SAN TOMAS AQUINO CREEK
Emergency Action Plan – Quick Guide

West Valley Watershed EAP dated: July 2025

This guide summarizes key information/guidelines as described in the West Valley Watershed Emergency Action Plan and its San Tomas Aquino Creek Appendix (EAP). Page numbers are referenced (in red) identifying the location in the EAP where full information and data can be found. This guide is a summary and does not replace the full EAP.

PURPOSE OF EAP (p. 1)

This Emergency Action Plan for Severe Storm and Flood Response in the West Valley Watershed (EAP), a Valley Water internal document, is focused on fluvial flood threats caused by severe storms and high flows in the creeks and is intended to provide general guidance for response in the West Valley Watershed. In addition, specific guidance is included for San Tomas Aquino Creek to facilitate Valley Water's activities within the following four areas:

1. Pre-incident planning prior to a storm/flood event.
2. Response to potential, imminent or actual storm/flood events.
3. Recovery actions following a storm/flood event.
4. Collaboration and coordination with other responsible jurisdictions.

LIMITATIONS OF EAP (p. 5)

The EAP shall not constrain the Incident Commander (IC) in the field or others when dealing with flooding on San Tomas Aquino Creek. It does not replace or override existing plans, authorities, or responsibilities.

Instead, this EAP will focus on how Valley Water can improve coordination before, during and after a flood incident to include providing oversight and guidance. It is not intended to set precedent or commit resources without knowledge of the conditions that may occur, nor provide prescriptive lists of what to do during storm and flood monitoring and response, that Valley Water and other Stakeholders are individual jurisdictions and have independent responsibility to accomplish their tasks.

SAN TOMAS AQUINO CREEK DESCRIPTION (pp. 67-72)

San Tomas Aquino Creek begins in the hills above the City of Saratoga and flows about 25 miles northerly through portions of the cities of Saratoga, Monte Sereno, Campbell, San José, Santa Clara and the Town of Los Gatos. Saratoga Creek is the largest tributary entering San Tomas Aquino Creek in the City of Santa Clara north of El Camino Real. The Creek discharges into Guadalupe Slough at the confluence with Calabazas Creek. San Tomas Aquino Creek Watershed drains about 45 square miles along the eastern edge of the West Valley Watershed.

About 68% (17 miles) of San Tomas Aquino Creek has been modified including about 3.7 miles that flows in a culvert under San Tomas Expressway. An adjacent pedestrian/bicycle path runs along the creek from near El Camino Real to the Bay Trail just north of Highway 237. Two ALERT stream gauges on the creek, located at Williams Road and Mission Blvd, provide real-time high flow data.

FLOOD THREATS
(pp. 73-77 & Table 3A, p. 81)

Valley Water has identified the following potential flooding areas:

- Upstream of Williams Rd including Campbell Ave, Hamilton Ave, and Payne Ave.
- Near Homestead Road at a daylight section of the San Tomas Expressway box culvert.
- Areas near Keily Blvd and Scott Blvd

See Attachment 14 for maps of hot spots (pp. 63-65).

EAP PERSONNEL (pp. 10-14)

In keeping with the concepts of SEMS and NIMS, utilizing common functions to maintain the orderly flow of information and responsibility within an agency and between agencies is important during emergency situations. Consistency in utilizing the SEMS functions in an activation improves the organization and communication flow.

Four Emergency Management Organization (EMO) levels for Valley Water's Emergency Response are described in the Valley Water Emergency Operations Plan (EOP) and are shown below:

1. Policy Group – The Policy Group includes the Board of Directors, District Counsel (Risk and Legal Advisors), Chief Operating Officer (CEO), Assistant CEO and the Valley Water Emergency Steering Committee (ESC). The ESC, led by the Unclassified Leadership Team, provides direction and resourcing for emergency-related preparedness efforts.

2. Emergency Operations Center (EOC) – The EOC is organized based on the SEMS and NIMS functions of Management, Planning & Intelligence, Operations, Logistics, and Finance & Administration.

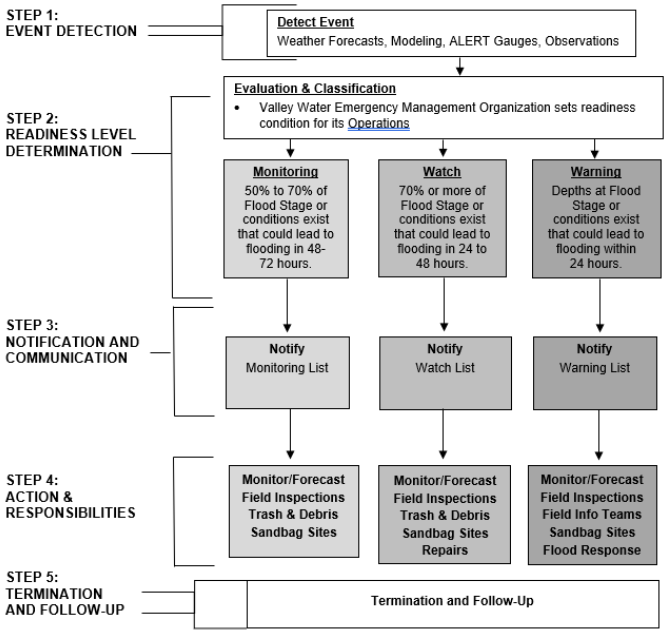
3. Department Operations Center (DOC) – The DOC is part of the Watersheds Division management that controls and coordinates actions specific to their area of operations. The DOC communicates internally and with other organizations through the EOC (when activated). They may function similar to an EOC following SEMS and NIMS, but often will utilize other procedures that are more appropriate for their response to the event while still supporting documentation necessary for an EOC activation.

4. Field Response Teams – These teams have specific skills and capabilities to command or support field incident objectives (e.g., Incident Commanders (IC) and Field Information Teams (FIT)).

EAP OVERVIEW (p. 19)

There are five steps in the EAP process:

1. Event Detection
2. Readiness Level Determination
3. Notification & Communication
4. Actions & Responsibilities
5. Termination & Follow-up



STEP 1 – EVENT DETECTION (p. 22 & pp. 78-79)

This step describes the detection of an unusual or emergency event and provides information to assist Valley Water in determining the appropriate emergency level for the event. Unusual or emergency events may be detected by:

- **Weather Forecasts** - The National Weather Service (NWS) provides weather (e.g., precipitation) forecasts in advance of storm events and Valley Water contracts with a service provider for enhanced. During storm events, the NWS will host webinars with affected agencies and utilities to discuss forecasts and share information to enhance regional preparedness. In addition, the NWS maintains websites (Attachment 13) that provide forecasts and will issue public notices of flood threats on local television and radio programming if the level is threat is high.
- **Hydrologic/Hydraulic Modeling** - If forecasts show a heightened possibility of flooding, it is possible that Valley Water will run hydrologic and hydraulic modeling to determine risk and impact areas for a specific storm event. Valley Water and NWS will utilize this modeling to help set their threat level for San Tomas Aquino Creek (Table 2A) and provide the information to local agencies and the public as appropriate. And, this same modeling and information that helps determine threat levels is used by Valley Water in determining flood severity levels for San Tomas Aquino Creek (Table 3A) during storm events.
- **Gauge System** - Valley Water's Automated Local Evaluation in Real Time (ALERT) system can set alarms to automatically notify appropriate staff at predetermined stages. These gauges and alarms provide data in near real-time and can provide extra warning to determine the level of threat for flooding. A listing of all Valley Water gauges can be found at http://alert.valleywater.org. These gauges provide data in near real-time upstream of Williams Road and at Mission College Blvd on San Tomas Aquino Creek and for two locations on the Saratoga Creek tributary
- **Visual Observations** - As water levels increase in the creeks, rivers, and waterways, Valley Water Field Information Teams (FITs) or other personnel or stakeholders are deployed to visually monitor and report back to an Emergency Management Organization (EMO) the water levels in areas of potential flooding. In addition, a Webcam at Agnew Road (https://valleywateralert.org/scvwd/webcams/site.php?cid=9001) can be monitored remotely.

  HH&G maintains a master list of flooding hotspots as shown in Attachment 14 (pp. 63-65) that includes San Tomas Aquino Creek at:

  - **Campbell Avenue to Williams Road** – possible high flows and blockages at Williams Road trash rack and bridges can cause overtopping and flooding along San Tomas Expressway,
  - **Hetch-Hetchy Pipelines** – check for high flows on levees and debris on pipeline crossing, and
  - **Highway 237** – check levees upstream and downstream for high flows and possible levee stability issues.

STEP 2 – READINESS LEVEL DETERMINATION (p. 22 & pp. 80-81)

Evaluation—After detecting and gathering adequate intelligence regarding the situation, an evaluation of waterway conditions must be performed by appropriate personnel. The personnel evaluating the intelligence will generally be one or more Subject Matter Experts (SMEs) from O&M and HH&G. SMEs evaluation of intelligence information will be shared with an EMO with appropriate management staff for decisions on actions and establishing readiness levels.

Classification—The EAP is always active, however, after detection of an unusual event the readiness level may be changed. If the EOC is not active, **Valley Water will convene an Emergency Management Organization (EMO) that includes executive leadership to determine whether and how to activate the EOC.**

Based on a technical evaluation of the intelligence detected by SMEs that the threat exists, they may recommend that the EMO monitor the situation over a general area or for a specific creek and location. If a specific creek is being assessed the recommendation for monitoring or activating the EOC would be based on facility specific thresholds detailed in an Appendix of the EAP or situations as described in Attachment 1. These thresholds are consistent with Flood Severity Levels used by the National Weather Service as shown in Table 3.

If the EOC is activated, the readiness level of either Watch or Warning would be set by the EMO (EOC Management) based on all intelligence gathered.

The decision for a change in readiness level from Preparedness to Monitoring is made at a meeting of Valley Water EMO. If they determine that the EOC should be activated, the EOC Director, as part of the EMO, will take the lead to determine whether to set the readiness level at Watch or Warning. Tables below describe the Flood Readiness Levels and the Flood Severity Levels. These levels are consistent with those issued by the National Weather Service.

Flood Readiness Levels

PREPAREDNESS	This is the base stage of readiness that will be the typical condition throughout most of the year. An Emergency Management Organization (EMO) is not active at this level. Preparedness is defined as: • Flood stage (Minor Flooding or greater) is not estimated within the next 72 hours or • Measured stream depth is below 50% of flood stage.
MONITORING	This condition is variable and requires more intense monitoring and a heightened level of alertness. A portion of the EMO may be minimally active to monitor for any developing flood concern. Monitoring is defined as: • Flood stage may occur in 48 to 72 hours, or • Measured stream depth is at 50% to 70% of flood stage, or • For areas that are controlled purely by storm drain runoff (flashy systems), the stream depth is estimated to reach flood stage within 24 hours.
WATCH	Flood level or a serious flood threat is expected to occur. Multiple portions of the EMO may be activated at an appropriate level. Watch is defined as: • Stream depth is estimated to reach flood stage or greater within 24 to 48 hours, or • Measured stream depths are at 70% to 100% of flood stage, or • For areas that are controlled purely by storm drain runoff (flashy systems), the stream depth is estimated to reach flood stage within 6-12 hours.
WARNING	This is a more urgent situation with flooding imminent or occurring. The EMO is more completely active. Warning is defined as: • Flood stage or greater is occurring or is estimated to occur within 24 hours, or • For areas that are controlled purely by storm drain runoff (flashy systems), the stream depth is estimated to reach flood stage or greater within minutes/hours or is occurring.
Note: Flood stage is the depth of water at which a stream or facility begins flooding (see Glossary of Terms).	

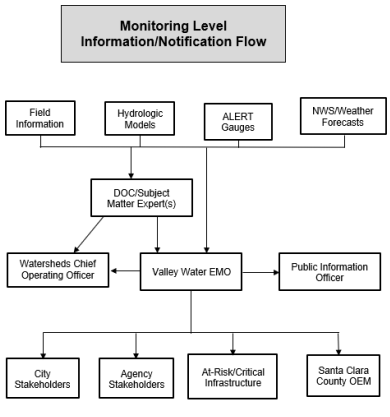
Flood Severity Levels

Action (Yellow)	An established gauge height which when reached by a rising stream, lake, or reservoir represents the level where action is taken in preparation for possible significant hydrologic activity. **San Tomas Aquino Creek** – The stream gauge at Williams Road is near or expected to be near 8 feet (10-year flow rate).
Minor Flooding (Orange)	Minimal or no property damage, but possibly some public threat (e.g., inundation of roads). **San Tomas Aquino Creek** – Williams Road stream gauge is at or is expected to be between 8 to 9 feet (exceeds a 10-year flow rate). • Overbanking possible onto Williams Road, Payne Avenue, West Hamilton Avenue, and Campbell Avenue, causing street flooding. • Possible overbanking onto San Tomas Expressway between Homestead Road and Forbes Avenue at the daylight area of the box culvert.
Moderate Flooding (Red)	Some inundation of structures and roads near stream, evacuations of people and/or transfer of property to higher elevations. **San Tomas Aquino Creek** – Williams Road stream gauge is at or is expected to be between 9 to 9.5 feet (exceeds a 50-year flow rate). • Overbanking upstream of Williams Road moves west and northward along Boynton Avenue, ponding along Interstate 280 (I-280). Worst flooding is east of Boynton High School. • Overbanking upstream of Homestead Road spread along San Tomas Expressway moves northward and spreads into surrounding neighborhoods. • If Saratoga Creek has substantial flows as well, overbanking on the east bank is possible between Highway 101 and Scott Boulevard.

Major Flooding (Purple)	Extensive inundation of structures and roads, significant evacuations of people and/or transfer of property to higher elevations. **San Tomas Aquino Creek** – Stream gauge at Williams Road is above or expected to be at or above 9.5 feet (100-year flow rate). • San Tomas Expressway will flood with water moving northward under the I-280 viaduct toward Homestead Road. Water sheet flows toward Pruneridge Golf Course. • Extensive flooding stemming from the daylighted section of the culvert upstream of Homestead Road. • Areas east of Kiely Boulevard and west of Scott Boulevard are at risk. • Floodwaters may continue to move northward, bounded by San Tomas Aquino Creek and Scott Boulevard, crossing the Caltrain tracks toward Highway 101. • If Saratoga has significant flows as well, overbanking will occur on the east bank into an office park between Highway 101 and Scott Boulevard, bounded by the creek and San Tomas Expressway, inundating the office park.

STEP 3 – NOTIFICATION & COMMUNICATION (pp. 22-26)

Notification: After the condition levels and severity have been determined, appropriately communicating the situation to responsible agencies, staff, and other identified individuals and groups is critical. Depending on the condition level, responsibilities for notifications and who is notified would vary. The charts shown below show the flow of information for the three flood threat condition levels and the contact list is Attachment 9 (p. 49).



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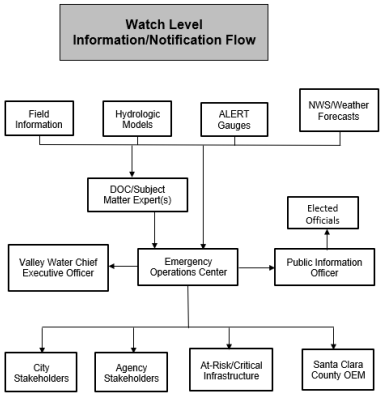

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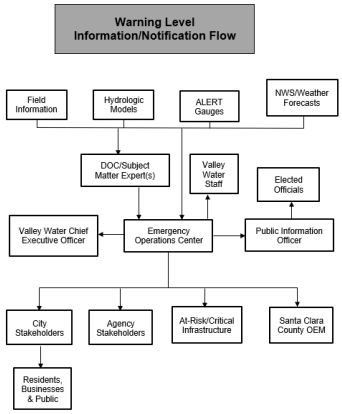

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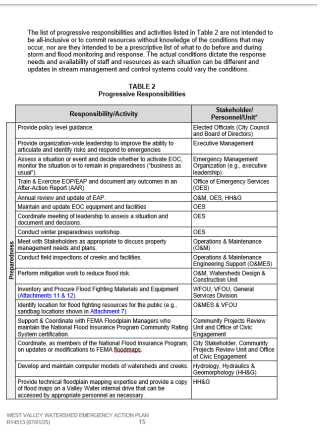
STEP 4 – ACTIONS & RESPONSIBILITIES (pp.14-18)

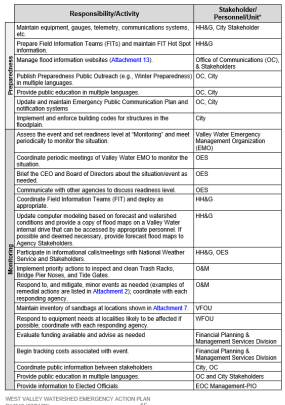
As the weather conditions change, the responsibilities of the City, District and other Stakeholders adjust. The list of responsibilities provided in Table 2 (pp. 15-18) illustrate in general terms what actions are needed at each threat level, and who has lead responsibility. Specific responsibilities for personnel are included in Attachments 3-8 (pp. 33-47).



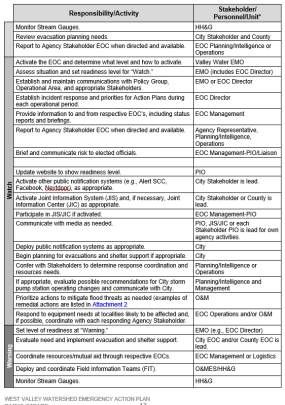
The list of progressive responsibilities and activities listed in Table 2 are not intended to be all-inclusive or to commit resources without knowledge of the conditions that may occur, nor are they intended to be a prescriptive list of what to do before and during storm and flood monitoring and response. The actual conditions dictate the response needs and availability of staff and resources as each situation can be different and updates in stream management and control systems could vary the conditions.

TABLE 2
Progressive Responsibilities

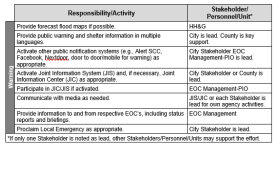
	Responsibility/Activity	Stakeholder/ Personnel/Unit*
Preparedness	Provide policy level guidance.	Elected Officials (City Council and Board of Directors)
	Provide organization-wide leadership to improve the ability to articulate and identify risks and respond to emergencies	Executive Management
	Assess a situation or event and decide whether to activate EOC, monitor the situation or to remain in preparedness ("business as usual").	Emergency Management Organization (e.g., executive leadership)
	Train & Exercise EOP/EAP and document any outcomes in an After-Action Report (AAR)	Office of Emergency Services (OES)
	Annual review and update of EAP.	O&M, OES, HH&G
	Maintain and update EOC equipment and facilities	OES
	Coordinate meeting of leadership to assess a situation and document and decisions.	OES
	Conduct winter preparedness workshop.	OES
	Meet with Stakeholders as appropriate to discuss property management needs and plans.	Operations & Maintenance (O&M)
	Conduct field inspections of creeks and facilities.	Operations & Maintenance Engineering Support (O&MES)
	Perform mitigation work to reduce flood risk.	O&M, Watersheds Design & Construction Unit
	Inventory and Procure Flood Fighting Materials and Equipment (Attachments 11 & 12).	WFOU, VFOU, General Services Division
	Identify location for flood fighting resources for the public (e.g., sandbag locations shown in Attachment 7)	O&MES & VFOU
	Support & Coordinate with FEMA Floodplain Managers who maintain the National Flood Insurance Program Community Rating System certification.	Community Projects Review Unit and Office of Civic Engagement
	Coordinate, as members of the National Flood Insurance Program, on updates or modifications to FEMA floodmaps.	City Stakeholder, Community Projects Review Unit and Office of Civic Engagement
	Develop and maintain computer models of watersheds and creeks.	Hydrology, Hydraulics & Geomorphology (HH&G)
	Provide technical floodplain mapping expertise and provide a copy of flood maps on a Valley Water internal drive that can be accessed by appropriate personnel as necessary.	HH&G



	Responsibility/Activity	Stakeholder/ Personnel/Unit*
Preparedness	Maintain equipment, gauges, telemetry, communications systems, etc.	HH&G, City Stakeholder
	Prepare Field Information Teams (FITs) and maintain FIT Hot Spot information.	HH&G
	Manage flood information websites (Attachment 13).	Office of Communications (OC), & Stakeholders
	Publish Preparedness Public Outreach (e.g., Winter Preparedness) in multiple languages.	OC, City
	Provide public education in multiple languages.	OC, City
	Update and maintain Emergency Public Communication Plan and notification systems	OC, City
	Implement and enforce building codes for structures in the floodplain.	City
Monitoring	Assess the event and set readiness level at "Monitoring" and meet periodically to monitor the situation	Valley Water Emergency Management Organization (EMO)
	Coordinate periodic meetings of Valley Water EMO to monitor the situation.	OES
	Brief the CEO and Board of Directors about the situation/event as needed.	OES
	Communicate with other agencies to discuss readiness level.	OES
	Coordinate Field Information Teams (FIT) and deploy as appropriate.	HH&G
	Update computer modeling based on forecast and watershed conditions and provide a copy of flood maps on a Valley Water internal drive that can be accessed by appropriate personnel. If possible and deemed necessary, provide forecast flood maps to Agency Stakeholders.	HH&G
	Participate in informational calls/meetings with National Weather Service and Stakeholders.	HH&G, OES
	Implement priority actions to inspect and clean Trash Racks, Bridge Pier Noses, and Tide Gates.	O&M
	Respond to, and mitigate, minor events as needed (examples of remedial actions are listed in Attachment 2), coordinate with each responding agency.	O&M
	Maintain inventory of sandbags at locations shown in Attachment 7.	VFOU
	Respond to equipment needs at localities likely to be affected if possible, coordinate with each responding agency.	WFOU
	Evaluate funding available and advise as needed	Financial Planning & Management Services Division
	Begin tracking costs associated with event.	Financial Planning & Management Services Division
	Coordinate public information between stakeholders	City, OC
	Provide public education in multiple languages.	OC and City Stakeholders
	Provide information to Elected Officials.	EOC Management-PIO



	Responsibility/Activity	Stakeholder/ Personnel/Unit*
Watch	Monitor Stream Gauges.	HH&G
	Review evacuation planning needs.	City Stakeholder and County
	Report to Agency Stakeholder EOC when directed and available.	EOC Planning/Intelligence or Operations
	Activate the EOC and determine what level and how to activate.	Valley Water EMO
	Assess situation and set readiness level for "Watch."	EMO (includes EOC Director)
	Establish and maintain communications with Policy Group, Operational Area, and appropriate Stakeholders.	EMO or EOC Director
	Establish incident response and priorities for Action Plans during each operational period.	EOC Director
	Provide information to and from respective EOC's, including status reports and briefings.	EOC Management
	Report to Agency Stakeholder EOC when directed and available.	Agency Representative, Planning/Intelligence, Operations
	Brief and communicate risk to elected officials.	EOC Management-PIO/Liaison
	Update website to show readiness level.	PIO
	Activate other public notification systems (e.g., Alert SCC, Facebook, Nextdoor), as appropriate.	City Stakeholder is lead.
	Activate Joint Information System (JIS) and, if necessary, Joint Information Center (JIC) as appropriate.	City Stakeholder or County is lead.
	Participate in JIS/JIC if activated.	EOC Management-PIO
	Communicate with media as needed.	PIO, JIS/JIC or each Stakeholder PIO is lead for own agency activities.
	Deploy public notification systems as appropriate.	City
	Begin planning for evacuations and shelter support if appropriate.	City
	Confer with Stakeholders to determine response coordination and resources needs.	Planning/Intelligence or Operations
	If appropriate, evaluate possible recommendations for City storm pump station operating changes and communicate with City.	Planning/Intelligence and Management
	Prioritize actions to mitigate flood threats as needed (examples of remedial actions are listed in Attachment 2.	O&M
	Respond to equipment needs at localities likely to be affected and, if possible, coordinate with each responding Agency Stakeholder.	EOC Operations and/or O&M
Warning	Set level of readiness at "Warning."	EMO (e.g., EOC Director)
	Evaluate need and implement evacuation and shelter support.	City EOC and/or County EOC is lead.
	Coordinate resources/mutual aid through respective EOCs.	EOC Management or Logistics
	Deploy and coordinate Field Information Teams (FIT).	O&MES/HH&G
	Monitor Stream Gauges.	HH&G



	Responsibility/Activity	Stakeholder/ Personnel/Unit*
Warning	Provide forecast flood maps if possible.	HH&G
	Provide public warning and shelter information in multiple languages.	City is lead. County is key support.
	Activate other public notification systems (e.g., Alert SCC, Facebook, Nextdoor, door to door/mobile for warning) as appropriate.	City Stakeholder EOC Management-PIO is lead.
	Activate Joint Information System (JIS) and, if necessary, Joint Information Center (JIC) as appropriate.	City Stakeholder or County is lead.
	Participate in JIC/JIS if activated.	EOC Management-PIO
	Communicate with media as needed.	JIS/JIC or each Stakeholder is lead for own agency activities.
	Provide information to and from respective EOC's, including status reports and briefings.	EOC Management
	Proclaim Local Emergency as appropriate	City Stakeholder is lead.

*If only one Stakeholder is noted as lead, other Stakeholders/Personnel/Units may support the effort.

STEP 5 – VALLEY WATER TERMINATION & FOLLOW-UP (p. 27)

After this EAP has been activated at a level of Monitor, Watch or Warning and then returned to Preparedness, EAP operations must be terminated and follow-up procedures completed.

a. Termination Responsibilities

In a Watch or Warning, the EOC Director, is responsible for terminating EAP operations and directing that this decision is relayed to each person notified during the original event.

EOC Management will ensure that all forms for Action Planning, Situational Reports, or others utilized during the event are collected and organized chronologically as determined appropriate. If electronic documentation was utilized, these could be saved on a storage device that could be retrievable or could be printed and saved as a hard copy in the file.

b. Follow-Up Responsibilities

The Operations & Maintenance Engineering Support Unit (if DOC is activated), or the Emergency Services & Security Unit (if EOC was activated), will prepare an After-Action Report (AAR) of the event and will track implementation of appropriate recommendations in the AAR.

The City or other stakeholders will be responsible for damage assessment to homes and businesses and any permit requirements required to reoccupy structures and to promote flood mitigations measures during any reconstruction.

MAINTENANCE OF EAP (p. 7)

O&M will work with Office of Emergency Services Unit, Hydrology Hydraulics & Geomorphology Unit and other appropriate stakeholders to review and, if needed, update the EAP at least once each year. The EAP annual review should include the following:

- Verify that the phone numbers and persons in the specified positions are current and revise if any of the contacts have changed,
- Verify and, if necessary, update flood maps and flood thresholds,
- Verify the locally available resources and equipment are current, and/or
- Incorporate appropriate recommendations from any AAR prepared after training or activation of the EAP.

ATTACHMENTS (pp. 29-66)