



VENTURA COUNTY FLOOD SAFETY PLAN

NOVEMBER 2016



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Abbreviations and Acronyms

ALERT	Automated Local Evaluation in Real Time
ALERT2	ALERT with a New Standard Protocol
AOC	Agency Operations Center
Cal Fire	California Department of Occupational Safety and Health Administration
Cal OES	California Office of Emergency Services
Cal OSHA	California Division of Forestry and Fire Protection
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
CNG	California National Guard
DWR	California Department of Water Resources
EAS	Emergency Alert System
EDIS	Emergency Digital Information Service
EMS	Emergency Management System
EOC	Emergency Operations Center
FCC	Federal Communications Commission
FEMA	Federal Emergency Management Agency
FWS	Flood Warning System
FSP	Flood Safety Plan
GC	Government Center
GPS	Global Positioning System
IC	Incident Commander
ICP	Incident Command Post
ICS	Incident Command System
JIC	Joint Information Center
MOY	Moorpark Operations Yard
NIMS	FEMA's National Incident Management System
NRCS	National Resources Conservation Service
NWC	National Weather Service
OA	Operational Area (County)
OES	Office of Emergency Services
O&M	Operations and Maintenance
PIO	Public Information Officer
PL 84-99	Public Law 84-99 USACE authority for emergency management Services
RACES	Radio Amateurs Civil Emergency Services
RD	Reclamation District

REOC Cal EMA's Regional Emergency Operations Center
RIMS Response Information Management System

SEMS Standardized Emergency Management System
SO Sheriff's Office
SOC Storm Operations Center
USACE United States Army Corps of Engineers
SOY Saticoy Operations Yard
USBR U.S. Bureau of Reclamation
WPD Watershed Protection District

1 Plan Introduction

1.1 Purpose

This Flood Safety Plan (FSP) outlines Ventura County's planned response to flood emergencies in or affecting Ventura County.

The purpose of the plan is to provide information, policies, and procedures that will guide and assist Ventura County (County) with 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 the County, local governments, special districts, and State agencies in flood emergency operations.

Although this is a public document, appendices to this FSP 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 FSP deleting restricted data may be obtained from the Ventura County Watershed Protection District website: <http://www.vcfloodinfo.com/the-crs-program/overview>

1.2 Scope

The County Flood Safety Plan:

- Establishes the emergency management organization to respond to a flood emergency affecting the County.
- Identifies policies, responsibilities, and procedures required to protect the health and safety of 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.

2 Concept of Operations

2.1 Situation Overview

Ventura County is located on the coast of Southern California. Areas adjacent to rivers, sloughs, creeks, and drainage canals and other low-lying areas are subject to flooding. Damaging floods in Ventura County were reported as early as 1862. On average, floods causing damage have occurred every five years since then. A 1945 report by the Ventura County Flood Control District reported that floods of sufficient magnitude to cause extensive damage occurred in 1862, 1867, 1884, 1911, 1914, 1938, 1941, 1943, and 1944 (Warren 1945).

A 1943 Flood Control District report compared the flow rates occurring in March 1938 to those occurring in January 1943. Piru and Sespe Creeks had flow rates of 35,600 and 56,000 cubic feet per second (cfs), respectively, in 1938 and 20,000 and 44,000 cfs, respectively, in 1943. The Ventura River had a flow rate of 39,200 cfs in 1938 and 43,000 cfs in 1943. Warren (1945) estimated that the damage from the 1938 storm totaled about \$1,010,000. The 1943 report showed numerous pictures of landslides, debris flows, flooded roads, and sediment-choked channels.

More recently, state and local protective facilities, such as dams, bypasses, and levees, afford a level of flood protection; however, the flood events of 1969, 1980, 1988, 1992, 1993, 1998, and 2005 demonstrated that there is still a significant flood threat in the county.

A flood occurs when the existing channel of a stream, river, canyon, or other watercourse cannot contain excess runoff from rainfall or snowmelt, resulting in overflow on to adjacent lands. In coastal areas, flooding may occur when high winds or tides result in a surge of seawater into areas that normally lie above the high tide line.

The county is vulnerable to a number of flooding sources caused by river floods, levee failures, drainage pump failure, and dam failure. These may produce major losses to public infrastructure and private property. Deep flooding caused by levee failure or overtopping remains a possible threat to some county locations.

A "floodplain" is the area adjacent to a watercourse or other body of water that is subject to recurring floods. Floodplains may change over time due to natural processes, changes in the characteristics of a watershed, or human activity such as construction of bridges or channels. In areas where flow contains a high sediment load, such as along the Santa Clara River. The course of a river or stream may shift dramatically during a single flood event.

Coastal floodplains may also change over time as waves and currents alter the coastline. Nationwide, floods result in more deaths than any other natural hazard. Physical damage from floods includes the following:

- Inundation of structures, causing water damage to structural elements and contents.
- Erosion or scouring of stream banks, roadway embankments, foundations, footings for bridge piers, and other features.
- Impact damage to structures, roads, bridges, culverts, and other features from high-velocity flow and from debris carried by floodwaters. Such debris may also accumulate on bridge piers and in culverts, increasing loads on these features or causing overtopping or backwater effects.
- Destruction of crops, erosion of topsoil, and deposition of debris and sediment on croplands.
- Release of sewage and hazardous or toxic materials as wastewater treatment plants are inundated, storage tanks are damaged, and pipelines are severed.

Floods also cause economic losses through closure of businesses and government facilities; disrupt communications; disrupt the provision of utilities such as water and sewer; result in excessive expenditures for emergency response; disrupt transportation both within Ventura County and from Los Angeles to San Francisco, and generally disrupt the normal function of a community.

In regions that do not have extended periods of below-freezing temperatures or significant snowfall, floods usually occur during the season of highest precipitation or during heavy rainfalls after prolonged dry periods. Ventura County is usually dry during the late spring, summer, and early fall and typically receives most of its rain during the winter months.

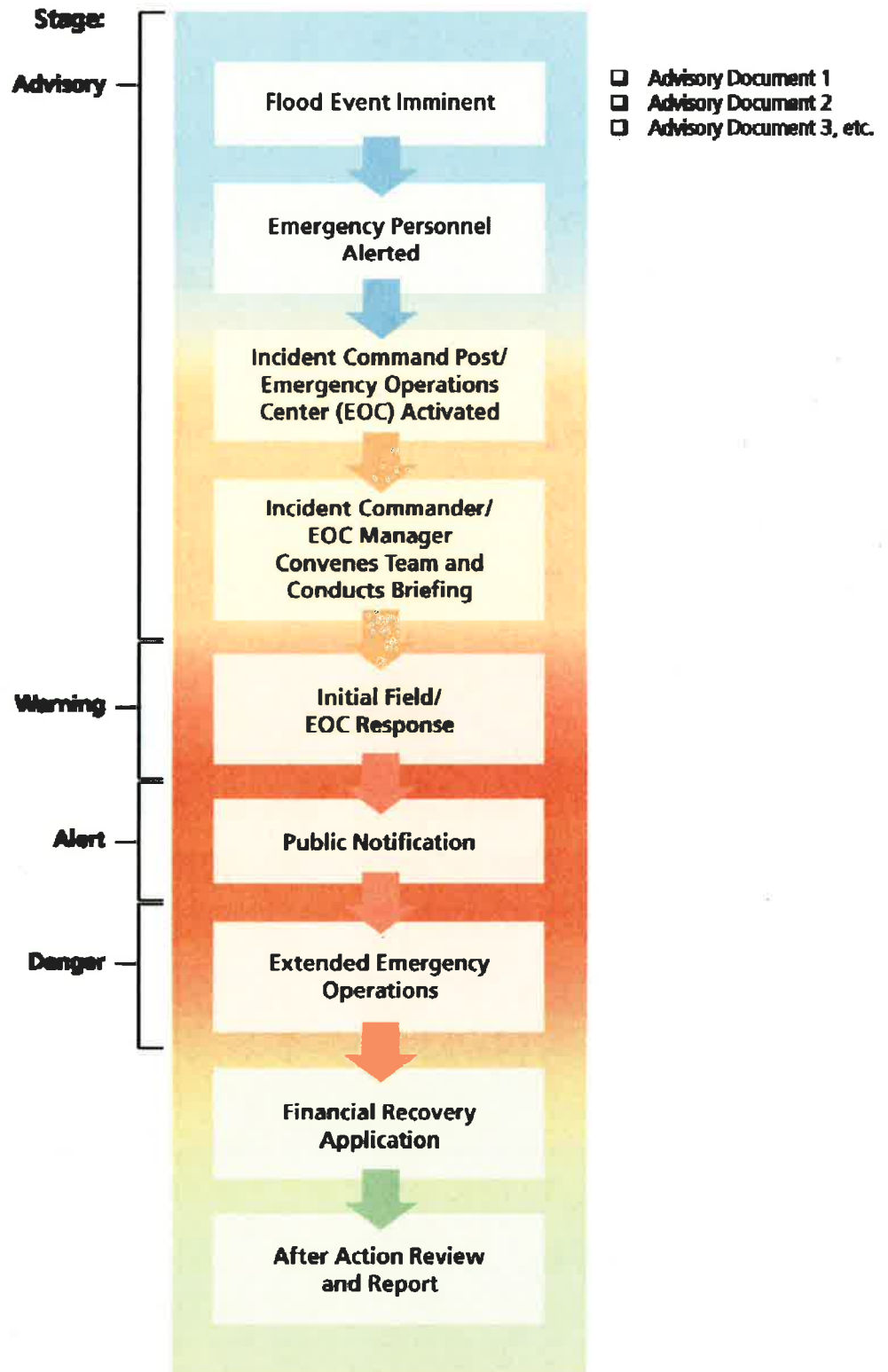
The average annual precipitation in Ventura County ranges from 15.1 inches at the coast to 28.8 inches in the mountains near Ojai, but most of this precipitation occurs in the winter months. Further, the prevailing weather patterns during the winter and the orientation of the mountain ranges in the northern half of the county combine to produce extremely high-intensity rainfall. Certain rainfall intensities can produce severe flooding conditions, particularly in small watersheds where flash floods are likely.

Flash floods are particularly dangerous. The National Weather Service defines a flash flood as one in which the peak flow travels the length of a watershed within a six-hour period. These floods arise when storms produce a high volume of rainfall in a short period of time over a watershed where runoff collects quickly. They are likely to occur in areas with steep slopes and sparse vegetation. They often strike with little warning and are accompanied by high-velocity flow.

There are fourteen dams which could have a significant impact on Ventura County residents in the event of dam failure. Ten of these dams are in Ventura County and include: Bard Reservoir, Casitas Dam, Lake Eleanor, Lake Sherwood, Las Lajas, Matilija Dam, Runkle Debris Basin, Santa Felicia Dam, Senior Canyon, and Linaloa Lake. The four in Los Angeles County include: Bouquet Canyon Dam, Castaic Dam, Pyramid Dam and the Westlake Reservoir.

Figure 1

Flood Response Flow Chart



2.2 General Approach to Seasonal Flood Operations

Ventura County is responsible for many levees, drainage facilities and flood control structures throughout the county. For a full list, <http://www.vcwatershed.net/publicMaps/conveyance/>.

Flood response levels for Ventura County will be based on river stage for the Ventura River, Santa Clara River, and Calleguas Creek. Not all flooding in the jurisdiction may be based on river stage. Therefore, for local flooding, additional flood prone areas will be based on specific criteria developed for those areas. Flood forecasting can be found at the following location: <http://www.vcwatershed.net/fws/VCAHPS/>. The FEMA floodplain maps, which may be located at (<https://msc.fema.gov/portal/search#searchresultsanchor>), are an additional source to find areas that are prone to flooding. Figure 1 demonstrates, in general, how resources are mobilized and various actions initiated as a function of the criteria.

2.2.1 Monitoring

Ventura 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 jurisdiction. For each gage location on a stream or water course, stages or flows have been categorized into three levels: monitoring stage, danger stage, or flood stage.

The real-time gages can be accessed through the internet either through the Resources area at: <http://www.vcwatershed.net/fws/>, or through the California Data Exchange Center (CDEC) within the California Department of Water Resources website (www.water.ca.gov). CDEC includes links to the National Weather Service and links to satellite photos. CDEC provides information on all of the California rivers and reservoirs. This allows direct monitoring of outflows at key dams affecting Ventura County. The following dams may affect Ventura County: Bard Reservoir, Casitas Dam, Lake Eleanor, Lake Sherwood, Las Lajas, Matilija Dam, Runkle Debris Basin, Santa Felicia Dam, Senior Canyon, and Linaloa Lake. There are also four dams in Los Angeles County, which include: Bouquet Canyon Dam, Castaic Dam, Pyramid Dam and the Westlake Reservoir.

2.2.2 Analysis and Initial Response

After compiling monitoring and surveillance information, the 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. 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.

Watershed Protection District (District) Operations and Maintenance (O&M) begin storm patrols (including dams and levees) to monitor these conditions when triggering events occur.

2.2.2.1 Field Patrol Trigger

District Zone 1 begins storm patrols when significant storms are predicted or the forecast models

show flooding may occur within the Ventura River watershed.

District Zone 2 begins storm patrol when significant storms are predicted or the forecast models show flooding may occur within the Santa Clara River watershed.

District Zone 3 begins storm patrols when significant storms are predicted or the forecast models show flooding may occur within the Calleguas Creek watershed.

District Zone 4 begins storm patrols when significant storms are predicted or the forecast models show flooding may occur within the Potrero Creek, Sycamore Canyon, Cuyama River or Lockwood Valley areas.

If conditions exceed their capabilities on any of the channels, or if boils or slumping down are observed on levees, O&M supervisors will contact the EOC to signal a potential flood event and to trigger mutual aid resources.

DWR Flood Operations Center (FOC) may request support from the U.S. Army Corps of Engineers (USACE) under PL 84-99.

2.2.3 Alerting and Activation

As coordinated operations continue, O&M supervisors will brief their Agency Operations Center (AOC) and the Emergency Operations Center (EOC). Depending on the flooding situation, the AOC and EOC will be activated and staff will respond to the EOC to coordinate operational area response to the disaster with other agencies.

The Watershed Protection District (WPD) Operations Center may also be made operational. County EOCs remain operational until the threat from flooding is contained and controlled.

2.3 Public Notification for Flood Threats

2.3.1 Initial Notifications

Initial notification is often limited in detail. For example, a flash flood warning may be issued by the National Weather Service (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 local EOC activation. A follow-up call from the local EOC to the notifying party or agency can be made to obtain further detail.

- A flash flood watch means it is possible that rain may cause flash flooding in specified areas.
- A flash flood warning means flash flooding is highly likely, imminent, or is occurring.
- A flood watch means long-term flooding is possible in specified areas.
- A flood warning means long-term flooding is either imminent or is occurring.

The EOC may receive direct warning from DWR, NWS, or the California Office of Emergency Services (Cal OES). The U.S. Bureau of Reclamation (USBR), USACE, or other agency that locally

controls dams will advise of dam incidents, significant releases, or significant changes in releases. The county is responsible for warnings in unincorporated areas. Various incorporated areas have responsibility for evacuation notification of the public within their boundaries. They 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 County of Ventura. Due to the flashiness of the rivers in Ventura County the activities related to storms are not only based on stage of river flows. Weather predictions, forecast modeling and river stages all dictate which phase the County is in.

PHASE I: Normal Preparedness

With a weather prediction indicating an incoming storm, the flood warning system is checked to make sure all critical stations are functioning properly. Additionally, areas of known flood issues will be checked to make sure things such as drains are clear and ready for the predicted storm event.

PHASE II: Increased Readiness

When the weather forecasts along with the stream flow modeling predictions indicate a significant storm event the County makes sure there is enough staff coverage for the possible event along with making sure that the staff has everything needed such as sand bags and measuring equipment ready to go

PHASE III: Emergency Preparedness

At this phase the staff may start to be deployed to critical known trouble areas. Staff not already at work are notified. All trucks and heavy equipment are filled with gas and ready with required gear and equipment. The SOC and EOC have discussed possible staffing for the event.

PHASE IV: Emergency Response Phase

The SOC and/or the EOC have been activated and are now staffed to coordinate equipment and responses. Staff are working report problems and high water areas.

PHASE V: Recovery

The staff works areas reported with problems in an order of critical importance.

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 situation. County of Ventura 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 elevations.

2.5.1 Phase I: Normal Preparedness

Departments having emergency responsibilities assigned in this FSP 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 counterpart organizations of other departments and jurisdictions.

During this Phase, Flood Fight Training is generally given. The County of Ventura conducts pre-season coordination and holds an annual Storm Day including the cities to practice storm event response.

The procedure checklist shall be reviewed periodically and updated where necessary. River advisory stages would fall under this phase. The river advisory stage occurs when the elevation of the water bodies in any of the four (4) zones is at or below specified depths.

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, an unusually rapid snowmelt, or rising stream flows.

The river warning stage would trigger Phase II (monitor/initial action). The river warning stage is initiated when the elevation at specified locations in the 4 zones exceeds the river advisory stage.

As this situation develops, the head of the Ventura County Sheriff, or a designee, will evaluate information, decide upon necessary action, and initiate appropriate response. Generally this means to put 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. County of Ventura will coordinate with the following EOCs (if operational).

County of Ventura EOC goes into operation. The extent of staffing is event-driven and at the discretion of the EOC Director.

The 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, activates 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 EOCs 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 and the Cal OES Regional Operations Center for the Inland 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: Emergency Preparedness

This phase begins when an evaluation of the situation indicates it is a matter of “when” rather than “if” emergency conditions will exist. The river flood stage would exist under this phase.

The river flood stage starts when the elevation at specified locations in the 4 zones exceeds the river advisory stage.

The Ventura County Sheriff Officer of County of Ventura or a designee, will immediately put emergency plans into full operation and conduct operations as follows:

- Advise responders to activate resources and advise the Sheriff’s Office of Emergency Services.
- Where resources appear insufficient, prepare to apply for and receive mutual aid.
- Contact the Sheriff’s OES to give available information as to the kind of threat, its imminence, potential severity, area affected, and associated problems. Reports will include action being planned or taken, as well as possible deficiencies in critical emergency resources.
- Should the possible or expected emergency develop, ensure that ALL alerted agencies are promptly notified of this new change in conditions. This may also prompt immediate public notification, as is required by the nature of the threat.
- Recommend that the EOC be opened when projections clearly indicate a potential need for EOC multi-agency coordination.

2.5.4 Phase IV: Emergency Response Phase

This phase can be initiated by a river danger stage of flood elevation in any of the 4 WPD zones or upon occurrence of a flood emergency requiring extraordinary effort. The nature of response operations is dependent upon the characteristics and requirements of the situation. The emergency organization will be mobilized to cope with the specific situation. Each service, when mobilized, will operate according to the provisions of this FSP. Priority will be given to operations such as the following:

- Survey and evaluate the emergency situation and advise the County of Ventura AOC
- Have the EOC immediately notify the Ventura County Sheriff Officer of County of Ventura
- Mobilize, allocate, and position personnel and materials for patrolling and flood fight
- Establish staging areas for personnel, supplies, and equipment
- Establish Evacuation Centers to aid in managing the movement of people from the area
- Produce and disseminate emergency information and advice to other EOCs when a Joint Information Center is not operational
- Protect, control, and allocate vital resources
- Restore or activate 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 FOC involving all parties. When local resources are committed to the maximum and additional materials/personnel are required to control or alleviate the emergency, requests for mutual aid will be initiated through the county EOC.

2.5.5 Phase V: Recovery

County of Ventura will address identified recovery needs. Governmental assistance could be required for an extended period. Recovery activities would include:

- Removal of debris
- 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

This stage has three major objectives:

- Reinstatement of family autonomy and the provision of essential public services
- Permanent restoration of public property along with reinstatement of public services
- Performance of research to uncover residual hazards, to advance knowledge of disaster phenomena, and to provide information to improve future flood operations

2.5.6 Federal and State Emergency and Disaster Assistance

State and federal support during the Emergency Phase:

- County of Ventura will consider requesting Cal OES and DWR support during the Emergency 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 declares a disaster, the Governor may support it by proclaiming a State of Emergency and then requesting the President make a National Disaster declaration for the affected area.
- If the President declares the area a national disaster, assistance from the Federal Emergency Management Agency (FEMA) will 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. Request for this authority must be made in a timely manner (30 days).

3 Organization and Assignment of Responsibilities

3.1 General Organization and Responsibilities

3.1.1 Levee Flood Control Operations

Within Ventura County unincorporated area, the WPD has responsibility for the levees within its jurisdiction. WPD has engineers and staff to help with flood fight responsibilities during flood emergencies. The WPD can request mutual aid and coordinates with the County AOC and EOC during flooding episodes.

3.1.2 Mutual Aid Regions and Regional Support

Mutual Aid requests go to the EOC 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 EOC may then request resources from the DWR, and USACE.

3.1.3 State Flood Control Operations

DWR is responsible for State flood control operations through its FOC, Division of Flood Management, other divisions, and their 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.

3.1.4 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 their dam releases and reservoir operations.

4 Direction, Control, and Coordination

4.1 Ventura County Sheriff

The Ventura County Sheriff Officer establishes overall policies and priorities, with approval of the Ventura County Board of Supervisors, providing direction for local flood response. Responsibility for managing emergency response within these policies and priorities is delegated to the EOC Manager and, on scene, to the Incident Commander (IC), who reports to the EOC Operations Section Chief. The EOC supports Incident Response by supplying resources, equipment, and supplies. Where supplies are limited, the EOC establishes priorities for allocation.

4.2 Incident Commander

The IC at the flood fight scene is in charge of 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

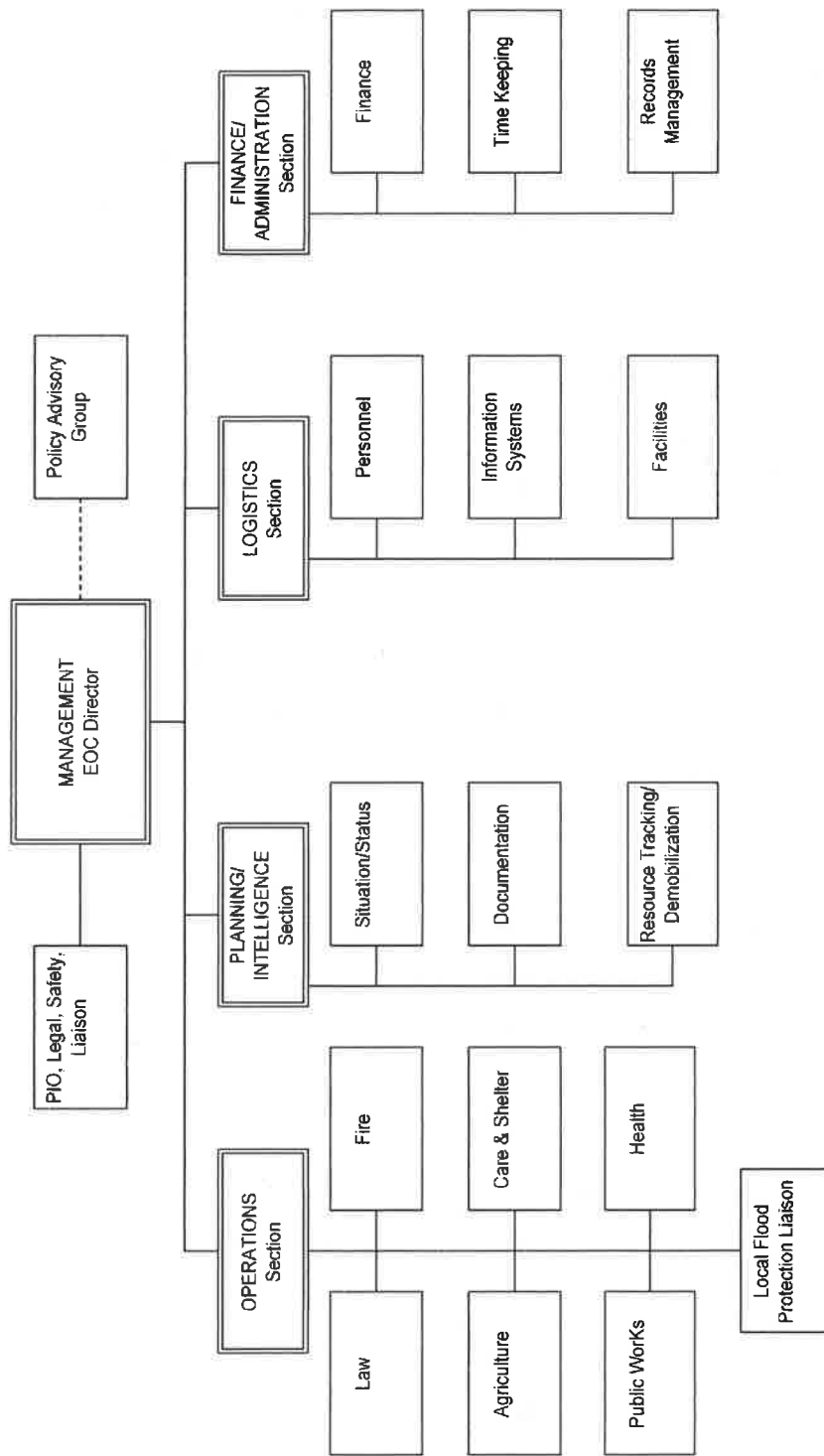
The Public Works Agency Duty Officer has authority to activate this plan based on the previously identified stages.

4.5 Standardized Emergency Management System Structure

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

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

Figure 2. Sample SEMS-based Emergency Organization Chart



OPERATIONS

Law Branch:

- Field Ops/Evacuations
- Detention
- Dispatch

Fire Branch:

- Fire
- HazMat Response
- Rescue

Health Branch:

- Environmental Health
- Mental Health
- Public Health

Public Works Branch:

- Reconnaissance
- Engineering Support
- Heavy Equipment Support

PLANNING & INTELLIGENCE

Situation/Status Branch:

- Planning & Forecasting
- Field Observation
- Information Collection/ Display

Documentation Branch:

- Written
- Visual/Graphic

Resource and Demobilization Branch:

- Personnel
- Equipment
- Material

Ag Branch:

- Biologists
- Animal Control

Care & Shelter Branch:

- Care & Shelter
- Red Cross
- Medical Transport

Local Flood Protection Liaison Unit:

- Levee District __
- Levee District __
- Reclamation District ____
- Reclamation District ____
- Reclamation District ____
- Reclamation District ____

LOGISTICS

Procurement Branch:

- Supplies
- Equipment

Personnel Branch:

- Employees
- Volunteers

Facilities Branch:

- EOC
- Off-Site Work Areas
- R&R Areas

Information Systems Branch:

- Network Technicians & Admin
- Help Desk
- Communications

FINANCE & ADMINISTRATION

Finance Branch:

- Invoice Processing
- Payroll Tracking

Table 1 provides a summary of critical responsibilities, indicating the part of the SEMS structure having primary responsibility for leadership in those functions and the part providing support.

Table 1. Summary of Critical Flood Emergency 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
Ventura County Sheriff	S		S	S									
EOC Manager/ Incident Commander	S	S	S	P					S	S		S	S
Public Information Officer	P	S	S						S	S		S	S
Operations Section		S	P	S	P	P	P	P	P	P	P	S	S
Plans and Intelligence	S	P	S	S	S		S	S	S	S	S	S	P
Logistics	S		S	S	S	S	S	S	S	S	S	S	S
Finance and Administration				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 is 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 to allow the public as much warning time as possible so they can evacuate or avoid the area. Ventura County is committed to notifying the public as to the conditions of area levees, rivers, and tributaries that threaten flooding and starting evacuation 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. In Ventura County and surrounding areas, there are many ways to inform the public. These include:

- Emergency Siren System
- Emergency Alert System
- Reverse 9-1-1 System

- Fire and Police Vehicle Loudspeakers
- Neighborhood Watch and other community support programs
- The Sheriff's OES Operator for the public to call for more information.

4.6.1 Notification Protocols

The Public Notification System is activated by the Ventura County Sheriff Officer to provide public instructions to local TV and radio stations before activating sirens. All media outlets must be notified of the emergency such that they are providing public alert announcements. The actual verbal or written messages that will be given – whether through the media or other messaging systems – are the responsibility of the Public Information Officer, the EOC, and the Joint Information Center when it is open. Sample notices are contained in Part III, References and Supporting Documents.

In case of an evacuation, the County of Ventura will notify the area's special needs care providers of the emergency. These providers will be asked to notify their clients in the affected area and give instructions to their clients. *{{NOTE: Service providers will need ongoing training that the County of Ventura would provide as to how this evacuation coordination will occur, and as to how combined resources can work together to affect a successful evacuation of the special needs clients. Currently, only some of the service providers are prepared to offer this notification support, or may only provide client notification during work hours.}}*

4.7 Resources

4.7.1 Staffing

County of Ventura employs staff that are designated as emergency responders. Additional flood emergency response staffing may come from other County of Ventura employees.

4.7.2 Integration with Police, Fire Responders

SEMS creates a set 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 complexities. 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. So, SEMS provides standard response and operation procedures to reduce problems and potential miscommunications on such incidents.

4.7.3 Getting and Training Volunteers

One of the most important aspects of flood response in County of Ventura is the myriad of government and non-government agencies and organizations and local businesses that partner with County of Ventura. The volunteer groups provide critical personnel and resources.

County of Ventura maintains 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. County of Ventura has registered all CERT members as Disaster Service Workers.

4.7.4 Cal OES and DWR Assistance

During emergency response to flooding or storms County of Ventura may require assistance in performing sand bagging, emergency debris clearance, and similar activities to save lives and protect public safety. 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 Operational Area (OA). If Ventura County OA resources are not sufficient or timely, then the request is 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 crews are usually tasked to a State agency. Details of acquiring additional resources are contained in Appendix C.

4.8 Disaster Intelligence

Disaster intelligence means the tools and techniques County of Ventura used 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

4.8.1.1 Weather Forecast

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 National Weather Service provides daily briefings on upcoming weather as part of its role in the DWR FOC. County of Ventura participates in these briefings starting at the River Advisory stage.

4.8.1.2 River Forecast

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 the river. Hydrologists for DWR work with the National Weather Service to provide twice daily forecasts of river height at various points. These forecasts are issued as "River Bulletins" and County of Ventura subscribes to DWR's email distribution system. In addition, County of Ventura 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.

4.8.1.3 Flood-Related Events, such as Levee Slumps or Boils

As important as it is to anticipate the potential situation, it is equally vital to be aware of current conditions and sudden shifts in those conditions. County of Ventura maintains regular contact with Storm Patrols and other field responders. This ensures it quickly learns of any changes in the situation, facilitating prompt response.

4.8.1.4 Traffic Information

Similarly, County of Ventura maintains regular contact with Law Enforcement, County Department of Transportation, Caltrans, and others to ensure situational awareness of traffic issues. Reports from the EOC apprise emergency managers of flooded intersections due to storm drains being stopped up.

4.8.1.5 Maps of Staging Areas and Stockpiles

County of Ventura has tasked the Administration/Finance Branch with maintaining its inventory of flood response materials and supplies at their locations. Details are contained in Section 6.

4.9 Essential Services

If the inhabitants are expected to be **essential service providers**, it is the policy of County of Ventura that new buildings shall be required to be located outside an area that may be flooded in the event of any levee failure or 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 the policy of County of Ventura 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 the policy of County of Ventura 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. County of Ventura 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 Building” means 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.

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 (Public Information Officer or PIO), available Communications Technicians, Message Center Operators, and Messengers (if needed). Personnel for these positions come from the County of Ventura staff. Additional personnel are available from the local Radio Amateurs Civil Emergency Services (RACES) organization and from State agencies through Mutual Aid.

5.2 Public Alerting Systems

5.2.1 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.

The system is used within County of Ventura on a voluntary basis during day-to-day situations that pose a threat to the safety of life and property. County of Ventura uses a commercial broadcast facility – (call letters, frequency) – as the central point of information dissemination under the EAS format. Access to EAS is coordinated through the County of Ventura Office of Emergency Services. (Please refer to Appendix D Evacuation.)

{{NOTE: Further specifics about activation protocols, including authority, contact points, procedures, and mechanisms need to be added here with appropriate security protocols after being worked out locally.}}

5.2.2 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. For access to EDIS, contact County of Ventura OES at 805-654-2551.

The purpose of EDIS is to alert, inform, and reassure the public about current or foreseen threats to public safety. Any bulletin that serves those purposes is appropriate for distribution on EDIS, provided that it is clear, concise, timely, accurate, correctly prioritized, and targeted to the affected geographic area.

5.3 Local Radio Systems

The following *local* communications systems operate within County of Ventura.

5.3.1 Radios

County of Ventura has the following radio equipment. Please see Table 1 for frequencies.

Base Station

Mobile in all field vehicles

Handheld available in all field vehicles

5.3.2 Consolidated Public Safety Communications System (CPSCS)

The County of Ventura functions as the primary 9-1-1 Public Safety Answering Point (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, fire, and EMS agencies.

In addition to the locally available dispatch frequencies, the County Public Safety Communications Centers 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.

- Law Enforcement Channels
- Fire Channels
- EMS Channels
- LMA/RD Channels
- Digital Information Systems

5.3.3 Local Communications Support Resources

This section describes locally available communications resources

5.3.3.1 Mobile Emergency Coordination Unit (MECU)

County of Ventura OES maintains a fully equipped mobile communications vehicle (Mobile Emergency Coordination Unit - MECU) that may be used to support or enhance existing emergency communications anywhere in the county. The MECU is totally self-contained and possesses public safety and local government radio dispatch capabilities for use during emergency situations. The MECU is stationed at the County OES center. Requests for use of the MECU by any local government agency must be forwarded to the County OES or the Operational Area EOC, when activated.

5.3.3.2 Radio Amateur Civil Emergency Services (RACES)

The RACES network operates on amateur radio frequencies (UHF, VHF, and 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

Table 2 Incident Radio Communications Plan

INCIDENT RADIO COMMUNICATIONS PLAN			1. Incident Name: COUNTY-WIDE PLAN	2. Date/Time Prepared: 5/2/96	3. Operational Period Date/Time:
System/Cache	Channel	Function	Frequency	Assignment	Remarks
	SEMS-1 SEMS-2 SEMS-3	COMMAND/ DISPATCH	159.210 pl 100.0 156.150 pl 100.0 154.010 pl 100.0	VCSSO WEST CO. VCSSO EAST CO. VCFPD DISPATCH	Agency Dispatch to Check-in (Base/MTN)
	SEMS-4	INFORMATION OFFICERS	158.730 pl 100.0	VCSSO CAR to CAR	Simplex Channel Cell Phones for Backup
		OPERATIONS			
	SEMS-5	Law Enforcement Ops Branch	155.535 pl 114.8	VCSSO TACTICAL	(Base/MTN)
	SEMS-6	Fire Operations Branch	154.325 pl 100.0	VCFPD BLUE	(Base/MTN)
	SEMS-7	EMS OPS	155.205 pl 103.5	EMN	(Base/MTN)
	SEMS-8	AIR OPS	155.160 pl 100.0	VCSSO SAR	Simplex Channel
	SEMS-9	TRAFFIC OPS	156.015 pl 100.0	VCSSO CITYWIDE	Simplex Channel
		LOGISTICS			
	SEMS-10	BASE/SECURITY CMDND POST	TX 158.94/ RX 153.845 pl 100.0	LG-3 M/A (South Mtn)	(Base/MTN)
	SEMS-11	FLEET/EQUIP MAINT	TX 156.240/ RX 151.025 pl 141.3	PW ROADS	(Base/MTN)
	SEMS-12	RESTAT CHECK-IN	156.075 pl 100.0	CALCORD	Simplex Channel
VNC - ICS 205	5. Prepared By (Communications Unit) SHERIFF'S OFFICE of EMERGENCY SERVICES				

and communications post within the 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. Several cities have well-established amateur radio organizations assigned to support their local EOC operations. When the EOC is activated, local RACES networks coordinate with the RACES Coordinator stationed at the EOC.

5.3.3.3 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 EOC will/will not actively monitor CB channels. County of Ventura uses CB as a backup system, recognizing that CB communications are usually monitored.

5.3.3.4 Mobile Emergency Coordination Unit (MECU)

County of Ventura OES maintains a fully equipped mobile communications vehicle (Mobile Emergency Coordination Unit - MECU) that may be used to support or enhance existing emergency communications anywhere in the county. The MECU is totally self-contained and possesses public safety and local government radio dispatch capabilities for use during emergency situations. The MECU is stationed at the County OES center. Requests for use of the MECU by any local government agency must be forwarded to the County OES or the Operational Area EOC, when activated.

5.3.4 Telephone Systems

5.3.4.1 Common Carrier Telephone Service

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

5.3.4.2 Cellular Phones

-Each individual field personnel is issued a cell phone or has access to a cell phone during flood emergencies.

5.3.4.3 Two-Way Radios

Field trucks are equipped with two-way radios that can be used to communicate in the event that there is no cell phone coverage or accessibility.

5.3.4.4 Satellite Phones

Satellite phones are used in remote areas for communication and assigned to managers in the event of an emergency.

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.

County of Ventura’s solution to these communications weaknesses has been to develop a fault-tolerant system. In this system, a failure of one weak link can be addressed by additional capacity elsewhere in the system.

5.3.5.1 Loss of Power

Loss of emergency power has been the primary cause of communications failure in past emergencies. County of Ventura’s solution to power loss has been to ensure proper installation and generator maintenance. County of Ventura tests its generators regularly and maintains adequate stockpile of fuel.

5.4 Protocols for Contacting Storm Patrols

Initial contact with the storm patrol teams is in accordance with the Activation Tree (Appendix A). Generally, communications with storm patrol teams will be through the Public Works Agency 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

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 systems together. The manner in which 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 systems.

County of Ventura has chosen to meet interoperability needs by

- Maintaining several spare handheld radios to exchange on scene
- Using cell phone
- Collocating dispatch personnel

5.6 Media Interface

The County of Ventura EOC will establish a Joint Information Center and designate a Public Information Officer (PIO). 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 Incident Commander on scene.

(Sample Press releases are in Part III. References and Supporting Documents)

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 created a formal structure, within which each jurisdiction retains control of its own personnel and facilities, but can give and receive help whenever it is needed. State government, on the other hand, is obligated to provide available resources to assist local jurisdictions in emergencies.

County of Ventura has developed and maintains a current emergency plan compatible with the California Master Mutual Aid Agreement. This Flood Safety Plan 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 Flood Safety Plan is coordinated with those of neighboring jurisdictions to ensure mutual compatibility.

6.2 Record Keeping

County of Ventura tracks, records, and reports on all County of Ventura flood response personnel time. County of Ventura collects and maintains documentation on all emergency information needed for reimbursement by Cal OES or FEMA. County of Ventura 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 management principle. It implies that all assets and personnel during an event need to be tracked and accounted for. It ensures maintenance of accountability over all resources. Thus, they 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 people during a flood. The objective of resource management is to (a) maximize efficient resource use while maintaining cost-effectiveness and resource safety, (b) consolidate control of single resources in order to reduce communications activity, and (c) instill resource accountability. Resource management enhances the benefit of mutual-aid agreements and improves interoperability.

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 on the resources applied to flood response.

6.4 Stockpiles – Location and Access

County of Ventura maintains stockpiles of flood fight equipment and supplies in the following locations.

Location	Access Contact	Emergency Access
PWA Saticoy Yard	John Lagomarsino	805-672-2100
PWA Moorpark Yard	Manny Aragon	805-378-3033

6.5 Staging Areas

County of Ventura has identified the following sites for use as Staging Areas for incoming resources.

Location	Address	Phone
PWA Saticoy Yard	11201 Riverbank Drive Ventura, CA 93004	805-672-2100
PWA Moorpark Yard	6767 Spring Road Moorpark, CA 93021	805-378-3033

6.6 Evacuation Centers

County of Ventura has identified the following sites for use as Shelter and Care facilities.

Location	Address	Contact
Varies with location of emergency		

6.7 Equipment

Saticoy Yard

(15) Three-cell watertight flashlights	(1) Light plant
(45) 'D' cell batteries	(20) Orange vests
(15) Cal OSHA approved hardhats	(10) GPS Units
(15) Flat-tipped shovels	(10) Portable radios

(20) Sets assorted size raingear	(6) US Coast Guard-approved lifejackets
(14,000) empty sandbags	(50) Orange Cones
(3) Generators 3,500 KW or larger	(200) Red wire marking flags
(30) Vehicles with mobile radios	(1) Base radio

Moorpark Yard

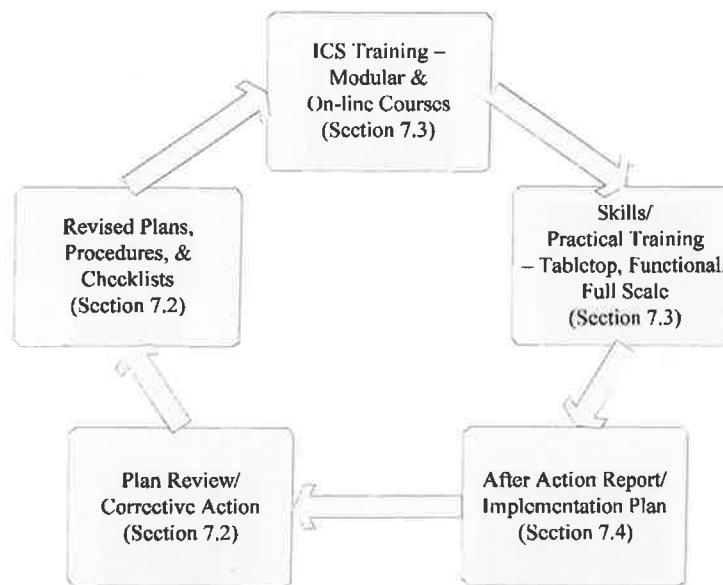
(15) Watertight flashlights	(20) Orange vests
(60) 'D' cell batteries	(10) Portable radios
(6) US Coast Guard-approved lifejackets	(10) GPS Units
(15) Cal OSHA approved hardhats	(25) Vehicles with mobile radios
(10) Flat-tipped shovels	(1) Base radio
(1) Light plant	(20) Sets assorted size raingear
(14,000) empty sandbags	(50) Orange Cones

7 Plan Development and Maintenance

7.1 Plan Development

The Watershed Protection District Director has primary responsibility for developing, reviewing, and updating this Flood Safety Plan on a regular basis. The Watershed Protection District Director will request input from individuals, jurisdictions, and agencies having responsibilities under this plan. Figure 3 shows the County of Ventura Plan Maintenance cycle.

Figure 3 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 Watershed Protection District Director
- 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 Watershed Protection District Director when changes occur or are imminent.
- These changes will be incorporated into this plan, published, and distributed to jurisdictions and agencies holding this plan (see Distribution List).

7.3 Training and Exercises

All emergency responders from Agency/Jurisdiction are strongly encouraged to take advantage of FEMA's on-line training. In addition, the Watershed Protection District Director 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 training records. This plan will be exercised regularly. The Watershed Protection District Director will conduct emergency preparedness exercises in accordance with an annual exercise schedule. Jurisdictions and agencies having assigned responsibilities under this plan must ensure assigned personnel are properly trained to carry out these responsibilities. See also specific training for Storm Patrol and Flood Fight.

Finally, after a draft of the Flood Water Removal Appendix is complete, County of Ventura will 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. The Appendix will then be made final.

7.4 Evaluation

The Watershed Protection District Director will coordinate and facilitate post-incident analyses following emergencies and exercises. An After-Action Report and Implementation Plan will be prepared by Watershed Protection District Director and distributed to those jurisdictions and agencies involved in the emergency or exercise.

8 Authorities and References

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

8.1 Federal

- 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

- 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 sec)
- 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

- Ordinance of the County of Ventura relative to Workers' Compensation Insurance for Registered Volunteer Disaster Service Workers, dated February 9, 2010 .
- Resolution of the County of Ventura Board of Supervisors adopting the California Disaster and Civil Defense Master Mutual Aid Agreement, dated March 3, 1958.
- Adoption of the County of Ventura Flood Safety Plan on (Date) by the Ventura County Board of Supervisors.

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 The California Emergency Management Agency (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 directed to the Ventura County Operational Area EOC (or County OES if the EOC is not activated) for processing. 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

There are independent OASIS locations through the EOC, allowing for rapid, reliable communications with Regional/State and Operational Area Command Centers. Locations are in the EOC and in the County of Ventura Communications Center.

A.1.4 Mobile Command & 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. *{{NOTE: LMAs and Reclamation Districts may choose to leave this section out of their plan, as they generally lack access to these systems.}}*

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 Emergency Alert System (EAS) program feeds, and is occasionally used by California Highway Patrol aircraft to coordinate with their 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

NEWS RELEASE: Winter Storm Awareness Week and Family Preparedness Planning

Ventura County Board of Supervisors has issued a proclamation designating Winter Storm Awareness Week September 26-30, 2016, in Ventura County. 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 Agency/Jurisdiction 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.

A. 3 **Emergency Call-Down Tree**

Because the County of Ventura has the position of Duty Officer in both the Public Works Agency and in the Sheriff's OES, the individual assigned in this position has a full listing available at all times the handle call-down.

A. 4 **Emergency Contact Directory**

Agency Name	Contact Name	Office Phone
Public Works Agency	Duty Officer	805-654-3830
Sheriff's OES	Duty Officer	805-947-8120

A. 5 Sample Press Releases

News Release – Possible Flooding

NEWS RELEASE: Ventura County Public Works Agency (VCPWA) Monitors Storm; Citizens Should Review Plans

The VCWPA 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 Agency/Jurisdiction Emergency Operations Center was staffed (Day) from (Time) to (Time). 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.

Example News Release – Probable Flooding

NEWS 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, Ventura County Public Works Agency (VCPWA) has instituted storm patrols and other 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 out-of county evacuations take 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.

Example News Releases – Imminent or Occurring Flooding

EAS MESSAGE: Voluntary Evacuation

The Ventura Office of Emergency Services 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. Office of Emergency Services Ventura is strongly recommending voluntary evacuation to safeguard human life in the area.

The Office of Emergency Services Ventura 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

The County of Ventura is requesting activation of the Emergency Alert System at the direction of Chief Executive Ventura. The Chief Executive has ordered a mandatory evacuation of all persons located in (describe affected areas by landmarks where available).

Law enforcement personnel may be posted along evacuation routes to help people move as safely and quickly as possible.

Example News Releases – Re-Entry

Office of Emergency Services Ventura 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)

NEWS RELEASE: Exercise Precautions When Returning Home

Office of Emergency Services Ventura 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.
- 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.

Appendix B Storm Patrol

B.1 Purpose

The purpose of storm patrols is to have qualified personnel visually evaluate the performance of the County of Ventura facilities. Their intent is to determine the condition of the facility and to identify potential and existing problems:

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

Implementation of this procedure will ensure each member of the Levee Patrol Team is capable of participating in precautionary actions and emergency response that may occur with County of Ventura's facilities.

This program will predominantly be undertaken by the Public Works Agency, with operational support from the County of Ventura. 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 the County of Ventura
- 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 to become qualified 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 County of Ventura and the Public Works Agency have a responsibility to ensure the following equipment is staged in an approved location and is in serviceable condition. The following resources, resource lists, and locations shall be maintained by the listed agencies.

Public Works Agency Office Building

(20) Three-cell watertight flashlights	(4) 500-watt lights
(60) ‘D’ cell batteries	(2) Light standards
(20) CAL-OSHA approved hardhats	(8) Propane lanterns
(20) Flat-tipped shovels	(4) Portable radios
(20) Sets of assorted size raingear	(200) Orange wire marking flags
(20,000) Empty sandbags	(200) Yellow wire marking flags
(1) Generators 3,500 KW or larger	(200) Red wire marking flags

Ventura County Fire Department

(20) Watertight flashlights	(20) Orange vests
(80) ‘D’ cell batteries	(10) Portable radios
(26) US Coast Guard approved lifejackets	(10) GPS Units
(25) CAL-OSHA approved hardhats	(2) Vehicles with mobile radios
(6) Flat-tipped shovels	(1) Base radio

B.2.3 Component III – Storm Patrols

- The Division Supervisor will create routes that ensure complete coverage and, wherever possible, overlapping coverage

- The 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.

B.2.3.1 Motor Patrols

- The storm patrol will be initiated when a Phase III alert is declared or at the direction of the Sheriff's) OES Director, or upon request from the Public Works Agency. The storm patrol will consist of the following:
 - At least twenty four-wheel drive vehicles with mobile radio capabilities.
 - Two trained and currently qualified assigned people per vehicle.
 - Patrol areas will be divided by WPD zones as shown on the attached map. Figure 1
 - Radio designators will be designated as Zones one, two, three, or four.
 - Patrol crews will be rotated on a 12-hour frequency.
 - Completion of a Storm Patrol Activity Log will be required for each shift using ICS Form 214.
 - All members will receive a safety briefing and utilize appropriate safety gear.

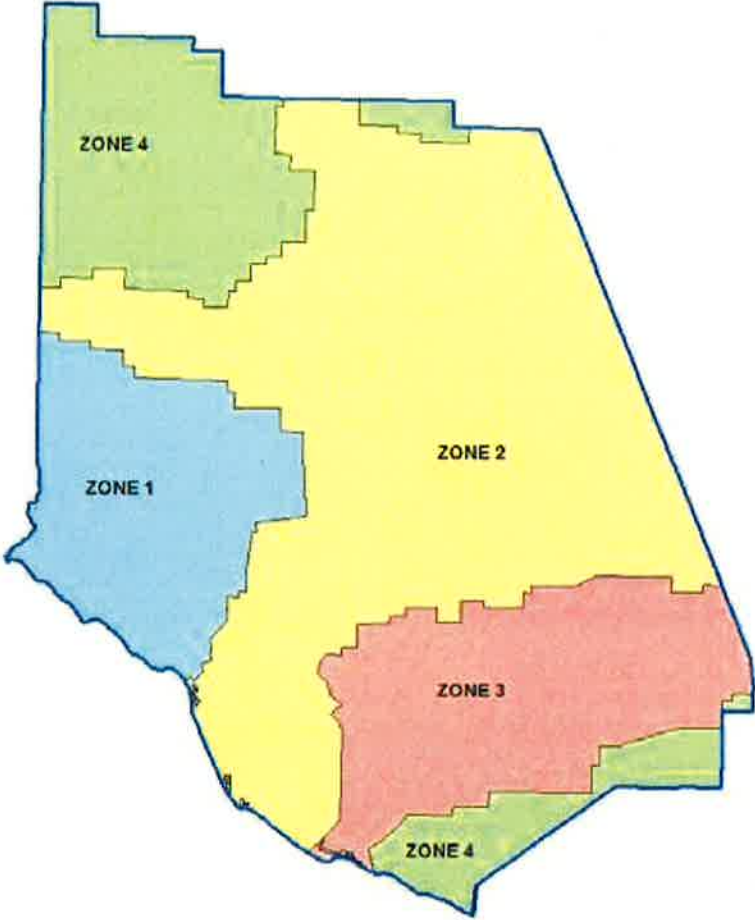
B.2.4 High Water Recording Procedures

- Record the extent of high water as data is received from gages.
- Post data to the web at <http://www.vcwatershed.net/fws/VCAHPS/>.
- Provide that information to the County EOC and DWR upon request

B.3 Augmenting Staff

When local personnel resources are depleted or reasonably committed, mutual aid is requested and coordinated within the Operational Area (OA). If OA resources are not sufficient or timely, the request is then forwarded to the Cal OES Regional Emergency Operations Center (REOC). The REOC evaluates and fills requests by (a) staff from unaffected OAs, (b) tasking a State agency, or (c) accessing federal assistance. (See Appendix C, Section 4 for Procedures.)

Figure 3 Storm Patrol Areas – Zones 1-4



Appendix C Flood Fight

C.1 Trigger(s)

At Phase II or upon notification of a potential problem by a storm patrol, establish necessary staging areas for supplies, equipment, and personnel. County of Ventura has ensured the staging areas are a safe distance from other emergency facilities, such as evacuation centers, shelters, and Incident Command Posts. If required by the situation, commence filling sandbags.

C.2 Prioritization

County of Ventura 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 plans to delay or contain the spread of flood waters have been developed and detailed in the Public Works Agency Emergency Procedures Manual.

Based on input from storm patrols and other informed observers, the County EOC establishes a Unified Command to set priorities for flood fight operations. All Incident Commanders conduct 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 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 designations 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

NOTE: *In most cases, relief cuts should be evaluated and planned for being made immediately after a storm breach to limit flooding in the area – with specific location, length, depth, equipment required, contractors, and evacuation rates.*

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 County Executive Officer of County of Ventura has the authority to activate this Appendix. Dispatch of Flood Fight Teams shall be in accordance with priorities set by the County EOC.

C.4 Personnel

County of Ventura maintains a cadre of emergency responders. Additional flood emergency response staffing comes from other County of Ventura employees and from volunteers.

When the County of Ventura requires additional people for sand bagging, emergency debris clearance, diking, and similar activities to save life and protect public safety, 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 Ventura County Operational Area (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 (a) there must be actual or imminent danger to life or public safety, and (b) 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 free of charge. Crews may require feeding and sheltering; transport vehicles may require gas and maintenance. These services 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 Ventura County OA, the EOC will forward unfilled requests to the Inland REOC Operations Section. The REOC will follow up with the Ventura County OA 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, hard copy of the form should be faxed to the Inland 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 Ventura County OA EOC must take special care not to duplicate requests with any 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 below).

C.4.6 Fire Mutual Aid

Unlike procedures for other types of emergencies, crews supervised by Cal Fire for flood fight are ***not*** accessible under the Fire and Rescue Mutual Aid Plan. All requests for crews for flood fight 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 Ventura County OA Region Fire Branch coordinator and the Ventura County OA Construction and Engineering Branch coordinator 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 Ventura County Environmental Health Division keeps a master list of all permitted hazardous material locations in Ventura County and is responsible for managing entries in the California Environmental Reporting System (CERS). CERS is a statewide web-based system to support California Unified Program Agencies (CUPAs) and Participating Agencies (PAs) in electronically collecting and reporting various hazardous materials-related data as mandated by the California Health and Safety Code and new 2008 legislation (AB 2286). Under oversight by Cal/EPA, CUPAs implement Unified Program mandates that streamline and provide consistent regulatory activities. Data on hazardous materials stored, locations, and other pertinent information are recorded in this system which is password controlled with limited access. Authorized positions within Ventura County Fire have access to this database for use during any emergency situation.

C.6 Materials and Supplies

In accordance with DWR recommendations, County of Ventura has stockpiled the following items for flood fight activities. *{{NOTE: This list of materials is suggested for every 5 to 6 miles of storm.}}*

- Visquine plastic - 15 rolls (@100'x20'x10mil)
- Sandbags - 15,000
- Twine - @ 200 lb. Test 10 boxes
- Wooden stakes - 500
- Tie buttons - 2,000

Tools Needed:

- Lineman pliers - 15 each
- Sledge hammers -15 each
- Shovels - 15 each
- Life jackets - all personnel

To expedite flood fight activities and preparedness, County of Ventura has identified the location of stockpiles and a contact number for the person(s) who has access. Persons in need of access information may call the either the PWA or Sheriff's Office Duty Officer for immediate communications information.

C.7 Public Supplies

County of Ventura has placed supplies of sand bags at strategic sites. Citizens affected or threatened by flooding may secure sand and sandbags at these locations.

Sandbag Stock Pile Sites

Location	Address	Contact Phone
All Sheriff's substations	Government Center, 800 South Victoria Avenue, Ventura	805-947-8120
Ventura County Fire Stations	165 Durley Avenue, Camarillo	805-389-9769
Saticoy Yard	11201 Riverbank Drive, Ventura	805-672-2100
Moorpark Yard	6767 Spring Road, Moorpark	805-378-3033

C.8 Logistics Procedures

Resource Management will track the rate of consumables used. When the approximate date of complete consumption approaches the date of reasonable delivery, the Logistic Chief shall be apprised. The Logistic Branch shall initiate procurement in consultation and coordination with the Finance/Administration Branch. The Logistics Chief will notify the Operations Chief.

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

C.9 Training in Flood Fight Procedures and Techniques

Personnel from County of Ventura participate in DWR Flood Fight training, which DWR provides annually. Also, see the DWR Flood Fight Manual located at the following site: 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, the Utility Representative becomes part of the IC's staff. In principal, the Utility Representative gives advice to the IC; in practice the Representative often works directly with the Operations Section Chief.

Appendix D Evacuation

D.1 Public Notification

The decision to evacuate rests with the Ventura County EOC; and the instructions to be given to the public are the responsibility of the Public Information Officer (PIO), the Joint Information Center and the 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. Ventura 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.

{{NOTE: Select only those systems applicable to the area.}}

A well-informed public will respond better to an emergency situation. In Ventura County and surrounding areas, there are several ways to inform the public. These include:

- Emergency Siren System
- Emergency Alert System
- Reverse 911 System
- Fire and Police Vehicle Loudspeakers

D.1.1 Emergency Siren System

The Emergency Siren System is a primary warning system. It has been modified so that the EOC can activate one siren, a group of sirens, or all sirens, depending on the need. The siren system is tested at 11:00 am on the last Friday of each month. Public education as to the significance and meaning of the sirens is a key component of this system.

The Emergency Siren System is activated by the EOC Incident Commander. Before a siren is activated, local radio and television outlets are notified such that they are providing public alert announcements. In a large event, all notifications must be handled by the EOC through the Joint Information Center. Coordination must occur among all call centers, public safety dispatch centers, and the EOC prior to siren activation. In localized immediate need events, the EOC Incident Commander must coordinate with the Ventura County PIO and the media to provide information. It is very important that all notification be coordinated to prevent confusion.

The Emergency Siren System works with the Emergency Alert System (EAS). Once Emergency Sirens are activated, the public turns on the radio (KVTA 1590) or the television to local network news (ABC 3 or 7, CBS 2, NBC 4 or KTLA 5) for emergency announcements. The public also may

find significant information on the National Weather Service radio or via media outlets using the Emergency Digital Information System.

D.1.2 Emergency Alert System

The EAS provides emergency information by radio, television, and cable television. There are strict rules on how to activate the system. The only individuals that can activate the EAS are the EOC Incident Commander and the Sheriff. The EAS should only be activated in extreme emergencies by these authorized individuals.

In an emergency it is very important that all the media outlets are kept informed of the emergency. Once the EOC is open it is the EOC's responsibility to keep the media informed on a regular basis so that current information flows to the public.

The EOC Incident Commander or the Sheriff have authority to activate the EAS and must supply the message through the PIO. The details of EAS activation are in the Ventura County Emergency Plan as well as in the EOC and the Joint Information Center.

D.1.3 Reverse 9-1-1

Ventura County has contracted with Sigma Communication to make telephone contact with households and businesses to alert them to an emergency. The system can make 96 calls a minute with a 30- second message. This allows for messages going to nearly 3,000 telephones each hour. If more capability is needed, the Ventura County can contact Sigma Communications for additional capacity.

The system expands in increments of 3,000 messages per hour. Messages are sent to phone numbers in the database that identifies the name and location of any caller to the 911 system.

The Reverse 911 can be activated by Sheriff or the EOC Incident Commander. They can either provide a discrete message to be sent or ask for a pre-recorded evacuation (or other) message be sent, and direct the company as to the target area. The message to be sent should be crafted or reviewed by the Joint Information Center, which is made up of PIOs from Police, Fire, Utilities, and other departments.

D.1.4 Vehicle Loudspeaker Systems

All Fire and Police vehicles have loudspeaker systems. The Sheriff Department also has helicopters with loudspeakers to make announcements over neighborhoods. The loudspeakers are very useful for neighborhood actions, directing traffic and warning people not to enter areas. Since the Emergency Sirens do not have the capability to provide voice instructions, the vehicle loudspeakers are the best way to give directions to the public. 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 Reverse 911 alerts).

In the case of emergencies, these vehicles can drive through a neighborhood and make announcements; and 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 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 Sacramento 311 number for more information, or check the EAS TV or radio sources.

Ventura 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 Ventura County web master. All emergency information that goes on the website needs approval by the EOC Director. An additional website providing emergency information is the <http://www.readyventuracounty.org/> site. This site is dedicated to providing emergency related material in addition to information generated by an actual emergency event. Future capacities of the outreach efforts of this forum include e-mail alerts and use of social networks, such as Twitter.

D.2 Operations

The decision to evacuate rests with the Ventura County 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 Ventura County 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 Ventura County EOC. The Ventura County EOC will advise nearby communities and reception centers.

D.3 Maps

A map showing the locations of selected critical facilities in Ventura County may be found at: <http://www.venturacountymhmp.com/map/criticalfacilities/#9/34.7125/118.8887/roadmap/0//>.

Critical facilities include schools, hospitals, and nursing facilities, as well as hazardous material storage areas. Addresses and latitudes/longitudes of these facilities are maintained in a database by Ventura County... The OA maintains a listing of other special needs populations, including areas where demographics indicate a need for contact in a language other than English.

Information on evacuation route may be accessed at: <http://www.vcfloodinfo.com/pdf/ventura-county-hazard-evacuation-routes.pdf>. Information related to routes and traffic conditions will be provided using the EAS. Potential flooding areas are shown at <http://www.vcfloodinfo.com/>. If deemed necessary by the Ventura County EOC, buses and drivers will be obtained from the closest unified school district and staged at the closest public facility. For individual rescue situations, helicopters are available from Sheriff's OES or mutual aid through the Ventura County EOC. Operational responsibility for post-evacuation security and patrols rests with local law enforcement, possibly assisted by local fire personnel.

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 planning for floods.

However, in Ventura County, watersheds are much steeper than in most of the rest of the country, and therefore the rivers and streams tend to be much "flashier", meaning that the flood crests tend to rise rapidly, peak for a relatively short time, and then recede as rapidly, or nearly so, as the rise in flood crest. Because of this, internal levee structure is homogeneous in materials. The homogeneous nature of Ventura County levees reflects the overall short time frame from beginning to end of a flood flow, in that the short time frame limits the saturation of the levee structure and the development of seepage paths through the levee. However, this type of construction also makes the levee more susceptible to erosive forces and to the rapid erosion of the internal levee materials should the rock rip-rap protection be compromised. As a result, the time limit to respond to a potential levee breach is limited.

Because of the rapid rise and fall of the flood waters, removal of the flood waters from within the protected areas of the levees would usually be through the existing storm drainage systems. As the flood crest in the river drops, the impounded flood waters with the levee limits will begin to flow back into the channel through the existing storm drain penetrations through the levee. The time-frame for this process is less than the time required to mobilize with the proper pumps to manually drain the area. There may, however, be times when flood water removal might be necessary. Therefore, Priorities 3 and 4 remain in our plan to cover these exceptions.

E.1 Priorities

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 in Ventura County this choice will 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

Efforts to stop erosion of a levee is generally the first step of any levee breach repair. It may be necessary to wait for the inflow to slow before taking this action. Rock and suitable materials

are available to armor the ends of the break before closing the opening with additional suitable material. After the breach is closed, it is more cost-effective to let the ground dry out on its own depending on the extent of flooding. Equipment and contractors will be mobilized, structural repairs will be assessed and permanent repairs will be made.

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

After the breach is closed, this alternative would remove water using available portable pumps. For large flooded areas, the time and expense for this will be extensive. For this reason, this priority will only be used in extreme circumstances. Information on equipment to carry out this activity is available through County GSA and ESD offices.

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 extreme 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*). When County of Ventura is required to take action to restore damaged facilities legal counsel will be consulted before making a final decision.

E.2 Contractors and Vendors

County of Ventura maintains a list of –prequalified contractors and vendors through the General Services Agency and the Engineering Services Department. The list is available to all disaster response departments for use in emergency disaster situations. This is done so that the lists of pre-qualified vendors and contractors can be updated annually to be sure that all of their required information is up-to-date.



Ventura County Watershed Protection District