public informed on evacuation activities and specific actions they should take.

Activate public warning systems to include Emergency Alert System (EAS).

Issue evacuation advisement

- use other systems as necessary or most effective for the situation
- Mass Notification System or SMCALERT.

Initiate procedures to warn those persons with disabilities such as the hearing impaired community, the medically fragile, and non-English speaking groups.

Advise the Cal OES Region Duty Officer of the situation.

Advise Dispatch, Fire, Law Enforcement and Public Works Mutual Aid Coordinators of situation.

Notify affected jurisdictions, agencies, and facilities of public evacuation such as:

- American Red Cross of need to establish shelters
- Neighboring counties if local shelter facilities may be overwhelmed
- Hospitals of potential influx of patients

## **PUBLIC INFORMATION**

Coordinate outreach/awareness of activities with all media. Disseminate instructional materials and information to evacuees concerning:

- Specific areas / neighborhoods to be evacuated
- List of items that evacuees should take with them
- Departure times and pick-up points for people requiring transportation assistance
- Phone numbers for American Red Cross Disaster Registry
- Phone numbers for Tele-sensory Device for the Deaf (TTD) and teletypewriter (TTY) phones for the Hearing Impaired to obtain evacuation information

Establish a Media Center for the public to obtain additional information (e.g. hotline)

Coordinate with appropriate officials (mass care, health and medical) to obtain necessary information for broadcasts. Schedule news conferences, interviews and media access at regular times and in coordination with the County Operational Area EOC Coordinate rumor control activity with San Mateo County EOC staff and affected cities.

## MASS CARE AND SHELTER OPERATIONS CRITERIA

All activities must be coordinated with Operational Area EOC

Establish evacuation centers and direct people to them; coordinate transportation access to shelters and initiate planning for eventual return of evacuees to their home areas.

Insure that all plans promote actions necessary to return evacuees to their original locations at the end of the crisis

Review existing agreements with community organizations that provide care and shelter services in an emergency such as Volunteers Assisting in Disasters (VOADS) and Community Based Organizations (CBOs.)

Ensure shelters are open and staffed with utilities, water, hygiene, and food facilities in accordance with American Red Cross standards; establish logistics for necessary resupply.

## THE BASIC PLAN

Presumably, there are limits to the amount of water the atmosphere can hold and release in one place at one time. However, it is not certain that these hypothesized limits have been reached and the record suggests that the greatest amounts in many places have not yet been recorded. It is important to add that the brevity of the precise record of floods in most places (usually only a few decades) and the fact that the possible magnitude of the largest floods is unknown means that much uncertainty remains regarding the true extent of the frequency and potential consequences of various flood events. Floods are generally measured according to the height that the waters reach. The forecast / warning of their magnitude is based on the chances that water levels will equal or exceed a certain point/height/depth on a recurring basis. Intervals of probability are classified into hazard zones.

### The Watches and Warnings

Watches and Warnings will be broadcast by NOAA through the National Weather Service (NWS) as part of its charter to the nation as well as by commercial weather reporters. These broadcasts and warnings are expected to reach the public through various communication methods and programs (e.g. All Hazards Radio) and will include the information illustrated below. Emergency Managers can be expected to have access to more precise information and more detailed forecasts to assist them in planning and responding.

#### Flood Watch

This level of notice alerts the public that flooding is possible within the Watch Area.

#### Flood Warning

Issued by NOAA when flooding is expected to occur more than 6 hours after heavy precipitation

#### Flash Flood Warning

Issued by NOAA when **flash flooding is expected within 6 hours**

Persons and organizations within the Warning Area should take precautions immediately; both Watches and Warnings will include general, but not site specific, protective measures (e.g. move to higher ground; move possessions to second floor, etc.) that are recommended by NOAA.

**Evacuation Option** If public officials determine that an immediate and hasty evacuation of an area is, or shall be, required, they should advise citizens to:

**Safety**

Not walk, swim, or drive through flood waters. Learn and practice driving the local flood evacuation routes. They have been selected because they are safe and provide the best means of escaping flood waters. Flood waters move swiftly and may carry debris that can cause injuries. Remember that 24 inches of water can wash a car away and six inches of fast moving water can knock a person off their feet.

Stay off bridges over fast-moving water. Fast-moving water can wash bridges away without warning and especially if the water contains any debris. Keep away from waterways. If you are driving and come upon rapidly rising waters, turn around and find another route. Move to higher ground away from rivers, streams, and creeks.

Avoid storm drains and irrigation ditches. During a flood, storm drains and irrigation ditches fill quickly with fast-moving water. Walking in or near storm drains or irrigation ditches is nearly a sure way to drown.

## 2 - CONCEPT OF OPERATIONS

### **Activation**

This plan becomes effective upon receipt of a Flood Warning or Flood Watch from the National Weather Service or State Warning Center, or on order of the San Mateo County Operational Area District Coordinator or the San Mateo County Director of Emergency Services or County Manager. Individual cities may initiate their flooding response plans. Upon activation, the senior on-duty Sheriff's OES representative will utilize the Warning/Watch action checklist to put the plan into operation.

### **Notifications**

Public Safety Communications Dispatch will notify the OES Duty Officer by assigning them to the NOAA weather related incident. OES personnel will ensure notification is made to relevant local government agencies as necessary by conference calls as needed.

### **Public Warning**

It is the responsibility of the affected jurisdiction, local or state, to warn their public of a flooding emergency. These jurisdictions include cities, the unincorporated county and state facilities and are further identified in this plan.

As noted, the public may be warned in a variety of ways as the degree and location of the emergency dictates. These include:

- Multi-faceted Social Media wireless devices
- Announcements through the Emergency Alert System on radio and television
- Weather Emergency Advisement (WEA)
- Announcements over a privately owned NOAA All-Hazard "weather" radio
- Direct notification utilizing SMC Alert and reverse 9-1-1 Mass Notification System
- Emergency vehicles using public address systems
- Announcements on local radio stations / HAM radio / internet / cable & satellite television
- Door to door notification

Warning to the public should include an explanation as to if, and why, any temporary evacuation is necessary and where they should go. If the direction is to go to a mass care shelter, the location and route to that shelter should be provided. If an immediate evacuation is necessary due to the expected effects of a flood (i.e. a flash flood), the public should be directed to go quickly to previously identified evacuation sites or inland and to higher ground. Residents should be assured that the evacuated area (i.e. homes, businesses, etc.) will be monitored by law enforcement until the flooding threat has passed.

## 3 – ROLES & RESPONSIBILITIES

The OES Duty Officer and the Operational Area District Coordinator have the authority to initiate any of the below listed roles and responsibilities as the urgency of the situation dictates.

### **OES Duty Officer**

- Collect and interpret NOAA messages (see Attachment B) to evaluate all information and notify the OES Director and staff; establish and continuously update the situation report in WebEOC.
- Coordinate an area-wide conference call in advance of the forecasted event.
- Participate in Region II Cal OES conference call to exchange information
- Provide initial evacuation considerations to jurisdictions / agencies
- Assign PIO to the EOC Continue supporting media contact / relations with information
- Advise county leadership on nature and scope of the emergency
- Maintain communication with NOAA, Cal OES Region II.

### **Operational Area Coordinator (OES Director)**

- Conduct conference call(s) as appropriate with affected entities. (Attachment A)
- Conduct follow-up notifications as needed; continue on-line Web-EOC updates
- Inform the County Manager and Board of Supervisors on the situation

### **Public Safety Communications**

- Receive alerts from the National Weather Service.
- Notify the on-call OES Duty Officer of alerts received from the National Weather Service.
- Update the OES Duty Officer of additional alerts received from the NOAA.

### **Sheriff's Office**

- Establish command at incident area and radio the location of the Command Post
- Establish a staging area and assign a Staging Manager to receive additional resources
- Consider holding over / calling back personnel to reinforce 24 hour operations
- Consider establishing traffic control points to restrict non-resident traffic into threatened areas and monitoring evacuated areas to control looting.
- Coordinate scene security, traffic control and crowd control with other agencies.
- Assist State Beaches and Parks with warning information and any evacuation of the state beaches / recreational areas if required

### **Fire Services**

- Consider holding over / calling back personnel to reinforce 24 hour operations
- Assist the Sheriff's Office and local law enforcement with warning and evacuation information
- Provide emergency medical treatment and transport as needed
- Provide search and / or rescue in the flooded areas as needed
- Request mutual aid including Swift Water Teams when needed

### **Public Information Officer**

- Develop situation summaries for the public and all media
- Manage media requests
- Monitor public reactions to the situation and inform the Operational Area EOC staff

**Sheriff's Search and Rescue Bureau**

- Assign Storm Watch assets as directed per their mission
- Provide general incident support as requested
- Clear debris from road ways and report downed power lines and other hazards

**Sheriff's Air Squadron**

- Conduct mission directed flight missions of affected areas and report situations to EOC
- Monitor, photograph impact of flooded areas

**Emergency Medical Services**

- Consider staging ambulances for rapid response to the hazard area as missions are received
- Consider holding over / calling back personnel to reinforce 24 hour operations
- Provide requested reports to promote situational awareness with OA EOC

**Public Works**

- Support perimeter and traffic control efforts with Fire Services and Law Enforcement
- Request public works mutual aid assistance as necessary to initiate debris removal operations
- Consider holding over / calling back staff as needed to reinforce 24 hour operations
- Coordinate actions with city public works departments as needed for coordinated pumping work to lower and control water levels in flooded areas or storm drain cleanouts.
- Provide situational awareness reports to the County EOC from 9 Damage Assessment personnel doing site visits the areas prone to flooding
  1. San Francisco Creek
  2. Belmont Creek
  3. Cordilleras
  4. Pescadero Creek
  5. Colma
  6. Broadmoor
  7. San Carlos
  8. Pillarcitos Creek, Half Moon Bay
  9. Butano Creek, Pescadero
- Respond on a priority basis to urgent calls from clients for service in inundated areas
- Use GIS mapping to electronically record and display all affected areas
- Coordinate repairs with utility providers including electric, gas, water, sewer and trash removers as needed
- Assist in gathering detailed information on damaged systems and infrastructure to support formal requests for California State or federal reimbursements
- Consider Engineering to assess hillsides that have slipped out in previous storms

**Environmental Health Services**

Evaluate the direct and indirect threats to life, property and the environment, post flood conditions

- Advise the Incident Command / Operational Area EOC of exposure and health issues stemming from residual waters especially concerning disrupted sanitary sewer systems and spills and actions that should be taken
- Provide guidance and services as necessary to assure the health of responders and citizens
- Provide requested reports to promote situational awareness with OA EOC

**Coroner**

- Supervise the removal and decontamination of any deceased persons
- Coordinate identification of the deceased persons
- Manage next-of-kin notifications and release of remains
- Report statistics to Operational Area EOC and or jurisdiction for situational awareness

**American Red Cross**

- Establish communication with OES Duty Officer for a briefing on the situation
- Prepare to assist communities with shelter management
- Maintain communication throughout the situation with OES Duty Officer



## 4 - ACTIVATION OF THE OA EOC

The activation of the EOC will be initiated by the Director of Emergency Services with approval through Chain of Command including Sheriff and the County Manager. The EOC staff will support incident command posts in recovering from the events.

### **EOC MANAGEMENT**

On-going event management suite of duties will include:

- Maintain contact with the NOAA Meteorologist and/or Lead Forecaster.
- Maintain contact with the Op Area using Web-EOC
- Support Unified Command and handle mission and resources tasking from Command Posts
- Monitor the need for evacuations and/or shelter operations; insure Operations, Planning and Logistics Sections' Chiefs are coordinating support
- Plan for the next Operational Period
- Establish a schedule for follow-on briefings and information exchanges

### **EOC OPERATIONS**

- Obtain Situation Reports from WebEOC or direct from the field Command Posts
- Assign all Agency Representatives to the Sheriff's OES 4<sup>th</sup> Floor Conference Room 417B
- Manage intelligence from field reports of threats to public safety, property and the environment
- Coordinate mutual aid from Operational Area partners
- Determine status transportation corridors and allocate resources to dewater or clear debris
- Coordinate response and service restoration with all utility services, water treatment facilities and sewage plants in accordance with established priorities
- Monitor and report progress to the Director of Emergency Services and other Section Chiefs related to the status of meeting EOC Objectives and Priorities.
- Anticipate extended operations and schedule adequate staffing (field support and EOC) to be available for the next (several) operational periods.
- Coordinate closely with the Planning and Logistics Sections to identify requirements for field and EOC support and reduce short notice materiel and service requests being sent to Logistics.

### **PLANNING SECTION**

- Ensure that an event is established in WebEOC
- Coordinate, establish and publish an EOC meeting schedule
- Monitor damage reports and update Situation Summary ICS-209
  - Populations of evacuation centers
  - Shelters
  - Animal care facilities
- Status of county Operational Area airports
- Monitor progress of objectives
- Coordinate with appropriate Section Chief(s) for any goals not being met. If new events or information requires adding or adjusting the established Objectives and Priorities schedules ensure all Section Chiefs are briefed.

- Coordinate with the Director of Emergency Services to establish a Recovery Task Force to commence planning for transition to long term recovery. Potential members of Recovery Task Force will be determined by the nature / scale of the event and may include representatives from the EOC Sections, SMC Board of Supervisors, PG&E the SMC Planning Department, business leaders, County government and civic organizations.
- Coordinate with the Director of Emergency Services for information needed to recommend / justify a continued declaration of a state of emergency
- Ensure that the Documentation Unit Leader has established a system to collect, collate, retain and maintain EOC documentation.
- Prepare to support damage assessment teams and provide them with inspection priority lists.

## LOGISTICS SECTION

- Ensure Logistics Section Unit Leaders are providing support to both the field and EOC responders in a timely fashion; priority must be to the field for any limited quantities of necessary materials and equipment.
- In participation with the Public Works Unit Leader in the Operations Section and land fill operators, develop a plan to collect, transport and dispose of disaster related debris of all types. Coordinate with the Public Information Officer for dissemination of refuse pick-up schedules to the public.
- Coordinate with Operations for a determination relating to establishing a Base if needed to support the reception of mutual aid resources from outside jurisdictions on a long term basis. Communicate as needed with the Staging Area Manager to support operations.
- Inventory the functioning Sand Bag Filling Stations for on-hand inventory of bags and sand; intensity of filling operations; publish accessibility by the public and pick up options
- Coordinate with the Finance Section Chief to establish spending limits and purchase approval procedures; accounting and payment procedures; required documents and receipts from the Logistics Unit Leaders. Ensure the limits and procedures are clearly understood and followed by all Logistics Unit staff members.
- Coordinate with the American Red Cross for victim assistance needs and status of Volunteer Organizations Active in Disasters (VOAD) support.

## FINANCE SECTION

- In close coordination with the Director of EOC, establish emergency response spending limits and procedures; disseminate information to Finance Section Unit Leaders and Logistics Section Chief.
- Establish a disaster accounting system to track and record emergency response costs
- Review state and FEMA procedures for documenting and reporting disaster recovery financial information. (Information relating to FEMA procedures and documentation can be found on the internet at [www.fema.com](http://www.fema.com))
- Coordinate with EOC Section Chiefs and jurisdiction departments to establish correct procedures for reporting emergency response related injuries and claims.

- Coordinate with San Mateo County Finance Department to assure field responders and jurisdictional departments are reporting/recording expenditures correctly.
- Activate the SMC Budget Division as required and monitor department documentation and support department activities.

## 5 - RECOVERY OPERATIONS

### Concept of Operations

San Mateo County, cities, towns, and special districts serving the County will be involved in recovery operations. In the aftermath of a disaster, many citizens will have specific needs that must be met before they can pick up the thread of their pre-disaster lives. Typically, there will be a need for services such as the following:

- Assessment of the extent and severity of damages to homes and other property
- Request WebEOC updates re INITIAL DAMAGE ESTIMATES (IDE) from Op Area partners
- Restoration of services generally available in communities - water, food, and medical assistance
- Repair of damaged homes and property to habitable standards
- Professional counseling when the sudden changes resulting from the emergency have resulted in mental anguish and inability to cope with daily requirements
- Assistance to citizens in applying for rebuilding / repair financial aid from state or federal programs (e.g. operations of a Local Assistance Centers)
- The County will help cities recover by making referrals to these services and by seeking additional resources if the communities need them.

### Phases of Recovery

Recovery occurs in two phases: short-term and long-term. Short-term recovery operations will begin during the response phase of the emergency. The major objectives of short-term recovery operations include rapid debris removal and clean-up especially of potential infectious sources; the immediate reporting and removal of any discovered human remains; and orderly and coordinated restoration of essential services (e.g. electricity, water, and sanitary systems.) Short-term recovery operations will include all the agencies participating in the County's disaster response.

A goal of short-term recovery is to restore local government services to at least minimal capacity. Short-term recovery includes continued protection by law enforcement and Health Department, public works/utility restoration.

- Expanded social, medical and mental health services
- Re-establishment of County government operations such as building permits
- Transportation route restoration of all types on published schedules
- Initial debris removal and clean-up operation especially for disease control
- Abatement and demolition of weakened, hazardous or severely compromised structures
- Assisting the resiliency of local businesses to restart commercial operations

The major objectives of long-term recovery operations include:

- Coordinated delivery of long-term social and health services
- Improved land use planning and zoning amendments as needed
- Incorporating recent operational data in an improved County Emergency Operations Plan
- Re-establishing the local economy to pre-event levels
- Recovery of eligible disaster response costs from state or federal sources
- Effective integration of mitigation strategies based on lessons learned into recovery planning such as improved re-construction techniques; re-zoning; communication and infrastructure systems protection / hardening.

The County will coordinate with special districts and private utility companies on all efforts to restore utility systems and services during recovery operations. Medical services may continue in temporary facilities, as necessary. The County Mental Health Department will be requested to coordinate and conduct Critical Stress Debriefings for emergency response personnel, DSWs, and victims of the disaster/event.

For federally declared disasters, registration centers and Local Assistance Centers (LAC) might be established by the Federal Emergency Management Agency (FEMA) to assist disaster victims and businesses in applying for individual assistance grants and Small Business Administration Disaster Assistance Loan Programs. In coordination with the American Red Cross, temporary shelter(s) for disaster victims will be operated until interim housing can be arranged. Debris removal and clean-up operations will be expedited as much as possible to support short-term recovery operations.

The goal of long-term recovery is to restore facilities to their previous conditions to the extent possible. Long-term recovery includes hazard mitigation activities, restoration and reconstruction of public facilities, and disaster response cost recovery.

The County and various cities will be respectively responsible for their approach(s) to mitigation which could include zoning variances, building code changes, municipal plan changes, seismic safety elements, and other land use planning techniques. With public safety a primary concern, rapid recovery may require adjustments to conventional policies and procedures to streamline the recovery process.

Hazard mitigation actions will need to be coordinated and employed in all activities by the County in order to ensure a maximum reduction of vulnerability to future disasters and financial burdens. The County will strive to restore essential facilities to their pre-disaster functions by retrofitting, repairing or reconstructing them during long-term recovery operations. Re-construction employing up-to-date techniques and alternate materials might not be eligible for State or federal reimbursements; each case is different. Deliberately new or expanded construction projects will almost certainly not be reimbursed.

Recovery programs will also be sought for individual citizens and private businesses; redevelopment agencies will play a vital role in rebuilding commercial areas.

### **Recovery Operations Organization**

For the County, recovery operations will be managed and directed by the County Executive. Recovery issues involving other jurisdictions and/or special districts will be coordinated and managed between the County Executive and designated representatives. On a regularly scheduled basis, the County Executive will convene meetings with department managers, key individuals, Board of Supervisors and representatives from affected jurisdictions and special districts. These meetings will be held to collectively make policy decisions and to gather and disseminate information regarding completed and ongoing recovery operations. The OES Director will assist the County Executive in facilitating and leading the recovery process. County departments will also be represented and responsible for certain functions throughout the recovery process. While the EOC is activated, the recovery planning process will be conducted by the Advance Planning Unit of the EOC Planning Section.

### **Recovery Damage / Safety Assessment**

An Initial Damage Estimate (IDE) will be developed quickly during the emergency response phase through field reports and / or on-site observations to support a request for a gubernatorial proclamation and for the State to request a presidential declaration.

This will be followed by a detailed assessment of damage during the recovery phase by the

County, cities, and special districts as needed. This detailed assessment will provide the basis for determining the type and amount of state and / or federal financial assistance needed for recovery.

As the immediate threat to life, property and the environment subsides, the rebuilding of San Mateo County will begin through various recovery activities. Recovery activities involve first the restoration of services to the public and then rebuilding the affected area(s). Examples of recovery activities include:

- Restoring all utilities in accordance with established priorities;
- Establishing and staffing Local Assistance Centers;
- Applying for state and federal assistance programs;
- Conducting hazard mitigation analysis;
- Identifying residual hazards and prioritizing their removal;
- Determining and documenting recovery costs associated with response and recovery
- Preparing initial plans for rebuilding, retro-fitting facilities and buildings.

The recovery period has major objectives which may overlap, including:

- Reinstatement of family and individuals' autonomy;
- Provision of essential public services;
- Permanent restoration of private and public property;
- Identification of residual hazards and assignment of responsibilities for mitigation;
- Plans to recognize and mitigate potential future hazards;
- Recovery of costs associated with response and recovery efforts;
- Coordination of state and federal, private and public assistance.
- Awareness of, discovery of, controls over, and punishment of, instances of waste, fraud and abuse of public recovery funds

The Planning Section of the Operational Area EOC will complete the detailed damage / safety assessment with input from sections as needed. The Operations Section may in most cases supply the first available detailed damage/safety assessment input data in WebEOC, Damage Assessment/Initial Damage Estimates.

### **Recovery Documentation**

Documentation is the key to recovering emergency response expenditures and costs. Damage assessment documentation will be critical in establishing the basis for eligibility of disaster assistance programs.

Under the State Natural Disaster Assistance Act (NDAA), documentation is required for damage sustained to public buildings, levees, flood control works, irrigation systems, county roads, city streets, bridges, and other public works. Under federal disaster assistance programs, detailed documentation must be obtained regarding damage sustained to roads, water control facilities, public buildings and related equipment, public utilities, facilities under construction, recreational and park facilities, educational institutions, and certain private non-profit facilities.

Debris removal and emergency response costs incurred by the affected entities should also be documented for assistance purposes under the federal programs. It will be the responsibility of the County, cities, and special districts to collect documentation of these charges. The documented information should include the location and extent of damage, and estimates of costs for debris removal, emergency work, and repairing or replacing damaged facilities to pre-disaster condition.

The cost of compliance with modern building codes for re-construction, repair, and restoration will also be documented. The cost of improving facilities may, or may not, be included for reimbursement under federal mitigation programs in accordance with the rules in effect at the time of filing.

In every case, documentation is the key to recovering expenditures related to emergency response and recovery operations. For the County, cities, and special districts, documentation must begin at the field response level and continue throughout the activities of the Operational Area Emergency Operations Center as the disaster unfolds.

### **After-Action Reporting**

The Standardized Emergency Management System (SEMS) requires any city, city and county, or county proclaiming a local emergency for which the governor proclaims a state of emergency to complete and transmit an Cal OES SEMS After Action Survey and Corrective Action Plan (AAR) to CAL OES within (90) days of the close of the incident period. The AAR will provide, at a minimum, response actions taken, application of SEMS, suggested modifications to SEMS, necessary modifications to plans and procedures, identified training needs, and recovery activities to date (refer SEMS Regulation Title IX, Division 2, Chapter 1, Section 2450, a.)

The AAR to CAL OES can also serve as a source for documenting the County's emergency response activities, identifying areas of concern and successes. It will also be utilized to develop and describe a work plan for implementing improvements. The AAR will be a composite document for all SEMS levels, providing a broad perspective of the incident, referencing more detailed documents, and addressing all areas specified in regulations. It will include an overview of the incident, including enclosures, and addressing specific areas if necessary. It will be coordinated with, but not encompass, hazard mitigation. Hazard mitigation efforts may be included in the "recovery actions to date" portion of the after-action report.

The San Mateo County Office of Emergency Services will be responsible for the completion and distribution of the AAR, including sending it to the California Emergency Management Agency within the 90-day period. Information will be incorporated from the cities and special districts as applicable. Data for the AAR will be collected from questionnaires, Web-EOC records, other documents developed during the disaster response, interviews of emergency responders and other sources of information as appropriate.

### **Disaster Assistance Programs**

When requesting disaster assistance, some key areas of concern must be adequately addressed. These areas include the needs of distinct groups, disaster assistance available at each level of declaration, and the level of detail required on each request for disaster assistance.

The disaster assistance programs have been developed for the needs of four distinct groups:

- Individuals
- Businesses (including agriculture interests)
- Governments
- Non-profit organizations

Individuals may receive loans or grants for such things as real and personal property losses; dental; funeral; medical; transportation; forced unemployment; sheltering; and rental assistance; depending on the extent of damage. It is important to note that damages may go undiscovered for weeks or months until examinations of structures and systems (e.g. buried lines and pipes; building foundations; etc.) can be completed and documented.

Loans for many types of businesses are often made available through the United States Small Business Administration, assisting with physical and economic losses as a result of a disaster or an emergency. Programs exist for agricultural or other rural interests through the United States Department of Agriculture, including assistance for physical and production losses, repair, and reconstruction. Funds and grants are available to government and non-profit organizations to mitigate the risk of future damage. A Local Assistance Center (LAC) will be established and staffed by necessary agencies to assist public and private entities with recovery operations.

It is important for individuals to understand the differences between loans which must be repaid and grants which are usually not repaid but are subject to stricter controls of application.

### **Prevention/Mitigation Phase**

Preventing damage and losses from future disaster includes those efforts known as mitigation activities. Mitigation efforts occur both before and following disastrous events. Post-disaster mitigation is part of the Recovery process. Preventing, eliminating or reducing the impact of hazards that exist within the Operational Area and are a threat to life and property are part of the Mitigation efforts. It is the responsibility for each City in the Operational Area to identify areas within their respective jurisdictions that could cause potential damage; such as unconstrained flooding sources, latent ponding topographies, landslides, areas of unresolved soils erosion, overdue maintenance on piping systems leading to ruptures/failures under stress, et cetera; and to mitigate such issues on a timely basis.

Mitigation tools include:

- Local ordinances and statutes; designing zoning ordinances; building codes and providing for strict enforcement with penalties for deviations;
- Structural measures and building requirements to the latest seismic and hydrological standards;
- Tax levee valuations or abatements encouraging investments in proper procedures;
- Public information and community relations to prepare the public through personal efforts;
- Land use planning preventing construction in areas susceptible to flooding.

These are activities requiring participation by elected officials directing the appropriate actions and assisted by the staff of San Mateo County Sheriff's Homeland Security Division and Office of Emergency Services.



## Appendix A: Conference Call Agenda

- Roll Call (Operational Area)

Sheriff's Coastside Patrol  
 Public Safety Communications Dispatch  
 Half Moon Bay  
 Pacifica  
 State Parks/Beaches  
 Cal OES  
 County Parks  
 North County Fire  
 Coastside Fire  
 County Fire/CalFire  
 California Highway Patrol  
 Cal Trans  
 San Mateo County Public Works  
 Pacific Gas & Electric  
 NOAA/National Weather Service  
 Millbrae  
 South San Francisco  
 Redwood City  
 Woodside  
 Portola Valley  
 East Palo Alto  
 Atherton

County Public Works  
 Menlo Park  
 Brisbane  
 Daly City  
 Colma  
 San Carlos  
 San Bruno  
 Hillsborough  
 Burlingame  
 San Mateo  
 Foster City  
 La Honda  
 Pescadero  
 San Mateo County Airports  
 County Human Services Agency  
 County Health Services  
 County EMS Agency  
 Peninsula Humane Society  
 Menlo Park Fire District  
 California Fish and Wildlife

**Special Districts:**

Coastside County Water  
 Sewer Authority Midcoast  
 Montara Water/Sanitation District  
 Bay Area Water Supply Agency  
 Pillar Point Harbor  
 Oyster Point Harbor  
 Broadmoor Police District  
 San Francisco Airport

**Schools:**

County Department of Education  
 Cabrillo Unified  
 La Honda/Pescadero Unified  
 Jefferson School District

(Continued next page)

Situation Report (Operational Area)

- Initial Recommendations (Operational Area)
  - Parks Closures
  - Evacuations
  - Public Alerting (MNS, SMCAAlert, EAS, sirens)
  - Road Closures
  - Transportation Corridor Issues
- Initial Response Actions by Agencies (Agencies as called)
  - Sheriff's Coastside
  - Pacifica Police Department
  - Half Moon Bay Police Department
  - State Parks
  - County Parks
  - Red Cross

Collectively determine the level of urgency and possible need for evacuation shelter opening, and if so, which shelters to open. Determine need for Traffic Control Points and "pass through" criteria (residents, business / boat owners, etc.)

- Formalize any needed resource request procedures via WebEOC
- Identify Public Information Officers and establish a Joint Information Center (JIC)
- Determine need for a local Emergency Alert System (EAS) message.
- Other issues
- Set time for next conference call; Adjourn.

## Appendix B: Glossary

**After Action Report:** A report covering response actions, application of SEMS/ICS, modifications to plans and procedures, training needs, and recovery activities. After action reports are encouraged following any emergency which requires a declaration of an emergency

**Agency Representative:** An individual assigned to an incident or to an EOC from an assisting or cooperating agency who has delegated authority to make decisions on matters affecting that agency's participation at the incident or at the EOC. Agency representatives report to the liaison officer at the incident or to the liaison coordinator at EOC levels.

**American Red Cross:** A federally recognized volunteer agency that provides disaster relief to individuals and families.

**Base Flood:** A term used in the National Flood Insurance Program to indicate the minimum size flood to be used by a community as a basis for its flood plain management regulations, presently required by regulation to be that flood which has a one-percent chance of being equaled or exceeded in any given year.

**Base Flood Elevation (BFE):** The elevation for which there is a one-percent chance in any given year that flood levels will equal or exceed it. The BFE is determined by statistical analysis for each local area and designated on the Flood Insurance Rate Map. It is also known as the 100-Year Flood.

**Cal OES:** California (State) Office of Emergency Services

**Damage Assessment:** The process is utilized to determine the magnitude of damage and the unmet needs of individuals, businesses, the public sector, and the community as a result of a disaster or emergency event.

**Department Operations Center:** An EOC used by a distinct discipline (such as fire, medical, hazardous material) or a unit (such as department of public works, department of health or local water district). Department operations centers may be used at all SEMS/ICS levels above the field response level depending upon the impacts of the emergency.

**DHS:** Department of Homeland Security (a federal cabinet level agency that includes FEMA)

**Disaster Service Worker:** Includes public employees and any unregistered person recruited into service during a state of war emergency, a state of emergency, or a local emergency by a person having authority to command the aid of citizens in the execution of his duties. It does not include any member registered as an active fire-fighting member of any regularly organized volunteer fire department, and having official recognition, and full or partial support of the county, city, town, or district in which such fire department is located.

**Emergency Alert System:** A system that enables the County Manager and NOAA, federal, state, and local governments to communicate through commercial radio and television broadcast stations with the general public in the event of a disaster.

**Emergency Operations Center (EOC):** A location for performing centralized emergency management. EOC facilities are established by an agency or jurisdiction to coordinate the overall agency or jurisdictional response during an emergency.

**Emergency Operations Plan (EOP):** A jurisdiction plan for responding to appropriate hazards.

**Emergency Functions (EFs):** These are functional area-of-response activities established to facilitate the delivery of federal assistance during the immediate response phase of a disaster. Their purpose is the protection of lives, property and public health, and the maintenance of public safety. The specific ESFs are described below to facilitate requests for federal assistance. Lead federal agencies are indicated in parentheses.

**EOC Action Plan:** The plan developed at EOC levels which contain objectives, actions to be taken, assignments, and supporting information for the next operational period.

### **Essential Facilities**

Facilities vital to maintaining the health, safety and overall well-being of the public following a disaster (e.g., hospitals, police and fire department buildings, utility facilities, etc)

**Flood Hazard Boundary Map (FHBM):** The official community map showing the boundaries of the flood plain and specially designated flood hazard areas. It is prepared by FEMA using the best flood data available at the time a community enters the emergency phase of the National Flood Insurance Program (NFIP). It is superseded by a Flood Insurance Map (FIRM).

**Flood Insurance:** The insurance coverage provided under the National Flood Insurance Program

**Flood Insurance Rate Map (FIRM):** The official community map prepared by FEMA showing the base flood elevation along with special hazard areas and the risk premium zones. The Flood Insurance Rate Map development is funded by FEMA and is based on detailed surveys and analysis of the site-specific hydrologic characteristics.

**Incident Action Plan:** The plan developed at the field response level which contains objectives reflecting the overall incident strategy, specific tactical actions, and supporting information for the next operational period. The plan may be oral or written.

**Individual Assistance (IA):** Supplementary federal assistance provided under the Stafford Act to individuals and families adversely affected by a major disaster or an emergency. Such assistance may be provided directly by the federal government, state or local governments, or disaster relief organizations.

**King Tides:** otherwise naturally occurring and forecasted tides that can produce exceptionally high water events due to the periodic alignment of astronomical bodies (i.e. moon and sun).

### **National Weather Service Issuances**

Outlook – statement for general conditions that might develop into an adverse event

Watch – danger is not confirmed for the possibility of an event within the next 6-12 hours

Advisory – for events that are likely to occur within the next 6-12 hours.

Warning – the most urgent issuance for events forecasted to develop within the next 6 hours

Statements - Issued as updates to the above profiles

Flooding

Flood Watch – alerts public that flooding is possible in the Watch Area

Flood Warning – flooding is expected to occur more than 6 hours after heavy precipitation, snowmelt, ice jams, or dam failures

Flash Flood Warning – flash flooding is expected within 6 hours as a result of heavy precipitation or dam failures

Flash Flood Statement - updates to any of the above three issuances

**OASIS:** Operational Area Satellite Information System; a ground based closed telephone communications exchange system allowing direct dialing between points in the Operational Area organizational network intended to supplement emergency communications capabilities.

**One Hundred-Year Flood:** The flood elevation that has a one-percent chance of being equaled or exceeded in any given year. It is also known as the base flood elevation.

**Operational Area:** Comprises the land area inside the mapped territorial limits of San Mateo County including cities formally established in the county; remote communities and settlements; and the land area characterized as 'unincorporated'.

**Operational Period:** The period of time scheduled for execution of a given set of operation actions as specified in the Incident Action Plan / EOC Action Plan. A single Operational Period may be of any length but usually not over 24 hours

**POD:** Point of Distribution for non-medical commodities and supplies; not to be confused with a medical Point of Dispensing for pharmaceutical materials (an unfortunate coincidence of terminology). unit within the Finance Section and responsible for financial matters involving vendor contracts.

**Public Assistance (PA):** Supplementary federal assistance provided under the Stafford Act to state and local governments or certain private, non-profit organizations. It does not include assistance for the direct benefit of individuals and families.

**Shelter Manager:** An individual who provides for the internal organization, administration, and operation of a shelter facility (e.g. American Red Cross).

**Stafford Act:** Robert T. Stafford Disaster Relief and Emergency Assistance Act, PL 100-707, signed into law November 23, 1988; amended the Disaster Relief Act of 1974, PL 93-288.

**Standardized Emergency Management System (SEMS):** A system established in California for managing response to multi-agency and multi-jurisdiction emergencies at the jurisdiction level. SEMS is similar in organization to the Incident Command System (ICS) and is composed of five basic sections: management, operations, planning, logistics, and finance.

**State Coordinating Officer (SCO):** The person appointed by the governor to act for the state in cooperation with the Federal Coordinating Officer.

**Unified Command:** Unified Command is best described as a team effort that allows agencies with responsibility for an incident, either geographical or functional, to manage an incident in common by establishing a mutual set of incident objectives and strategies. This is accomplished without losing or abdicating agency authority, autonomy, responsibility, or accountability. This occurs more frequently at the field level, in large-scale events, that involve more than one jurisdiction or more than one technical or legislated responsibility.

## Appendix C: Acronyms

AC	Area Command
ADA	Americans with Disabilities Act
AMR	American Medical Response
ARC	American Red Cross
DA	Damage Assessment
DOC	Department Operations Center
DSW	Disaster Service Worker
EAS	Emergency Alert System
EDIS	Emergency Digital Information System
EMS	Emergency Medical Services
EOC	Emergency Operations Center
EOP	Emergency Operations Plan
ESF	Emergency Support Functions
FEMA	Federal Emergency Management Agency
GIS	Geographic Information System
IC	Incident Commander
ICP	Incident Command Post
ICS	Incident Command System
IDE	Initial Damage Assessment
JIC	Joint Information Center
MAC	Multiagency Coordination Center
MACS	Multi-Agency Coordination System
NFIP	National Flood Insurance Program
NIMS	National Incident Management System
NOAA	National Oceanic and Atmospheric Administration
NWS	National Weather Service
PA	Public Assistance
PIO	Public Information Officer
RACES	Radio Amateur Civil Emergency Services
REOC	Regional Emergency Operations Center
SA	Salvation Army
SCO	State Coordinating Officer
SEMS	Standardized Emergency Management System
SOC	State Operations Center
TENS	Telephone Emergency Notification System
VOAD	Volunteer Organizations Active in Disaster

## Appendix D: Checklists

- EOC Director/OES Coordinator determines if EOC is to be activated.
  
- Obtain situation status brief from services; consider activating the Emergency Operations Center.
  
- Determine status of county facilities and essential equipment.
  
- Have the PIO prepare a statement to broadcast on the Emergency Alert System (EAS) for the public. Coordinate information with affected Cities and affected agencies and districts as appropriate.
  
- Request information relating to life safety issues from Public Safety Communications and/or the San Mateo County Medical Officer.
  
- Contact affected adjacent jurisdictions, agencies and districts to determine mutual aid needs.
  
- Complete Immediate Action Checklists. If EOC activation is warranted effect notification of EOC Staff to report to the EOC.
  
- Upon notification that the EOC is operational, move to EOC. Provide staff with situation brief that includes identification of the first operational period end time and a detailed description of the EOC Objectives and Priorities for the first Operational Period.

**AFTER THE EOC IS ACTIVATED****MANAGEMENT SECTION**

- Maintain contact with the County and affected adjacent City(s) to confirm information on the situation. Coordinate mutual aid assistance as required.
  
- Determine if recall of jurisdiction employees is appropriate to support staffing needs.
  
- Depending on the type of flooding, request a technical expert from the Operations Section to serve as an advisor to Command Staff.
  
- Consider seeking a declaration of disaster or asking the County Public Health Director for a Public Health Declaration.
  
- Check with Safety Officer on adequacy of personnel protection in the field for the threat being faced.
  
- Ensure Agency Representatives to the County have a duplicate communications linkage to the Command Staff.
  
- Appoint an experienced Recovery Unit Leader (Consequence Management) to work in the Plans Section to begin working with federal, state and local authorities on long term social and economic recovery



**PUBLIC INFORMATION OFFICER**

- Develop communications with the County, other affected city(s), or Field PIO(s).
  
- Assess needs for additional PIO staff and plan staffing for next 24 hours.
  
- If a state or federal information center (JIC) is established send a jurisdiction representative.
  
- If chemical or biological agents are present in effluents, request a technical expert from the County Health Department to help craft and disseminate a clear and accurate message.
  
- Have all messages translated into Spanish, and other local ethnic dialects as available assets permit.

## OPERATIONS SECTION

Obtain operational status of public safety response staff and equipment for:

- Law Enforcement
- Fire/Rescue
- Public Works
- EMS
- Public Health
- Coroners Office
- Lifeline utility systems
- Medical systems and facilities



If evacuation of the building/area is required, do not return until the fire department declares the area safe



Coordinate with the County Medical Officer regarding the handling of requests for information on the effects of any hazardous material(s) in the area.



Confirm that mandatory notifications including to the state OES or Federal agencies have been made; if not, make them.



If an evacuation has been initiated, provide mutual aid to the Field Incident Commander to isolate area and deny entry into contaminated area(s).



Request and obtain periodic situation assessments from either field responders or through Public Safety Communications as appropriate.

Coordinate mutual aid requests from the County and affected adjacent City(s) including:

- Law Enforcement
- Fire/Rescue
- Public Works
- EMS
- Public Health and Coroners Office



- Determine status of key transportation corridors (highways, roads, streets, rail, air, water). Coordinate with Section Chiefs to reopen key transportation assets or to go around damaged areas.
  
- Coordinate response and service restorations with affected utility services.
  
- Monitor and report progress to the EOC Director and other Section Chiefs related to the status of meeting EOC Objectives and Priorities.
  
- Plan for extended operations. Ensure that adequate staffing (field and EOC) will be available for the next operational period(s).
  
- Coordinate closely with the Logistics Section for field and EOC support. Plan ahead to identify requirements to reduce short notice requests being sent to Logistics.
  
- Make contact with public transportation agencies to determine status and availability of transportation resources.

## PLANNING SECTION

- Ensure Major Incident or Significant Information Reports from Operations Section (and other Sections) are being received, verified, analyzed, and displayed by the Situation Status Unit Leader either manually or using electronic aids such as Web-EOC.
  
- In close coordination with the EOC Director, establish and publish an EOC Action Plan meeting schedule.
  
- Obtain initial Windshield Damage Assessment information from Operations Section and/or Public Safety Communications. Commence planning for detailed Damage Assessment with emphasis on essential facility locations (hospitals, potential shelters, police and fire stations, communications nodes, etc.) being inspected first..  
  
Closely monitor and display essential and accurate information including:
  - Number of Deaths
  - Number of Injuries
  - Number of Missing
  - Displaced Victims
  - Number of Victims in Shelters
  
- Significant Weather  
• FEMA Category Damage Assessment Totals  
• Status of Hospitals  
• Severe, moderate and lightly damaged areas  
• Status of Airport  
• Status of Pre-hospital systems
  
- Monitor progress of meeting initial Objectives and Priorities. Coordinate with appropriate Section Chief(s) for goals not being met. If new events or information requires adding or adjusting the established Objectives and Priorities ensure Section Chiefs are briefed.
  
- Ensure Section Chiefs are aware of, and are planning for, anticipated shelter operations for displaced residents and visitors. Ensure forecast weather conditions are factored into sheltering requirements.

## LOGISTICS SECTION

- Ensure Logistics Section Unit Leaders are providing support to both the field and EOC responders in a timely fashion.
  
- Ensure the Care and Shelter Unit Leader is coordinating and managing shelter operations in close concert with the American Red Cross. Also ensure that the Care and Shelter Unit Leader is passing appropriate information to the Public Information Officer for dissemination to local news media.
  
- In coordination with the Public Works Unit Leader in the Operations Section and land fill operators, develop a plan to collect, transport and dispose of disaster related debris. Coordinate with the Public Information Officer for dissemination of refuse pick-up schedules to the public.
  
- Evaluate communications capabilities to manage emergency response. Coordinate repair or replacement of key communications capabilities that are inoperable. Coordinate with Section Chiefs for additional communications required for immediate and long term operations.
  
- Make determination relating to establishing a staging area to support mutual aid resources from outside jurisdictions. Assign a Staging Area Manager and coordinate the commencement of staging area operations.
  
- Coordinate with the Finance Chief to establish spending limits, accounting and payment procedures for the Logistics Unit Leaders. Ensure the limits and procedures are clearly understood and followed by all Logistics Unit Leaders.
  
- Coordinate with the American Red Cross for victim assistance and status of Volunteer Organizations, Active in Disasters (VOAD) support.

**FINANCE SECTION**

- In close coordination with the Director of EOC, establish emergency response spending limits and procedures. Disseminate information to Finance Section Unit Leaders and Logistics Section Chief.
  
- Establish and maintain a Disaster Accounting System to track and record emergency response costs.
  
- If a state or federal declaration is possible, coordinate with EOC Section Chiefs and jurisdiction Departments specific procedures for tracking and reporting responder time sheets services and supplies, material and vehicle use.
  
- Review state and FEMA procedures for documenting and reporting disaster recovery financial information. Information relating to FEMA procedures and documentation can be found on the internet at [www.fema.com](http://www.fema.com).
  
- Coordinate with EOC Section Chiefs and jurisdiction departments to establish correct procedures for reporting emergency response related injuries and claims.

## Appendix E: References

### **Federal**

National Incident Management System (NIMS), a system mandated by HSPD-5 to provide a consistent nationwide approach for Federal, State, Local and Tribal governments, the private sector and non-governmental organizations to work effectively and efficiently together to prepared for, respond to and recover from domestic incidents.

National Response Framework, 2008, sets forth roles and responsibilities of federal and certain non-federal entities after catastrophes overwhelm state and local government.

42 U.S.C. §§ 5121-5206 The Robert T. Stafford Disaster Relief and Emergency Assistance Act, P.L. 92-288, as amended

6 U.S.C. 317 – the role of FEMA includes evacuating disaster victims

42 U.S.C. 960(23) – Temporary housing and evacuation of threatened persons are to be included in the scope of hazardous substance removal.

H.R. 3858 (109<sup>th</sup> Congress) Amends the Stafford Act to ensure State and local plans address the needs of individuals and household pets and service animals following a major disaster or emergency

Americans with Disabilities Act of 1990

Centers for Disease Control and Prevention, Public health Workbook to Define, Locate and Reach Special, Vulnerable, and At-Risk Populations in an emergency, 2006

FEMA- Individual and Household Assistance Programs (IHP) manual

### **California**

California Emergency Services Act, California Government Code, Sections 8550-8668.

California State Emergency Plan (California Government Code, Section 8850 et seq.)

California Code of Regulations, Title 19, Chapters 1 through 6.

Standardized Emergency Management System (SEMS) - Chapter 1 of Division 2 of Title 19 of the California Code of Regulations

California Master Mutual Aid Agreement

SB1451. Emergency Preparedness for the Disabled Community; Guidelines for Controlling Movement of People and Property during an Emergency, State of California, Office of Emergency Services, 1999.

Guidelines for Coordinating Flood Emergency Operations, completed in compliance with the Flood Emergency Action Team (FEAT): Initiative Number 1. November 21, 1997.

Legal Guidelines for Flood Evacuation, State of California, Office of Emergency Services, 21 November 1997

Legal Guidelines for Controlling Movement of People and Property during an Emergency; State of California, Office of Emergency Services, 1999

California Health and Human Services Agency, California Department of Social Services, Emergency Function 6, Care and Shelter Annex, Executive Summary, October 2013

California Department of Social Services, Care and Shelter Plan Template (for cities and counties)  
<http://www.cdsscounties.ca.gov/coplanners/res/pdf/doc10.pdf>

California Department of Social Services, Best Strategies for Effective Mass Care & Sheltering Planning  
<http://www.cdsscpinties.ca.gov/coplanners/res/pdf/doc8.pdf>

California Department of Social Services, People with Disabilities and Elderly Shelter (PWD/E) Annex

Governor's Office of Emergency Services, Legal Guidelines for Controlling Movement of People and Property during an Emergency. 1999

Governor's Office of Emergency Services, Meeting the Needs of Vulnerable People in Times of Disaster: A Guide for Emergency Managers. May 2000

California Delegation Quarterly Report for Emergency Management and Individuals with Disabilities and the Elderly, September 30, 2006

Guidelines for Coordinating Flood Emergency Operations. Completed in compliance with the Flood Emergency Action Team (FEAT): Initiative Number 1. November 21, 1997

**American Red Cross**

Training: Shelter Management and Operations.



## Appendix F: Flood Threat Analysis

### General Situation

Floods are generally classed as either slow-rise or flash floods. Slow-rise floods may be preceded by a warning time lasting from hours, to days, or possibly weeks. Evacuation and sandbagging for a slow-rise flood may lessen flood-related damage. Conversely, flash floods are the most difficult to prepare for, due to the extremely short warning time, if any is given at all. Flash flood warnings usually require immediate evacuation within the hour.

Once flooding begins, personnel will be needed to assist in rescuing persons trapped by flood water, securing utilities, and cordoning off flooded areas and controlling traffic. These actions may overtax local agencies and additional personnel and resources may be required. It is anticipated that existing mutual aid resources would be used as necessary to augment local resources.

### Special Situation

Watersheds in San Mateo County are relatively small and the run to the Pacific Ocean or to the San Francisco Bay. The typical long, slow-rising floods experienced in the Central Valley and along the great rivers of northern California do not occur here.

Major floods in the county have occurred in 1940, 1955, 1958, 1973, 1982, 1983, and 1986. The December 1955 flood was the most severe in recent history until the 1982 event. Major flooding also occurred in Dec 96 - Jan 97. The 1982 flood had its most severe impacts in Pacifica, where heavy rains induced mud flows which destroyed several homes and killed 3 children. The flood also impacted the community of Pescadero - the one part of the rural area where a significant amount of development has occurred in a natural flood plain. The storm almost completely flooded the rural service center, blocked all access roads to the town, and severed telephone and electric power services. Most of the residents of Pescadero had to evacuate.

### Rural Flooding

The risk of flooding in the rural area is dependent on several variables: the amount and intensity of rainfall that is annually received in each watershed; the width and topographic setting of the flood plains of the major streams; the degree to which flood control improvements have been made; and, most importantly, the amount of development that is located within known flood plains.

The unincorporated rural areas of San Mateo County contain 21 major watersheds. All but two of these watersheds drain to the Pacific Ocean. Only the Crystal Springs and San Francisquito Watersheds drain to the San Francisco Bay.

In the rural area, the major streams remain almost completely in undisturbed natural conditions. Very few flood control improvements (outside of installation of culverts and occasional clearance of debris from creek channels) have taken place. Major flood control projects (such as channelization or channel diversion) have been undertaken in more densely populated urban areas on the bayside.

Compared to neighboring bay area counties, the rural portion of San Mateo County receives abundant annual rainfall. In effect, the rural mountainous areas act as a "rain trap." Average rainfall in the rural area ranges from more than 45 inches per year in the Skyline Ridge area to over 30 inches per year in most of the South Coast watersheds west of Skyline. By comparison, Redwood City, located on the east side of the Skyline Ridge, averages only 19 inches per year.

During years of average rainfall and relatively mild storm systems, the natural stream channels of the rural watersheds are adequate to drain runoff. However, in years of abnormally high rainfall or

unusually severe storms, disastrous flooding can occur. Runoff during such conditions cascades rapidly down the narrow stream channels of the mountainous areas. The strong velocity of flood waters during these times can carry debris for long distances, block stream channels and create areas of severe localized flooding.

The table in Exhibit 1 summarizes the annual measured stream flow of San Gregorio and Pescadero Creeks between 1970-1981. This table indicates the wide variation in runoff that can occur in the rural area. In the San Gregorio watershed, an area that drains over 39,000 acres, runoff has ranged from over 61,000 acre-feet in 1972-3 to only 840 acre-feet in the severe drought year of 1976-77.

### **Urban Flooding**

In more densely populated urban areas, the risks to life and property from flood hazards are increased. In the past, development patterns in urban areas have generally ignored the threat of flooding. As more and more development occurs within flood plain areas, it often became necessary to finance expensive engineering solutions to the flooding problems.

In the urban portion of the county, the problem of directing storm runoff from the mountains to the Bay has been addressed through various flood control and drainage districts (Exhibit 2). Improvements have included installation of culverts and bridges, construction of levees, various methods of channel alteration or installation of underground storm drains. In spite of these improvements, many of the creek channels could be overtopped during the 100-year flood.

The "solution" to the flood hazard problem in the urban area can itself create certain hazardous situations. When natural stream channels are altered and vegetation is removed, the velocity of the storm runoff increases because it can more efficiently flow toward the bay. This can create hazards to those who might accidentally fall into the creek, particularly young children.

Urban areas can also be victimized by the problem of debris blockage of creek channels. In many areas, residential neighborhoods border directly on creek channels. These areas could easily be spot flooded if the channels are not clear. Additionally, decaying flood-deposited garbage or other organic material could create health hazards in the aftermath of a flood.

### **Tidal Flooding**

The hazards of tidal flooding in areas proximate to San Francisco Bay have been mitigated to some degree by the series of levees constructed for salt evaporation ponds in the southeast of the county and for flood protection in the north and central parts of the county. Generally, however, these levees would not withstand the flood intensities of the 100-year base flood.

### **Emergency Response Actions**

Emergency response actions associated with the above situations are presented in Volume One, Operations Section Event Specific Checklist.

### **Exhibits**

Exhibit 1 - Pescadero and San Gregorio Creeks Stream flow

Exhibit 2 - Flood Control District Zones

Exhibit 3 - Coastside Creeks

Exhibit 4 - Bayside Creeks

**Exhibit 1 Stream Flow Gauges**

**PESCADERO AND SAN GREGORIO CREEKS STREAM FLOW  
ANNUAL MEASURED STREAM FLOW FOR  
PESCADERO AND SAN GREGORIO CREEKS  
WATER YEARS 1970-1981**

**(in acre-feet<sup>a</sup>)**

WATER YEAR <sup>b</sup>	PESCADERO CREEK <sup>c</sup>	SAN GREGORIO CREEK <sup>d</sup>
1970	30,420	28,790
1971	18,540	22,840
1972	4,660	5,630
1973	51,830	61,220
1974	47,290	57,820
1975	25,780	19,020
1976	2,990	2,220
1977	1,250	840
1978	45,620	34,110
1979	16,600	18,210
1980	41,520	34,630
1981	9,640	9,250
<hr/>		
<b>12 Year Mean</b>	24,680	24,550
<b>12 Year High</b>	(1973) 51,830	(1973) 61,220
<b>12 Year Low</b>	(1977) 1,250	(1977) 840

**SOURCE:** US Geological Survey, Water Resources Data for California, Reports for Water Years 1970-1981.

- <sup>a.</sup> An "acre-foot" is defined as the volume of water that would cover one acre to a depth of one foot. Each acre-foot is equivalent to 325,851 gallons.
- <sup>b.</sup> A "water year" is the official term of measurement used by the US Geological Survey to monitor seasonal stream flow. It corresponds to the beginning of each rain season (October) and measures through to the end of September.
- <sup>c.</sup> The Pescadero Creek measuring station is located 5.3 miles upstream from the mouth of the creek (about 3.0 miles east of the town of Pescadero).
- <sup>d.</sup> The San Gregorio Creek measuring station is located just south of the town of San Gregorio, approximately 1.4 miles upstream of the mouth of the creek.

## Exhibit-2 San Mateo County Control District

<b>DISTRICT</b>	<b>AREA SERVED</b>	<b>TOTAL ASSESSED VALUE 1982-1983 (\$ MILLIONS)</b>
Colma Creek Flood Control Zone	Portions of Daly City, South San Francisco, Colma, Pacifica and other unincorporated areas	2,430
Colma Creek Flood Central Subzone 1	Central portion of South San Francisco, west of Highway 101	69
Colma Creek Flood Control Subzone 2	Parts of southern and eastern South San Francisco, completely surrounding Subzone 1	517
Colma Creek Flood Control Subzone 3	Portions of Daly City, South San Francisco and other unincorporated areas	1,844
Ravenswood Slough Flood Control Zone	Portions of East Palo Alto and Menlo Park	347
San Bruno Creek Control Zone 1	Lands owned by the San Francisco International Airport west of 101	5
San Bruno Creek Control Zone 2	The drainage basin area within the City of San Bruno	686
San Francisquito Creek Flood Control Zone 1	Southern East Palo Alto area, along the border between Santa Clara and San Mateo Counties	46
San Francisquito Creek	Portions of Woodside, Menlo Park, East Palo Alto and Portola Valley, bounded by the Santa Clara, San Mateo borderline and Skyline Blvd	1,330

## Exhibit-3 Coastside Creeks

Calara Creek	Pacifica
San Pedro Creek	Pacifica
Martini Creek	Montara
San Vicente Creek	Moss Beach
Denniston Creek	El Granada
Arroyo de en Medio	Granada
Frenchman's Creek	Half Moon Bay
Pilarcitos Creek	Half Moon Bay
Arroyo Leon Creek	Half Moon Bay
Aroyo Canada Verde	Half Moon Bay
Purissima Creek	San Mateo County
Lobitos Creek	San Mateo County
Tunitas Creek	San Mateo County
San Gregorio Creek	San Gregorio
Pomponio Creek	San Mateo County
Pescadero Creek	Pescadero
Butano Creek	Pescadero
Arroyo de los Frijoles	San Mateo County
Gazos Creek	San Mateo County
Whitehouse Creek	San Mateo County
Cascade Creek	San Mateo County
Green Oaks Creek	San Mateo County
Ano Nuevo Creek	San Mateo County
Finney Creek	San Mateo County
Elliot Creek	San Mateo County

## Exhibit-4 Bayside Creeks

Colma Creek	Daly City, Colma, South San Francisco
San Bruno Creek	San Bruno
Easton Creek	Burlingame
Sanchez Creek	Hillsborough
San Mateo Creek	San Mateo
Laurel Creek	San Mateo
Belmont Creek	Belmont
Pulgas Creek	San Carlos
Cordilleras Creek	San Carlos, Redwood City
Redwood Creek	Redwood City
Atherton Creek	Atherton
San Francisquito Creek	Menlo Park
Bear Gulch Creek	Woodside, Atherton
Corte Madera Creek	Portola Valley
Los Trancos Creek	Portola Valley, Los Trancos Woods