Agenda Item 5

REPORT OF ACTIVITIES OF THE DEPARTMENT OF WATER RESOURCES

By

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*Presented before the Central Valley Flood Protection Board on August 24, 2012

FUNCTIONAL AREA 1FLOOD 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 is finishing the last of the summer channel and structure inspections and continues to inspect CVFPB Encroachment Permits. Inspection staff is starting the field work portion of an inventory and categorization of encroachments along Maintenance Area 9 in coordination with other portions of DWR and the CVFPB. Coordination regarding inspections, permits, and other topics with LMAs, CVFPB staff, and USACE staff continues.

FLOOD PROJECT INTEGRITY/VULNERABILITY ASSESSMENT ACTIVITIES

No new information this month.

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

The annual workshop for the Local Maintaining Agencies (LMAs) was held on August 14 and 15 at the JOC. Morning (9:00-11:00am; August 14) and afternoon (1:30-3:30pm; August 15) sessions were scheduled to present the LMAs with information on the annual reporting program and improvements for 2012, presentations on other DFM programs including inspection, erosion, and grants followed by a hands-on session. The hands-on session provided LMAs with an opportunity to learn how to submit information electronically, ask questions about the web application, and be familiarized with new features that have been added to the web application this year.

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 July 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 July 31 was about 11.1 million acre-feet (MAF), which is about 64 percent of average. For comparison, on July 31, 2011, the observed Sacramento River Region unimpaired runoff through that date was about 24.2 MAF, or about 139 percent of average.

On July 31, the Northern Sierra 8-Station Precipitation Index Water Year total was 41.5 inches, which is about 85 percent of the seasonal average to date and 83 percent of an average water year (50.0 inches). During July, the total precipitation for the 8-Stations was 0.2 inches, which is about 100 percent of the monthly average. Last year on July 31, the seasonal total for the 8-Stations was 72.2 inches, or about 148 percent of average for the date.

On July 31, the San Joaquin 5-Station Precipitation Index Water Year total was 24.7 inches, which is about 62 percent of the seasonal average to date and 61 percent of an average water year (40.8 inches). During July, the total precipitation for the 5-Stations was 0.0 inches. Last year on July 31, the seasonal total for the 5-Stations to date was 64.4 inches, or about 162 percent of average for the date.

Selected Cities Precipitation Accumulation as of 7/31/2012 (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	0.67	372	0.17	94	2
Redding	0.00	0	0.15	167	0
Sacramento	0.03	0	0.00	0	0
San Francisco	0.01	0	0.08	0	0
Fresno	0.00	0	0.00	0	0
Bakersfield	0.02	0	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 07/31/2012								
Reservoir	River	Storage	Average Storage	% Storage	% Average	% Capacity	Flood Control Encroachment	Total Space Available
Trinity Lake	Trinity	2.079	1,992	104	2,448	85	---	369
Shasta Lake	Sacramento	3,271	3,322	98	4,552	72	-1,281	1,281
Lake Oroville	Feather	2,673	2,638	101	3,538	76	-865	865
New Bullards Bar Res	Yuba	790	752	105	966	82	-176	176
Folsom Lake	American	622	709	88	977	64	-355	355
New Melones Res	Stanislaus	1,638	1,454	113	2,420	68	-782	782
Don Pedro Res	Tuolumne	1,430	1,537	93	2,030	70	-600	600
Lake McClure	Merced	595	681	87	1,025	58	-429	430
Millerton Lake	San Joaquin	323	326	99	520	62	-197	197
Pine Flat Res	Kings	314	519	60	1,000	31	-686	686
Isabella	Kern	120	269	44	568	21	-242	448
San Luis Res	(Offstream)	678	1,037	65	2,039	33	---	1,361

The latest National Weather Service Climate Prediction Center (CPC) long-range, 1-month precipitation outlook for August 2012, issued July 31, suggests no tendency for above or below average rainfall for California, except the southeastern portion of the State where above average rainfall is indicated.

HYDRO-CLIMATE ANALYSES

Work continues on the University of California Task Orders for studies supporting climate change hydrology effort. In the past month, the State Climatologist has met with UC Davis and Scripps personnel to discuss project progress to date and products to be delivered. The UC Davis Study is continuing analyses of reconstructed historical storms database and sensitivity of storm precipitation to temperature, wind speed, and atmospheric moisture availability. Watershed modeling to simulate runoff generation from analyzed storm structures is starting. Discussions at the last meeting focused on coordinating analysis efforts with other program activities including next steps in the Central Valley Flood Protection Plan (CVFPP) Climate Change Technical Work Group and 200-year Hydrology Framework. Discussions with the Scripps team were on coordinating atmospheric river information into the 200-year Hydrology Framework and CVFPP work. Discussions were also addressed updating the status of evaluating the Intergovernmental Panel on Climate Change Fifth Assessment climate change simulations for atmospheric river projections.

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 the CVFPP activities. The State Climatologist has met with the consultant team and efforts to connect with the external science panel for further discussion have started.

The climate variability sensitivity study (CVSS) pilot of CVHS is progressing. Two watersheds have been selected for analysis with the option for adding a third if funds 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.

Informational presentations were made at the American Association of State Climatologists and Western States Water Council Extremes Workshop pertaining to the 200-Year Hydrology Framework project. The presentations were positively received and helpful discussion resulted. A draft outline of the Framework is now being developed.

REAL-TIME DATA COLLECTION NETWORK

Coordination between NOAA, DWR, and Scripps continues as the 21st Century Extreme Precipitation Monitoring project moves forward. The project was highlighted at a Western States Water Council meeting on extreme events in July. Articles on the project are being prepared along with other outreach activities to bring attention to the new monitoring capability provided by the network.

HYDROLOGIC DATA MANAGEMENT

- Feather River PRMS Model - The Cal/Nevada River Forecasting Center temperature and precipitation data and other similar data streams are being evaluated for use in the Feather model.
- Yuba River and Merced River PRMS Models - Updated surface water and climate data was quality control checked and forwarded to the USGS for use in the calibration of the models.
- Kings River PRMS Model - A new scope of work is being drafted up to launch an effort to build a PRMS model for the Kings River.
- General - A schedule is being developed to conduct some basic calibration and PRMS model theory training for HAFOO staff.

REAL-TIME DATA COLLECTION NETWORK

Snow Surveys and Snow Course Maintenance:

- So far, summer maintenance of snow courses and the remote data collection network has progressed smoothly. We have some coordination issues to resolve with the National Parks Service and US Forest Service to gain access for maintenance in the wilderness regions, but otherwise progress is steady.
- A draft memo was sent to the USFS Shasta-Trinity office to begin the process of obtaining approval to repair Foster's Cabin for use in measuring 3 snow courses within the wilderness boundary.

HYDROLOGIC DATA MANAGEMENT

The Snow Surveys section continues to collect, review, Quality Control, and enter Full Natural Flow (FNF), precipitation, snow, and reservoir storage data for thousands of locations statewide on a daily basis. With this data staff continues to issue daily, monthly, and seasonal water condition reports on CDEC. The Governor's announcement of moving forward with the Bay-Delta Conservation Plan sparked a little bit of media interest in FNF/Delta Inflow averages. During the month,

Snow Surveys staff alone responded to over one dozen media requests. Other calls were handled by other Hydrology staff.

BULLETIN 120 AND WATER SUPPLY INDEX FORECASTS
The last Bulletin 120 update was issued on June 7th and the next forecast will not be issued until February 2013.

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, 50% exceedance, 65% of normal)
Sacramento Valley Index (SVI)
(6.9, 50% exceedance, Below Normal)
San Joaquin Valley Index (SJI)
(2.2, 75% exceedance, Dry)

The next WSI forecast will be made in December.

BULLETIN 120 AND WATER SUPPLY INDEX FORECASTS
No new information this month.

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
Yuba-Feather Forecast-Coordinated Operations (YF F-CO)
The team is preparing to test the new release of the HEC-ResSim. The new features of practical interest to the YF F-CO is the capability of incorporating ensembles into model runs and the new Lag and K routing method within HEC-ResSim.

Library of Models
The Library of Model (LOM) development focused on stitching together already implemented three independent LOM operational processes such as content check in, content review and content check out. During the month of July the development team made progress on hosting electronic web application and associate databases from California data exchange center (CDEC). The team performed a series of tests for LOM application functionalities using different types of test data.

RIVER FORECASTING
No new information this month.

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

FLOOD OPERATIONS, TRAINING AND EXERCISES
No new information this month.

OUTREACH
No new information this month.

FLOOD SYSTEM ANALYSIS SECTION (FSAS)
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)
- Continued work on development and review 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.
- Continued internal coordination with USACE and DWR Central Valley Floodplain Evaluation and Delineation program.

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.

- Debris removal is ongoing in seepage ditches in Sutter area (50 miles).
- Beaver dam removal is ongoing in seepage ditches in Sutter area (50 miles).
- Gravel screening is 100 percent complete at the Feather River Channel Pit (10 Tons).
- Disking the refuge on the East Levee of the Sutter Bypass is ongoing (20 acres).
- Disking the toe roads at Maintenance Area (MA) 13 is 100 percent complete (20 miles).
- Seepage ditch spoil pile at Wadsworth Canal was disked and leveled (10 acres).

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 ongoing in the Sacramento area.
- Concrete repairs at the Sutter Yard are 70 percent complete.
- Debris Removal is ongoing at all pumping plants in Sutter Bypass.
- Construction is ongoing at Knights Landing Outfall Gates, Sutter Pumping Plants, Weir 2, and Willow Slough.
- Weir 2 –The Department of Water Resources (DWR) received a Notice of Violation (NOV) from the Department of Fish and Game (DFG) for the contractor

performing non-permitted work at Weir 2. DWR authorized the contractor to perform the work without notifying DFG. DWR is currently updating the permit to include the work performed.

- Knights Landing Outfall Gates - The first of two phases of work is underway with the installed cofferdam. The PortaDam cofferdam system took longer to install than expected, but that work was not a critical path item.
- Butte Slough Outfall Gates – Land based geotechnical exploration drilling was completed and lab testing has begun.
- Llano Seco Riparian Sanctuary Unit Restoration and Pumping Plant/Fish Screen Facility Protection Project EIS/EIR - On August 6, 2012, DWR Flood Management Staff participated in a conference call with River Partners and Ayres Associates to discuss DWR comments submitted on the Draft EIS/EIR. The project involves removal of existing bank protection on an eastward loop of the Sacramento River known as Camp 2 Bend and allowing a new channel to be cut. The purpose of the project is to protect the alignment of the Sacramento River at the water diversion for the Princeton-Codora-Glenn and Provident Irrigation Districts and develop additional habitat. There are concerns that this project will adversely impact diversions into the Butte Sink above the project and increase velocity and scour in the Sacramento River below the project. DWR requested additional information for the hydraulic modeling done for the project was not included in the EIS/EIR.

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.

- Mowing levee slopes is 50 percent complete at Units 2 and 3 (2 miles).
- Burning levee slopes are 100 percent complete at MA 1 (8 miles), 100 percent complete at Colusa Bypass (4 miles), 100 percent complete at Moulton Bypass (3 miles), 100 percent complete at MA 5 (30 miles), 70 percent complete at the East Levee of the Sutter Bypass (15 miles), 75 percent complete at Cache Creek (19 miles), and 60 percent complete at Unit 4 (1.5 miles).
- Spraying levee slopes is 30 percent complete at Cache Creek (19 miles), 75 percent complete at Putah Creek (10 miles), and 35 percent complete at Willow Slough (4 miles).
- Rodent Program (poison, trapping) for all areas in Sacramento and Sutter are ongoing.
- Levee gate repairs are ongoing at MA 1.
- Levee crown road dragging is 70 percent complete on east levee of Sutter Bypass (15 miles), 50 percent complete at MA 1 (8 miles), and 10 percent complete at Willow Slough (2 miles).

- Mowing levee slopes is 100 percent complete at Unit 1 (2.72 miles), 100 percent complete at Cache Creek (11 miles), 100 percent complete at Putah Creek (10 miles), and 100 percent complete at East Yolo (2 miles).
- Levee slope burning is 100 percent complete at the East Levee of the Sacramento River (17 miles), 100 percent complete at MA 3 (4 miles), 100 percent complete at MA 1 (8 miles), 100 percent complete at Colusa Bypass (4 miles), 100 percent complete at Moulton Bypass (3 miles), and 100 percent complete at MA 5 (30 miles).
- Vegetation Control with CDF crews is 100 percent complete at the north levee of Colusa Weir (5 Acres).
- Spraying levee slopes are 100 percent complete at Grizzly Slough (3.6 miles).
- Grading crown roadways is 100 percent complete on Cache Creek (53 Miles).
- Levee crown road dragging is 100 percent complete at MA 3 (3 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)

The SERP subcommittee is making significant progress with the SERP five-year pilot effort and implementation is anticipated in fall 2013. The SERP Manual is final as of August 2012, and the subcommittee will now use the manual to develop and finalize the agency permits. The CEQA effort can now move to final stages. The Program Environmental Impact Report and biological assessment 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. Anticipated completion for reconnaissance is September 2012.

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

- provided approximate eight hours of technical assistance to local communities and the public who had questions regarding the NFIP, Certified Floodplain Manager certification, and Federal grants,
- conducted the Community Assistance Visit (CAV) for the City of Red Bluff,
- conducted 3 CAV inspections for participating NFIP communities,
- finalized the CAV report for the City of Red Bluff,
- participated in a public meeting in Clarksburg to discuss the regional Yolo County floodplain mapping and floodplain management issues,
- met with the FEMA Community Rating System specialist and representatives from the City of Sacramento, Sacramento County, and the City of Roseville to prepare for the CRS Workshop at the upcoming FMA Conference,
- finalized changes to the updated DWR CRS website,
- completed review of public outreach and repetitive loss templates that can be used by participating CA CRS communities,
- met with Cal EMA and DWR DSOD to cover community emergency response plans (levee failure and dam failure) and other changes in the new CRS Coordinators' Manual to be released in 2013),
- and finalized the updated local officials CA CRS brochure.
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FPM staff is collaborating with the FEMA Region IX office, through meetings and phone conferences, to initiate the FY 2013 Community Assistance Program contract negotiation.

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.

The Alluvial Fan Floodplain Evaluation and Delineation for northern counties (AFFED North) is now complete. This work, completed in the 2nd quarter of 2012, identified and delineated potential alluvial fan flood hazard areas covering 630 square miles. DWR is making progress in developing preliminary two-dimensional models and Flood Hazard delineation maps for the alluvial fan areas in Riverside and Ventura Counties under DWR's AFFED South project. Riverside and Ventura counties are the pilot study areas selected for the AFFED program.

Riverside County is reviewing the preliminary FLO-2D models and Flood Hazard delineation maps developed for the "High Priority" alluvial fan areas in Riverside County. Development of 2-dimmensional models and Flood Hazard delineation maps for the "Remaining" alluvial fan areas in the Riverside County are about 25% completed.

Development of 2-dimmensional models and Flood Hazard delineation maps for the "High Priority" alluvial fan areas in Ventura County are about 60% completed.

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

Riverine Hydraulic Model Development (HEC-RAS)

- Upper Sacramento basin 80 % completion
- Lower Sacramento basin 80 % completion
- Upper San Joaquin basin 95 % completion
- Lower San Joaquin basin 70 % completion

Overland Hydraulic Model Development (FLO-2D):

- Upper Sacramento basin 80 % completion
- Lower Sacramento basin 80 % completion
- Upper San Joaquin basin 95 % completion
- Lower San Joaquin basin 80 % completion

CVFED has updated its schedule for the completion of the entire Riverine and Overland Hydraulic Model Development to November 2012.

In July, FEB processed 3 requests for data and transferred a total of 315 LiDAR tiles and 318 tiles of Aerial Imagery. Two of these requests were from outside public agencies and the other was from DWR. The total amount of data transferred is about 92 GB, covering a land area of about 270 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 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.

- FPM staff is analyzing and comparing the International Existing Building Code and other International Codes with respective California codes associated with the NFIP for consistency to ensure California NFIP communities are compliant with the NFIP regulations. This effort was requested by FEMA Headquarters and, in addition to California, will benefit NFIP communities across the nation. Comparing California and International Building Codes to NFIP regulations will be completed in late August.
- Selective Department of Housing and Community Development (HCD) and Division of State Architect (DSA) manufactured homes regulations have also been analyzed for NFIP consistency.
- Issues with code inconsistency are beginning to be addressed.
- Staff is working with the California Geologic Survey sponsored Tsunami Policy Working Group. The working group will make policy level recommendations related to development in tsunami hazard zones along the California coast.

- The United States Geologic Survey is planning a “tsunami” simulation event for California in the later part of the year to raise public awareness regarding the flood risks associated with tsunamis.

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 participates and provides cost-share for feasibility studies with the United State Army Corps of Engineers (USACE) and local partners. Several studies are underway and new ones are expected in the near future.

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 State and the SAFCA are coordinating to develop the Locally Preferred Plan for the ARCF GRR. The major goal of the non-federal sponsors is to limit the amount of real estate acquisition necessary to improve the levees along the Sacramento River.

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 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.
- USACE, DWR, and SBFCA met on July 24 to discuss what the Tentatively Selected Plan (TSP) for the Sutter Basin Feasibility Study would be. USACE has identified both what they think the National Economic Development plan is and a more extensive plan that the project team will support as the TSP based on non-economic factors including Life Safety. SBFCA has indicated that they are going to insist that an even more extensive plan be carried forward as the Locally Preferred Plan.
- At the July 11 Project Delivery Team meeting, USACE recommended that the NEPA documents for the 408 process and the Feasibility Study be combined.

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. 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 headquarters on what technical products will be required under the

new 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 held the Alternative Formulation meeting July 9. USACE is moving forward with the Locally Preferred Plan (LPP) as the recommended plan. USACE will need to process a waiver for recommending LPP in place of the National Economic Development (NED) Plan. The waiver will illustrate the significance of the LPP and suggest that any cost above the NED be considered betterments and solely a non-federal responsibility.

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.

- The Construction Certification letter was completed on June 25. The letter is a critical component of the Integral Determination Report (IDR). The IDR was sent up for Agency Technical Review ATR on July 30. The IDR and Post Authorization Documentation Report will determine the work for which USACE will approve credit to the non-federal sponsors.

EARLY IMPLEMENTATION PROGRAM (EIP) PROJECTS
EIP includes projects that are ready to proceed in advance of the Central Valley Flood Protection Plan. 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 currently 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 will offer 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.

- CVFPB Permit No. 18690 to install chain link fencing, K-rails, and a maintenance road within the Sacramento San Joaquin Drainage District right-of-way, parallel to and on the landside of the Feather River east (left) bank levee and Yuba South Levee (Yuba County) was heard at the January 27 Board meeting. Due to late notification of one of the lot owners, and the drainage issue, the CVFPB rescheduled all the hearings to a special Board meeting that took place in Marysville on March 2. The Board heard the individual lot owners' arguments but decided to postpone their decision until the August 2012 Board meeting.

Three Rivers Levee Improvement Authority - Upper Yuba River (TRLIA-YR)
This project will offer 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, 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 Flood Projects Office (FPO) is in the process of preparing an Executive Briefing Paper regarding this issue.

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 will be 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 to take the end date beyond June 2012. This is necessary due to the length of time Endangered Species Act compliance is taking to be completed by the Research Ethics Board. FPO is awaiting return of the extension from Contracts.
- CVFPB staff request sampling of the NCC cutoff wall as part of the permit and SAFCA submitted a sampling plan. Geotechnical Engineers, Inc. (GEI) has sampled areas of the blended cutoff wall Bentonite spoil material as requested by CVFPB staff. DWR staff is waiting for the report from GEI.

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. Sukut continues to perform surface preparations of the levee and seepage berm for fill placement.
- The CVFPB issued two Notice of Violations (NOVs) to Nordic for unacceptable work on Elements 6B to 9A. EIP Program staff notified SAFCA that payments will be made for this portion of the work now that both NOVs have been cleared. EIP staff is waiting for invoices from SAFCA.
- SAFCA is in discussions with EIP for an approximate $30.5 million increase in the funding agreement amount due to increased project costs. DWR is reviewing the work plan that documents the project scope and costs. SAFCA and DWR FPO staff and management are meeting to discuss this work plan and expect resolution.
- DWR inspection staff report resolution of a 3.1 mile crack in the crown of levee due to drying of fat clay. This is being resolved to DWR staff satisfaction.

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 and all major construction is complete for these sites. 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 in September 2012.
- The River Mitigation planting preconstruction meeting is scheduled to take place on August 3.

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

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

American River Common Features Project

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

- DWR Real Estate (RE) 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, Site R10 is being negotiated with the county for a permit to work during nighttime construction for 58 nights.
- A notice to proceed (NTP) has been issued for Howe Avenue. R6 NTP to be issued in mid-August 2012. USACE has negotiated with the Water and Power Authority to de-energize power lines along Site R6 during September to mitigate for peak energy usage. DWR is currently working with USACE Public Affairs Officer and State RE to create a process to mitigate for night-time construction by relocating affected residents (who desire relocation) during all construction evenings.
- Work on the Natomas Basin and American River Design and Construction component has been postponed indefinitely until federal authorization and funding has been approved.
- State and local Land, Easements, Rights-Of-Way, Relocation, and Disposal Areas (LERRDS) updated estimate has been submitted to the USACE, which may impact the nonfederal cash need of the project.
- USACE, State, and SAFCA have completed four public outreach meetings to discuss construction of Howe Avenue and R6 projects. The State will be supplying room and board reimbursement for all affected residents near site R6 during night time construction.
- Comment period for two Mitigated Negative Declarations closed on July 16. Comments on the two documents are being coordinated with USACE. A third Mitigated Negative Declaration was filed on July 2 and the comment period closed for that document on August 1.

American River Watershed – Natomas Features Project

The Project was fully constructed in 1998 and it increased flood protection by controlling flows and reducing flood stages in four creeks. 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.

- DWR processed its final payment according to the Licensed Professional Counselor's Association Amendment, and paid its outstanding State-share obligation of $ 3,711,700 to SAFCA on July 31. The State has no further financial obligations on construction of 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.

- 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.
- The USACE is currently 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. The overall quality of work has been great.
- Design – Phase IV design is for the chute, stilling basin and approach channel. The next major milestone is to complete 95% of Phase IV design on August 10. Design Safety Assurance Review (SAR) will occur on August 27.
- LERRDs – The CA DGS, CA CDCR, and USACE has been meeting to negotiate a lease solution. The USACE has requested a temporary work area easement on the Folsom Prison site from the CDCR for additional staging area. The lease is expected to be finalized by September 15.
- 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 Notice of Completion for the EIS/EIR was filed with the State Clearinghouse to start a 45 day public review on the Draft of the JFP-Approach Channel. Approval is expected in April 2013. Approval of this document would allow Phase IV construction to begin. FPO staff coordinated with the CVFPB staff and webmaster to have the EIS/EIR posted on the CVFPB website. Two public meetings were held at the City of Folsom Community Center on August 23, at 10 a.m. and 5 p.m.

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 soon. 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 the USACE after approval of the crediting package.
- DWR will also sell its shared interest in the Davis Ranch mitigation site to the Kaweah Delta Water Conservation District, valued at approximately $135,000.

The quitclaim is scheduled for the consent calendar at the August 24, 2012, CVFPB meeting.

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 continued in July.
- An additional payment of $560,000 was submitted to the USACE to cover modification costs associated with Phase 1.

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 public draft of the Environmental Assessment/Initial Study will be published for review on August 3. The review period closes September 4.

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 have been completed on the four creeks, and additional improvements are forthcoming.

- Construction on a 3,000 foot floodwall began along Morrison Creek on May 1. The work is now approximately 25% complete. The USACE, DWR, and SAFCA have all been involved in on-site activities regularly.
- SAFCA is finishing its design efforts to construct improvements on Unionhouse Creek upstream of Franklin Boulevard. SAFCA anticipates beginning construction in September, and plans to finish the work prior to the Regional Transit Blue Line extension work next spring along the creek.
- USACE anticipates completing all necessary work on the South Sac Streams project with its remaining $4 million in federal funds, with some matching non-federal funds. This would complete the project construction in 2013.
- DWR anticipates submitting a LERRD crediting package to the USACE in the next two weeks, representing approximately $3.5 million in state and local creditable expenses. An additional $4M or $5M will be submitted in the next couple of years.
- The Moulton soil stockpile was removed in June. The final environmental confirmation sampling Task Order was approved August 6 and will be completed soon.

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.

- The O&M supplemental manual is complete, but the review process has been delayed at USACE. It will be sent to the State and locals for review by the end of September.

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

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.
- A Public hearing was held for the Pit Resource Conservation District's Lower Ash Creek Wildlife Area Restoration Project in Bieber, CA, northeast of Redding.

FLOOD CONTROL SUBVENTIONS PROGRAM

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.

- Program approved and processed one funding reimbursement request for the Santa Ana River Mainstem Project for total amount of $8,946,892.49.
- Program is currently reviewing five funding reimbursement requests for 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 SCO audit reports which were originally submitted to DWR as far back as 1992.
- Two new reimbursement requests for total of $3,760,760 were received.
- In total, forty six funding reimbursement requests for total of $68.57 million are pending review (excluding amount pending SCO audit release).

LOCAL LEVEE ASSISTANCE PROGRAM

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.

- LLAP Draft List of Approved Projects – The public comment period for the Draft List of Grant Approvals ended on August 3. LLAP intends to draft a response to comments and post the Final List of Approvals in the upcoming weeks.
- LLAP Project Site Visits – LLAP project managers will tour the sites of all 37 proposed new projects over the next few weeks in advance awarding grant funding. The field visits are considered effective project management.

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.

- Sutter County Prop 13 Agreement – Partial retention was approved for completed work to date and final release has been processed by the Accounting Office.
- 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 after a contract number is in place.

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. The list will be published online for a 15-day public comment period.
- Staff has begun developing Funding Agreement language.

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.

- Assembly Bill (AB) 1788 Regulations – The Regulations have been formally approved.

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

No.	Urban Study Area	Historic Data Collection (TRM)	Initial Field Investigations (P1GDR)	Preliminary Analyses	Supplemental Field Investigations (SGDR)	Final Analyses & Report (GER)
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	In Progress	Pending
19	Calaveras River	Done	Done	Done	In Progress	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

Table Notes:

- 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.
- 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.
- 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 76% 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.
- Based on local stakeholder input, additional drilling was planned in the Chico and RD17 study areas. Drilling is currently underway in the RD17 study area. In the Chico study area, drilling is scheduled to begin in August 2012.
- 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, Davis, 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 1,620 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 59% 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 June-July for Wheatland, Gerber, Clarksburg, Knights Landing, Sutter Bypass, and RD 2095. 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 was awarded during the reporting period Geomorphology mapping has started. Three levee segments were for 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).
- A task order was completed to support USACE effort for Lower San Joaquin Basin Feasibility Study using ULE and NULE data and preliminary analyses to create additional levee reliability curves for leveed areas on the Calaveras and Bears rivers, RD404, and RD17.

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? What are their 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.

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. Legislation required that an initial plan be completed by January 1, 2012, and updated every five years thereafter.

- The Administrative *Record* and the *Consolidated Final Program Environmental Impact Report* (FPEIR) for the CVFPP are expected to be completed in August.
- The CVFPP Project Development Team continues scoping of the two State Basin-Wide Feasibility Studies. These feasibility studies will refine the State System-wide Investment Approach (SSIA) developed as part of the 2012 CVFPP.

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.

- DWR continues a series of RFMP Kick-off meetings with local flood management partners for each of the proposed 9 Flood Planning Regions. The meetings are to give an overview of CVFPP implementation through the regional planning process and discuss how the local partners will indentify and prioritize proposed flood system improvements for their regions.

- In addition to the RFMP Kickoff Meetings, two public workshops were held in Stockton and Sacramento, August 8th and 9th, respectively, to receive public comments on the RFMP Directed Funding Guidelines. The public comment period ended on August 17th. General responses to comments along with the Final RFMP Directed Funding Guidelines will be posted on the RFMP webpage. The schedule is dependent on the nature and extent of comments received.
- DWR continues to provide technical assistance to RFMP local agencies in response to requests for planning information and geospatial data.

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 initiated a new interagency team (Conservation Strategy Development Subcommittee), under the oversight of the existing Interagency Advisory Committee, to provide input from regulatory and resource agencies for developing the Conservation Strategy.
- Agency representatives reviewed preliminary working drafts of the Strategy and provided both encouragement for the current direction and suggested improvements. Staff created an online website to provide better access to Strategy related documents for DWR and agency partners.

- **CONSERVATION STRATEGY FUNDING GUIDELINES**
- The 30-day public review of the Draft Project Solicitation Proposal (PSP) ended in late July.
- A webinar was held July 23 to answer questions and provide instructions for submitting applications for funding.

- Staff met with consultants, mitigation bankers and other potential applicants to answer their questions on the draft PSP.
- Staff is incorporating public comments into a final PSP and preparing a Director's Decision Memo to approve the final version of the PSP.
- Staff has initiated an interagency team, under the oversight of the existing Interagency Advisory Committee, to provide input from regulatory and resource agencies related to linking PSP-funded projects and funding mitigation requirements.

CONSERVATION STRATEGY OUTREACH

- Staff continues to conduct a series of interviews with DWR managers and agency representatives to improve the outline and planned content of the Conservation Strategy.
- FES will be presenting a panel on the Conservation Strategy at the upcoming 2012 FMA Conference. The Conservation Strategy will provide presentations on fish passage, floodplain ecosystem modeling, and an integrated ecosystem and floodplain case study.
- Conservation Strategy staff participated in the second of a series of NGO-sponsored workshops at UC Davis to document the multiple benefits of hydrologically connected floodplains in the Central Valley.

REGIONAL CONSERVATION PLANNING

REGIONAL ADVANCED MITIGATION PLANNING (RAMP)

- The RAMP Bi-Monthly Work Group meeting took place on July 19. The group discussed the up-coming presentation to the Strategic Growth Council, gave suggestions on how to perform review of the draft Statewide Framework, and listened to talks on funding restrictions related to federal transportation or USACE Civil Works dollars.
- The Strategic Growth Council directed staff at their meeting on July 11 to meet with DWR and Caltrans and discuss methods to remove barriers to RAMP being implemented more broadly. A meeting with agencies and non-profits was scheduled for August 1 and the invitees include staff from Resources Agency, Governor's OPR, The Nature Conservancy, Conservation Strategy Group, DFG, Caltrans, and DWR. SGC staff gave their recap of the Council's directive from the July 11 meeting and asked the RAMP Work Group to prepare a list of essential items to move RAMP forward.

INVENTORY, ANALYSIS, AND MODELING

FINE-SCALE VEGETATION MAPPING

The CSU-Chico Geographic Information Center (GOC) continues to make progress on the fine-scale map scheduled for delivery in late 2013.

MEANDER MODELING

Staff continues to work with Dr. Larsen (UC Davis) on river meander modeling tools to better understand and plan river ecosystem dynamics.

TARGETED CONSERVATION PLANNING

Staff is working with other DWR programs and resource agencies related to improving scientific and planning information for bank swallows, giant garter snakes, and riparian brush rabbit.

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.

No new information this month