Agenda Item 6

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 and published the reports for the Spring 2011 levee inspections. Inspectors are starting the summer channel and structure inspections and expect to complete all summer inspections on time. FPIS staff is also working on completing California's Central Valley Flood System Improvement Framework Progress Report No. 4 as well as participating in a number of coordination efforts to enhance the inspection and maintenance of the flood control system.

Local Maintaining agency assessment

On July 21, two workshops were held for Local Levee Maintaining Agencies to help meet annual reporting requirements of AB 156. Morning and afternoon sessions (two hours each) included demonstrations of the web application, hands-on experience and other program improvements.

Library of Models

During the month of June the LOM electronic infrastructure development continued with the effort primarily focused on the development of the support Framework. The following specific activities are in progress:

- migrating the User Management and Workflow Management Systems to Oracle
- enhancing the Workflow Manager to make Workflow Threads sharable between users
- enhancing the Navigation Schema to support multi-step workflow processing, enhancing the user access management, and the support of Bread Crumb for Navigation tracking
- update the LOM templates to support the enhanced navigation Schema
- debugging the above new features

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.

As of July 1, 2011, statewide hydrologic conditions were as follows: precipitation, 140 percent of average to date; runoff, 140 percent of average to date; snow water equivalent, 15 percent of the April 1 average; and reservoir storage, 120 percent of average for the date. Sacramento River Region unimpaired runoff observed through June 30, 2011 was about 22.8 million acre-feet (MAF), which is about 133 percent of average. For comparison, on June 30, 2010, the observed Sacramento River Region unimpaired runoff through that date was about 14.5 MAF, or about 85 percent of average.

The first and last parts of June were unusually cool and wet. On July 1, the Northern Sierra 8-Station Precipitation Index Water Year total was 72.2 inches, which is about 149 percent of the seasonal average to date and 144 percent of an average water year (50.0 inches). During June, the total precipitation for the 8-Stations was 3.2 inches, which is about 320 percent of the monthly average. Last year on July 1, the seasonal total for the 8-Stations was 52.9 inches, or about 109 percent of average for the date.

On July 1, the San Joaquin 5-Station Precipitation Index Water Year total was 64.1 inches, which is about 162 percent of the seasonal average to date and 157 percent of an average water year (40.8 inches). During June, the total precipitation for the 5-Stations was 2.8 inches, or about 467 percent of the monthly average. Last year on July 1, the seasonal total for the 5-Stations to date was 44.7 inches, or about 113 percent of average for the date.

Selected Cities Precipitation Accumulation as of 06/30/2011 (National Weather Service Water Year: July through June)					
City	Jul 1 to Date 2010 - 2011 (in inches)	% Avg	Jul 1 to Date 2009 - 2010 (in inches)	% Avg	% Avg "Water Year" Jul 1 to Jun 30 2010 - 2011
Eureka	45.13	118	44.51	117	118
Redding	36.36	108	30.45	91	108
Sacramento	23.98	134	20.74	116	134
San Francisco	22.98	114	21.39	106	114
Fresno	17.51	156	12.36	110	156
Bakersfield	10.33	159	7.10	109	159
Los Angeles	17.85	136	12.43	95	136
San Diego	12.62	117	10.55	98	117

Key Reservoir Storage (1,000 AF) as of 06/30/2011								
Reservoir	River	Storage	Avg Storage	% Average	Capacity	% Capacity	Flood Control Encroachment	Total Space Available
Trinity Lake	Trinity	2,419	2,125	114	2,448	99	---	29
Shasta Lake	Sacramento	4,402	3,724	118	4,552	97	-151	150
Lake Oroville	Feather	3,515	2,942	119	3,538	99	-23	23
New Bullards Bar Res	Yuba	956	828	115	966	99	-10	10
Folsom Lake	American	928	830	112	977	95	-49	49
New Melones Res	Stanislaus	2,300	1,517	152	2,420	95	-120	120
Don Pedro Res	Tuolumne	1,917	1,600	120	2,030	94	-63	113
Lake McClure	Merced	1,002	752	133	1,025	98	-6	23
Millerton Lake	San Joaquin	484	415	117	520	93	7	36
Pine Flat Res	Kings	963	696	138	1,000	96	-14	37
Isabella	Kern	360	308	117	568	63	-1	208
San Luis Res	(Offstream)	1,825	1,350	135	2,039	90	---	214

The latest National Weather Service Climate Prediction Center (CPC) long-range, 1-month precipitation outlook for July 2011, issued June 30, 2011, suggests below average rainfall for southeastern California. No tendency for above or below average rainfall is suggested for the remainder of the State.

HYDRO-CLIMATE ANALYSES

Work continues on the University of California Task Orders for studies supporting climate change hydrology effort. Quarterly meetings with the principal investigators have been held or identified and progress reports obtained. The United States Forest Service (USFS) has requested an archeological study be conducted prior to the American River Snow monitoring instrumentation installation occurs this summer. Efforts are being made to coordinate with the USFS to address this issue and move the project forward. The Sacramento Municipal Utility District is assisting the Department to get the archeological study completed. Efforts in the atmospheric river climatology project are being coordinated with the Central Valley Flood Protection plan to provide some information on potential future conditions. An initial table of information was provided indicating the potential for larger AR moisture fluxes in the future projections.

The Central Valley Flood Protection Plan (CVFPP) Climate Change Technical Work Group is moving forward with a technical example to demonstrate the methodology developed in earlier meetings. Meetings and coordination continue as the draft CVFPP plan elements move forward. The committee will have the opportunity to review the information that is presented in the CVFPP.

The Central Valley Climate Variability and Change Study (CVSS) program continues to be organized. A program management plan and a work plan for the climate variability and change phase of CVHS have been are now available on the CVHS project website. The United States Army Corps of Engineers (USACE) is working out the resourcing needed to complete the study and engage the appropriate expertise. Anticipated start date of the technical work is September 2011.

Efforts continue to coordinate the hydraulics and hydrology efforts of the Department with the United States Army Corps of Engineers (USACE). For the hydrology products, the Central Valley Hydrology Study (CVHS), the reservoir simulation models developed for the program have undergone internal review at the USACE and comments provided to the district office. The district office will develop a response to the comments within a week. Other model development and data analysis continues as well.

The first set of Bulletin 195 files for the Oracle database was delivered from the consultant to the Department. These files will have the annual extremes data and the information to develop the depth-duration frequency tables and curves. Further meetings have been held with the regional office staff and climate change program staff to develop the appropriate data collection and processing protocols for extremes. An opportunity exists to leverage this work on a larger scale with the Western Region Climate Center. Meetings are scheduled to explore these possibilities.

REAL-TIME DATA COLLECTION NETWORK

Staff maintained 30 gage sites located in the Feather, Yuba, Bear, American, Mokelumne, and upper San Joaquin River basins.

SYSTEM RE-OPERATION

The consultant hired to assist in the System Re-Operation study produced a draft study plan in April. The product was reviewed and found to be deficient. The revised plan was delivered at the end of June. The revised plan of study is currently under review by Department staff.

HYDROLOGIC DATA MANAGEMENT

The Snow Surveys section continues to collect, review, perform 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 of June, Snow Surveys staff alone responded to over twenty-five media requests and conducted several on camera interviews and one live radio interview. Snow Surveys staff also responded to over forty historic data requests from a variety of sources (media, consultants, water managers, etc.). Concerns ranged from flooding and the timing of the snow melt, to questions about climate change and La Nina patterns. The usual number of public requests filtered in asking about trail access, skiing, and rafting conditions, and one asking how much snow is typically on the ground when the season ends. (The answer is zero.)

Bulletin 120 and Water Supply Index Forecasts
The June 29th Bulletin 120 Update is the final of the season, however, unofficial updates have continued in support of the high water reservoir coordination calls for the San Joaquin/Tulare Lake Region. The June 29 Bulletin 120 Update, which includes observed conditions through the morning of June 29, can be found at:

http://cdec.water.ca.gov/cgi-progs/iodir?s=b120up.

Forecast Summary
The projected median April-July runoff now ranges from 144 percent (Shasta Lake, Total Inflow) to 193 percent (Kern River). The changes to the forecast from last week were made due to additional precipitation and continuing analysis of flows-to-date relative to historic patterns. The precipitation and varying temperatures in June have increased the challenge of estimating a recedence rate.

Snowmelt & Seasonal Volume Runoff Forecasting
Precipitation Runoff Modeling System (PRMS) development:

- The Yuba model is nearing completion of the preliminary calibration process and is expected to be delivered by USGS in late July: followed by testing and calibration refinement.
- Work continues on the Feather model upgrade.
- Data is being complied for the Kings River model.

Snow Surveys and Snow Course Maintenance
While some snow remains on the mountains (still well above normal for the highest elevations), snow measurements and snow data monitoring have concluded for this season.

Snow course maintenance and gage maintenance has begun. Several troublesome snow sensors, temperature sensors, and precipitation sensors have been accessed, serviced, and tested and will be ready for the next snow season. Course maintenance activities have been focused in the Kern, Kings, and Owens River watersheds.

Runoff
For all forecasted rivers, the June flow rates through June 28 are greater than 160 percent of average.

- All rivers from the Feather through the Tule are flowing at a rate greater than 200 percent of average.
- All rivers from the Feather through the Mokelumne are flowing at a rate greater than 250 percent of average.
- The Yuba River is flowing at a rate greater than 280 percent of average.

Precipitation
Since June 21 there has been significant precipitation amounts measured over the central and northern Sierra. At least an inch of precipitation fell over these regions during the last several days. Consequently, the seasonal total is now about 72 inches (144 percent of an average water year) for the Northern Sierra 8-Station Index and 63.8 inches (156 percent of an average water year) for the San Joaquin 5-Station Index. For some basins, the precipitation amounts were large enough to produce noticeable jumps in the river flow rates.

Snowpack
In all regions of the Sierra (north, central, south) the average SWC has continued to decrease despite the recent precipitation event. As of June 30, the statewide SWC is 4 inches, which is a decrease of one inch compared to June 27 (before the precipitation). This year, as in other wet years, the mystery persists concerning the water content remaining above the highest sensor.

Consider a few oddities of the 2011 Water Year:

- On January 1, the snowpack in all regions was close to or greater than 1983, one of the wettest years on record.
- In the northern and central Sierra, the SWC on June 1 was equal to or greater than the average April 1 SWC.
- The San Joaquin 5-Station Precipitation Index, through June, registered only one month that was within 45% of average
- The wettest month, on average, for the Northern Sierra 8-Station Index is January; this year, January was less than 25 percent of average yet the water year total will be over 140 percent of average.
- At no time, from the middle of December through the third week of June, did the SWC in the southern Sierra fall below the daily average.

Water Supply Index (WSI)
The WSI has not changed since May 1st. The forecast can be summarized as follows:

- **Sacramento River Unimpaired Runoff Water Year Forecast (SRR)**
  23.9 MAF, 50 percent exceedance, 128% of normal
- **Sacramento Valley Index (SVI)**
  10.0, 50 percent exceedance, Wet
- **San Joaquin Valley Index (SJI)**
  5.1, 75 percent exceedance Wet

Runoff
Regional Sierra flows for June in the Sacramento, San Joaquin and Tulare Lake regions were 246, 225 and 177 percent of average, respectively. Flows for individual rivers in these regions ranged between 178 and 305 percent of average.

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

After a cool April, May and the early part of June, the heat wave along with summer thunderstorms helped finally arrive to accelerate the snowmelt in the Sierra Nevada. As a result state reservoirs have fill to near capacity by the end of June. Key forecast points on the San Joaquin River, like Vernalis and Newman, have remained well below their monitor or flood stages since late May. Weekly calls between DWR, the CA-NV River Forecast Center, Corps of Engineers and reservoir operators continued through June to coordinate reservoir releases of San Joaquin Basin reservoirs. Operators have begun to make increases to reservoir releases to avoid spilling. Subsequently San Joaquin River stages will rebound in the first half of July with a small chance that the Newman location will reach or exceed its monitor stage. The Chowchilla and James Bypasses are expected to reach or exceed their respective design capacities. San Joaquin reservoirs are expected to fill or peak in storage in the first week of July. Coordination of reservoir releases is expected to continue through the 2nd week of July.

RIVER FORECASTING

Prepared daily forecasts for water levels and flow, and reservoir inflows at designated locations. Provided forecast information and participated in weekly snow melt briefings and reservoir operator coordination conference calls. Prepared weekly Hydrologic Status and Forecast Conditions updates to DWR management.

FLOOD OPERATIONS EMERGENCY RESPONSE

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

FLOOD OPERATIONS, TRAINING, AND EXERCISES

The Flood Operations Center (FOC) continues to be involved in multiple activities in response to the May 2011 Golden Guardian 2011 Exercise. Staff is actively analyzing and processing collected data from the Exercise in order to evaluate how

to make strategic and focused changes to flood emergency operations. This analysis will be processed into a GG2011 After-Action-Report (AAR). The AAR will identify current capabilities, any issues to be resolved, recommendations for changes, and a plan for corrective action. Preliminary results indicate the AAR will include proposals to improve standard operating procedures (SOPs), develop a better system to track resource allocation and inventory use, provide specific training needs for better staff response, identify necessary additional resources to better implement our flood emergency response capability, and to reevaluate improved communication devices and protocols (especially for the Delta).

The improvement efforts noted above will also feed into the Department's Flood Academy, which the FOC continues to develop in partnership with the Training Office and other groups and committees. The Flood Academy is meant to be a hub for preparedness tools, resources, and training and exercise efforts. The goal of the Flood Academy is to help emergency responders become more efficient and more comfortable in their emergency response roles and to increase the Department's overall preparedness efforts and response capabilities. Among other outreach and coordination efforts that are being developed, the Flood Academy will also be publishing a routine newsletter of future flood awareness events and training opportunities.

In addition, the FOC continues to be involved with Snowmelt Briefings and San Joaquin and Tulare Lake Basin Reservoir Release Status calls held weekly.

REGIONAL FLOOD PREPAREDNESS SECTION (RFPS)

RFPS continues to work directly with the United States Army Corps of Engineers (Corps) and the State Water Project Contractors (SWP Contractors) to improve our readiness for a flood emergency in the Sacramento-San Joaquin Delta. During the last months the RFPS meet with the Corps on a number of topics. Both organizations are each developing a Delta specific emergency response plans that recognizes the unique challenges of the Delta. The RFPS is developing the DWR Delta Flood Emergency Preparedness, Response, and Recovery Plan. An internal DWR review version of this plan will be available in December 2011. Final plan adoption is scheduled for December 2012.

FLOOD SYSTEM ANALYSIS SECTION (FSAS)

FSAS continues to develop a systematic levee vulnerability assessment tool that will utilize levee-related data being collected by DWR to annually assess relative vulnerability of the project levees within the Central Valley flood-control system. This assessment will integrate information related to system performance, engineering evaluations, and operation and maintenance practices. Engineering staff have researched and identified potential data sources. This tool will support the objectives of FA01 by informing emergency response and resource planning decision makers. The tool will be used for the State-federal flood control system with the flexibility to expand valley and state wide.

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.

No new information

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 and mowing is underway at Sutter Bypass and Tisdale Weir.
- Maintenance Yard crews are grading toe roads at Cache Creek, Willow Slough, and Sacramento Bypass.
- Tree maintenance and vegetation spot spraying in all areas is continuing as needed.
- Sutter Yard staff completed minor earthwork to re-establish the channel geometry for the Sycamore Creek Sediment Removal Project is complete in advance of channel restoration work.
- The mitigation/restoration portion of the Sycamore Creek Channel Rehabilitation Project is scheduled to begin on July 11, 2011. The contractor expects the restoration to be complete in six to eight weeks. The civil engineering portion of the project (sediment removal and channel configuration) finished in the fall of 2010.

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.

- The initial scope of work on the construction for the replacement of Weir No. 2 has been completed. The Phase I work site has been cordoned off with a cofferdam spanning half the channel, and staff conducted a fish rescue in advance of excavation of the channel. Continued construction for the fish ladder and half of the weir is expected to continue until the end of October, with construction to resume the following season to complete the new weir.
- Work to correct remaining punch list items at the recently constructed Willow Slough Weir began on July 5th.
- Construction to expand the footprints of Sutter Bypass Pumping Plants No.1, 2, & 3 to modernize the facilities has been completed. Construction will now focus on electrical and communications upgrades of the pump control system and installation of emergency electrical power backup generators at each plant. Construction is expected to be completed the end of October 2011.
- Site characterization continues and design is underway for the remediation of the groundwater contamination from former underground storage tanks at the Sacramento Maintenance Yard facility.
- Staff is working through remaining environmental compliance issues associated with construction to rehabilitate the Knights Landing Outfall Gates.
- Maintenance and debris removal activities are continuing at the Knights Landing Outfall Gates, Butte Slough Outfall Gates, Willow Slough Weir, Weir 2, and Weir 4.
- Minor repairs on the Sacramento Weir's wooden stop logs are planned for this summer.
- All major concrete repairs on Sacramento Weir have been completed.
- Ongoing activities include minor levee gate maintenance in all areas

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.

- Corrected "unacceptable" rated items from the Corps recent periodic inspections in MA 7 and MA 16.
- Levee slope mowing is underway for MA1, Sacramento Bypass, Putah Creek, and Cache Creek.
- Rodent control program work (grouting rodent holes) is in progress in MA16.
- Small erosion repair work performed in MA12.
- Crown roadway grading and graveling is underway in MA12.
- Ongoing activities include debris removal and vegetation management.

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.

- All environmental permit applications have been received and are being processed by the regulatory and resource agencies for the Knights Landing Outfall Gates Rehabilitation Project. DOE approval of the final package is expected late July, with advertising in late August, bid opening late September and the notice to begin work in late October. Construction is scheduled to begin June 1, 2012. The coffer dam is being configured so work can be performed in dry conditions while at least half (5) of the gates remain in operation during construction.

LEVEE REPAIRS

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

Reclamation District 2064, SJRM 71.5R, Rock Slope Protection
The project is on schedule for 2011 construction pending receipt of the Biological Opinion from NMFS and acceptance by USACE.

Reclamation District 404, SJRM 42.3R, Slurry Wall
The Work Agreement was executed on June 2, 2011 and the project is on schedule for 2011 construction pending completion of a DWR contract with RD404.

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FUNCTIONAL AREA 3 FLOODPLAIN RISK MANAGEMENT

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

FLOODPLAIN MANAGEMENT TECHNICAL SUPPORT

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

- Conducted three Community Assistance Visits with the Cities of Lemoore, Banning, and Williams.
- Conducted a "Floodplain Management & Duties of the Local Administrator" workshop in the City of Fortuna
- Conducted two "FEMA Elevation Certificate" workshops in the Cities of Fortuna and Sonora.
- Co-hosted a workshop with the California Emergency Management Agency to both assist local government agencies in developing a Local Hazard Mitigation Plan and to provide federal grant programs information.
- CRS staff continues to work with community representatives interested in starting regional CRS users groups. Staff worked with FMA's Floodplain Forum website administrator to create new CRS sub-forums for different geographic areas to facilitate postings by local users groups.
- Provided 60 hours of technical assistance to community officials, engineers and surveyors, and homeowners.

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.

- DWR staff received, processed, and delivered multiple data requests from public agencies, one of which was for CVFP Board Sutter Bypass 2-D model project.
- As of July 1, 2011 staff had a total of 75 inquiries for the CVFED data, 20 of those were from within DWR and the other 55 were from other public agencies. Staff delivered on a total of 55 requests, 18 of those were for requests from within DWR and the other 37 were for requests from other public agencies.
- Staff transferred a total of over 81,000 LiDAR tiles and over 320,000 tiles of Aerial Imagery. The total amount of data transferred adds up to about 39 Terabytes covering a land area of over 57,000 square miles.

- On June 30th, CVFED also delivered a preliminary FLO2D model to USACE as part of coordination work with the Lower San Joaquin River Feasibility Study.

FLOOD RISK NOTIFICATION

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

No new information.

FLOOD RISK PLANNING

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

- The second Urban Level of Flood Protection Criteria (ULOP) work group meeting was held on June 21st and included representatives from cities and counties, professional planning associations, Central Valley Flood Protection Board, and State and federal agencies. The last ULOP work group meeting is scheduled for August 1st.
- Continuing to update the draft ULOP Criteria document based on comments received from the previous work group meetings.

FUNCTIONAL AREA 4 FLOOD PROJECTS & GRANTS

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

CENTRAL VALLEY FLOOD PROJECTS

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

USACE/CVFPB STUDIES SECTION

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

American River Common Features GRR

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

- USACE is continuing to develop draft alternatives to address critical levee deficiencies along the American and Sacramento rivers. These alternatives consist of a combination of levee improvements to multiple sections of the levees. The local sponsor, in coordination with Board staff, will develop a Locally Preferred Plan (LPP) that has levee improvements proposed by the non-federal sponsor. Completion of the draft alternatives is anticipated for June 2012.
- Board staff is currently processing a geological permit with the State Lands Commission (SLC) for soils analysis and borings needed by USACE along the American River. Board staff plans on submitting a categorical exemption, which is anticipated to be presented at the SLC August Board meeting.

Frazier Creek Feasibility Study

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

- Project Management Plan (PMP) is still under preparation.

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

- The draft Feasibility Cost Sharing Agreement (FCSA) Amendment No. 2 is still pending USACE approval.
- Flood Projects Office (FPO) continues to work with SJAFCA on how best to accelerate the study if it is not chosen as a USACE Expedited Study.

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.

- USACE is continuing to secure funds to bring the project to an acceptable stopping point for FY 11-12. The local sponsors anticipate receiving adequate funds for FY 11-12 to support the non-federal match to accomplish this.

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

- Board Staff and USACE are continuing efforts to close out the Continuing Authorities Program (CAP) Project and secure funding for the development of the Project Management Plan (PMP).

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

- USACE distributed for review and comment a white paper dated April 30, 2011 to lay out a strategy for moving the project forward. Board staff provided comments on June 9, 2011.

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.

- The Sutter Basin Feasibility Study is one of two studies selected nationwide for a new trial program to accelerate USACE's current feasibility study process. The trial program is referred to as the Pilot Study Program.
- The environmental document public scoping meeting was held on June 27, 2011 in Yuba City and June 28, 2011 in Gridley.

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

- The draft Feasibility Cost Sharing Agreement (FCSA) Amendment No. 2 is being approved by USACE Division and then the final version will be presented to the Board for approval. Amendment No. 2 will provide language to allow the State to accelerate funds in advance of USACE up to the Non-Federal Sponsor's cost-share. The study cost is estimated to increase from $5.7M to $10M with this amendment due to refinements in the study tasks since the first Project Management Plan (PMP) was written.

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 developing a revised schedule and cost change request (SACCR). The USACE new estimate to complete the study is still being determined.

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.

- Project Management Plan (PMP) is still under preparation.

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

- The FCSA and LFCSA are now fully executed.
- A meeting has been scheduled with the City of Woodland, USACE, and DWR on July 14, 2011 to discuss ways to move the project forward without USACE funding.

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

- On April 2011, the Assistant Secretary of the Army (Civil Works) denied the use of the Water Resources Development Act (WRDA) 1986 Section 104 crediting and Section 103 (k) non-federal cash contribution deferral for the Yuba River Basin Project. The denials invalidated the current phased implementation of the AFB document, placed a financial burden on the non-federal sponsors, and necessitated the reevaluation of the strategy for proceeding with a single Yuba River Basin General Revaluation Report (GRR).

- To expedite the use of Section 104 credits in lieu of cash payments to USACE for the Marysville Ring Levee (MRL) Project, the federal and State partners are proposing a Post Authorization Report/Limited Reevaluation Report (LRR) for the original 1999 authorized features of the Yuba River Basin Project and concurrently advance the GRR. Once completed, approval of the LRR will allow for credit to be used for the MRL. The GRR will evaluate additional features along the Feather River, Bear River, and WPIC for inclusion in the authorized project. The inclusion of such features would require additional authorization. The GRR will be the decision document that will support the granting of credit to complete the MRL.

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

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

- No change since last month.

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

- RD-17 is preparing to install piezometers required by DWR and CVFPB. Construction is due to commence on July 11, 2011.

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

- Construction of Vegetated Wave Buffer, Segment 2, is continuing.
- CVFPB has required TRLIA to remove all existing asbestos concrete piping left in the floodway within the setback area and all PVC irrigation lines within 100 feet from the water side toe of the setback levee as well as removing visible PVC risers. TRLIA has provided a work plan and is planning to proceed with the removal in the first week of July 2011.

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

- TRLIA awarded the construction contract to the lowest bidder Magnus Pacific, notice to proceed was granted, construction began in June 2011.
- Mobilization of equipment and materials to the project continues. Silt fence along the project right of way is being installed. Contractor has begun the stripping of vegetation from the levee and work areas. Work on the portion of the levee within Segment 4 to be degraded is underway and the removed material will be used as a fill for the seepage berm.
- During the week of June 20, 2011, the grading contractor discovered buried debris on the landside of the levee at the eastern-most limits of Segment 4 that appears to be old farm trash. HDR and Kleinfelder have had environmental and archeological staff onsite to assess the debris and obtain material samples for environmental testing. It is our understanding that the archeological representative has determined that the rubbish had no historic value and that the initial environmental tests results were inconclusive.
- CVFPB has approved PG&E power pole relocation. Construction is scheduled to begin around July 15, 2011.

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

- SAFCA has submitted the NCC Project Completion Report, dated May 9, 2011 and received June 24, 2011. DWR staff will commence distribution for review.

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

- Construction is currently underway on Element 9A to 12B (I5 to Powerline Rd). Sukut Construction has started clearing and grubbing in anticipation of the cutoff wall construction (total contract amount - $19.2M).
- Construction continues on Element 6B to 9A (Teal Bend to I5). Nordic Construction is currently constructing the slurry wall (60 percent).

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

- Invitation for contract bid submittals for the CHP Academy and The Rivers was closed on June 2, 2011. Raito Construction was awarded The Rivers Project and Teichert construction was awarded the CHP Academy Project.
- Section 408 Permit was approved on June 22, 2011.
  WSAFCA is planning to award the construction contract in July 2011

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.
- The Mayhew Project site staging area and erosion site repair design is complete.
- Construction at Site R5 will begin July 15, 2011.
- Howe Ave and Site R6 design is currently at 90 percent submittal.
- Negotiations to obtain temporary easements for construction at Howe Ave and Site R6 are currently underway.

Folsom Dam Raise and Bridge Element
The Folsom Dam Raise and Bridge Element Project provide Flood Damage Reduction and Dam Safety benefits to Sacramento.
- Off-site environmental mitigation is underway.
- USACE is currently working on preliminary design and a Project Management Plan (PMP) for the project.
- USACE has assigned a new project manager to the Folsom Dam Raise.
- A Project Partnership Agreement (PPA) is scheduled for execution in 2012.
- Design of temperature control shutter is scheduled for completion in 2013.

Folsom Dam Modifications (Joint Federal Project)
The Folsom Dam Modifications Project (Folsom Dam Joint Federal Project) provides Flood Damage Reduction and Dam Safety benefits to Sacramento.
- Granite Construction's work on the Central Structure contract is about nine percent complete. The contractor continues production blasting, excavation, and rock anchor installations in the Control Structure area. Conduit installations have started at the Generator building and the concrete batch plant is being mobilized.
- Joint Agency task force meetings for optimization of the construction schedule are ongoing and will continue to seek opportunities to advance the schedule throughout the contract.

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

- Construction for Phase 1 is currently underway with scheduled completion in late September 2011.
- The Phase 4 design is at 60 percent.
- Local and State Partners are currently in negotiation with USACE to resolve the denial of Section 103 Deferral extension and Section 104 credit denial.

Mid-Valley Area Levee Reconstruction Project

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

- DWR received the final submittal of plans and specifications for Sites 12, 12A, 13 on June 7.

South Sacramento Streams Project

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

- The State is in the process of acquiring real estate from Union Pacific Rail Road (UPRR) with the intent to allow USACE to award a contract by 30 September 2011 to construct 2,850 feet of floodwall along Morrison Creek and UPRR tracks. Construction is scheduled to begin in spring 2012.
- Complications with right of way limitations on the Unionhouse Creek design along 4,500 feet of the creek have led the local sponsor to investigate alternatives for flood control along Unionhouse Creek. Initial indications are that SAFCA may pursue flood control improvements apart from USACE, and ask that this portion of the project be removed from the USACE scope of the authorization. Specifics on the SAFCA plan will be available at SAFCA's board meeting this month on July 21 and in next month's report.
- USACE, the State and SAFCA are intending to proceed with the design of flood control improvements along approximately two miles of Florin Creek as the next step in this project.

West Sacramento Area Project, Slip Repair

- The Real Estate Certification package was delivered to USACE on June 9.
- USACE has received all requested non-federal funds, which will carry the project through the end of FY 2011.
- USACE awarded the construction contract on June 16 and construction is scheduled to start July 1.

STATEWIDE FLOOD PROGRAMS

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

FLOOD CORRIDOR PROGRAM (FCP)

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

- The 2010-11 Funding Cycle request for grant-funded project proposals closed in March. A total of 36 proposals were submitted. FCP staff members completed site visits and evaluations for all 36 proposals, with staff from other DWR regional offices and from CA Dept. of Fish and Game, Cal Emergency Management Agency, and CA Dept. of Conservation assisting. Three of the four consensus meetings were held in May. The fourth and final consensus meeting was held in Red Bluff to finalize scoring and grant dollar amount recommendations.
- The first Management Team meeting, including FloodSAFE and DFM managers, was held to discuss funding recommendations. The next Management Team meeting will be held in mid-July.
- Received final audits for two River Partner Projects: La Barranca Unit (SAP #4600003357) and Vierra Unit (SAP #4600003359) from the Department of Finance showing no issues or problems. Close-out letters were mailed for both projects.

FLOOD CONTROL SUBVENTIONS PROGRAM (FCSP)

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

- One claim for $77.6M was completed.
- Seven claims for $24M are under review.
- No audit payments were processed.
- Four new claims for $6.9M were received.
- 43 claims for $130.7M are pending review.
- A meeting was held with the Real Estate Branch (REB) to discuss ways to effectively incorporate REB services as part of the FCSP claim review and approval process.
- A meeting with Legal is being planned to confirm if/when DGS involvement may be needed regarding RE appraisal and new FCSP contract agreements.
- Program Delivery improvement process review and implementation continues.

LOCAL LEVEE ASSISTANCE PROGRAM (LLAP)

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

- Contra Costa County's Amendment No. 1 to the Wildcat and San Pablo Creek Levee Geotechnical Evaluation Project was approved. The amendment increased the agreement term, increased the overall grant amount, and updated the project work plan, schedule, and budget.
- City of Oroville received City signatures for execution of a grant agreement for the Evaluation of the City of Oroville Levee. The Agreement is now in process of receiving DWR legal counsel signatures.

- San Bernardino County re-submitted the Project Completion Report and Geotechnical Report for the Levee Certification and Modernization Project. These documents were reviewed and approved by the DWR Project Manager. The DWR PM is in the process of closing the agreement and releasing retention funds.
- LLAP staff participated in a CAL-EMA funding fair where a presentation was given to potential program applicants. A brochure was developed prior to the fair and was used as an informational handout for potential sponsors.

YUBA-FEATHER FLOOD PROTECTION PROGRAM (YFFPP)

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

- Responded to public information request (FOIA) for TRLIA Phase 2 Design/Implementation. Invoices packaged and sent to Public Records Coordinator. Staff attended a site visit to verify claims made against projects in question.
- YWCA Feasibility Contract expired on June 30, 2011. Project close out is underway; a letter will be sent when financial data is verified.

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

LLAP and FCSP are all in process of finalizing their program guidelines.

- The Final LLAP Guidelines, which includes all external and internal comments, is being reviewed by DFM Management. Upon approval by the Director, the PSP will be posted.
- The Final AB-1788 is under review and approval by DWR Executive.

ENVIRONMENTAL SERVICES

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

- Activities are described under the individual project headings.
- The Eastside Bypass Mitigation Project received a report that the mitigation proposed by USFWS (fence construction in the San Joaquin River Channel) is infeasible because the resulting vegetation would cause a rise in water surface elevation that would encroach into the FEMA 3-foot required freeboard. USFWS responded with an alternative mitigation approach to enhance habitat within the San Luis Wildlife Refuge that would have no effect on floodwater conveyance or stage elevation.

TECHNICAL ASSISTANCE

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

- Staff directed completion of Phase I of The DFM Desk Reference Manual/Intranet Website Project which includes development of subject matter components for the Budget Process, SAP Reporting, Bond Accountability and Project Management Basics. Training for all DFM staff is being prepared.
- Staff continues to provide GIS services in assistance to flood projects programs.
- Staff attended meetings on flood protection subject matters involving a USACE Engineering Circular to implement risk assessment in levee planning initiatives, CVFPP progress briefing and internal commenting as well as levee design criteria updates.
- Flood Corridor Programs and Environmental Support Branch staff continued to participate in the Permitting Subcommittee and Work Group for preparation of the Lower Feather River Corridor Management Plan. Current work products that are being developed include (1) a description of maintenance, habitat restoration, and other management actions for which programmatic permits will be sought from the regulatory agencies; and (2) a map of features to be created on the ground including high flow channel, sediment removal areas, and potential public recreation sites.

DELTA FLOOD PROJECTS

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

DELTA LEVEES MAINTENANCE SUBVENTION PROGRAM

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

Work Agreements for FY 2009-2010

- DWR staff has completed 62 joint levee inspections and received DFG approval for 59 claims. Payments will be processed by staff as DFG approves the claims.
- Staff has received 62 final claims for the maintenance work totaling $13 million. To date, 53 reimbursements have been paid totaling $7.8 million.

Work Agreements for FY 2010-2011

- DWR staff has mailed work agreements to 68 reclamation district and has received signed work agreements from 64 reclamation districts. An additional four work agreements have been received since the April CVFPB meeting.
- The agreements will be finalized once signed by the Board's Executive Officer.

Work Agreements for FY 2011-2012

- Staff has received 66 applications totaling $72.5 million. We have started to audit the applications for preparation of the CVFPB report. The allocated fund for FY11-12 is $12 million.

DELTA LEVEES SPECIAL FLOOD CONTROL PROJECTS

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

- No new information.

Current information can be found at:

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

FUNCTIONAL AREA 5 EVALUATION & ENGINEERING

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

URBAN LEVEE EVALUATION (ULE)

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

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

Geotechnical Evaluation Reports			
Study Area	**% Complete**	**Study Area**	**% Complete**
Chico	31	NEMDC East	40
Marysville	**41**	Natomas	15
Sutter	35	Bear Creek	25
RD 784	40	Calaveras River	25
Davis	10	RD 404	37
Woodland	10	RD 17	50
American River	40	Stockton Non-Project	**30**
West Sacramento	95	W. Sac. Non-Project	12
Sacramento River	45	South Sac. Streams	11

Changes shown in bold.

- Overall, ULE is 69% complete.
- The West Sacramento GER (Volumes 1 and 2), the template for all GERs is still awaiting comments from the Independent Consulting Board before being finalized.
- No drilling activities occurred during this reporting period.
- Schedules for completion of the Geotechnical Evaluation Reports (GERs) Program are continuing to be prepared with the current delivery date of the GERs scheduled for the end of 2012.
- Most ULE efforts for the reporting period have been for planning the GERs noted above and in support of the CVFPP.

NON-URBAN LEVEE EVALUATION (NULE)

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

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

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

- Overall, Non-Urban Levee Evaluations are 44% complete.
- At the Independent Consulting Board meeting in May, updates on the Geotechnical Assessment Report (GAR), Remedial Alternatives and Cost Estimates Report (RACER), and Geotechnical Data Report (GDR) were presented. The approach to the Geotechnical Overview Reports (GORs) was also presented for review and comment.
- Drilling activities occurred during this reporting period in Yolo and San Joaquin Counties and is anticipated to continue in July.
- Schedules for completion of the GORs are continuing to be prepared with the current delivery date of the GORs scheduled for the end of 2012.

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 RD 17, SAFCA (AR Common Features), West Sacramento (for USACE setback), and Sutter Butte Area Flood Control Agency.

TECHNICAL POLICY

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

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

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 includes two major upcoming deliverables: 1) Flood Control Systems Status Report (FCSSR) and 2) Living with Risk: California and Flood Protection in the Central Valley, 1848-2007 Report (History Report).

- A policy level review of the draft FCSSR was accomplished in June 2011. Revisions to the document based on that review are underway. The public review document first to be first submitted to the legislature and then general public is scheduled for release later this summer.
- An administrative draft of the history document for DWR and Board review is scheduled for this fall with a public review draft scheduled for release in early 2012.

CENTRAL VALLEY FLOOD PROTECTION PLAN (CVFPP)

The CVFPP reflects a system-wide approach to protecting lands currently protected from flooding by the SPFC. The initial plan is to be completed by January 1, 2012, and updated every five years thereafter.

- A second administrative working draft of the CVFPP was reviewed by DWR and Board staff in June. Work is underway on continuing development of the document and including comments from the working draft. An administrative working draft of the CVFPP is scheduled for distribution to CVFPP Regional Partners, SPFC maintaining agencies, and others in September 2011.
- Work continues on the draft Program Environmental Impact Report which is being reviewed for consistency and close integration of updates made to the CVFPP in response to comments received during the June internal review. Impact analyses are being drafted as the CVFPP State System-wide Investment Approach is being refined.
- Coordination continued between the CVFPP Product Delivery Team and USACE on the Project Management Plan (PMP) for the Central Valley Integrated Flood Management Study (CVIFMS).

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

No new information.

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 DOCUMENTS

Conservation Framework

Staff received comments on the 70% draft Conservation Framework and identified other needed improvements. These changes were incorporated and staff submitted a 90% draft of the Conservation Framework.

Conservation technical documents

Staff completed 90% drafts of the following technical reports to support the Conservation Strategy, CVFPP, and associated CEQA documentation: Biological Status and Trends Report, Fish Passage Barriers Assessment, Restoration Opportunities Analysis, Regional Permitting Options, Regional Advance Mitigation Planning, Habitat Conservation Objectives From Overlapping Plans, and Fish Passage Barriers Assessment.

REGIONAL CONSERVATION PLANNING

Regional Advanced Mitigation Planning (RAMP)

- Agency comments are currently being incorporated into the Statewide Framework. After this process is complete, the Framework will be reviewed within DWR followed by vetting by the directors of DFG, Caltrans, and DWR. The public version of the Framework is scheduled for release on August 1, 2011.
- Staff met with county agencies within the RAMP pilot area to discuss and receive comments on how to best incorporate RAMP within their programs. Planning for future meetings is in progress.

- A communication plan is under development. Outreach is planned to coordinate the Statewide Framework and Regional Assessments across partner agencies. Staff will coordinate with FloodSAFE outreach on communication plans.
- The new RAMP website continues to provide a variety of communication tools for collaborating and reviewing documents.

Corridor Management Planning

- Staff continues to work with DFM on planning activities for the Lower Feather River CMP.
- A permitting subcommittee met and determined future focus on a long-term permitting strategy.
- FESSRO staff provided a presentation on EcoFIP/HAR analyses and planning meetings were initiated for future public outreach coordination.
- A project description is being formulated which will outline the type and magnitude of activities to occur within the Feather River Project corridor. The team will seek programmatic permits and agreements for these activities.

SCIENTIFIC AND PLANNING INFORMATION

Vegetation mapping

- The medium-scale vegetation mapping draft is nearly complete, with some final areas now completing accuracy assessments.
- The Riparian Habitat Joint Venture lead is coordinating experts for agency review.
- A fine-scale map product which will provide detail at project-level specificity is being initiated and field teams started surveys in July.

FUNCTIONAL AREA 7 LEGISLATION, BUDGETS, AND COMMUNICATION

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

COMMUNICATION AND BRIEFING MATERIALS

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

No new information.

FUNDING ADVOCACY & AGENCIES' ALIGNMENT

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

On May 5, 2011, the Assistant Secretary of the Army (ASA) Darcy issued a memorandum in connection with the Yuba River Basin Project indicating that the ASA's office will no longer consider applications for Section 104 Credit and will instead rely upon Section 2003 of the Water Resources Development Act 2007. The ASA's decision to discontinue Section 104 crediting will have a significant impact upon State and local agencies. Most of the State and local agencies' investments in the Central Valley levee system can be credited under Section 104, but not Section 221, because investments are being made during the federal feasibility phase. The ASA's decision effectively puts Non-Federal sponsors in the untenable position of choosing between foregoing credit for hundreds of millions of dollars of investments or jeopardizing public safety by delaying construction until after a Chief's Report has been finalized. Without credit for State and local investments, a number of problems arise, including the likelihood that when the federal project is eventually authorized for construction, the U.S. Army Corps of Engineers (USACE) will ignore Non-Federal investments and require a minimum 35% Non-Federal cost share.

The Department of Water Resources (DWR) has been working with other Non-Federal partners including the Central Valley Flood Protection Board's staff to develop a draft White Paper and one page summary on this issue. Because of the severity of the impact of the ASA's decision, DWR and the Non-Federal partners are planning a trip to Washington, DC to address this issue with the ASA, USACE, as well as, members of Congress and their staff.

LEGISLATION LIAISON & LEGAL

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

No new information.

PROGRAM MANAGEMENT, BUDGET, & FISCAL SERVICES

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

No new information.

FLOODSAFE PROGRAM ADMINISTRATION & COORDINATION SERVICES

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

No new information.