Agenda Item 5

REPORT OF ACTIVITIES OF THE DEPARTMENT OF WATER RESOURCES

By

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FUNCTIONAL AREA 1 FLOOD EMERGENCY RESPONSE

This functional area includes work to better prepare for, respond to, and recover from flood emergencies. A program for flood emergency response is a necessary part of flood management because California will always face flood emergencies, even when system improvements reduce the frequency of flooding. Program activities include inspection and assessment of flood projects' integrity; reservoir operations and river forecasting; flood data collection, management, and dissemination; precipitation and runoff forecasting; Delta flood preparedness, response, and recovery; and statewide flood emergency response functions.

REAL-TIME FLOOD CONDITIONS, STATUS, & WARNING

The purpose of the Real Time Flood Conditions, Status, and Warning element is to provide information needed to manage floods as they are occurring. This element supports flood operations by 1) inspecting, documenting, and assessing the integrity of the Sacramento and San Joaquin Flood Control Project levees, 2) storing and managing information so that it is accessible to flood managers and the general public, 3) providing emergency flood information and warnings based upon existing and forecasted conditions and field reports, and 4) developing information management tools to support emergency operations.

INSPECTIONS

The Flood Project Inspection Section finalized the *2011 Inspection Report of the Central Valley State-federal Flood Control System* on December 28, 2011 and it was transmitted by the DFM Division Chief to the Central Valley Flood Protection Board (CVFPB). This is the annual report on the effectiveness of facility maintenance activities of the maintaining agencies. The report covers levees, channels, and structures, including pumping plants. Deficiencies are noted and each agency receives a rating for the facilities within its maintenance responsibilities based on the fall inspections. The report is based primarily on DWR's inspections conducted during the summer and fall of 2011. Also included in the report are the results from DWR's Supplemental Erosion Survey of the San Joaquin River Flood Control System. This annual report is intended for use by the U.S. Army Corps of Engineers (USACE), DWR, the Central Valley Flood Protection Board (CVFPB), Local Maintaining Agencies (LMA), and other interested parties.

LOCAL MAINTAINING AGENCY ANNUAL REPORTING PROGRAM

On December 30, staff submitted the Draft 2011 Local Maintaining Agency Annual Report to the Central Valley Flood Protection Board. The report is administered by DWR as part of the California Water Code Section 9141 initiated in Assembly Bill 156 in 2007. According to the code, the local maintaining agencies (LMAs) within the central valley are obligated to provide a status report on their levee maintenance practices to DWR by September 30 of each year and DWR is required to summarize the information and package it for the Board by December 30 of each year. In 2011, DWR received a 90% response from a total of 89 agencies, which is the highest in four years. Approximately 55% of responding LMAs used DWR developed electronic web application and 45% used hard copy formats to submit the

information. This year, staff made an effort to reduce the size of the report significantly to support the Department's environmental sustainability initiative without compromising the quality of this important information. Staff is currently working to deliver the final report to the Board and LMAs in February. A CD will be mailed to the Board and LMAs with the final product. The report will also be made available on the DWR and CVFPB websites.

FLOOD PROJECT INTEGRITY/VULNERABILITY ASSESSMENT ACTIVITIES

- **Levee Instrumentation Pilot Study**
  Phase II of the project that included installation of the piezometers and data logger system was completed on schedule by the end of October 2011. An Operations and Maintenance manual along with as-built drawings is currently being finalized.
- **DWR Utility Crossing Inventory Program (UCIP)**
  Utility Crossing Inventory Program continued to make progress by expanding the UCIP database with additional desk studies. The UCIP team is coordinating internally and working with the Local Maintaining Agency Assessment Section to enhance AB156 reporting tool that will allow LMAs to view the utility crossing inventory information (UCIPs desk study and field survey) online. This enhanced tool to allow the LMAs to record any utility crossing status updates including any actions the LMA has taken to address issues related to utility crossings.

CLIMATE DATA COLLECTION & PRECIPITATION/RUNOFF FORECASTING

This Element supports Flood Emergency Response by providing information on current and forecasted water conditions, and by providing meteorological and climate information. Additionally, this Element includes evaluating and improving the data collection and exchange network and forecasting models, providing water supply and watershed runoff information and forecasting, and the development of a new generation of forecasting and data collection tools to improve the quality, timeliness, and length of watershed and river forecasts. Real-time data, its timely availability, and quantities and quality are all critical to improving forecasting quality and timeliness.

WATER CONDITIONS

As of December 31, statewide hydrologic conditions were as follows: precipitation, 50 percent of average to date; runoff, 40 percent of average to date; snow water equivalent, 20 percent of average for the date (5 percent of the April 1 average); and reservoir storage, 115 percent of average for the date. Sacramento River Region unimpaired runoff observed through December 31, 2011 was about 1.5 million acre-feet (MAF), which is about 49 percent of average. For comparison, on December 31, 2010, the observed Sacramento River Region unimpaired runoff through that date was about 4.7 MAF, or about 148 percent of average.

December was extremely dry across California. On December 31, the Northern Sierra 8-Station Precipitation Index Water Year total was 6.9 inches, which is about 39 percent of the seasonal average to date and 14 percent of an average water year (50.0 inches). During December, the total precipitation for the 8-Stations was 0.3

inches, which is about 4 percent of the monthly average and third driest December on record. Last year on December 31, the seasonal total for the 8-Stations was 31.9 inches, or about 180 percent of average for the date.

On December 31, the San Joaquin 5-Station Precipitation Index Water Year total was 4.0 inches, which is about 31 percent of the seasonal average to date and 10 percent of an average water year (40.8 inches). During December, the total precipitation for the 5-Stations was 0.0 inches, the driest December on record (tied with 1989). Last year on December 31, the seasonal total for the 5-Stations to date was 31.1 inches, or about 239 percent of average for the date.

Selected Cities Precipitation Accumulation as of 12/31/2011 (National Weather Service Water Year: July through June)					
City	Jul 1 to Date 2011 - 2012 (in inches)	% Avg	Jul 1 to Date 2010 - 2011 (in inches)	% Avg	% Avg "Water Year" Jul 1 to Jun 30 2011- 2012
Eureka	10.87	64	20.61	121	27
Redding	6.33	46	16.07	117	18
Sacramento	2.35	35	9.38	142	13
San Francisco	3.37	37	11.68	128	14
Fresno	1.57	43	8.16	223	14
Bakersfield	1.31	63	7.25	349	20
Los Angeles	3.00	75	10.98	274	23
San Diego	4.57	138	8.11	245	44

Key Reservoir Storage (1,000 AF) as of 12/31/2011								
Reservoir	River	Storage	Avg Storage	% Average	Capacity	% Capacity	Flood Control Encroachment	Total Space Available
Trinity Lake	Trinity	1,936	1,668	116	2,448	79	---	512
Shasta Lake	Sacramento	3,095	2,897	107	4,552	68	-276	1,457
Lake Oroville	Feather	2,545	2,226	114	3,538	72	-618	993
New Bullards Bar Res	Yuba	643	537	120	966	67	-153	323
Folsom Lake	American	416	479	87	977	43	-161	561
New Melones Res	Stanislaus	1,975	1,344	147	2,420	82	5	445
Don Pedro Res	Tuolumne	1,576	1,329	119	2,030	78	-114	454
Lake McClure	Merced	659	454	145	1,025	64	-15	366
Millerton Lake	San Joaquin	331	278	119	520	64	-96	189
Pine Flat Res	Kings	557	418	133	1,000	56	-67	443
Isabella	Kern	167	154	109	568	29	-3	401
San Luis Res	(Offstream)	1,928	1,401	138	2,039	95	---	111

The latest National Weather Service Climate Prediction Center (CPC) long-range, 1-month precipitation outlook for January 2012, issued December 31, 2011, suggests below average precipitation for Central and Southern California. No tendency for above or below average rainfall is suggested for almost all of Northern California, except for the far North Coast where above average rain is indicated.

SNOWMELT & SEASONAL VOLUME RUNOFF FORECASTING

The latest Water Supply Index was issued on January 10, 2012. The forecast summary is as follows:

Sacramento River Unimpaired Runoff Water Year Forecast: 12.0 MAF (66% of avg.) Sacramento Valley Index (SVI): 6.9 (Below Normal) San Joaquin Valley Index (SJI): 2.0 (Critical). Of particular note from this forecast is the drop in the 99 percent

exceedence forecasts for both the Sacramento and San Joaquin Valleys from the December 1 forecasts. A drop in the 99 percent exceedence forecast verifies what we already knew from the lack of precipitation in December; these are extremely dry conditions for this time of year. Conditions effecting these forecasts include unimpaired runoff rates of 49 percent and 52 percent of average to date (as of 1/1/2012) for the Sacramento River basin and San Joaquin River basin respectively. On January 1, 2012, precipitation in the Sacramento River Region was at 38 percent of average while the San Joaquin River Region was also at 38 percent of average. Snow pack is not a consideration of the Water Supply Index calculations, however they are an indication for how wet or dry the winter has been. As of January 6, 2012, the statewide average snow water content was only 2 inches, which represents 15 percent of average for the date and just 6 percent of the April 1 average. For comparison on the same date last year, the statewide average snow water content was 23 inches which represented 199 percent of average for the date and 79 percent of the April 1 average. Quite a remarkable difference! The next Water Supply Index forecast will be issued on Wednesday, February 8, 2012. With January completely dry so far, there is a good chance that the February 1 WSI forecasts will drop compared to the January 1 forecast.

SNOW SURVEYS & SNOW COURSE MAINTENANCE

As of January 10, 2012, the regional snow pack conditions are as follows:

- **Northern Sierra** 2" of SWC for 6% of April 1 Avg. and 14% to date
- **Central Sierra** 1" of SWC for 4% of April 1 Avg. and 9% to date
- **Southern Sierra** 2" of SWC for 8% of April 1 Avg. and 20% to date
- **Statewide** 2" of SWC for 6% of April 1 Avg. and 14% to date

The first snow surveys of the season were conducted on Dec. 29, 2011 and Jan. 3, 2012 near Echo Summit along Highway 50 in the Central Sierra Nevada. The manual readings were as follows:

Location	Elevation	Snow Depth	Water Content	% of Avg
Alpha	7,600'	0.0"	0.00"	0
Phillips Station	6,800'	4.0"	0.14"	1
Lyons Creek	6,700'	7.1"	2.40"	20

The next snow course measurements will occur during a 10-day window surrounding February 1, 2012. This will be the first true statewide look at the manual snow course measurements.

HYDROLOGIC DATA MANAGEMENT

The Snow Surveys section continues to collect, review, Quality Control, and enter Full Natural Flow (FNF), precipitation, snow, and reservoir storage data for thousands of locations statewide on a daily basis. With this data staff continues to issue daily, monthly, and seasonal water condition reports on CDEC. The extremely

dry conditions have caught the eye of the new media and many phone calls and inquiries for media interviews have come in. Additionally, data requests continue to stream in from academia, other agencies, and the public on a near normal basis. There is a lot of interest in where the current rain and snow amounts rank historically in terms of the driest years. Other calls were handled by other HAFOO staff. One positive of the extremely dry conditions thus far this fall and winter is that DWR field staff has made use of the dry weather to prolong field maintenance well beyond when they would have normally stopped for the winter. This has enabled staff to complete more course maintenance, instrumentation installation and troubleshooting, and maintenance of the existing gage network.

BULLETIN 120 & WATER SUPPLY INDEX FORECASTS

The first Bulletin 120 will be issued on Tuesday, February 8, 2012. New FNF averages reflecting the 50-year period from 1961-2010 have been calculated and will be used beginning this water year. A more thorough process is required to update precipitation station averages because historic records are not as clean and thus require more focus to stitch together complete records that go back in excess of 50 years.

HYDRO-CLIMATE ANALYSES

Work continues on the University of California Task Orders for studies supporting climate change hydrology effort. Meetings discussing progress will be scheduled for January or February. The Central Valley Flood Protection Plan Climate Change Technical Work Group is moving forward with a work plan to continue to advance work not completed for the 2012 plan. Continued collaboration will work through the State Climatologist.

REAL-TIME DATA COLLECTION NETWORK

Snow level radar installations efforts continue for year 3 installations. Due to the dry weather, work continues to get the soil moisture sensors online and communicating in real-time. The California Nevada River Forecast Center has created a web page to display a text product of data from the snow level radar sites and is working with DWR personnel on getting the data from the National Weather Service to CDEC. Coordination between NOAA, DWR and Scripps continues as the 21st Century Extreme Precipitation Monitoring project moves forward. A meeting was held at the American Geophysical Union Fall Meeting in San Francisco with members from NOAA, NASA, Scripps, CEC, and DWR to discuss future efforts to monitor and study the impact of aerosols on precipitation. Monitoring from the Extreme Precipitation Network is helpful to this effort.

RESERVOIR OPERATIONS & RIVER FORECASTING

This element supports Flood Emergency Response through a coordinated effort with various agencies' operating reservoirs in the system to enhance reservoir operations. The goal of coordinated operation of the reservoirs will be to reduce peak flood flows downstream of the reservoirs. Additionally, this Element supports

Flood Emergency Response through river forecasting activities conducted in coordination with the National Weather Service River Forecast Center located at the Joint Operations Center in Sacramento. By conducting real-time and long-range hydrologic and watershed analyses, this Element provides accurate and timely runoff and river peak flow forecasts.

RESERVOIR COORDINATED OPERATIONS
Minimum required flows and normal operations for reservoir operators due to lack of precipitation in the Sierra Nevada since November 2011.

LIBRARY OF MODELS
The LOM pilot project development efforts for the month of December, 2011 focused on testing model check-in processes including internal QC on the code and adjusting check-in forms for check-in package management. In addition the development team implemented, debugged and tested content review and model check out processes in the LOM web application. Debugging model check-in and review processes, website navigation, content search and check-out feature refinement are currently underway. The LOM technical team has been meeting twice a month since November 2011 to discuss the LOM infrastructure development progress and testing.

FLOOD OPERATIONS EMERGENCY RESPONSE
This element includes all preparation and planning to execute flood fights, deploy teams, provide training, and coordinate local response needs and federal assistance in the event of a flood. This includes maintaining the readiness of the Flood Operations Center and all the staff that may have to staff it in the event of an emergency and assuring local response efforts can be integrated into the State response system.

FLOOD OPERATIONS, TRAINING AND EXERCISES
The Flood Operations Center (FOC) was involved in multiple activities in the month of November and December. The FOC has been regularly participating in Emergency Action Plan Meetings with Yuba County Water Agency, PG&E, and various other local agencies. These meetings consisted of the annual face-to-face meetings, table-top exercises, or functional exercises. These requirements are set by the Federal Energy Regulatory Commission for dams that generate power.

In early October, the FOC participated in the Forecasted-Coordinated Operations (F-CO) Exercise 2011. Based on recommendations that resulted from this exercise, the FOC further developed the roles and responsibilities of emergency responders within the FOC and developed protocols for information flow from communication logs, phone calls, and emails. The FOC is currently preparing a communications test to further define information flow and refine the communication tools and processes used to record, track, and disseminate emergency operation information.

In order to improve communication inside of the FOC during activation, staff is

presently working with the Decision Support Section to enhance the Communications Log within FOCIS. With this enhanced Communication Log, information flow between the various SEMS Sections will be fine-tuned to improve its efficiency.

In December 2011, the Flood Operations Center (FOC) began efforts to enhance the Executive Update issued during flood operations or extreme weather events. The FOC initiated a working group with Hydrology Branch personnel to explore potential ways of streamlining the production of the Executive Update, which included combining two previously separate reports into one comprehensive Flood Emergency Response Executive Update. The working group will explore tools and potential methods to achieve the ultimate goal of automating the collection, collation, production, and dissemination of flood operations and hydrologic information.

The FOC conducted an Environmental Tabletop Exercise on December 8, 2011. The purpose of the exercise was to review roles and responsibilities and to improve understanding and coordination among the members of Interagency Flood Management Collaborative Program Management Group (Collaborative) during a response to flood events and levee threats that could affect sensitive species. The exercise highlighted the need for further development of notification protocols, definition of emergency operations and flood fight activities, baseline assessment tools, training, and a follow-up communications exercise to test the communication/notification plan.

This past summer, the FOC began its annual update cycle for the Directory of Flood Officials (DOFO). The DOFO has been officially published and approximately 1000 directories have been disseminated to emergency responders. The FOC asks that all prior versions of the DOFO be shredded to protect the confidential nature of the information contained in the Directory.

The FOC is currently in the process of developing standardized county maps outlining major flood control features, county seats, and other pertinent information. These maps will be used by FOC Management and Incident Command Teams during emergencies. These maps are generated from GIS data. A standard GIS template for the base map information has been established and is currently being refined. These maps will be distributed as large hard copy maps that are immediately available during activation of the FOC or ICTs. The GIS template will allow the maps to be updated with operation information obtained from the previous Operational Period.

The FOC is collaborating with Federal, State, and local partners to develop the Levee Threat Mitigation Process (LTMP). The purpose of the LTMP is to clarify the roles and responsibilities of the FOC and provide a guide to local maintaining agencies, County Offices of Emergency Services, and other DWR Divisions for addressing flood threats as quickly as possible. Contained within the Levee Threat Mitigation Process are the Engineer's Levee Threat Assessment and Levee Threat Monitoring Guidelines.

In December, the FOC met with and gathered information about levee threat monitoring from several key personnel within the Flood Project Integrity & Inspections Section, Maintenance Support Branch, Sacramento Maintenance Yard, Flood System Sustainability Branch, and Regional Projects Assessment Branch. The FOC also hosted two public workshops to gather input from local maintaining agencies and their engineers on the Engineer's Levee Threat Assessment (ELTA) and Levee Threat Monitoring Guidelines. Comments are currently being addressed and further revisions of both documents are being reviewed.

Now in the middle of the 2011-2012 flood season, the FOC is maintaining its situational awareness and is monitoring the flood control system as needed. River forecast recordings are now being recorded on weekends and holidays to disseminate information to the public.

FLOOD FIGHT MATERIALS READINESS

As part of the FloodSAFE Flood ER program, the FOB has developed a Flood Fight Materials Management Plan (FFMMP). This plan provides specific locations, service life, maintenance, management, oversight procedures and availability of DWR flood fight materials pre-deployed throughout the State. This document will be updated annually of current locations of all available materials, recent inventories, condition of inventory, response times to acquire the materials, and other pertinent logistical support information utilized by the Flood Operations Center. In producing the FFMMP, the Flood Operations Branch has identified its pre-deployed field storage of Flood Fight Materials. Pre-deployment containers are stocked and ready for deployment in 10 locations throughout the State. Stored materials include: rock, sandbags, plastic sheeting, wooden stakes, twine and buttons. The FFMMP will provide a tool to provide a rapid response of materials into the field when needed. A timely response to material request needs can save a levee and ultimately lives and property. Training on the use of this plan will be conducted for DWR logistic personnel in our flood operations center as well as staff on our incident command teams.

FLOOD FIGHT TRAINING

The Flood Operations Branch's Flood Fight Methods Training classes have been well attended the last few months in preparing ER staffs from around the state for an emergency response. Currently 603 multi-agency staff has completed the flood emergency training throughout the State through the end of December. On-going training continues with several classes scheduled for January and February. The number of staff trained does not reflect additional training by the California Conservation Corps utilizing the DWR flood fighting techniques.

BASIC INCIDENT COMMAND SYSTEM TRAINING

Basic Incident Command System (ICS) training is a requirement of all Department staff to prepare and aid in the Department's flood emergency response. The Flood Operation Center has taken on the responsibility of providing basic ICS training of all DWR staff. Basic ICS training includes FEMA IS-100 (introduction to Incident

Command Systems), FEMA IS-200 (ICS for single resources and initial action incidents), IS-700 (introduction to national incident management systems (NIMS), and Intro to SEMS. Classes began in December and will continue monthly until all DWR staff has been certified as qualified emergency responders.

COMMUNICATIONS EXERCISE

On 14 December 2011, in preparation for the winter season, the Response and Security Section conducted an exercise to drill the Incident Command Teams (ICTs) use of communication tools. The IT communications unit of the ICTs tested the satellite communications aspects of the Emergency Command Communications Trailers (ECCTs). The ECCTs are used to remotely transfer layers of data to the FOC server utilizing VPN access and/or FTP access. Other communication devices were also tested including satellite phones, IP phones, analog phones, the BGAN communication system and the VHS radio system. Successful communication and data transfer from the ECCTs to the FOC is critical. This type of training is essential and mission critical for emergency responders to be prepared in using various alternative means of communication in the event of an emergency during the flood season and throughout the year.

FLOOD EMERGENCY RESPONSE PROJECTS

Grant applications are due in mid-January for the Delta Communications Equipment Flood Emergency Response grant (directed expenditure). The FOC continues working on the grant guidelines for the Local Flood Emergency Response Projects grant, primarily considering public comments on the draft guidelines. The goal of this grant program is to improve the effectiveness of, and reduce the time required for, emergency response by local agencies. The total amount of funding available in this round is $5 million. There is no local match required for this competitive grant. We anticipate the guidelines for the grant to be finalized in early 2012.

FOC staff is attending monthly meetings with the Delta Levees Habitat Advisory Committee to facilitate additional communication.

EMERGENCY RESPONSE SUPPORT

This element includes various efforts that will further the Departments understanding of the flood system interactions with water supply systems and conjunctive use programs. It also includes the update of the Central Valley hydrology for use in risk assessment and project development. Another component includes developing a comprehensive plan to response to flood events in the Delta.

CENTRAL VALLEY HYDROLOGY STUDY (CVHS)

Significant accomplishments over last month include:

- Sacramento & San Joaquin HEC-ResSim model reviews are complete. HEC built in improvements into new build of HEC-ResSim, as a result of this review.
- Rainfall-runoff model analysis plans are complete and model development is complete. Calibration and verification of models is complete. Model simulation runs are complete or underway, depending on basin in question.

- Continuing internal coordination with USACE.
- Unregulated flow period of record simulations are underway for development of unregulated time series.

FUNCTIONAL AREA 2 OPERATIONS AND MAINTENANCE

Operations and Maintenance is a functional area under FloodSAFE established to ensure project facilities are operated and maintained in good working condition to function as designed. Although Operation and Maintenance has been a long-standing base program within DWR, FloodSAFE has expanded the program and provided additional funding. Historically, Operation and Maintenance projects were undertaken based on a backlog of deferred maintenance. Now, in addition to continuing to work on deferred maintenance, new projects are identified through a number of inspection programs. Operation and maintenance must continue indefinitely into the future, even after the FloodSAFE functional objectives have been achieved although the needs are expected to change over time as system upgrades and modifications are implemented.

CHANNEL MAINTENANCE

DWR is responsible for maintaining channel flow capacity for Sacramento River Flood Control Project channels and for performing channel-specific maintenance activities identified in the USACE Operations and Maintenance Manuals, including channel clearance if required to maintain design flow capacity. Channel Maintenance consists of inspection and evaluation, routine operations and maintenance, and implementation of corridor management projects.

- Bear River – mowed (3 acres), work ongoing.
- Colusa Weir (CDF Hand Crews) – mowed (5 acres), work ongoing.
- MA13 (Cherokee Canal) (CDF Hand Crews) – mowed (20 acres), work ongoing.
- Debris removal along 50 miles of seepage ditches is ongoing.
- Removal of beaver dams along 50 miles of channels is ongoing.

FLOOD FACILITIES OPERATION AND MAINTENANCE

DWR operates, maintains, and repairs or replaces flood control structures located throughout the Sacramento River Flood Protection Project to ensure readiness in the event of emergencies and that facilities function as designed. Actions include inspection and evaluation, routine operation and maintenance, and non-routine maintenance. Facilities include pumping plants that transfer runoff and excess water from the land-side of levees in the flood system to flood channels; bridges providing access over and to flood facilities; flow gages; and water control structures such as weirs.

- Pipe inspection in all areas 100% complete.
- Gate & Barricade maintenance/repair for 30 locations is complete in Sacramento Yard Area of responsibility (30% complete overall).
- Other ongoing activities at Sacramento yard include Supply Building Remodel (80% complete).
- Levee Gate repairs for MA1, East Levee Sutter Bypass, and MA5 ongoing.
- MA17 Pumping Plant Pump 3 preventative maintenance (50% complete).
- Other ongoing activities at Sutter yard include addressing Safety assessment findings and concrete repair (50% complete).

LEVEE MAINTENANCE

This element maintains levees and roads under DWR jurisdiction (State-maintained Maintenance Areas and bypasses) in accordance with USACE Operations and Maintenance Manuals. Annually, after high water recedes, levees are evaluated and repairs are made as necessary. Routine and extraordinary maintenance are also performed as necessary to meet maintenance assurances provided to the federal government.

- Rodent Program (poison, trapping, grouting) for all areas in Sutter are ongoing.
- Spraying levee slopes are 75% complete on the East Levee of the Sutter Bypass (18 Miles) and 45% complete on MA1 (7 miles).
- Spraying crown roads are 85% complete on Putah and Willow creeks (16 miles).
- CDF vegetation control is ongoing at MA5.
- Tree trimming is 50% complete on Putah Creek (3 miles) and 35% complete in MA9 (2.5 miles).

ENVIRONMENTAL INITIATIVES

DWR is responsible for planning projects in a way that avoids or minimizes environmental impacts, and for obtaining state and federal environmental permits and clearances for projects within the Operations and Maintenance Functional Area. Environmental Initiatives touches all aspects of this functional area and therefore is considered a close partner to the other maintenance elements and their activities. As such, it should be considered a part of each of the other major elements rather than a stand-alone element. Also, with DWR's established open collaborative process, various local, state, and federal agencies examine issues and develop integrated solutions to the complex environmental compliance requirements and resource opportunities as flood control maintenance activities are undertaken. Components include developing and managing environmental programs, and managing mitigation requirements for lands and habitats developed or acquired by the Department to mitigate for flood management maintenance and improvement projects.

- Flood Maintenance Office and Flood Project Office environmental staff in coordination with Flood Operation Center staff conducted an environmental emergency response tabletop exercise with environmental resource and regulatory agencies on December 8, 2011. The purpose was to improve coordination and review roles and responsibilities in emergency response efforts. Representatives from the U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, National Marine Fisheries Service, Department of Fish and Game and the Central Valley Regional Water Quality Control Board participated in the 3-hr exercise.
- DWR has received the draft hydraulic modeling technical report for baseline conditions and a list of proposed future conditions to model for the Lower Feather River Corridor Management Plan (CMP). A work group meeting is scheduled for January 19, 2012, to discuss modeling scenarios for future conditions indentified

in the technical report, which will inform development of the CMP. The Draft CMP is scheduled for completion in March 2012, and the final should be complete in June 2012.

LEVEE REPAIRS

The Levee Repairs Program repairs critically damaged levees and proactively repairs other damaged levees that cannot wait for system improvement projects and require rapid repair before the next flood season. Levee repair projects are implemented through collaboration with federal and state resource agencies, USACE, and local agencies. Levee repairs are done under three federal authorized programs; Sacramento River Bank Protection Project (SRBPP), Levee Stability Program (LSP), and PL84-99 Rehabilitation Assistance Program (PL84-99). In addition, the State repairs flood project levees under the Sacramento-San Joaquin Erosion Repairs Project (SSJERP).

- **Sacramento River, RM 77.2L – SRBPP**
  Construction work is complete and the plant establishment phase has begun.
- **Lower American River, RM 10L &10.6L – SRBPP**
  Construction work is complete and the plant establishment phase has begun.
- **Feather River, RM 7.0L – SRBPP**
  Construction work is complete and the plant establishment phase has begun.
- **Sacramento River RM 57.2R setback levee project - SRBPP**
  Construction is on hold due to flood season but is expected to resume in April and is scheduled to be complete in 2012.
- **Sacramento River RM 16.8L, 26.0L, 41.9R, 55.2L, 71.3R, 130L, 157.7R – SRBPP**
  These erosion repair sites scheduled are for 2013 construction. Design is 90% complete and the DWR Real Estate Branch is working on right-of-way needs.
- **San Joaquin River RM42.3R - LSP**
  Project limit was extended per Urban Levee Evaluation Branch request. PS&E is being updated to reflect the change in project limits. Construction is scheduled for 2012.

FUNCTIONAL AREA 3 FLOODPLAIN RISK MANAGEMENT

The primary purpose of Floodplain Risk Management is to reduce loss of life and property caused by floods and to restore the natural resources and beneficial functions of floodplains by providing comprehensive guidance and technical support and assessing the floodplain management needs and issues of California communities in order to promote a comprehensive and system-wide flood management strategy.

FLOODPLAIN MANAGEMENT TECHNICAL SUPPORT

Floodplain Management Technical Support provides statewide technical support to federal, state and local agencies, and the public for flood hazard maps, levee data and National Flood Insurance Program (NFIP) activities, including the Community Rating System (CRS).

- CRS staff gave a presentation to the CRS Task Force to update California CRS program. Task Force members throughout the U.S. attended. DWR anticipates the release of 2012 CRS Manual and is preparing to revise CRS program components according. CRS staff contacted FEMA Region IX regarding a data issue for the City of Wildomar. Staff also informed them about two other newly incorporated cities in Riverside County (Jurupa Valley and Eastvale; both were incorporated after being mapped as part of the unincorporated area of Riverside County) which are not currently participating NFIP communities. Staff responded to multiple requests from citizens and consultant engineers for technical assistance. One involved the construction of a new cellular telephone tower in a coastal floodplain.
- William Hom, P.E., CFM, Chief of Floodplain Management Technical Support Section, retired after 38 years of distinguished state service, of which 20 years were in floodplain management

STATEWIDE FLOODPLAIN EVALUATION AND DELINEATION

Floodplain Evaluation and Delineation works to estimate the frequency, depth, and limits of potential flooding throughout the state providing building blocks in terms of floodplain assessments, standards, methodologies, tools, and analyses supporting multiple applications including FloodSAFE programs and projects and FEMA's National Flood Insurance Program.

Ricardo Pineda and Senarath Ekanayake met with Riverside County and San Diego County flood control officials in December regarding pilot studies related to the Alluvial Fan Floodplain Evaluation and Delineation Project.

CENTRAL VALLEY FLOODPLAIN EVALUATION AND DELINEATION

Floodplain Evaluation and Delineation works to estimate the frequency, depth, and limits of potential flooding in the Central Valley by providing building blocks in terms of floodplain assessments, standards, methodologies, tools, and analyses supporting multiple applications including FloodSAFE programs and projects and FEMA's National Flood Insurance Program.

Staff finalized channel geometry data development (for both bathymetric and field survey methods). Staff also delivered to the USACE calibrated HEC-RAS models for the Lower San Joaquin River Feasibility Study for a quality assurance review. The USACE has dual roles in this case: one is the Federal sponsor for the LSJRSF and the second is quality assurance review under contract with CVFED.

FLOOD RISK NOTIFICATION

The Flood Risk Notification Element focuses on communicating flood risk to the public, and local, state and federal agencies to increase flood hazard awareness for areas protected by the State Plan of Flood Control.

FRN staff attended the Flood Risk Communication Essential Workshop in Sacramento. FRN staff also worked with county assessors to attain data missing from the 2011 FRN final database, worked with staff of Division of Statewide Integrated Water Management for alternative sources of parcel data, and continues to respond to public inquiries regarding the FRN 2011 notice, including a request from a mobile home park to provide 300 copies to their residents. In the fall of 2011, approximately 272,000 flood risk notification flyers were mailed to property owners whose property is protected by the facilities of the State Plan of Flood Control.

FLOOD RISK PLANNING

Flood Risk Planning is focused on incorporating flood risk management into statewide and local land use decision making to identify potential flood hazards and mitigation strategies to reduce flood risks through creating planning approaches and data sets that help agencies, communities, and individuals make better informed decisions.

- On January 31st, FPM Branch staff will participate in the DWR sponsored Climate Change, Extreme Weather, and Southern California Floods Workshop to be held in Alhambra, CA. The workshop will focus on climate change impacts on Southern California floods and FPM staff will present Alluvial Fan Task Force Findings and Recommendations relative to the Alluvial Fan Floodplain Evaluation and Delineation project.
- Ricardo Pineda has been selected to be on a national advisory team for the Federal Inter-agency Floodplain Management Task Force. The goal of this Task Force is to update the 1994 Unified National Approach to Floodplain Management. This effort may inform the potential for issuing a new federal executive order (EO). The existing EO on this topic (EO 11988) was issued during Jimmy Carter's administration. Ricardo participated in the Task Force's kickoff meeting on January 11th.
- Regarding Building Codes, an FPM staff was accepted to be on national Task Group being formed by FEMA's Building Science Branch to develop national consensus standards through ASTM for Flood Damage Resistance Rating of Materials and Assemblies. This pre-standard development is an important step

in the building code/standard development process. Being on this task group will benefit our California Building Standards Code development of flood-mitigating code to apply in Central Valley 200-year floodplain by ensuring that it is coordinated with new national standards, at the minimum, as national "I-Codes" often set precedence. DWR is mandated by Senate Bill 5 to develop code that makes buildings in the above mentioned floodplain flood-resilient.

- Staff is working with stakeholders to identify sustainable measures for Central Valley agriculture communities that are mapped within FEMA's Special Flood Hazard Area (SFHA). As a result of Procedure Memorandum (PM) 34 and PM 43, there are a growing number of agricultural communities being mapped into the SFHA.
- FPM Branch staff participated in FEMA's webinar on proposed revisions to analysis and mapping procedures for non-accredited levees; staff plan to provide public review comments.
- Ricardo Pineda made a presentation to DWR FESRO staff on the Lower Mississippi River flood control system, 2005 levee and floodwall failures in New Orleans, the recently completed flood protection system in New Orleans, and the major wetland and marshland restoration projects proposed for the New Orleans area.
- Ricardo Pineda made a presentation to DWR Integrated Water Management executives on FPM projects and programs within FloodSAFE Functional Area 3.

FUNCTIONAL AREA 4 FLOOD PROJECTS & GRANTS

Flood Protection Projects and Grants are responsible for the State's input to project selection and funding. The program is responsible for the majority of physical improvements to the flood management system and provides grant money in the Delta and Statewide. Flood Protection Projects and Projects Grants has been a long-standing DWR base program and is expected to continue indefinitely into the future due to the ongoing need for system improvements and the long-lead time to implement federal flood control projects. The work is based on the acknowledgement that the State will continue to be a significant partner in viable flood management projects in the Central Valley, Delta, and Statewide.

CENTRAL VALLEY FLOOD PROJECTS

This element is responsible for the review of flood projects and cost-sharing on federal feasibility studies. It contains three components: Feasibility Studies, Early Implementation Program (EIP) Projects, and Flood Control Projects.

USACE/CVFPB STUDIES SECTION

The State participates and provides cost-share for feasibility studies with USACE and local partners. Several studies are underway and new ones are expected in the near future.

American River Common Features GRR

This study will provide flood improvements for lower American River downstream of the Folsom Dam, Sacramento River downstream of Natomas Cross Canal, and the Natomas Cross Canal to a 200-year level of flood protection. The Post Authorization Change Report (PACR) evaluates alternative plans for the levee system around the Natomas Basin and acts as an interim general reevaluation study to the GRR.

- USACE is preparing a draft existing conditions report for the Scoping Meeting. The scoping meeting is anticipated for Mid February.

Frazier Creek Feasibility Study

This study will generate an EIS/EIR and feasibility study to evaluate federal, State, and local interests in planning, designing, mitigating, and improving existing levee system of Frazier Creek/Strathmore Creek in Tulare County.

- DWR's Legal Counsel has concurred with the provisional language for the draft Feasibility Cost Sharing Agreement (FCSA). A date has not been established to bring the FCSA before the Board.

Lower San Joaquin River Feasibility Study

This study is a coordinated effort by the State, USACE and San Joaquin Area Flood Control Agency (SJAFCA) to investigate feasible 200-year level flood protection alternatives and opportunities for floodplain restoration and recovery, recreational enhancements, and ecosystem restoration for the city of Stockton and surrounding areas. The cost estimate for the study is $10.6 million with a projected 2016 completion date.

- USACE has agreed to use existing available geotechnical, hydraulic, and economic data where available to complete the preliminary screening of

alternatives for this project. This decision will allow the PDT to meet the goal of completing the screening by June 2012.

- The non-federal sponsors are working with USACE to amend the Feasibility Cost Share Agreement (FCSA) to allow In Kind Contributions (IKC) and cash payments to be accelerated to USACE up to the cost share per the FCSA. This allows the Study to move forward should USACE receive no funding in the President's budget. Once the amendment language is agreed upon by all sponsors, the amendment will be presented to the Board.
- On November 30, 2011 DWR issued the Notice to Proceed for additional geotechnical work including mapping, data gathering and field investigations in support of the preliminary screening process.

Merced County Streams Project-Bear Creek GRR

This project's purpose is to evaluate options to increase the level of flood protection from a 50-year event to 200-year event for the Merced Urban Area.

- Nothing new for this month..

Rock Creek/Keefer Slough Feasibility Study

This study will generate an EIS/EIR and feasibility study to evaluate federal, State, and local interests in planning, designing, mitigating, and improving existing levee systems of White River and Deer Creek in Butte County.

- USACE and the Board Staff continue to complete the closeout process of the Continuous Authority Project (CAP) for Rock Creek. USACE is in the process of providing tasks completed during the life of the project in order to process the final accounting documentation.

Sacramento River Flood Control System Evaluation

The Sacramento River Flood Control System Evaluation (SRFCSE) will concentrate on deficiencies in non-urban levees that may be a threat to small/rural communities due to levee instability as well as identify and prioritize sites that will be presented in a final report. There will be no formulation of projects to correct deficiencies during this study.

- Nothing new to report.

Sutter Basin Feasibility Study

This multipurpose study aims to address levee improvement measures for existing levee systems as well as environmental restoration and recreation opportunities.

- On November 30, 2011, USACE conducted the In Progress Review (IPR) #3. The purpose of this review was to present the USACE Vertical Team with the Recommendation of Final Array of Alternatives. The Array resulted from the Value Engineering Charrette which was completed on November 4, 2011. These activities are a continuation of the USACE National Pilot Program.
- On December 21, 2011, DWR and Sutter Butte Flood Control Agency (SBFCA) met with USACE to discuss the increase in study cost and status of Feasibility Cost Sharing Agreement (FCSA) Amendment #2 to the FCSA and the Project Management Plan (PMP). DWR and SBFCA requested an accounting of cost

increase; USACE is revising the PMP which will show how project costs have increased.

West Sacramento GRR
The General Reevaluation Report (GRR) is being conducted to study future work necessary to provide a minimum of 200-year level of protection for the City of West Sacramento.

- Amendment No. 2 to the Feasibility Cost Sharing Agreement (FCSA) is being processed. This amendment will allow the non-federal sponsors to increase the study costs from $5.7M to $10M and allow In Kind Contributions (IKC) and cash payments to be accelerated up to the cost share per the FCSA. This acceleration of funds allows the Study to move forward should USACE receive no funding in the President's budget.

West Stanislaus County - Orestimba Creek Feasibility Study
This study will evaluate feasible flood protection alternatives for the City of Newman and the surrounding agricultural areas to achieve a 200-year level of flood protection.

- USACE is preparing for the Alternative formulation meeting, a major USACE milestone in the feasibility process. USACE is producing a draft report which will be presented at the Alternative formulation meeting. The alternative formulation briefing is anticipated for April 16, 2012.

White River/Deer Creek Feasibility Study
This study will generate an EIS/EIR and feasibility study to evaluate federal, State, and local interests in planning, designing, mitigating, and improving existing levee system of White River and Deer Creek in Tulare County.

- DWR's Legal Counsel has concurred with the provision language for the draft Feasibility Cost Sharing Agreement (FCSA). A date has not been established to bring the FCSA before the Board.

Woodland/Lower Cache Creek Feasibility Study
USACE will develop alternatives for a new feasibility study to determine if there is a National Economic Development (NED) plan that is federally justified. The study will continue efforts suspended in 2004 after local resistance to USACE-selected Flood Barrier Option alternative. USACE estimates that the new feasibility study will be complete in 2017 with design of a selected alternative to commence in 2017.

- DWR's Legal Counsel has concurred with the provisional language for the draft Feasibility Cost Sharing Agreement (FCSA) that will allow the Nonfederal Sponsors to advance fund contributions, payments, ahead of USACE to the cost share outlined in the FCSA. This allows the Study to move forward should USACE receive no funding in the President's budget.

Yuba River Basin Project GRR
The Yuba River Basin Project consists of increasing the level of flood protection in the Yuba River Basin communities of Marysville, Linda, Olivehurst, and Arboga.

- DWR is preparing the Nonfederal Sponsor's preference document to pursue the National Economic Development Plan for the GRR instead of the Locally Preferred Plan; this will result in a loss of potential credit. This decision will be brought before the Board in the January 26, 2012 Board meeting.

EARLY IMPLEMENTATION PROGRAM (EIP) PROJECTS
EIP includes projects that are ready to proceed in advance of the CVFPP. An element of approval for these projects ensures that they do not eliminate opportunities or prejudice the flood risk reduction alternatives that would provide regional or system wide benefits.

Levee District 1 - Setback Levee at Starbend Feather River (LD-1)
Levee District 1 constructed a 3,400 foot long setback levee at Star Bend near RM 18.0 on the right bank of the Feather River.

- No change since last month. DWR staff is waiting for LD-1 to provide closeout documents to begin the closeout process.

Reclamation District 17 - 100-Year Seepage Area Project (RD-17)
The RD-17 levees have unacceptably low factors of safety for under- and through-seepage. These issues are being addressed by constructing seepage berms, slurry walls, and setback levees.

- RD-17 is moving forward with the 60 percent design plans and will be presenting the information to DWR on January 12 and 13, 2012.
- RD-17's funding agreement has been extended as a one-year time extension. No additional funds are needed for this project.
- DWR is currently analyzing the results from the piezometer data and working with RD-17 to ensure the levee is performing as designed.

Three Rivers Levee Improvement Authority – Feather River (TRLIA-FR)
The Feather River Levee Improvement Project (FRLIP) will offer 200-year flood event protection for both Highways 65 and 70. FRLIP will lower water surface elevations by 1.5 feet along the Feather River and the lower Yuba River benefiting the communities of Olivehurst, Linda, Plumas Lake, Marysville, and Yuba City. This project includes one of the largest setback levees west of the Mississippi River and creates 1600 acres for site mitigation, agricultural use and habitat.

- Construction of the Vegetated Wave Buffer, Segment 2, is now complete and a post construction job-walk will be scheduled for January 2012.
- The Board has required TRLIA to remove all existing asbestos concrete piping left in the floodway within the setback area and all PVC irrigation lines within 100 feet from the water side toe of the setback levee as well as removing visible PVC risers. This work is now 100 percent complete. A post construction job-walk will be scheduled for January 2012.
- Permit No. 18690 to install chain link fencing, K-rails, and a maintenance road within the Sacramento San Joaquin Drainage District Right-of-Way, parallel to and on the landside of the Feather River east (left) bank levee and Yuba South Levee. (Yuba County) is scheduled to be heard at the January Board meeting.

Three Rivers Levee Improvement Authority - Upper Yuba River (TRLIA-YR)
The **Upper Yuba River Levee Improvement Project** will complete a levee system designed to provide 200-year level of protection for 40,000 residents in South Yuba County.

- Construction work is about 90 percent complete. CVFPB has approved a time extension request, for winterization work to be performed during in the flood season, to December 31, 2011. Gate and pipe fence installation continues.
- Amendment 1 to extend the Funding Agreement time to September 2013 has been signed by all parties and now it is been reviewed with DGS.

Sacramento Area Flood Control Agency - Natomas Cross Canal (SAFCA-NCC)
This project, part of the Natomas Levee Improvement Program, would improve the level of flood control protection to the Natomas Basin by providing at least 200-year level of flood protection. This is accomplished by installing cutoff walls to prevent seepage, underseepage, and raise the levee.

- SAFCA has submitted the NCC Project Completion Report, dated May 9, 2011, which was received on June 24, 2011. Comments from reviewers were received in June with the exception of those from the Board. EIP is awaiting the CVFPB's approval of the work completed under the NCC 1 & 1B Permits, which will allow EIP to release the 10 percent withholding. SAFCA has expressed concerns over delays in releasing these funds.

Sacramento Area Flood Control Agency - Capital Outlay (SAFCA-CO)
This project, a part of the Natomas Levee Improvement Program, would improve the level of flood control protection to the Natomas Basin by providing at least 200-year level of flood protection. This is accomplished by installing cutoff walls to prevent through seepage, underseepage, and raise the levee. SAFCA plans to complete components to Element 12A (approximately RM 67) along the Sacramento River in 2011 and have USACE complete the remainder. This is estimated to occur in 2014.

- Construction is currently underway on Elements 10 to 12A (I5 to Powerline Rd). Sukut Construction has completed cutoff wall construction and is currently working on embankment construction (total contract amount - $19.2 million). Construction is approximately 50 percent completed. A time extension has been submitted to the Board for work to continue through January 15, 2011. Sukut has filed a claim with SAFCA for approximately an additional $6 Million which is going to resolution.
- Construction is continuing by Nordic Construction on Elements 6B to 9A (Teal Bend to I5) and is approximately 90 percent complete. Nordic has recently been issued two Notice of Violations (NOVs) by the Board for unacceptable work. SAFCA is working with Nordic, the Board, and EIP staff to resolve the NOVs quickly. EIP Program staff notified SAFCA that no payments will be made for this portion of the work until the work has been completed to the satisfaction of the Board (in compliance with the plans and specs).
- SAFCA is in discussions with EIP staff and management for an increase in the Funding Agreement amount of $193,270,000 by an additional amount not to exceed 10 percent. This increase is due to increased project costs. A Decision Memo has been drafted and is under review.

- EIP is processing a payment to SAFCA of approximately $11 Million for work completed.

West Sacramento Area Flood Control Agency, Capital Outlay (WSAFCA-CO)
The CHP Academy, the Rivers and the I-Street Bridge projects are part of the North Area Plan and were selected to be completed under EIP. All three projects are designed to provide 200-year level of protection for about 47,000 residents. The I-Street Bridge project was completed in November 2008. Plans and specifications are currently nearing completion for the CHP Academy and The Rivers projects. The two projects are scheduled for construction in June 2011 and are expected to be completed in December 2011.

- All major construction is complete at the Rivers and CHP Academy. Contractors continued working on completing punch list items. CVFPB has approved a time extension request for The Rivers project to perform during the flood season, to December 31, 2011. Construction is about 98 percent complete.
- Amendment 1 to extend the Funding Agreement time to September 2013 and increased the design cost by $14.3 million has been mailed to WSAFCA for their review and signature.

Sutter Butte Flood Control Agency, Feather River West Levee Project (SBFCA)
The Feather River West Levee Project will repair approximately 44 miles of levee along the west banks of the Feather River from the Thermalito Afterbay to near Star Bend.

- The Design Funding Agreement was signed by all parties on October 25, 2011 and should be officially executed by the Department of General Services next month.
- Design is currently at the 60 percent design level.

USACE/CVFPB PROJECTS
The Board continues to participate with USACE on non-federal cost-share funding for projects to upgrade the State-federal flood management system in the Central Valley.

American River Common Features Project
The American River Common Features Project is improving the levee system along the American and Sacramento Rivers in Sacramento.

- Construction of Site R5 and Mayhew Staging Area Revegetation/Erosion Site Repair Complete.
- DWR Real Estate is currently negotiating with Sacramento County and City for a programmatic approach to permanent and temporary easements for future Phase 2 and Phase 3 projects including Site L5A, L9A, R9, R10, L13 and NEMDC.

Folsom Dam Raise and Bridge Element
The Folsom Dam Raise and Bridge Element Project provide Flood Damage Reduction and Dam Safety benefits to Sacramento.

- The Folsom Dam Raise PDT is currently developing optimal construction plans to make best use of projected Congressional authorization and funding.
- A Project Partnership Agreement (PPA) is scheduled for discussion and execution in 2012 for the dam raise portion of the project. Replacement of the emergency gates a possible addition to the dam raise.

Folsom Dam Modifications (Joint Federal Project)

The Folsom Dam Modifications Project (Joint Federal Project) provides Flood Damage Reduction and Dam Safety benefits to Sacramento.

- The estimated completion for the JFP is October 2017.
- Control Structure excavation of over 238,000 CY is 77% complete as of November 29th. Blasting will continue through the month of December.
- Folsom Prison land lease is being processed with DGS, DWR and DCR. Lease signing is scheduled for March 2012.
- Project Development Team meetings are held monthly for the Operations Study.
- Chute and Stilling Basin 65% constructability review conference occurred the week of 5 Dec. Design is approximately one month ahead of schedule.
- Cut off wall option has been chosen as the preferred alternative. This option allows the rock plug excavation to begin sooner, overall schedule savings are being determined.
- Federal Air Quality Standards - Updated calculations of projected air emissions for the Approach Channel work indicate that it will exceed the federal de minimus standard of the Clean Air Act each year so, the Team is reviewing alternatives to mitigation without extending the schedule is positive.
- FY12 Funding—Federal capability predictions for FY12 are $28M and the President's Budget is $21M. Project Cooperation Agreement Amendment No. 3, allowing partner acceleration of funds, was approved by the Central Valley Flood Protection Board on December 2nd. The amendment is going through final signatures from all partners.

Marysville Ring Levee Improvement Project

The Marysville Ring Levee Project provides 200-year or greater flood protection to the City of Marysville by constructing cut-off walls and levee strengthening and reshaping features to the existing levee system surrounding the Marysville urban area.

- Phase 1 levee is now shut down for 2011. Reconstruction activities will be resumed in the summer 2012.
- USACE Levee Safety finalizing testing procedure to evaluate installed soil cement bentonite wall (SCB) for continuity, verticality and homogeneity. Wall evaluation scheduled for December 2011 with final wall evaluation results released in January 2012.
- Phase 2B geotechnical investigation underway by Fugro and HDR for Phases 2B and 4.
- Local Partners and Board staff are currently in negotiation with USACE to resolve the denial of Section 103 Deferral extension and Section 104 credit denial.

Mid-Valley Area Levee Reconstruction Project
The Mid-Valley Reconstruction Project extends from the Tisdale Bypass to the Sacramento Bypass and includes levees on Sacramento River, Feather River, Yolo and Sutter Bypasses, and Knights Landing Ridge Cut.

- USACE continues to review the 30% plans and specifications for Sites 9, 10, & 11 in Yolo County.
- The turnover letter for the O&M supplemental manual for RD 1500 is scheduled to be delivered to DWR in February.

South Sacramento Streams Project
The South Sacramento County Streams Project will increase the level of flood protection from 1-in-50-years to 1-in-200-years for the urbanized area of South Sacramento County and an area to the south and east of the City of Sacramento.

- The State recently acquired real estate from Union Pacific Rail Road (UPRR) and the USACE subsequently awarded a contract to construct 2,850 feet of floodwall along Morrison Creek and UPRR tracks. Construction is scheduled to begin in May 2012.
- Complications with right of way limitations on the Unionhouse Creek design along 4,500 feet of the creek have led the local sponsor to investigate alternatives for flood control along Unionhouse Creek. SAFCA is pursuing a contract with the City of Sacramento to design and construct improvements apart from USACE. Details on SAFCA's plan are expected to be released in late January 2012.
- USACE, the State and SAFCA are performing a conceptual design for the PACR on all of the remaining creeks. In addition, detailed design has begun for Florin Creek improvements.

West Sacramento Area Project, Slip Repair

- Repairs on the south slip are complete. A final inspection was performed on December 30th and there are no outstanding issues with the south repair. As-built drawings are being prepared for both the north and south repair sites.
- At the north repair site that was completed in October 2011, USACE is still addressing how the abandonment of the dewatering wells. The contractor will be required to recap the wells to USACE and DWR satisfaction.

STATEWIDE FLOOD PROGRAMS

The Statewide Flood Programs provide financial support to local entities for flood and ecosystem restoration related projects throughout the State. These programs include Flood Control Subventions Program, Flood Corridor Program, Local Levee Assistance Program, and Yuba-Feather Flood Protection Program.

FLOOD CORRIDOR PROGRAM (FCP)

The Flood Corridor Program provides local assistance grants to local governments, special districts, and non-profit organizations for flood risk reduction projects using non-structural methods. Each project must also include an ecosystem restoration or agricultural land conservation component.

- Draft funding recommendations are expected to be announced in January 2012 for non-structural flood risk reduction projects selected as a result of the most recent FCP competitive proposal solicitation.
- A grant funding agreement was signed for the River Partner's Ecosystem Restoration and Floodwater Attenuation project. The project increases transitory storage of floodwaters on the San Joaquin River National Wildlife at the confluence of the San Joaquin and Tuolumne Rivers. The funding source is Proposition 84.

FLOOD CONTROL SUBVENTIONS PROGRAM (FCSP)

The Flood Control Subventions Program provides financial assistance to local agencies cooperating in the construction of federally authorized flood control projects outside of the Central Valley and the State Plan of Flood Control.

- Six claims for total of $19,831,715 were approved for payment
- Eleven claims for $38.2 million are currently under review for processing
- No audit payments were processed
- One new claim for $437,207 was received
- In total, forty two claims for $109.3 are pending review
- Work on revising Program Guidelines is in progress

LOCAL LEVEE ASSISTANCE PROGRAM (LLAP)

LLAP provides financial assistance to local agencies to evaluate and perform urgent repair on their flood control facilities outside of the Central Valley and the State Plan of Flood Control.

- Contra Costa County's invoice #4 was reviewed and approved. Additional funds have been encumbered as a result of an amendment to the contract and invoice #4 is in the payment process. .Payment has been processed through the budget office. The County submitted the Klamath Glen Levee Final Geotechnical Report. The report is being reviewed and once complete, retention funds will be released and project will be closed out.
- Marin County continues to hold up project operations as it awaits information from USACE. An amendment to the contract, extending the termination date an additional 6 months, is currently in approval process.

YUBA-FEATHER FLOOD PROTECTION PROGRAM (YFFPP)

YFFPP provides Proposition 13 financial assistance to local entities demonstrating non-structural flood management projects showing a potential significant reduction of peak flood flows, flood stage, flood risk (including wildlife habitat enhancement and/or agricultural land preservation) on the Yuba and Feather Rivers.

- Staff is currently reviewing a new application for geotechnical evaluations along the Yuba River with the Three Rivers Levee Improvement Authority. A decision memo is being drafted to request approval for a new agreement once review has completed.
- Sutter County submitted invoice #4 for technical work to supplement the Sutter Count Feasibility Study ($1.4M Restricted Contract). Invoice was reviewed, approved, and is currently being processed in accounting.
- Yuba County Water Agency submitted request to amend language in the Flood Coordinated Operations Contracts. Staff is determining the details of the request and is working to draft an amendment and decision memo.

PROGRAM SUPPORT

The program support function is designed to ensure the various programs and their projects receive sufficient technical and administrative support to be successful. These support functions are Grant Guidelines, Environmental Services, Technical Assistance, and Federal Coordination.

GRANT GUIDELINES and PROGRAM SOLICITATIONS

Local Levee Assistance Program (LLAP) and FCSP have finalized their program guidelines.

- The Project Solicitation Package (PSP) application period ended on December 8, 2011. About 50 applications were received for a total of $87 million. Staff has begun the Acceptability and Completeness Review of all applications. Once approved, the applications will enter a thorough review process

ENVIRONMENTAL SUPPORT

FCP has a number of environmental resources that provide technical assistance to various FPO projects.

- Most activities are described under the individual project headings.
- Staff reviewed and provided comments for various sections of the Delta Plan Draft EIR and Delta Plan.

TECHNICAL ASSISTANCE

LLAP has resources to provide technical assistance in flood modeling, GIS, technical consultation, design criteria development, and databases to various programs in FPO.

The final AB 1788 regulations package has been submitted to the Office of Administrative Law. The regulatory action was published in the Regulatory Notice on October 7, 2011. Public hearings are scheduled for the Sacramento and Long Beach areas on November 30, 2011 and December 1, 2011.

- Staff has developed a white paper for the FAXCT 9 Feasibility Studies Sub-Team. The white paper is currently under review by team members and DWR staff.
- As part of the Lower Feather River Corridor Management Plan development, staff reviewed technical memos from the modeling subconsultants regarding the definition of baseline roughness conditions and the vertical reference datum used. Additionally, reviewed a table from the prime consultant describing anticipated future roughness condition scenarios to be modeled to compare baseline conditions with anticipated

REGIONAL PLANNING

Regional Planning is a new initiative resulting from the drafting of the 2012 Central Valley Flood Protection Plan. LLAP is taking the lead in the data collection effort for the Regional Plans.

- NULE data from FMO and ULE data FRAMO have been collected for all 9 regions. We are in the process of listing projects by region.
- A meeting was held with SJAFCA to discuss Regional Planning and their local flood protection needs.
- Presentations were made to FAXCT 1 and Executive Management updating them on the status of Regional Planning.

DELTA FLOOD PROJECTS

This is a grants program that works with more than 60 reclamation districts in the Delta and Suisun Marsh to maintain and improve the flood control system and provide protection to public and private investments in the Delta including water supply, habitat, and wildlife. The program, through its two major components; Delta Levees Maintenance Subventions Program and Delta Levees Special Flood Control Projects, works with the local agencies to maintain, plan and complete levee rehabilitation projects. One of the requirements to qualify for available funds is the project to result in no net loss of habitat in the Delta. Additional responsibilities under the Bay-Delta Levees Branch are in support of the levee system and habitat development; improve the flood fight capability of the Delta through planning, cooperative efforts, encouraging the development of emergency response plans for each Delta island, and conduct studies and contract efforts necessary for program purposes.

DELTA LEVEES MAINTENANCE SUBVENTION PROGRAM

DWR staff, on behalf of the Central Valley Flood Protection Board, initiates and manages work agreements to fund levee maintenance and rehabilitation. To date, the status of work agreements is as follows:

Work Agreements for FY 2009-2010

- DWR staff has completed 62 joint levee inspections and received DFG approval for 61 claims. Payments will be processed by staff as DFG approves the claims.
- Staff has received 62 final claims for the maintenance work totaling $13 million and, to date, 61 reimbursements have been paid totaling $9.2 million.

Work Agreements for FY 2010-2011

- DWR staff has mailed work agreements to 68 reclamation district and has received signed work agreements from 65 reclamation districts.
- Final Claims have been received from 61 reclamation districts totaling $17.9 million.
- DWR staff has completed 32 joint levee inspections and received DFG approval for 27 claims. Payments will be processed by staff as DFG approves the claims.

Work Agreements for FY 2011-2012

- The FY 2011-2012 funding allocation plan presented to the Board on September 23, 2011 has been approved by the Board. The plan allocates the funding of $12 million to 66 reclamation districts.
- Staff mailed Work Agreements on October 25, 2011 to participating districts for signature.
- To date, staff has received 36 agreements back from the districts. Agreements signed by the districts will be routed to the Board's Executive Officer for final signature.

DELTA LEVEES SPECIAL FLOOD CONTROL PROJECTS

DWR initiates and manages project funding agreements in support of local agencies' levee rehabilitation, habitat, or other projects. DWR is executing agreements authorizing the work proposed under Project Solicitation Packages.

- No new information.

Current information can be found at:

http://www.water.ca.gov/floodmgmt/dsmo/bdlb/spp/

FUNCTIONAL AREA 5 EVALUATION & ENGINEERING

Evaluation & Engineering is a FloodSAFE Functional Area established to address assessments of existing flood management facilities to identify deficiencies and needed improvements. This is a new Functional Area that is expected to continue after the FloodSAFE foundational objectives are met. Functional Area activities are performed in partnership with the USACE, which prior to FloodSAFE, conducted most evaluations and engineering for existing facilities. This Functional Area is based on the acknowledgement that changing conditions, new knowledge about system performance, and eventual facility deterioration will demand continued evaluation and engineering services.

URBAN LEVEE EVALUATION (ULE)

DWR is required to evaluate the current level of performance of the State-federal flood protection system in the Central Valley. Urban levees are levees that provide protection to developed areas with a population of at least 10,000 people. The evaluation of current urban levee performance is to include an estimate of the risk of levee failure, a discussion of the inspection and reviews performed, and recommendations regarding the levees and future work activities. The geotechnical engineering being performed will help flood managers understand the overall flood risks to populated areas in the Central Valley and consider alternative changes to the flood management system to better manage the risks.

ULE is evaluating 470 miles of urban levees for hidden defects. The 470 miles include State-Federal project levees as well as associated non-project levees that provide protection to urban areas receiving some protection from the State-Federal flood system. Urban levees are being evaluated to determine whether they meet defined geotechnical criteria and, where needed, identify remedial measures, including cost estimates, to meet the defined geotechnical criteria. The information being developed will be used in support of the Central Valley Flood Management Planning Program to inform development of two required documents: the Flood Control System Status Report and the Central Valley Flood Protection Plan.

Geotechnical Evaluation Reports			
Study Area	**% Complete**	**Study Area**	**% Complete**
Chico	**33**	**NEMDC East**	**43**
Marysville	**47**	Natomas	15
Sutter	35	**Bear Creek**	**28**
RD 784	**44**	**Calaveras River**	**28**
Davis	**13**	**RD 404**	**41**
Woodland	**13**	**RD 17**	**51**
American River	**43**	**Stockton Non-Project**	**35**
West Sacramento	97	W. Sac. Non-Project	15
Sacramento River	**50**	**South Sac. Streams**	**13**

Changes shown in bold.

- Overall, ULE is 69% complete.
- The West Sacramento GER (Volumes 1 and 2), the template for all GERs has received comments from USACE and is continuing to be finalized.
- Drilling continued in Davis, Woodland, West Sacramento (non-project levees), and Stockton during this reporting period. Other than a few limited areas that have access constraints, drilling is completed.
- Schedules for completion of the Geotechnical Evaluation Reports (GERs) Program are continuing to be modified with the current delivery date of the GERs scheduled for the middle of 2013.
- Marysville, Sacramento River, RD 784, NEMDC East, American River, and RD 404 GERs continue to be active. The RD 17 GER was initiated during the reporting period.

NON-URBAN LEVEE EVALUATION (NULE)

DWR is required to evaluate the current level of performance of the State-federal flood protection system in the Central Valley. Non-urban levees are levees that provide protection to agricultural areas and developed areas with a population of less than 10,000 people. The evaluation of current system performance is to include an estimate of the risk of levee failure, a discussion of the inspection and reviews performed, and recommendations regarding the levees and future work activities. The geotechnical engineering being performed will help flood managers understand the overall flood risks to populated areas in the Central Valley and consider alternative changes to the flood management system to better manage the risks.

NULE is evaluating 1,620 miles of non-urban levees for hidden defects. The non-urban levees being evaluated include State-Federal project levees and associated non-project levees that also provide protection to non-urban areas receiving some protection from the State-Federal flood protection system. Non-urban levees are being evaluated to determine whether they meet defined geotechnical criteria and, where needed, identify remedial measures, including cost estimates, to achieve the defined geotechnical criteria.

The information being developed will be used in support of the Central Valley Flood Management Planning Program to inform development of two required documents: 1) the Flood Control System Status Report and 2) the Central Valley Flood Protection Plan.

- Overall, Non-Urban Levee Evaluations are 50% complete.
- Drilling activities other than a few locations with access constraints were completed during this reporting period.
- Schedules for completion of the GORs are continuing to be prepared with the current delivery date of the GORs scheduled for the middle of 2013.
- GOR pilot studies are ongoing in the Woodland South and Gravelly Ford study areas.

TECHNICAL REVIEW

Geotechnical analyses are being conducting on behalf of the CVFPB on an "as-needed" basis and to support proposed and ongoing capital improvement projects. Collaboration with the USACE is occurring with on-going geotechnical studies, including review of associated documents that may impact the CVFPP.

- Technical reviews are currently being performed for SAFCA (AR Common Features), the Sutter Butte Area Flood Control Agency, and the (LSJFS) Lower San Joaquin Feasibility Study, and RD 17.
- ULE/NULE will be providing additional CVFPP fragility curves (or supporting data) to USACE for the LSJFS.

TECHNICAL POLICY

A statewide seismic policy is being developed for levee performance, emergency levee remediation, and long-term levee remediation. Interim Levee Design Criteria (ILDC) are also being developed to guide local urban levee improvement projects. Research is being conducted to resolve gaps in knowledge associated with the effects that woody vegetation growing on or near levees has on levee integrity; and provide technical support for the development of vegetation management policies as part of the CVFPP.

- Vegetation management policies and research continues.
- With the completion of the draft West Sacramento GER, seismic studies are continuing in the study area for an overall general cost estimate for seismic deficiencies and cost benefit analysis of these fixes.
- Provided support for development of policy papers and technical data for the CVFPP and participated in various FloodSAFE FAXCTs (Functional Area Cross Coordination Teams).
- Continuing support for Version 5 of the Urban Levee Design Criteria was provided.

FUNCTIONAL AREA 6 FLOOD MANAGEMENT PLANNING AND CONSERVATION STRATEGY

The Flood Management Planning and Conservation Strategy Functional Area refer to the planning and analysis necessary to evaluate flood systems as *complete* systems *consistent with the intent of the FloodSAFE Implementation Plan rather than a set of individual, isolated projects. This functional area consists of three elements: Central Valley Flood Management Planning (CVFMP) Program, Statewide Integrated Flood Management Planning and Conservation Strategies.*

CENTRAL VALLEY FLOOD MANAGEMENT PLANNING (CVFMP)

The CVFMP Program is one of several programs being managed within FloodSAFE California. The CVFMP Program addresses most of the flood-related planning activities that were authorized by the Legislature during the 2007/2008 session within much of the Central Valley. The CVFMP Program consists of two primary projects - State Plan of Flood Control (SPFC) and the Central Valley Flood Protection Plan (CVFPP).

STATE PLAN OF FLOOD CONTROL (SPFC)

The Flood Control Systems Status Report (FCSSR) was formally submitted to the Central Valley Flood Protection Board (Board) with the Public Draft 2012 CVFPP on December 30, 2011.

CENTRAL VALLEY FLOOD PROTECTION PLAN (CVFPP)

The CVFPP reflects a system-wide approach to protecting lands currently protected from flooding by the SPFC.

- DWR Central Valley Flood Planning Office transmitted the *Public Draft 2012* CVFPP and several draft CVFPP attachments including the Conservation Framework to the CVFPB on December 30, 2012. Web versions were made available to the public on CVFPB and DWR websites. All documents are available at www.water.ca.gov/cvfmp. Key elements of the plan will be presented to the CVFPB at their January 27, 2012 meeting. At that time, the CVFPB will describe its process for reviewing the technical documents and accepting public comments. The 2012 CVFPP is to be adopted by the Board by July 2012 and updated every five years thereafter.
- Both the State Assembly and Senate will be provided with a briefing on the Public Draft 2012 CVFPP prior to the January 27 meeting of the CVFPB.
- Interviews primarily about the State Systemwide Investment Approach (SSIA) in the Public Draft 2012 CVFPP were made to a number of print, radio, and television media outlets beginning on December 30.
- DWR released the second CVFPP Administrative Draft Program Environmental Impact Report (PEIR) in early January for selected internal review. Public release of the PEIR is anticipated for early March 2012.

STATEWIDE INTEGRATED FLOOD MANAGEMENT PLANNING

The Statewide Integrated Flood Management Planning Program (SFMP) will assess the flood risk to life and property statewide, and develop recommendations to and

guide the state's flood risk management strategic policies and investment decisions. The program will inventory existing and future flood management needs in the state's regions, identify opportunities for integrated flood management, and formulate potential integrated flood management solutions. The program will publish major work product is a report titled "Report on Flood Future: Recommendations for Managing California's Flood Risk" (Flood Future Report). In addition, SFMP includes integration of flood-related information into the California Water Plan.

Flood Future Report

- Work has been completed on the interviews of approximately 130 flood control agencies. Information gathered during these interviews is being reviewed for how it will help inform the Flood Future Report.
- The recommendations team is working on the development of the recommendations that will be included in the Flood Future Report.
- A final draft of the Exposure to Flood Hazard Technical Memorandum has been completed. The Technical Memorandum presents the analysis of the number of people and value of properties within the 100-year and 500-year FEMA floodplains statewide.
- Several other Technical Memoranda, including the Information Gathering, Risk Information Inventory, Finance, Integrated Flood Management, and Opportunities and Challenges memos are being prepared for inclusion in the Flood Future Report.
- Work continues on the Working Draft the Flood Future Report. A Public Review draft will be completed by May 15, 2012.

Integrated Flood Management in the California Water Plan

- The California Water Plan 2013 Design and Work teams and the Flood Caucus membership are being formed.
- A Flood Caucus meeting will be held at the California Water Plan Public Advisory Committee meeting on February 2nd.

CONSERVATION STRATEGIES

The Conservation Strategies Element is designed to provide support and integrate environmental stewardship into the CVFMP Program. Therefore, major progress, such as the status of key documents, progress on major milestones, and upcoming events, is described under the Central Valley Flood Management Planning section above.

CONSERVATION FRAMEWORK

- **Conservation Framework**
  As part of the public release of the draft 2012 CVFPP, the Conservation Framework was also publicly released and posted online as Volume 1 of the CVFPP on December 30th. Technical support documents for the Conservation Framework are being finalized and will be released as a separate volume.

- **Conservation Strategy Funding Guidelines**
  Staff held three public workshops and a webinar on the Conservation Strategy Funding Guidelines in December. The public comment period closed on December 21st. The guidelines are currently being revised to address comments

CONSERVATION STRATEGY OUTREACH

- **Interagency Advisory Committee**
  The IAC met in November and will meet bimonthly starting in February 2012. Agency participants discussed their agency's overarching comments and recommended changes on the Conservation Framework and key considerations in preparing for the Conservation Strategy.
- **Vegetation Management**
  Staff worked with DFM to develop DWR's vegetation management approach, which is described in the CVFPP and the Conservation Framework.

  Staff participated in conference calls with staff from the USACE Engineer Research and Development Center (ERDC) to discuss future priorities for their levee vegetation research program. ERDC has scheduled 3 webinars in late February where outcomes of the workshop will be shared with the public.

  Staff met conservation organizations and CVFPO staff to explain how restoration opportunities are addressed in the CVFPP and to listen to their suggested improvements.

  Staff worked with CVFPO staff to develop and conduct public workshops in November that solicited comments on the Working Group Draft of the CVFPP.

  Staff met with representatives of the Central Valley Flood Control Association, along with CVFPO staff, to brief them on the Conservation Framework and to understand their perspectives
- **Local Land Owner/Agriculture**
  Staff attended the California Association of Resource Conservation Districts (CARCD) 2011 Annual Conference in November to understand Central Valley agricultural issues.

  Staff continues to conduct interviews with representatives of the agricultural community to understand their perspectives related to the Conservation Framework. Collectively, these interviews involve individuals representing Resource Conservation Districts, University of California Cooperative Extension, the county and state Farm Bureaus, the Family Water Alliance, the California Farm Bureau Federation, the California Association of Resource Conservation Districts, water districts, and private landowners. The interview objectives include:
  - building working relationships and open lines of communication with key agricultural stakeholders;
  - obtaining input on the Conservation Framework from a targeted yet diverse group of agricultural stakeholders;

- obtaining input to inform the development of the Conservation Strategy, including “best practices” and lessons learned from conservation planning; and
- obtaining input for development of an Outreach, Coordination, and Education Plan that will itself inform development of the Conservation Strategy.

A technical memorandum will be developed after completion of the interviews summarizing the comments and recommendations of the interviewees.

REGIONAL CONSERVATION PLANNING

- **Regional Advanced Mitigation Planning (RAMP)**
  Staff worked with other members of the interagency RAMP Work Group to complete the administrative draft of the RAMP Regional Assessment for internal Work Group review. The Work Group is also creating several strategies for broader release of the Statewide Framework.

  Staff met with Glenn and Colusa County planning offices in December to discuss their interest in having their bridge repair projects included in the first RAMP Pilot Area Action Plan.

  The RAMP Initiative will be an agenda item on the January 24, 2012 meeting of the Strategic Growth Council. RAMP staff is also planning to give overview presentations at upcoming conferences in 2012.

CORRIDOR MANAGEMENT STRATEGIES (IN COORDINATION WITH DFM):

- **Lower Feather River Corridor Management Plan**
  Staff attended meetings and reviewed documents for the hydraulic modeling currently being developed for the Lower Feather River. Staff is reviewing model documentation and will determine how modeling results will be integrated into the draft CMP document in the next group meeting. The team also received internal (DES) comments concerning long-term fish passage issues on the Feather River. Comments specified the barrier at Shanghai bend and the need to coordinate with FERC efforts and obligations on the Feather River.

  Fish Habitat Enhancements for Lower Feather River CMP: Staff attended site visit to view fish passage issues on the Yuba River (Englebright and Bullards Bar dam, and mining dredge tailings) in November.

SCIENTIFIC AND PLANNING INFORMATION

- **Medium-scale vegetation mapping**
  The RHJV Coordinator consolidated comments from several resource agencies on the data set. The final map is completed and data will be publicly available on the DFG BIOS website in February, 2012.
- **Fine-scale vegetation mapping**
  CSU, Chico Geographic Information Center (GIC) staff is initiating work on map and polygon classification. DFG refined new and existing vegetation classifications for the map study area.

FUNCTIONAL AREA 7 LEGISLATION, BUDGETS, AND COMMUNICATION

The primary goal of the Legislation, Budget, and Communication functional area is to facilitate legislation, budget, and communication matters to aid the efficient work of all functional areas in improving flood safety. This functional area will work to secure sustainable funding to implement the FloodSAFE initiative and to secure legislative support for all other functional areas that must continue indefinitely into the future. It is also responsible for coordination and public outreach consistency.

COMMUNICATION AND BRIEFING MATERIALS

While each functional area will conduct some of its own coordination and outreach on individual programs, the Communication element of area 7 provides assistance and support to ensure consistency. Communications and coordination take place internally, as well as externally with partner agencies on various aspects of the FloodSAFE program; including status updates, achievements and accomplishments, and upcoming milestones, with frequency ranging from weeks to years.

- No new information.

FUNDING ADVOCACY & AGENCIES' ALIGNMENT

Effective coordination between State, federal, and local agencies will be required at all stages from project concept through completion of construction. FloodSAFE implementation will not be possible without federal funding. Proposition 1E requires that the State secure the maximum feasible amounts of federal and local matching funds. This group will, in coordination with DWR Executive Office, serve as the primary State advocate for securing the necessary federal funding. Primary federal partners also include USACE and FEMA.

- No new information.

LEGISLATION LIAISON & LEGAL

The Legislature is a key player in the implementation of the FloodSAFE initiative. Effective communication and reporting of plans and progress will aid the Legislature in funding flood management activities and with direction for future implementation. This element will also address legal issues that need to be resolved for progression of the FloodSAFE initiative.

- No new information.

PROGRAM MANAGEMENT, BUDGET, & FISCAL SERVICES

DWR is accountable for efficient management and expenditure of State funds. Preparing bond budgets and tracking of bond expenditures is essential to document investments of taxpayer dollars. This element provides overall management support to the other functional areas, including program management activities, strategic and

implementation plans, detailed budget preparation, and contracts, funds and invoice tracking.

- No new information.

FLOODSAFE PROGRAM ADMINISTRATION & COORDINATION SERVICES

This element includes all administrative and coordination work required for FloodSAFE implementation, including human resources activities, policy document review, and FloodSAFE governance activities, including managing working groups and coordination teams within DFM and DWR.

- No new information.