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 has completed summer channel and structure inspections, posted the reports, and notified the LMAs. Inspectors continue to inspect CVFPB Encroachment Permits and other authorized activity. Fall levee inspections have also started. Inspection staff continues the inventory and categorization of encroachments along Maintenance Area 9 and coordination with LMAs, CVFPB staff and USACE staff on a variety of topics.

FLOOD PROJECT INTEGRITY/VULNERABILITY ASSESSMENT ACTIVITIES

The Flood System Analysis Section continues to work on the development of the pre-season vulnerability assessment. This assessment will utilize levee vulnerability and performance-related data which is collected by DWR relative to project levees within the Central Valley Flood-Control System and establish a consolidated reference of detailed information describing the vulnerabilities. Current efforts are focused on qualifying data sources for inclusion in the assessment. Researching background information from various comprehensive documentation such as hydrologic, hydraulic, and geotechnical evaluations of the State's flood management system identify potential vulnerabilities. A pilot analysis is being conducted to inform future database querying process and automation for annual updating and reporting. Levee vulnerability information will be shared with emergency response partners at the county and local levels through the pre-season flood meetings scheduled this fall.

DWR UTILITY CROSSING INVENTORY PROGRAM (UCIP)

The Utility Crossing Inventory Program continued to make progress by expanding the UCIP database with additional desk studies. Program has completed desk studies documenting location of utility crossings for about 450 miles of the Project

Levees. Under a task order with GEI Consultants, additional resources have been assigned to perform desk studies. Field verification of utilities was completed for MA 4 (Sacramento Maintenance Yard, Sacramento River Unit 1). The UCIP team continued to work with CDEC to develop a web-based reporting tool allowing LMAs access to the utility crossing inventory information (UCIPs desk study and field survey) online.

LOCAL MAINTAINING AGENCY ANNUAL REPORTING PROGRAM (CWC 9140-9141)

Two annual workshops were held on August 14 and 15 at the JOC to review the program. Representatives from reclamation districts, their consultants, and the yard were present to gather the latest information on the program, its improvements, and other related programs.

On August 30, all agencies were mailed a reminder of the September 30 deadline for submitting their levee maintenance reports to DWR. They were also furnished with the necessary tools to report on the requirements. In addition, this year's letter included a request from FloodSAFE Environmental Stewardship and Statewide Resources Office regarding the type of project the LMAs are planning and pursuing. This information will help DWR assist locals obtain permits through approved grants.

Outreach to local agencies has continued through presentation in the Floodplain Manager's Associations' annual conference, held September 4 through 7, and a one-on-one meeting with RD 10.

On September 13, 2012, one of the local agencies in the program (Yolo County Public Works) informally told DWR that they do not have funds available to maintain the 0.29 miles of Cache Creek right levee. They would like the State to take over the maintenance of this levee. DWR advised Yolo County to escalate the request through the proper channels by notifying the Board.

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 August 31, statewide hydrologic conditions were as follows: precipitation; 75 percent of average to date, runoff; 60 percent of average to date, and reservoir storage; 95 percent of average for the date. Sacramento River Region unimpaired runoff observed through August 31, 2012 was about 11.5 million acre-feet (MAF),

which is about 64 percent of average. For comparison, on August 31, 2011, the observed Sacramento River Region unimpaired runoff through that date was about 24.8 MAF, or about 139 percent of average.

On August 31, the Northern Sierra 8-Station Precipitation Index Water Year total was 41.6 inches, which is about 85 percent of the seasonal average to date and 83 percent of an average water year (50.0 inches). During August, the total precipitation for the 8-Stations was 0.0 inches. Last year on August 31, the seasonal total for the 8-Stations was 72.2 inches, or about 147 percent of average for the date.

On August 31, the San Joaquin 5-Station Precipitation Index Water Year total was 24.9 inches, which is about 62 percent of the seasonal average to date and 61 percent of an average water year (40.8 inches). During August, the total precipitation for the 5-Stations was 0.2, which is about 100 percent of the monthly average. Last year on August 31, the seasonal total for the 5-Stations to date was 64.5 inches, or about 161 percent of average for the date.

Selected Cities Precipitation Accumulation as of 08/31/2012 (National Weather Service Water Year. July through June					
City	July 1 to Date 2012 – 2012 (in inches)	% Average	July 1 to Date 2011 – 2011 (in inches)	% Average	% Avg "Water Year" July 1 to June 30 2012 - 2013
Eureka	.74	151	0.21	43	2
Redding	0.00	0	0.15	56	0
Sacramento	0.03	60	0.00	0	0
San Francisco	0.02	33	0.11	183	0
Fresno	0.00	0	0.00	0	0
Bakersfield	0.02	50	0.00	0	0
Los Angeles	0.00	0	0.00	0	0
San Diego	0.00	0	0.00	0	0

Key Reservoir Storage (1,000) AF) as of 08/31/2012								
Reservoir	River	Storage	Average Storage	% Storage	% Average	Capacity	Flood Control Encroachment	Total Space Available
Trinity Lake	Trinity	1,934	1,839	105	2,448	79	---	514
Shasta Lake	Sacramento	2,795	2,966	94	4,522	61	-1,758	1,757
Lake Oroville	Feather	2,230	2,377	94	3,538	63	-1,308	1,308
New Bullards Bar Res	Yuba	676	653	103	966	70	-290	290
Folsom Lake	American	503	621	81	977	51	-474	474
New Melones Res	Stanislaus	1,556	1,374	113	2,420	64	-864	864
Don Pedro Res	Tuolumne	1,302	1,427	91	2,030	64	-728	728
Lake McClure	Merced	500	584	86	1,025	49	-525	525
Millerton Lake	San Joaquin	271	230	118	520	52	-249	249
Pine Flat Res	Kings	206	387	53	1,000	21	-794	794
Isabella	Kern	96	212	45	568	17	-265	472
San Luis Res	(Offstream)	599	890	67	2,039	29	---	1,440

The latest National Weather Service Climate Prediction Center long-range, 1-month precipitation outlook for September 2012, issued August 31, 2012, suggests no tendency for above or below average rainfall for Northern and most of Central California. Above average rainfall is indicated for the southeastern portion and part of the central region of the State.

HYDRO-CLIMATE ANALYSES

Work continues on the University of California Task Orders for studies supporting the climate change hydrology effort. In the past month, the State Climatologist met again with UC Davis and Scripps personnel to discuss project progress to date and products needed to support other programmatic activity. Discussions with UC Merced on the expansion of monitoring in the American River watershed through a National Science Foundation grant occurred. Follow up meetings to lay out how the Task Order investment fits in with the National Science Foundation work and the larger expectations of UC Merced's development of new snowpack monitoring paradigm began as well.

The Central Valley Flood Protection Plan (CVFPP) Climate Change Technical Work Group is moving forward with another document describing the framework for climate change analyses in the execution of CVFPP activities. The State Climatologist has met with the external science panel to begin work on the Atmospheric River sizing methodology to help build out the framework of climate change analysis put out in the 2012 plan. Work with consultants to coordinate CVFPP efforts with the 200 year level of protection hydrology began as well with a series of meetings. Additional meetings will follow in the near future.

The Climate Variability Sensitivity Study (CVSS) pilot associated with CVHS is progressing. Two watersheds have been selected for analysis with the option of adding a third if funds will allow. It appears that the third basin addition is feasible and the United States Army Corps of Engineers (USACE) Sacramento District is developing a proposed amendment to the CVSS scope of work. Efforts are also underway to line up the appropriate internal review for CVSS. USACE has initiated contract modifications to incorporate the American River watershed into the study and it appears that the USACE Institute for Water Resources will handle the internal review of the project.

A workshop on seasonal forecasting needs was held as part of the National Integrated Drought Information System (NIDIS) Southern California urban pilot effort. Water agency representatives expressed informational needs, and representatives from DWR and the California Nevada Applications Program Regional Integrated Science and Assessment (RISA) team, Western Region Climate Center, discussed possible options to meet those needs. The State Climatologist also participated in a conference call with the Climate Prediction Center to discuss seasonal forecast outlooks for the coming winter. The local team of National Weather Service and DWR members' expectations of the coming water year will meet in September.

REAL-TIME DATA COLLECTION NETWORK

Coordination between NOAA, DWR and Scripps continues as the 21st Century Extreme Precipitation Monitoring project moves forward. The next quarterly meeting of the project team will be September 18, 2012 at the Joint Operations Center. Discussions will focus on progress to date with sensor installations and setting the framework for the next memorandum of understanding to cover the next five years. Work on articles about the project continues, along with other outreach activities to bring attention to the new monitoring capability provided by the network.

HYDROLOGIC MODELING

The PRMS team conducted two days of in-house training on operating and calibrating PRMS models. The first day was meant as a refresher for operating the model and highlighted some of the changes featured in the more recent versions of PRMS. Day two focused on the development and calibration of the new models. Specifically, the team focused on various methodologies for collecting and distributing temperature and precipitation data within the model and the development of the HRUs that define the physical geometry of the model. The Yuba model is undergoing final calibrations, while one last pass at the Merced climate and FNF data is necessary to clean up data for final calibration.

REAL-TIME DATA COLLECTION NETWORK

Snow Surveys and Snow Course Maintenance:

The Snow Surveys section continues in summer snow course maintenance mode. We are working closely with the US Forest Service on the renewal of permits for several snow courses in the Sierra Nevada. A lot of effort is being made to update permits for the snow courses and sensors, especially those located in defined wilderness areas. In particular, a great deal of work and negotiation has been underway to restore Foster's Cabin in the Trinity Alps Wilderness. The cabin is essential to performing the snow surveys in that area and much work is needed to restore the cabin to a weather tight and safe option for the snow survey crews. The Shasta-Trinity National Forest staff has been providing assistance in filing the correct paperwork necessary to get the restoration work underway. In the meantime, the cabins in the Southern Sierra Nevada are ready for their fall cleaning and repair efforts. Crews will be tidying up the cabins and stocking them with food for the winter snow surveys by the first of October.

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. During the month, Snow Surveys staff alone responded to over one dozen media requests. Additional calls were handled by other Hydrology Branch staff.

The Snow Surveys Section is finalizing the preliminary April-July observed FNF data. This year there were some notable discrepancies between DWRs FNF records and what the US Army Corps was reporting for Pine Flat Dam. Those

issues have since been resolved, with USACE noting their errors. Great effort by Steve Nemeth in snow surveys for making note of the error and working with USACE and the Kings River Water Association on getting the errors resolved.

BULLETIN 120 AND WATER SUPPLY INDEX FORECASTS
The last Bulletin 120 update was issued on June 7, and we will not issue another forecast until next February.

The final WSI forecast (from May 1) of the year can be summarized as follows:

Sacramento River Unimpaired Runoff Water Year Forecast
11.8 MAF (65% of Normal) at the 50% exceedance
Sacramento Valley Index (SVI)
6.9 (Below Normal) at the 50 percent exceedance
San Joaquin Valley Index (SJI)
2.2 (Dry) at the 75 percent exceedance

The next WSI forecast will be made in December.

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
The F-CO Program conducted a workshop on September 6 to go over the tools to use in the Yuba-Feather F-CO exercise that will be held on October 4. Participants included staff from the Corps of Engineers, Yuba County Water Agency, and the Department of Water Resources.

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.

No new information this month.

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)

Work has continued on the development, review and approval of flood-flow frequency analysis, regulated flow time series, unregulated-to-regulated flow transforms and stage-to-flow transforms, and rainfall-runoff modeling of ungaged streams. Internal coordination has continued with USACE and DWR Central Valley Floodplain Evaluation and Delineation program.

DELTA FLOOD PREPAREDNESS

The Regional Flood Preparedness Section (RFPS) continues to work with our emergency response partners and contractors on the Delta Flood Emergency Preparedness, Response, and Recovery Program. The program will improve DWR's capabilities to prepare, respond, and recover from levee failure and flooding in the Delta. A Delta Emergency Channel Closure Locations study was completed under this program and is available to the Department for guidance.

A Draft Project Facility Feasibility Study report is now available and presents alternatives for further development of flood emergency response facilities in the Delta. DOE Real Estate and DGS are currently appraising 5 delta properties for 3 potential acquisitions. The program is working with Executive and SWP to develop the Delta Flood Emergency Preparedness, Response, and Recovery Plan which will detail roles and responsibilities throughout DWR and develop preparedness activities, response actions, and potential recovery strategies. An internal review draft of this plan will be available in first quarter of 2013. As part of external agency coordination, the Flood Operations Branch has facilitated meetings with DWR's key emergency response partners in the Delta region to discuss these elements and other planning efforts. Additionally, modeling tools to forecast water quality impacts resulting from levee failure and subsequent repair and recovery strategies are being refined, with a workshop being scheduled with developers and DWR staff to migrate the modeling capability into DWR.

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.

- Mowing at Shreiners is 15 percent complete (5 acres), 60 percent complete at Ridgecut (20 acres), 50 percent complete at Cherokee (200 acres), and 25 percent complete at Tisdale Bypass (300 acres).
- Debris removal is on-going in seepage ditches in Sutter area (50 miles).
- Beaver dam removal is on-going in seepage ditches in Sutter area (50 miles).
- Discing/Vegetation removal of the refuge near the East Levee of the Sutter Bypass is on-going (200 acres).
- Mowing at Cache Creek Settling Basin is 100 percent complete (15 acres).
- Seepage ditch spraying is 100 percent complete at the Sutter Basin collecting canals (50 miles).
- Beaver dam removal is 100 percent complete at Sycamore Creek.

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.

- Repair of gates and barricades is on-going in the Sacramento area.
- Concrete repairs at the Sutter Yard are 70 percent complete.
- Debris Removal is on-going at all pumping plants in Sutter Bypass.

- Construction is on-going at Knights Landing Outfall Gates, Sutter Pumping Plants, Weir 2, and Willow Slough.
- Pumping plant repairs are 100 percent complete at MA17.
- Repair of the wash rack slab at the Sutter Yard is 100 percent complete.
- Repair of a gate stem at Willow Slough Fish Ladder is 100 percent complete.
- Weir 2
  The contractor will not complete the project by the October 31 deadline. Phase 1 will be complete but Phase 2 will only be 50 percent complete by the deadline. Plans for a third construction season are underway with new permitting required. DWR will be seeking liquidated damages.
- Knights Landing Outfall Gates
  Starting in late August and continuing into September water levels in the Colusa Basin have been rising due to agricultural runoff. The water rose high enough to overtop the cofferdam and halt construction. Water levels continued to rise and with the cofferdam in place the backwater has affected farmers who had started to experience flooding on their fields. DWR has lowered the height of the cofferdam to allow more water to flow through the gates that are in construction. This has lowered the water surface in the Colusa Drain and should alleviate the flooding that the farmers are experiencing.
- Butte Slough Outfall Gates
  Land based geotechnical exploration drilling was completed and lab testing is still underway.
- Willow Slough Fish Ladder
  Divers have been scheduled to make retrofit repairs to the stoplog structure. Currently, the stoplogs do not provide a watertight seal.

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.

- Burning levee slopes are 25 percent complete at MA13 (8 miles), 70 percent complete at the East Levee of the Sutter Bypass (15 miles), 80 percent complete at Cache Creek (23 miles), 50 percent complete at Units 2,3 (1.5 miles), and 75 percent complete at Unit 4 (2.5 miles).
- Spraying levee slopes are 45 percent complete at Cache Creek (15 miles), 80 percent complete at Putah Creek (16 miles), and 55 percent complete at Willow Slough (9 miles).
- Rodent Program (poison, trapping) for all areas in Sacramento and Sutter are on-going.
- Grouting rodent holes are 20 percent complete on the East Levee of the Sutter Bypass (3 miles).

- Levee crown road dragging is 50 percent complete at MA1 (8 miles), 25 percent complete at Tisdale Bypass (2 miles), and 60 percent complete at Willow Slough (5 miles).
- Erosion repairs at the East Levee of the Sutter Bypass are 10 percent complete with 100 tons of rock placed.
- Tree trimming at MA 9 is 10 percent complete (3 miles).
- Mowing Levee Slopes is 100 percent complete at Units 2 and 3 (4 miles), 100 percent complete at MA4 (2.5 miles).
- Levee crown road dragging is 100 percent complete at the East Levee of the Sutter Bypass (10 miles), 100 percent complete at MA16 (4 miles), and 100 percent complete at Wadsworth Canal (6 miles).
- Erosion repairs at the setback levee of the East Levee of the Sutter Bypass are 100 percent complete (0.5 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.

Small Erosion Repair Program (SERP)

DWR is continuing to develop the Small Erosion Repair Program (SERP), as described in the 2012 Central Valley Flood Protection Plan and Conservation Framework. The multi-agency SERP subcommittee is making significant progress and implementation of the five-year pilot effort is targeted for the 2013 construction season. The SERP Manual is final as of August 2012. Program applications for the Regional Water Quality Control Board and the Department of Fish and Game are being processed. The program Environmental Impact Report and biological assessment are currently being reviewed by DWR management and legal counsel, and are planned for completion by November 2012.

Colusa Sacramento River State Recreation Area

DWR has a new agreement with the Department of Parks and Recreation (DPR) wherein DPR will maintain the 137-acre Colusa Sacramento River State Recreation Area (Colusa SRA) mitigation/restoration site until May 2013. The previous maintenance contractor, River Partners, is providing technical support to DPR staff

as it takes over maintenance of the site. Continuing the same high level of maintenance that was provided by River Partners at this site will support DWR in meeting established success criteria over the 10-year monitoring period. If successful, future partnerships with DPR for mitigation/restoration site maintenance may be considered.

LEVEE REPAIRS

The Levee Repairs Program consists of projects for repair, rehabilitation, reconstruction, or replacement of levees, weirs, bypasses, channels, and other facilities of the SPFC. Types of repairs are critical (has likelihood of failure during next high water event), serious (can withstand one high water event; likelihood of failure on subsequent high water events), and proactive (small deficiencies that are worsening rapidly and that can be designed and constructed by the Local Maintaining Agency (LMA)). Levee repair projects are implemented through collaboration with federal and State resource agencies, USACE, and LMAs. Levee repairs are done under three federal authorized programs; Sacramento River Bank Protection Project (SRBPP), Levee Stability Project (LSP), and PL84-99 Rehabilitation Assistance Project (PL84-99). In addition, the State is developing guidelines for a new project, Flood System Repair Project (FSRP), to address deficiencies in the entire State Plan of Flood Control Facilities in the Central Valley Watershed; FSRP replaces the San Joaquin River Bank Protection Project.

- Field reconnaissance efforts for FSRP began on July 12 to identify and evaluate levee deficiencies for the State Plan of Flood Control. This field reconnaissance will be completed on September 16, 2012. Repair site prioritization and development of agreements with the local reclamation districts will follow completion of the field effort.
- Draft Guidelines for development of work and cost-sharing agreements with DWR will be available for public comment and review in October 2012. Public outreach meetings will be held during the 45-day public review period.

FUNCTIONAL AREA 3 FLOODPLAIN RISK MANAGEMENT

The primary purpose of Floodplain Risk Management is to empower local communities through floodplain management program support and technical assistance to make wise land use decisions in flood prone areas that result in reduced flood risk and preservation of the beneficial uses of floodplains. FPM projects and programs work towards development of a statewide integrated approach for flood risk reduction and long term floodplain sustainability that reduces loss of life and property damage and minimizes the economic impacts associated with flooding.

FLOODPLAIN MANAGEMENT ASSISTANCE

Floodplain Management assistance provides statewide technical support to federal, state and local agencies, and the public for flood hazard maps, levee data, and the National Flood Insurance Program activities including the Community Rating System (CRS). As part of the NFIP Community Assistance Program (CAP) grant-partnership with the Federal Emergency Management Agency (FEMA), DWR conducts audits with communities participating in the NFIP, provides technical assistance to the public, and trains community officials.

In August 2012, the Floodplain Management Assistance Section and Regional Office staff:

- provided approximate ten hours of technical assistance to local communities and the public who had questions regarding the NFIP, Certified Floodplain Manager certification, and Federal grants,
- conducted community assistance visits (CAVs) for the City of Corning, City of Susanville, City of Riverbank, City of Blue Lake, City of Tiburon, and City of Sausalito,
- conducted 4 CAV inspections for participating NFIP communities, and
- conducted three FPM workshops covering FEMA Elevation Certificate and Substantial Damage/Substantial Improvement.

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.

On behalf of DWR, the California Geologic Survey has completed the quaternary geologic maps for ten Southern California counties. The quaternary geologic maps show the location of bedrock and surficial soils deposits formed or laid down over the past 1.8 million years. he quaternary maps can be used for many purposes including assisting in determining active and inactive areas of Southern California alluvial fans located at the base of mountains of the coast range,, San Bernardino range, San Gabriel range, and Tehachapi range.

Development of preliminary 2-dimmensional models and flood hazard delineation maps for the "High Priority" alluvial fan areas in Ventura County are complete. Staff will meet with Ventura County Watershed Protection District officials in late September to review the maps.

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.

The Central Valley Floodplain Evaluation and Delineation Program (CVFED) has finalized secondary post-processed LiDAR topography covering the Lower San Joaquin Basin (650 sq miles). These datasets are now available for use by public agencies.

CVFED previously had released secondary post-processed LiDAR topography for the Sacramento Basin (3,100 sq miles). Work is on-going to similarly complete the secondary post-processing of Upper San Joaquin River Basin LiDAR topography by fall 2012.

The status of the CVFED Hydraulic Model Development Project is as follows:

Riverine Hydraulic Model Development (HEC-RAS):

- Upper Sacramento basin: 85 % completion
- Lower Sacramento basin: 85 % completion
- Lower San Joaquin basin: 96 % completion
- Upper San Joaquin basin: 75 % completion

Overland Hydraulic Model Development (FLO-2D):

- Upper Sacramento basin: 85 % completion
- Lower Sacramento basin: 85 % completion
- Lower San Joaquin basin: 96 % completion
- Upper San Joaquin basin: 85 % completion

In the month of August FEB processed 11 requests for data and transferred a total of 13,638 LiDAR tiles and 9,898 tiles of Aerial Imagery. Seven of these requests were from outside public agencies and the other Six from DWR.
The total amount of data transferred in August adds up to about 4,835 GBs covering a land area of about 12,230 square miles.

FLOOD RISK NOTIFICATION

Flood Risk Notification focuses on communicating flood risk and risk mitigation strategies to the public and to local, state and federal agencies for areas protected by the facilities of the State Plan of Flood Control.

The 2012 FRN flyer has been approved by the Director's Office and is ready for publication. The release of the 2012 FRN is scheduled for mid to late September. The FRN flyer will be mailed out to approximately 272,000 property owners whose property receive protection from the facilities of the State Plan of Flood Control.

FLOOD RISK NOTIFICATION

By the end of August, the 2012 Flood Risk Notification flyer was ready to be sent out to approximately 270,000 property owners who own one or more properties protected by the facilities of the State Plan of Flood Control. Preparations for the 2012 FRN Flyer included extensive property owner parcel database and Geographic Information System work efforts. The USACE, FEMA, CVFPB, and CalEMA support DWR Flood Risk Notification program. The FRN website is up and running and can be found at www.water.ca.gov/myfloodrisk.

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 creation of integrated planning approaches and datasets that help agencies, communities, and individuals make well informed decisions.

- Staff continued to collaborate with the California Building Standards Commission, Division of the State Architect, and FEMA regarding FEMA NFIP building code requirements that are now part of the California Codes via the CBSC's adoption of the International Building Code and International Residential Code.
- Work on the Urban Level of Protection Criteria (200-year flood protection) document continued in August. Considerations of proposed changes in criteria due to draft Senate Bill 1278 were also considered.

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 California Department of Water Resources (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, represented by the Central Valley Flood Protection Board (CVFPB), participates and provides cost-share for feasibility studies with the United State Army Corps of Engineers (USACE) and local partners. Several studies are underway.

American River Common Features (ARCF) General Reevaluation Report (GRR)

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

- The non-federal sponsors of the project met to discuss development for the Locally Preferred Plan (LPP). The LPP will comply, to the fullest extent possible, with the Urban Levee Design Criteria (ULDC) as outlined in the Central Valley Flood Protection Plan (CVFPP).

Frazier Creek Feasibility Study

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

- Nothing new to report this month.

Lower San Joaquin River Feasibility Study (LSJRFS)

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.

- Resolution 2012-13 (Amendment #2 to the Feasibility Cost Sharing Agreement (FCSA)) was approved during the July 27, 2012 meeting of the Central Valley Flood Protection Board (CVFPB). This amendment allows the non-federal sponsors to accelerate their contribution of funds if deemed necessary while not exceeding the FCSA cost share limits.

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 to report 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 Rock Creek and Keefer Slough in Butte County.

- Nothing new to report this month.

Sacramento River Flood Control System Evaluation
The Sacramento River Flood Control System Evaluation 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 this month.

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 August 29, 2012, USACE held Internal Progress Review #5 (IPR#5) for the project. The purpose of IPR#5 was to present the rationale for the selection of the Tentatively Selected Plan (TSP) to the vertical team. The vertical team agreed with the alternative selected as the TSP, but gave feedback to staff that additional information would be needed before Decision Point #2, which is the official selection milestone for the TSP.

West Sacramento GRR
The 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.

- WSAFCA and DWR attended USACE's Project Review Board (PRB) on July 10, 2012. Both DWR and WSAFCA communicated their concern that the spring 2013 date for public distribution of the draft plan could not slip due to State requirements for Senate Bill 5 funding and WSAFCA construction scheduling needs. Additionally, at PRB USACE informed the local partners that while there still is no definitive direction from USACE HQ on what technical products will be required under the new 3x3x3 guidelines, the District is forging ahead with their best guess and will adjust as necessary as further direction is developed.

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 moving into the public review phase of the report. The draft report is in review by the non-federal sponsors of the project and internally within USACE. Public review is anticipated for mid September. Once the public review is complete, USACE will prepare responses to the public review and begin drafting the final Chief's report.

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.

- Nothing new to report this month.

Woodland/Lower Cache Creek Feasibility Study
USACE will develop alternatives for a new feasibility study to determine if there is a NED plan that is federally justified. The study will continue efforts suspended in 2004 after local resistance to the USACE-selected Flood Barrier Option alternative.

- USACE is currently revising the Project Management Plan for this Study to take into account the new 3x3x3 guidance.

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

- USACE has prepared a strategy paper that outlines the USACE, local, and State support for eliminating the Independent External Pier Review (IEPR) and Civil works review processes from the GRR, since there is no new construction anticipated to come out of the GRR. The strategy paper was endorsed by USACE District and is with USACE headquarters for approval.

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 to provide increased flood protection for Yuba City.

- Close-out documents are under staff review.

Reclamation District 17 - 100-Year Seepage Area Project (RD-17)
The RD-17 levees have unacceptably low factors of safety for under-seepage and through-seepage. These issues are being addressed by constructing seepage berms, slurry walls, and a setback levee to increase the level of flood protection for South Stockton, Lathrop, and Manteca communities.

- DWR is working with RD-17 to establish the direction of the Phase III design.

Three Rivers Levee Improvement Authority – Feather River (TRLIA-FR)
This project offers 200-year flood event protection for both Highways 65 and 70, benefiting the areas 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.

- Nothing new to report this month.

Three Rivers Levee Improvement Authority - Upper Yuba River (TRLIA-YR)
This project offers 200-year flood event protection for both Highways 65 and 70, benefiting the areas of Olivehurst, Linda, Plumas Lake, Marysville, and Yuba City. This project includes a portion of the south levee on the Yuba River.

- On July 2, 2012, TRLIA proceeded with completing the surfacing of segment 1 and the rest of uncompleted minor work on the other segments. Work is 100% completed.
- DWR is working with TRLIA to resolve four pending real estate easement issues.
- The final construction element of the Upper Yuba Project (Shad Pad) is scheduled to begin around September 15, 2012.

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 was accomplished by installing cutoff walls to prevent seepage, under-seepage, and raising the levee.

- EIP is requesting a two-year extension to the funding agreement. Even though all construction activities are complete, the additional time is needed to complete the remaining real estate transactions and closeout the project.

Sacramento Area Flood Control Agency – Sacramento River East Levee (SAFCA-SREL)
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, under-seepage, and raising the levee. SAFCA plans to complete components to Element 12A (approximately RM 67) along the Sacramento River in 2012 and have USACE complete the remainder; estimated to occur in 2014.

- Nordic and Sukut contractor claims with SAFCA have not been settled.
- The CVFPB issued two notices of violations (NOVs) to Nordic for unacceptable work on Elements 6B to 9A. These NOVs have now been cleared. EIP Program staff notified SAFCA that payments will be made for this portion of the work.

- SAFCA is in discussions with EIP for a $30.5 million increase in the funding agreement amount due to increased project costs. DWR staff has met with SAFCA to discuss alternatives for securing an increase in funding and SAFCA will submit a revised plan based on these recommendations.
- Resolution of the 3.1 miles of cracking due to fat clay soils in the crown of the levee has been resolved to the satisfaction of DWR inspection and CVFPB staff.

West Sacramento Area Flood Control Agency, North and Southport Improvement (WSAFCA)

The California Highway Patrol Academy, the Rivers, and the I-Street Bridge projects are part of the North Area Plan. These projects corrected through seepage and foundation under-seepage with excessive hydraulic gradients, embankment instability and erosion, and scouring. All three projects are designed to provide 200-year level of protection for about 47,000 residents. The Southport area is currently under design which may include a large setback levee.

- WSAFCA is scheduled to complete the 65% plans and specifications for the Southport project in September 2012.
- The river mitigation planting is scheduled to begin around mid September 2012.

Sutter Butte Flood Control Agency, Feather River West Levee Design Project (SBFCA)

The Feather River West Levee Project is planned to repair approximately 35 miles of levee along the west bank of the Feather River from Thermalito Afterbay to the north end of Star Bend. The design will include use of slurry walls and seepage berms to protect the communities of Gridley, Biggs, Live Oak, Yuba City, and parts of Sutter and Butte counties.

- Staff is seeking management approval to execute a construction funding agreement for $56.78 million for critical levee improvements next to Yuba City.

USACE/CVFPB PROJECTS

CVFPB 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.

- DWR Real Estate Branch (REB) is working towards certifying all temporary real estate rights for sites L5A, L9, L9A, R10, Jacob Lane C and Natomas East Main Drainage Canal in FY12. Currently, a new take-letter is required for Jacob Lane C and NEMDC South to accommodate changes to the staging areas.
- Howe Avenue and R6 are currently being constructed. Dust issues for Howe Avenue have been resolved through use of water trucks.
- Work on the Natomas Basin and American River Design and Construction component has been postponed indefinitely until federal authorization and funding has been approved.

- USACE, State, and SAFCA have completed four public outreach meetings to discuss construction of Howe Avenue and R6 projects. The State is prepared to provide hotel reimbursement for all affected residents near site R6 during night time construction.
- The EA/IS's for NEMDC South, Jacob Lane C and R10 have been approved by the CVFPB during the August 24, 2012, meeting.

American River Watershed – Natomas Features Project

The Natomas Features Project, which is also known as SAFCA Expanded Natomas Federal Plan (ENFP), improved levees at Arcade Creek, Dry Creek, Robla Creek, Pleasant Grove Creek Canal, and Natomas East Main Drainage Canal. This Project was fully constructed in 1998 and it increased flood protection by controlling flows and reducing flood stages in the Natomas area.

- The Federal Government approved a significant portion of the project for reimbursement eligibility, and in turn, the State reimbursed SAFCA for the State share of the project. After making final payment on outstanding obligations for this project last month, the State is in the process of closing out this project.

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 Bridge was complete in 2010, but Dam Raise has not started. The Dam Raise element is proposing to raise the Folsom Dam, auxiliary dams and embankment by 3.5 feet.

- A Project Partnership Agreement (PPA) is scheduled for discussion and execution in 2014. The temperature control shutters design is 35% complete and will be shelved to focus on updating three existing emergency spillway gates.
- USACE is working on the Dam Raise funding stream with possible construction beginning in 2017.

Folsom Dam Modifications (Joint Federal Project)

The purpose of the Folsom Dam Modifications Project (JFP) is to construct an auxiliary spillway at Folsom Dam that will work in conjunction with existing projects to help the Sacramento region achieve a 200-year level of flood protection. The estimated completion for the JFP is October 2017.

- Construction – Phase III control structure construction is on-going with the concrete placement for the grade beam and four monoliths. Approximately 13% of concrete pours are complete.
- Design – Phase IV design is for the chute, stilling basin, and approach channel. The major milestone of 95% Phase IV design has been completed and is in review. Design Safety Assurance Review (SAR) was completed on August 29, 2012. The Phase IV contract is expected to be awarded in the spring of 2013.
- LERRDs – The CA DGS, CA CDCR, and USACE has been meeting to negotiate a lease for land on the Folsom Prison property in the immediate vicinity of the Phase IV work area. USACE has requested a temporary work area easement on the Folsom Prison site from CDCR for additional staging area. The lease is expected to be finalized by October 1, 2012.

- Water Control Manual Update – The Manual update task force is reviewing the fact sheet, schedule, and presentation for the stakeholder outreaching workshops. Five workshops are scheduled in September to meet with the in-basin purveyors, electric power utilities and agencies, flood management organizations, emergency service groups, etc.
- Environmental Impact – The 45-day public review for the Draft EIS/EIR for the JFP-Approach Channel was completed in late August. Approval is expected in April 2013. Approval of this document would allow Phase IV construction to begin.
- Folsom Dam Modification Joint Federal Project (JFP) – Requested CVFPB staff to publish notice of availability of environmental document for Folsom Prison property staging area.

Lake Kaweah Enlargement Project (Terminus Dam, Kaweah River Project)
The Lake Kaweah Enlargement Project was completed in 2006 and remaining work is focused on turning over the O&M to the local sponsors, finalizing all financial balancing, and completing final real estate documents.

- DWR anticipates preparing a crediting package for LERRD expenses in 2012. Initial estimates are approximately $1.5 million in creditable costs. DWR would expect to receive approximately $1.125 million in credit or cash reimbursement from USACE after approval of the crediting package.
- State's quitclaim interest in the excess Davis Ranch mitigation site land (506 acres) to the Kaweah Delta Water Conservation District will be presented at the September CVFPB meeting. The approximately $135,000 value of the property will be credited to the State.

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

- Phase 1 construction and wall testing are approximately 60% complete and should be finished in the fall of 2012.
- Phases 2A and 4A design will continue in October with construction to begin in the spring of 2013.
- Phase 2B design will begin in the summer of 2013.
- Phases 2C and 3 designs will begin in the fall of 2013.

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.

- The review period for the public draft of the Environmental Assessment/Initial Study was extended to September 14, 2012, because location maps were not included with the electronic version that was initially circulated.
- Representatives from Knights Landing Ridge Drainage District and DWR attended the USACE Sponsor Project Review Board on August 14, 2012, to

discuss amending the PCA to include credit for construction In-Kind Contribution and follow up with the turnover to RD 1500, Sites 4, 6, and 7 (completed in 1998). The meeting result was for USACE to provide a summary of a path forward to amend the PCA, and the due date of the project construction completion letter to transfer Sites 4, 6, and 7 is September 28, 2012.

South Sacramento Streams Project

The South Sacramento County Streams Project will increase the level of flood protection for the urbanized area of South Sacramento County and an area to the south and east of the City of Sacramento. Portions of the project were completed on the four creeks, and additional improvements are forthcoming.

- Construction on a 3,000 foot floodwall began along Morrison Creek on May 1, 2012. The work is now approximately 50% complete. USACE, DWR, and SAFCA were all involved in on-site activities regularly. Work was delayed, but should finish by November 30, 2012.
- SAFCA began construction on its improvements on Unionhouse Creek upstream of Franklin Boulevard.
- USACE anticipates completing all necessary work on the South Sac Streams project with its remaining $2 million in federal funds, and an additional work plan request. This could complete the project construction in 2013, depending on utility relocations or real estate acquisition.
- DWR submitted a LERRD crediting package to USACE on August 31, 2012, of approximately $2.5M. An additional $1M should be submitted within six months, and an additional $2M or $3M in twelve months.
- The Moulton soil stockpile was removed in June. The final environmental confirmation sampling Task Order was approved August 6, 2012, and will be completed in September 2012.
- On August 20, 2012, SAFCA, USACE and DWR determined to accelerate the project, pending approval from the U.S. Fish and Wildlife Service, to work beyond the Giant Garter Snake restriction period (i.e., after September 30, 2012). The estimated completion date is November 30, 2012.

West Sacramento Area Project, Slip Repair

The West Sacramento Area Project raised and strengthened five miles of levees by a maximum of five feet on the east side of the Yolo Bypass and the south side of the Sacramento Bypass. Initial repairs were completed in 2001, but additional slips were identified during high water events in 2006 and March 2011.

- At the north slip repair site, two piezometers were removed for construction and still need to be replaced. The contract to complete this work will be awarded by USACE within the next few weeks.

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 (FCSP), Flood Corridor Program (FCP), Local Levee Assistance Program (LLAP), and Yuba-Feather Flood Protection Program (YFFPP).

FLOOD CORRIDOR PROGRAM (FCP)

The FCP 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.

- FCP has been working with the new grant recipients in order to hold public hearings in the vicinity of the new projects prior to release of over $58 million in grants to 13 localities statewide to reduce flood risk in their communities while protecting wildlife habitat and agriculture. The flood risk reduction projects will be funded by Propositions 84 and 1E and will benefit communities and resources from Siskiyou Country in the North to San Bernardino County in the South. FCP anticipates that there will be $28.3 million in remaining funds available for future grant awards.
- Hamilton City Flood Damage Reduction and Ecosystem Restoration Project – FPO staff conducted a public hearing for the project on August 15, 2012, attended by 15 stakeholders and local residents. At and following the August 15, 2012, public hearing, DWR received about five public comments, all positive, regarding the project. The public comment period closed August 29, 2012. The Reclamation District 2140, the grantee, is now working hard to gain the federal funding needed for this project.
- Ecosystem Restoration and Floodwater Attenuation on the Sacramento River – Amendment 1 to the funding agreement for this Flood Corridor Program grant project was signed August 29, 2012. The amendment shifts funds among tasks to compensate for increased labor costs due to a recent ruling on prevailing wages from the Department of Industrial Relations. The amendment also commits the grantee to work with DWR to restore a permanent breach in the San Joaquin River levee for transitory storage. The previous breach was sealed when the West Stanislaus Irrigation District repaired the levee in their diversion canal.

FLOOD CONTROL SUBVENTIONS PROGRAM (FCSP)

FCSP 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.

- FCSP is reviewing five funding reimbursement requests in the total amount of $5.45 million.
- No audit payments were processed. Program is in the process of verifying (retention) payments pending reimbursement for five completed State Controller's Office (SCO) audit reports that were originally submitted to DWR back in 1992.

- In total, forty six funding reimbursement requests totaling $68.57 million are pending review (excluding amount pending SCO audit release).
- FCSP is performing the cost share evaluation for the Los Angeles County Drainage Authority (LACDA) project.

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.

- The public comment period for the Draft List of Grant Approvals ended on August 3, 2012. LLAP finalized and sent comment response letters to commenting agencies. A Director's Decision Memo is being developed to approve the final list of 38 approved projects.
- The new projects have been added to the Master Project List and IO numbers are being developed for each project. The site visits and field reviews for the proposed new projects have been completed.
- Draft contract agreements between DWR and the local agencies have been created for each of the 38 new projects. Staff continues to work toward committing funds to each of the 38 projects.

YUBA-FEATHER FLOOD PROTECTION PROGRAM

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.

- TRLIA Goldfields Feasibility Study – DWR conducted a site visit to the proposed project area to meet with the Local Agency representative. Staff discussed project details and addressed remaining issues to finalize funding agreement and work plan. The final draft of the funding agreement has been completed and will be sent to the local agency for signatures. Staff continues to work toward committing funding to this project.

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 & PROGRAM SOLICITATIONS

LLAP finalized program guidelines and published a Program Solicitation Package in 2011.

- The Director has signed the Decision Memo approving the LLAP Draft List of Approved Projects from the recent solicitation and the list was published online for a 15-day public comment period.
- A Director's Decision Memo is being developed for approval of the LLAP Final List of Approved Projects resulting from the public comment period.

- Staff commenced preparation of a draft guidelines document for the Urban Flood Risk Reduction (UFRR), Non-Urban Flood Risk Management (NFRM), and Statewide Flood Risk Reduction (SFRR) programs by first preparing a briefing document on the outline of the guideline elements.

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.
- The Lower Feather River Corridor Management Plan (CMP) preparation is continuing. DWR's internal management team is engaged in a series of meetings with the contractor preparing the plan, AECOM, to resolve issues related to Plan implementation, future updates, and policy consistency with the Central Valley Flood Protection Plan. Also, the low-flow modeling contractor has begun data collection toward analyzing the stage effects due to changed conditions in the channel resulting from the breach at Shanghai Rapids.

TECHNICAL ASSISTANCE

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

- Staff participated in preparation of Program posters for use in the FMA Conference Poster Session.

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 CVFPB, 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 2010-2011

- DWR staff has mailed work agreements to 68 reclamation districts 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 61 joint levee inspections and received California Department of Fish and Game (DFG) approval for 59 claims.
- Reimbursements are being processed by staff as DFG approves the claims. To date, staff has initiated reimbursements totaling $11.0 million.

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.
- On October 25, 2011, Staff mailed Work Agreements to participating districts for signature. To date, staff has received 64 signed agreements from the districts. The signed agreements will be routed to the Board's Executive Officer for final signature.

Work Agreements for FY 2012-2013

- The deadline to submit an application for participation in the FY 2012-2013 subventions program was July 1, 2012. Staff has received applications from 67 reclamation districts.
- Staff is currently auditing applications and plans to request approval of the FY 2012-2013 funding allocation plan at the September CVFPB meeting.

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 executes agreements authorizing the work proposed under Project Solicitation Packages (PSPs).

- DWR has committed approximately $350 million dollars for levee work in the Delta, of which about $135 million has been allocated to PL 84-99 projects and $85 million to Human Microbiome Projects. To date, 42 miles of levee work has been completed.

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 that include State-federal project levees as well as appurtenant 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 for slope stability, under- and through-seepage, erosion, seismic and, where needed, to identify remedial measures and cost estimates to achieve the defined geotechnical criteria. The information developed to date has been used in support of the Central Valley Flood Management Planning Program to inform development of two required 2012 documents: the Flood Control System Status Report and the Central Valley Flood Protection Plan. Information currently shown in the table below as in process or pending will be used to support the 2017 updates to these documents.

The Final analyses and report (GER) is the end result of a five-step process that contains the following steps: historical data collection, initial field investigation, preliminary analysis, supplemental field investigation, and final screening. Each of these five steps results in the below listed deliverables.

The overall status of the ULE program intermediate and final deliverables for the 25 urban levee study areas are shown in the table below.

No.	Urban Study Area	Historic Data Collection (TRM)	Initial Field Investigations (P1GDR)	Preliminary Analyses	Supplemental Field Investigations (SGDR)	Final Analyses & Report (GER)
1	Chico	Done	Done	Done	In Progress	Pending
2	Marysville	Done	Done	Done	Done	In Progress
3	RD 784	Done	Done	Done	Done	In Progress
4	Feather River West Levee	Done	Done	Done	Done	In Progress
5	American River	Done	Done	Done	Done	In Progress
6	Sacramento River	Done	Done	Done	Done	In Progress
7	Davis	Done	Done	Done	In Progress	Pending
8	Woodland	Done	Done	Done	Done	In Progress
9	NEMDC 10East	Done	Done	Done	Done	In Progress
10	NEMDC West	Done	Done	Done	Done	In Progress
11	Natomas North	Done	Done	Done	Done	In Progress
12	Natomas South	Done	Done	Done	Done	In Progress
13	West Sacramento	Done	Done	Done	Done	Done
14	DWSC	Done	N/A	N/A	In Progress	Pending
15	South Sac Streams	Done	N/A	Done	In Progress	Pending
16	RD 404	Done	Done	Done	Done	In Progress
17	RD 17	Done	Done	Done	In Progress	In Progress
18	Bear Creek	Done	Done	Done	Done	Pending
19	Calaveras River	Done	Done	Done	Done	Pending
20	Lincoln Village	Done	N/A	N/A	Done	In Progress
21	Brookside	Done	N/A	N/A	Done	In Progress
22	Rough and Ready	Done	N/A	N/A	In Progress	Pending
23	Shima Tract	Done	N/A	N/A	In Progress	Pending
24	SJAFCA upland levees	Done	N/A	N/A	In Progress	Pending
25	Smith Canal	Done	N/A	N/A	In Progress	Pending

Notes:

1) In areas where detailed recent studies were performed in advance of the GER five-step process, initial field investigations and preliminary analyses were not performed and the TRM incorporated these recent studies instead.
2) In Progress means that the work has been initiated and is in various stages of completion. Most of the In-Progress SGDR work is nearing completion.
3) Pending means that the work is either waiting on the results of the SGDR to be completed or waiting to be scheduled to even out the workload.

ULE Summary

- Overall, ULE is 77% complete.
- Over 2000 interview records and historic reports have been obtained and reviewed. These records/reports are not currently data based but will be after completion of the ULE program.
- 400 miles of the urban levees were surveyed using a low altitude high accuracy (+/- 6 cm) LiDAR survey to generate topographic survey data.
- A bathymetric survey, to generate underwater topographic survey data, was performed for over 100 miles of river systems and integrated with the LiDAR survey to provide levee cross-section profiles that have both landside and waterside topography.
- 300 miles of levees were subject to Helicopter-based Electro-Magnetic Geophysical Survey (HEM). The HEM was performed to assist in assessing the subsurface stratigraphy between borings and determine the need for additional explorations.
- To supplement the HEM in no fly zones, over 100,000 feet of land based geophysical surveys were performed.

- For each of the 25 urban areas, a detailed geomorphic study and associated mapping effort were conducted to support the field explorations and subsequent analyses.
- Over 5,300 explorations along with 15,000 laboratory tests have been performed as part of this effort for the 25 urban levee study areas.
- The West Sacramento GER, the template for all GERs, was finalized in May 2012.
- Based on local stakeholder input, additional drilling was completed in the Chico and RD17 study areas.
- The current delivery date for completion of all GERs is the middle of 2013.
- Laboratory testing is continuing for some of the urban areas including Stockton and DWSC.
- Close coordination of the GER efforts and the EIP projects for RD 17 and Sutter Butte continues.

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 fewer than 10,000 people. The evaluation of current system performance includes 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 approximately 1,490 miles of non-urban levees that include State-federal project levees and appurtenant 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 design criteria at the 55/57 design water surface for slope stability, under- and through-seepage, erosion, and, where needed, identify remedial measures and cost estimates to achieve the defined geotechnical design criteria. The information being developed will be used in support of the Central Valley Flood Management Planning Program to inform development of the nine regional plans.

The overall status of the NULE program intermediate and final deliverables for the 21 non-urban levee study areas are shown in the table below.

No.	Non-Urban Study Area	Geotechnical Assessment Report (GAR)	Remedial Alternatives and Cost Estimate Report (RACER)	Geotechnical Data Report (GDR)	Geotechnical Overview Report (GOR)
1	Chico/North/South	Done	Done	In Progress	In Progress
2	Clarksburg	Done	Done	Done	In Progress
3	Colusa Drain	Done	Done	In Progress	In Progress
4	Colusa North	Done	Done	Done	In Progress
5	Colusa South	Done	Done	In Progress	In Progress
6	Gerber	Done	Done	Done	In Progress
7	Knights Landing	Done	Done	Done	In Progress
8	Sutter Bypass	Done	Done	Done	In Progress
9	Wheatland	Done	Done	Done	In Progress
10	Woodland South	Done	Done	Done	In Progress
11	Ash Slough	Done	Done	In Progress	In Progress
12	Berenda Slough	Done	Done	In Progress	In Progress
13	Black Rascal/Fairfield	Done	Done	In Progress	In Progress
14	Diverting Canal/Mormon	Done	Done	In Progress	In Progress
15	ESB/Chowchilla	Done	Done	In Progress	In Progress
16	Fresno River	Done	Done	In Progress	In Progress
17	Gravelly Ford	Done	Done	Done	In Progress
18	RD 2064	Done	Done	In Progress	In Progress
19	RD 2075	Done	Done	In Progress	In Progress
20	RD 2095	Done	Done	Done	In Progress
21	SJRRP/CCID	Done	Done	In Progress	In Progress

NULE Summary

- Overall, Non-Urban Levee Evaluations are 62% complete.
- Over 8,000 records have been obtained and incorporated into a searchable Microsoft Access database.
- Over 7,000 points of interest have been recorded and incorporated in GIS-based maps that also link to the project records database.
- For the 21 non-urban areas, a surficial geomorphic study and associated mapping effort were conducted. More detailed efforts were performed in selected areas. The surficial mapping was performed to aid the GAR while the more detailed efforts were performed to aid field exploration efforts.
- Over 3,000 explorations along with 6,000 associated laboratory tests were performed as part of this effort for the 21 leveed areas protecting populations greater than 1,000.
- No drilling occurred during this reporting period.
- Most of the laboratory testing is complete.
- Preparation of GDRs for NULE study areas is ongoing and nearing completion
- Preparation of GORs is continuing, with the current delivery dates scheduled for the middle of 2013.
- Pilot GORs in the Woodland South and Gravelly Ford study areas are nearly complete. The purpose of the pilot GORs was to develop the GOR process and obtain independent consulting board approval of such process.
- Preparation of GORs continued in August-September for each of the study areas. The results presented in the GORs will support FMO, regional plans, and SJRRP studies.

- To support the CVFPP, the NULE effort has been/was redirected to prioritize support for the Flood System Repairs Program and nine Regional Plans.
- To support the Flood System Repairs Project (FSRP), contract task orders were prepared during the reporting period to assist in assessing the need for repairs for areas identified in the GAR process. More information on the FSRP is presented below.

Support of Other DWR and USACE Programs:

- CVFPP: In support of Central Valley Flood Planning Program (CVFPP), ULE and NULE data and preliminary analyses were used to define levees reaches requiring remediation to bring them up to appropriate design standards; develop corresponding conceptual cost estimates; and prepare levee reliability curves and maps showing limits of deficiencies by failure mode (e.g., seepage, stability, erosion).
- CVFED – To support Central Valley Flood Evaluation and Delineation Program, ULE and NULE data and preliminary analyses were used to establish the height at which a levee no longer meets criteria for stability and seepage for 2100 miles of levees.
- FSRP – In support of the FSRP, NULE and ULE information is being used to perform detailed assessment of potential repair sites. The 8000 records and 7000 points of interest collected for NULE were used as a basis for FSRP. Information and processes developed under NULE and ULE will be used to screen, assess and estimate the initial remediation costs of specific repair sites. In addition, FSRP repair sites undergoing further feasibility and design studies will use field investigation and analyses data being performed under the NULE project. Field reconnaissance for the FSRP project is underway with eight teams currently conducting reconnaissance activities; teams are comprised of a combination of DWR and contractor staff.
- Task Order SJ105 to support the San Joaquin River Restoration Program is being implemented during the reporting period and Geomorphology mapping is in progress. Three levee segments were identified for subsurface work plans for field investigations (left and right banks of Eastside Bypass between Sand Slough and Mariposa Bypass; left bank of San Joaquin River from Chowchilla Bypass bifurcation structure upstream for about 5 miles).

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 the Sutter Butte Area Flood Control Agency, the (LSJFS) Lower San Joaquin Feasibility Study, and RD 17.
- ULE/NULE provided additional supporting data, including a technical memo on fragility curve development, to USACE for the LSJFS.

- ULE and USACE are in the process of providing data to SAFCA for their assessment of the American Rivers Common Features Project (without Natomas) study area.
- ULE continues to review the USACE Marysville design and construction project.

TECHNICAL POLICY SUPPORT

A statewide seismic policy is being developed for levee performance, emergency levee remediation, and long-term levee remediation. Urban Levee Design Criteria (ULDC) 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 to provide technical support for the development of vegetation management policies as part of the CVFPP.

- Vegetation management policies and joint research with Sacramento Area Flood Control Agency (SAFCA) continues with ULE/NULE logistical and technical support. The following studies have been or are nearly completed:
  - Tree Root Architecture
    How and where do tree roots grow on and near levees?
  - Levee Slurry Wall Investigations
    Do tree roots penetrate slurry walls and what are the effects?
  - How Trees affect Seepage and Stability of Levees
    Do tree roots become preferential seepage pathways through a levee and do trees contribute to levee slope instability?
  - Tree Windthrow
    What are the forces necessary to topple trees on California Levees?
  - Burrowing Mammal Habitat Associations
    How is burrowing mammal abundance related to the presence or absence of trees on levees?
  - Levee Mammal Burrow Characterization and Grouting Efficacy
    What are the seepage and stability implications? Do standard grouting methods seal burrows in a levee?
  - Forensics
    Has woody vegetation affected historic levee performance?
- In addition to the ULE five-step process, two seismic studies are being performed. The objective of the first study is to develop conceptual seismic remediation alternatives and associated costs for areas of levees that have been identified as being potentially compromised by earthquake loading in the GER. The second seismic study focuses on West Sacramento as a prototype to perform economic analyses and to develop a cost/benefit assessment for seismic remediation. As part of this effort, a draft Seismic Remediation Alternative Report was prepared during this reporting period.
- Participated in various FloodSAFE FAXCTs (Functional Area Cross Coordination Teams).
- Continuing support for Version 5 of the Urban Levee Design Criteria was provided.

- Continuing to provide support to the CVFED program.

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 SPFC primarily includes: (1) SPFC Descriptive Document and (2) Flood Control Systems Status Report (FCSSR), which were completed and provided to Central Valley Flood Protection Board (Board) in November 2010 and December 2011, respectively.

CENTRAL VALLEY FLOOD PROTECTION PLAN (CVFPP)

The CVFPP reflects a system-wide approach to protecting lands currently protected from flooding by the SPFC. The 2012 CVFPP was presented to the Board on schedule by January 1, 2012. The Board adopted the plan on June 29, 2012. The CVFPP is to be updated every five years. The 2012 CVFPP presents a State System-wide Investment Approach (SSIA) for making improvements to the SPFC over time through five flood management programs: (1) Flood Emergency Response Program, (2) Flood System Operations and Maintenance Program, (3) Floodplain Risk Management Program, (4) Flood System Assessment, Engineering, Feasibility, and Permitting Program, and (5) Flood Risk Reduction Program. Two important components in further refining flood system improvements include developing Regional Flood Management Plans (RFMP) and two State-led Basin-wide Feasibility Studies (BWFS).

BASIN-WIDE FEASIBILITY STUDIES (BWFS)

The two basin-wide feasibility studies (Sacramento River Basin and San Joaquin River Basin) have been initiated. The studies are to (1) develop a Locally Preferred Plan for use by the USACE in further efforts leading to federal authorizations of system-wide improvements, (2) assist in the preparation of environmental compliance evaluations, and (3) establish the State's role in project implementation.

- Efforts were initiated on developing several Task Orders aimed at refining system-wide elements of the SSIA in both major watersheds in the Central Valley. These include bypass improvements in the Sacramento and San Joaquin

River basins as well as initiation of overall efforts on each of the State-led feasibility studies.

- A coordination meeting was held on August 21 with Board President Bill Edgar, Board Member Clyde MacDonald, representatives from the Division of Flood Management, and various local Stakeholders to discuss integration of locally prepared Regional Plans and the State-led Basin-wide Feasibility Studies.
- The Central Valley Flood Planning Office (CVFPO) gave an overview presentation of the 2012 CVFPP, SSIA, and Basin-wide Feasibility Studies at the Corps sponsored Central Valley Integrated Flood Management Study (CVIFMS) Planning Charette on Wednesday, August 29.
- The CVFPO received an award for Excellence in Floodplain Management from the Floodplain Management Association on September 7 as part of their 2012 annual conference.

REGIONAL FLOOD MANAGEMENT PLANNING (RFMP)

Regional Flood Management Planning is a DWR sponsored and locally lead planning process to develop a long-term vision of flood management in each of the nine regions. Elements of a Regional Flood Management Plan (RFMP) will include a Regional Atlas, Regional Flood Management Priorities, and a Regional Financial Plan. Regional plans will be integrated with the two basin-wide feasibility studies being lead by DWR.

- A number of RFMP kick-off meetings were held in July and August 2012.
- Draft Guidelines for Directed Funding to Prepare the RFMP's have been circulated and final Guidelines are expected for posting on the DWR website mid-September, at which time the Directed Funding Application Period begins.
- Regional Flood Atlases have been posted on the DWR website.

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 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 a report titled "Report on Flood Future: Recommendations for Managing California's Flood Risk" (Flood Future Report). In addition, SFMP includes integration of flood management into the California Water Plan.

No new information this month

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 *STRATEGY*

Staff is working closely with CVFPO to integrate planning between the Basin-wide Feasibility Studies and the Conservation Strategy.

Conservation Strategy Funding Guidelines

- Proposal Solicitation Package
  DWR released the first Proposal Solicitation Package (PSP) issued under the Central Valley Flood System Conservation Framework and Strategy Guidelines. Up to $25 million in Proposition 1E funding will be allocated to environmental stewardship projects that support the Central Valley Flood Protection Plan (CVFPP). These projects will integrate environmental stewardship and sustainability principles into flood management activities. Concept proposals are due Oct 4, 2012.

  Staff is working with regulatory agencies to develop a formal template to guide more project-specific agreements related to advance mitigation projects funded under the PSP.

- Conservation Strategy Outreach
  Staff developed and presented a poster describing Conservation Strategy programs for several conferences this month: the national Flood Management Association (FMA) conference, the Levee Vegetation Symposium, and the California Water Plan Plenary. At the FMA conference, staff coordinated or gave presentations on the Conservation Strategy, floodplain restoration opportunity analysis, fish passage challenges, and the Dos Rios restoration project. At the *Levee Vegetation Symposium*, staff helped coordinate a field visit to familiarize conference participants with major setback levees of the Sacramento River Flood Control System.

Regional Conservation Planning

- Regional Permitting
  The interagency Regional Permitting Subcommittee recommends that DWR use the Natural Community Conservation Planning/Habitat Conservation Planning process as a regional approach for permitting multiple flood projects, with enhancements to cover permit needs beyond endangered species take. Staff is investigating several potential regions of the Systemwide Planning Area to identify where it might be most suitable to start such an approach.

- Lower Feather River Corridor Management Plan
  Staff is working with DFM staff and others to complete the Corridor Management Plan, with recent activity focused on developing a conceptual restoration plan and permitting strategy.

INVENTORY, ANALYSIS, AND MODELING

Fine-scale vegetation mapping

Data development continues on schedule for delivery in 2013. DFG staff will also provide an additional detailed report analyzing vegetation data for the fine-scale map product.

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.

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.

In October, DWR staff will travel to Washington, DC to meet with the Office of Management and Budget, USACE Headquarter and staff from the ASA office, members and staff from various congressional Offices and staff from Senate and House sub-committees on Authorization and Appropriations.