Agenda Item 8

REPORT OF ACTIVITIES
OF THE
DEPARTMENT OF WATER RESOURCES

By

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**Prepared for the Central Valley Flood Protection Board Meeting – August 28, 2015.*

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FLOOD EMERGENCY RESPONSE (FER)

Flood ER prepares for and responds to flood threats in close coordination with local, state, and federal entities. Preparing for flood response requires continuous data collection, regular flood system inspections and evaluations, forecasts and information dissemination, annual training and exercises, review and replenishment of supplies and equipment, and preseason coordination.

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.

HYDRO-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 June 30, statewide hydrologic conditions were as follows: precipitation, 70 percent of average to date; runoff, 45 percent of average to date; snow water content, 0 percent of average to date (0 percent of the April 1 average); and reservoir storage, 55 percent of average for the date. Sacramento River Region unimpaired runoff, for Water Year 2015, observed through June 30, 2015 was about 8.4 million acre-feet (MAF), which is about 50 percent of average. In comparison to Water Year 2014, the observed Sacramento River Region unimpaired runoff through June 30, 2014 was about 6.6 MAF, or about 39 percent of average.

On June 30, the Northern Sierra 8-Station Precipitation Index Water Year total was 36.0 inches, which is about 74 percent of the seasonal average to date and 72 percent of an average water year (50.0 inches). During June, the total precipitation for the 8-Stations was 0.8 inches, or about 80 percent of average for the month. Last year on June 30, the Water Year 2014 seasonal total for the 8-Stations was 28.9 inches, or about 59 percent of average.

On June 30, the San Joaquin 5-Station Precipitation Index Water Year total was 17.7 inches, which is about 45 percent of the seasonal average to date and 43 percent of an average water year (40.8 inches). During June, the total precipitation for the 5-Stations was 0.3 inches, or

about 50 percent of average for the month. Last year on June 30, the Water Year 2014 seasonal total for the 5-Stations was 19.2 inches, or about 48 percent of average.

Daily Precipitation (in inches) for Selected Stations as of 07/01/2015					
Station	October 1 to Date 2014-2015	% Average	Season to Date 2013-2014	% Average	% Average Oct 1 – Sep 30
Mount Shasta	33.71	80	12.06	29	77
Eureka	29.94	76	17.23	44	74
Redding	23.08	68	16.12	48	67
South Lake Tahoe	12.87	68	13.17	70	63
Sacramento Executive Airport	15.43	85	8.92	49	83
Santa Rosa (Sonoma Co AP)	22.27	62	13.70	38	61
San Francisco	17.55	75	11.96	51	74
Stockton	10.66	77	7.00	51	76
Yosemite	16.29	44	16.60	45	43
Monterey	14.51	91	8.32	52	90
Paso Robles	8.39	67	4.91	39	66
Fresno	6.43	57	4.91	43	56
Bakersfield	5.29	83	2.41	38	82
Death Valley	1.05	54	1.02	52	44
Los Angeles	8.40	57	5.74	39	56
Riverside	4.83	40	1.87	16	39
Palm Springs	2.19	46	0.92	19	38
San Diego	8.78	87	4.90	48	85

Key Reservoir Storage (1,000) AF) as of 06/30/2015								
Reservoir	River	Storage	Average Storage	% Average	Capacity	% Capacity	Flood Control Encroachment	Total Space Available
Trinity Lake	Trinity	930	2,086	45	2,448	38	---	1,518
Shasta Lake	Sacramento	2,198	3,650	60	4,552	48	-2,354	2,354
Lake Oroville	Feather	1,395	2,887	48	3,538	39	-2,143	2,143
New Bullards Bar Res	Yuba	515	830	62	930	55	-451	451
Folsom Lake	American	438	810	54	977	45	-539	539
New Melones Res	Stanislaus	401	1,532	26	2,400	17	-2,019	2,019
Don Pedro Res	Tuolumne	756	1,618	47	2,030	37	-1,274	1,274
Lake McClure	Merced	130	732	18	1,025	13	-882	895
Millerton Lake	San Joaquin	179	416	43	520	34	-342	341
Pine Flat Res	Kings	266	691	39	1,000	27	-734	734
Isabella	Kern	36	313	12	568	6	-325	532
San Luis Res	(Offstream)	813	1,293	63	2,041	40	---	1,226

The latest National Weather Service Climate Prediction Center (CPC) long-range, 1-month precipitation outlook for July 2015, issued June 30, 2015, suggests equal chances of wet or dry

conditions for most of California, except for the eastern third portion of the state where above average precipitation is suggested.

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.

FLOOD EMERGENCY PREPAREDNESS & OPERATIONS

This element includes preparing the Department to respond to flood emergencies by providing emergency response training, flood fight training, coordinating emergency preparedness endeavors with the various flood response partners, analyzing season flood threats, and assuring the staffing and function of the State-Federal Flood Center to coordinate State response to flood events.

Flood Operations Center staff has scheduled twelve Preseason Flood Coordination Meetings to be held this September and October across the state. These meetings for flood emergency responders will provide the opportunity to review flood emergency procedures, roles, responsibilities, and protocol, discuss areas of concern, and receive updates from local agencies in that particular region. In addition to DWR, partner agencies presenting information at each meeting include the National Weather Service, Governor's Office of Emergency Services, California Conservation Corps, County Offices of Emergency Services, and the U.S. Army Corps of Engineers. Notifications have been mailed to all local, state, and federal agencies listed in DWR's Directory of Flood Officials.

Delta Emergency Planning

Staff continues to manage the incorporation of comments on the DWR-USACE Delta Emergency Operations Integration Plan and Delta Flood Emergency Management Plan. New drafts of these plans are expected this winter.

Delta Emergency Response Grants

Staff continues to manage executed contracts with local agencies.

Delta Flood Emergency Facility Improvement Projects

Staff is working closely with USACE on the 404 permitting for the Rio Vista site. The Rio Vista site will be used to store the False River Emergency Drought Barrier rock when it is removed in October. DWR has received the county grading permit and 401 water quality permit for site work. Work outside of waters of the US is scheduled to begin in October 2015. The Webber

Avenue sites are currently bisected by a city road and right of way. After careful examination, DWR is now working to acquire this property which will allow better utilization of the site.

Delta Agency Coordination
The next Delta Working Group Meeting will be held on August 19, 2015 in Solano County.

FLOOD MANAGEMENT PLANNING (FMP)

FMP formulates strategies, plans, and investment priorities for implementation of flood management projects and development of flood risk management policy. It includes the Statewide Flood Management Planning Program and the Central Valley Flood Management Planning Program, which developed California's Flood Future: Recommendations for Managing the state's Flood Risk (California's Flood Future) and the 2012 Central Valley Flood Protection Plan (CVFPP).

CENTRAL VALLEY FLOOD MANAGEMENT PLANNING (CVFMP)

The CVFMP focuses on working with stakeholders to formulate plans for reducing flood risk and increasing the resiliency of the State Plan of Flood Control (SPFC). As recommended in the CVFPP, this program is currently implementing major planning efforts: locally led Regional Flood Management Planning which is working with more than 180 local entities to prepare regional flood management plans; state led Basin-wide Feasibility Studies (BWFS); the Central Valley Flood System Conservation Strategy (CS); and the CVFPP Financing Plan. Each of these planning efforts will inform the 2017 update of the CVFPP, the first five-year update as required by the California Water Code (CWC).

Basin-wide Feasibility Studies
No new information this month.

Basin-Wide Feasibility Study Atlases
No new information this month.

Regional Flood Management Planning (RFMP) Phase 2
The six directed funding agreements between DWR and our regional partners have been amended for time, budget, and scope, allowing for the continuation of the RFMP effort into a "Phase 2". RFMP Phase 2 is intended to extend the constructive collaboration, coordination, and meaningful engagement developed in Phase 1 through adoption of the 2017 CVFPP update. RFMP Phase 2 activities through June 2017 include Project Management, Coordination, Communications and Engagement, Regional Governance, and developing strategies to deal with Institutional Barriers. Regional coordinators are currently working with each region to develop their yearly work plan which will describe the budget and activities for this first year of RFMP Phase 2 funding.

Public Engagement
The Central Valley Integrated Flood Management Watershed Study (CVIIFMS) will be holding a 2-day Plan Formulation Meeting on August 24 and 25 in Sacramento.

CVFPO staff makes monthly presentations on the progress of development of the 2017 CVFPP at each monthly CVFPB meeting. The presentation can be viewed via archived video available at the CVFPB website CVFPB.ca.gov.

FLOODPLAIN RISK MANAGEMENT (FRM)

FRM promotes prudent management of floodplains to reduce flood risks by working closely with local governments and federal agencies including the Federal Emergency Management Agency (FEMA) and the USACE. Policies, guidance documents, and technical products are developed to guide actions taken in floodplains. An important program of successful floodplain risk management includes educating the general public about flood risks so they can plan, prepare, and take individual actions to reduce flood risk for themselves, families, and property.

CALIFORNIA FLOODPLAIN RISK MANAGEMENT (CFRM)
The CFRM works with individuals, communities, and professionals to reduce the risk of flooding. It is a comprehensive integrated program that preserves and enhances the natural and beneficial functions of floodplains, and identifies opportunities to minimize the impacts of flooding. The goal of CFRM is to reduce the frequency and severity of flood loss, loss of life, damage to property, and damage to the natural resources of floodplains. One of the basic foundations of CFRM is the identification and delineation of flood hazard areas within the state. This program promotes awareness of flood risks through risk assessment and risk mapping; the community assistance program; Flood Risk Notification (FRN); floodplain management mitigation planning; and mitigation cost recovery.

Floodplain Management Assistance
Floodplain Management Assistance provides statewide technical support to federal, state and local agencies as well as the public for flood hazard maps, levee data, and the National Flood Insurance Program (NFIP) 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 of communities participating in the NFIP, provides technical assistance to the public, and trains community officials.

No new information this month.

Flood Risk Notification (FRN)
The 2015 Flood Risk Notification will be mailed in September to approximately 275,000 property owners whose properties receive protection from the State Plan of Flood Control levee.

Coastal Floodplain Evaluation and Planning
An advanced draft of the Floodplain Management "Quick Guide Coastal Supplement- Planning for Sea Level Rise" document is complete and is awaiting management review. The Quick Guide Coastal Supplement will be presented at the 2015 California-Nevada-Hawaii Floodplain Management Association Conference in Southern California. The Quick Guide and Quick Guide Coastal Supplement are National Flood Insurance Program and CFRM desk reference documents developed by DWR.

CONSERVATION STRATEGY
The Central Valley Flood Protection Act of 2008 directs DWR to achieve multiple objectives through implementation of the CVFPP. Among these are environmental objectives to improve natural dynamic hydrologic and geomorphic processes; habitat quantity, diversity, and connectivity; and native species populations. The CS describes DWR's approach for achieving these objectives. It outlines actions to improve programmatic environmental permitting, provide advance mitigation for flood projects, improve systemwide vegetation management, integrate environmental stewardship into multi-benefit flood improvement projects, promote agricultural stewardship, and improve the quality of scientific and planning information needed for wise decision making.

- **Conservation Strategy Document:** In mid-July, DWR initiated a 60 day public review period. The complete draft document was released in coordination with the CVFPB, which will hold a second public workshop on the Conservation Strategy on October 9. The draft Conservation Strategy, executive summary, and all appendices are available on DWR's website for review. Comments are due September 14, 2015.

Advance Mitigation Projects:
Grasslands Mitigation Preserve (Advanced Mitigation for Giant Garter Snake) Westervelt Ecological Services (WES) received approval from the U.S. Army Corps of Engineers (USACE), US Fish and Wildlife Service (USFWS), US Environmental Protection Agency, and CA Department of Fish and Wildlife (CDFW) on the Bank Enabling Instrument (BEI), a key milestone in receiving mitigation credits for the bank. Construction began in July and is expected to be complete in October 2015. First credits (27.9 of DWR's allocated 130 credits) were released on August 7.

Bullock Bend Salmonid Mitigation Bank
Yolo County issued an Initial Study / Mitigated Negative Declaration (MND) on the Bullock Bend Mitigation Bank on July 1; the public comment period closed July 30. Westervelt Ecological Services (WES) expects a two-step approval process: 1) Planning Commission review in late August and 2) the Board of Supervisors in September. WES met with the CVFPB on July 29 and does not expect to encounter any issues with getting an encroachment permit. WES received comments from National Marine Fisheries Service, CDFW, and USFWS and is awaiting comments from the U.S. Army Corps of Engineers (USACE). WES expects to resubmit the BEI following further discussions with USACE regulatory staff.

TRLIA Feather River Floodway Corridor Restoration Project
TRLIA received notification from CDFW on June 17 that the Prospectus TRLIA submitted for CDFW and USFWS review was complete. This approval kicks off a 90-day period (starting June 18) where CDFW and USFWS will review the Prospectus and solicit additional clarifying information. Once they issue a written determination, TRLIA and the Sacramento Valley Conservancy will develop the BEI documents.

TRLIA issued an Initial Study/MND for the project on June 26; the public review period ended on July 29. TRLIA intends to consider adoption of the document at its regularly scheduled meeting on August 18.

STATEWIDE INTEGRATED FLOOD MANAGEMENT PLANNING (SIFMP)
Statewide Integrated Flood Management Planning (SIFMP) has identified flood risks facing Californians and proposed mitigation measures to manage the risks. SIFMP presented recommendations to improve flood management in a comprehensive report titled ***California's Flood Future: Recommendations for Managing the State's Flood Risk****. The report identified that more than 7 million Californians, or one in five, live within a 500-year level of flood risk floodplain, and approximately $580 billion in assets (crops, structures, and public infrastructure) are exposed to flooding. It was produced working jointly with the USACE and more than 140 public agencies and presented comprehensive information about exposure to flood risk in each of California's counties, and about specific projects and associated costs that local agencies are planning to implement to reduce flood risks to their communities. Information developed for "California's Flood Future" was used to create flood management content and recommended flood related risk reduction management actions presented in the "California Water Plan Update", published in October 2013.*

The SIFMP program is currently working to further define ways to implement the *California's Flood Future* recommendations. A primary focus is on development of funding strategies for a long-term, outcome-based approach to flood risk management throughout California within the context of overall water management investment. In addition, the program has wrapped up an expanded information gathering effort, in which approximately 240 flood and water management agencies were interviewed. A draft report titled *Investing in California's Flood Future* is being developed that will describe the state's investment priorities and finance options necessary to support the programs and projects that help improve flood management and reduce residual flood risk using an outcome-based approach. The report will support *Action 8* of the *California Water Action Plan.*

FLOOD RISK REDUCTION PROJECTS (FRRP)
FRRP works in coordination with local and federal agencies to implement new flood projects; provide funding that enables local agencies to repair and improve levees and other flood management facilities statewide; provide advanced mitigation for the SPFC to aid project delivery; and enhance ecosystems associated with the flood system. A primary responsibility of this program is to work closely with USACE.

DELTA LEVEE SYSTEM INTEGRITY (DLSI)
This program focuses on levee repair, maintenance, and improvements within the Sacramento-San Joaquin Delta. Funding is also available for planning, research, and habitat enhancement. The program includes the following components:

Delta Levees Maintenance Subvention Program
This is a cost-share program providing financial assistance to local agencies for maintenance, rehabilitation, and improvement of approximately 700 miles of project and non-project levees. Due to the public-private partnership nature of this program, it provides significant improvement to critical levees at a very reasonable cost. Staff, on behalf of the Board initiates and manages work agreements to fund levee maintenance and rehabilitation. The current status of work agreements is as follows:

Subventions Program FY 2013-2014
- Staff received 62 final claims by the November 1, 2014, deadline totaling approximately $12 million in work.
- Staff has reviewed all 62 claims for eligible reimbursements. Fifty nine claims for $5.8 million are being processed for payment. Three claims need final CDFW approval before payment can be made.

Subventions Program FY 2014-15
- On October 24, 2014, the Board approved the FY 2014-15 funding plan for $12 million.
- Final claims for work completed July 1, 2014 through June 30, 2015 are due to DWR by November 1, 2015.

Subventions Program FY 2015-16
- The Department received 71 applications for participation in the FY 2015-16 Delta Levees Subventions Program.
- In the fall, the Program will request CVFPB to approve $12 million from Proposition 1E funds for the FY 2015-16 Subventions Program.

Delta Stewardship Council (DSC) Interagency Agreement (IA)
The DSC IA funds the Delta Levees Investment Prioritization Study. The DSC has been collecting information and developing the framework for its investment strategy tool. The first draft Technical Memorandums (TMs) have been received by the DSC for review. The TMs support the analyses and reports that are IA deliverables. The TMs and Delta Levees Issue Paper are available on the DSC website. In May the DSC hosted 2 days of meetings for an independent Peer Review Panel. The Panel was given the TMs for review and was allowed to ask questions of the DSC's staff and their consultant, Arcadis. The Panel submitted their formal review to the DSC in July; the report was released to the public July 20, 2015. A link to the Panel's report is available on the Council's website.

Delta Protection Commission (DPC) Interagency Agreement (IA)
The DPC IA funds the study to investigate the feasibility of a statewide benefit assessment district for the Delta. The study is underway and is led by the DPC.

USACE/CVFPB PROJECTS
The Central Valley Flood Protection Board (CVFPB) participates with the United States Army Corps of Engineers (USACE) to ensure that state flood management needs and mandates are met, and provides required non-federal cost-share funds and technical assistance to repair or upgrade the Central Valley's flood management systems. These congressionally authorized State Plan of Flood Control (SPFC) projects are being constructed to improve flood protection for urban or urbanizing areas to a 200-year level of flood protection; reduce flood risk in rural areas; reduce the risk to life, infrastructure, and property; and reduce the state's liability. The following are USACE/CVFPB projects:

American River Common Features (ARCF) Project
The ARCF project improves levee systems along the American and Sacramento Rivers.

No new information this month.

American River Watershed – Natomas Basin Project
The Natomas Basin Project was approved by President Obama in the Water Resources Reform and Development Act in June 2014. It includes significant improvements to the Natomas Basin levees resulting in a minimum of 100-year level of flood protection for the basin.

- Design Agreement Amendment #1 adds CVFPB as a non-federal partner. This amendment is being reviewed by the State Department of General Services (DGS) for their approval.
- USACE is awaiting Water Resources Reform and Development Act 2014 (WRRDA 2014) implementation guidance from USACE HQ; there is no delivery schedule for the implementation guidance at this time. The implementation guidance would determine whether a new Project Partnership Agreement (PPA) is necessary – would have funding impact -, or the existing Project Cooperation Agreement (PCA) for the American River Common Features project can be amended to add the construction phase of the Natomas Basin project.
- Design Agreement Amendment #2 increases state's cost share by $310,000, and raise the total design cost to $3,846,150. This amendment is being reviewed by DGS for their approval.

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

- Construction and Design – The project status as of June 1, 2015, is as follows (no updates for July 2015):

Phases	Planning & Design	Construction
Preconstruction Engineering and Design	100%	N/A
Phase III – Control Structure	100%	98%
Phase IV – Approach Channel, Chute, and Stilling Basin	100%	50%
Phase V – Site Restoration	46%	8%
Project Overall	94%	71%

- Phase III – A ribbon cutting ceremony is currently scheduled to be held on the morning of August 27, 2015 to celebrate the completion of this phase.
- Interim Excavation #1 within the Approach Channel is complete.
- Training of USBR operations staff for the operations and maintenance of the Control Structure will continue through summer of 2015.

Folsom Dam Raise Project
The Folsom Dam Raise Project will provide flood damage reduction by increasing the reservoir storage capacity by 3.5 feet and performing structural modifications to the existing Folsom Dam tainter gates for operational safety.

- Gate improvement design safety assurance review (SAR) conference was held on July 28, 2015. Design completion schedule is January 2016.
- USACE received the USACE HQ's comments on the Project Partnership Agreement (PPA) and plans to respond to those comments in early September. DWR has provided draft responses to the USACE regarding the USACE HQ's comments on non-federal issues**.**

Lake Kaweah Enlargement Project (Terminus Dam, Kaweah River Project)
The Lake Kaweah Enlargement Project was completed in 2006, and the remaining administrative, financial, and turnover work is planned to be complete by September 2015.

No new information this month.

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

DWR, USACE, and the city of Marysville are preparing a design solution for CVFPB permitting of a sewer force main alignment crossing the levee from the Waste Water Treatment Plant project Phase 2C. A revised design is expected from the City in August 2015.

South Sacramento County Streams Project
The South Sacramento County Streams Project will increase the flood protection level for south Sacramento County's urbanized area and an area to the south and east of the city of Sacramento.

Florin Creek construction notice to proceed was issued on July 16, 2015. Construction includes channel widening, invert channel lining and paving, installing parapet walls, and retaining walls from Franklin Blvd to Highway 99. The construction will begin by mid-August 2015.

USACE/CVFPB Studies
CVFPB participates with USACE to ensure that state flood management needs and mandates are met, and provides required non-federal cost share funds and technical assistance for studies to repair or upgrade the Central Valley's flood management systems. These studies identify recommended project alternatives that lead to congressionally authorized projects. These multi-benefit projects will improve flood protection for urban or urbanizing areas; reduce flood risk in rural areas that are protected by the facilities of the State Plan of Flood Control (SPFC); reduce the risk to life, infrastructure, and property; and reduce the state's liability. The following are USACE/CVFPB studies:

American River Common Features (ARCF) General Reevaluation Report (GRR)
The GRR will provide a 200-year level of flood protection for the Lower American River, downstream of the Folsom Dam, the Sacramento River (downstream of the Natomas Cross Canal), and the Natomas Cross Canal.

USACE has tentatively scheduled the Civil Works Review Board for this study for December 8, 2015.

Central Valley Integrated Flood Management Study
This Study will identify federal interest in the Sacramento River Basin by identifying opportunities to reduce flood risk and protect floodplain and environmental assets.

A plan formulation meeting will be held on August 24 and 25 in Sacramento.

Cache Creek Settling Basin Project GRR
This settling basin was initially constructed in 1937 and modifications were completed in 1993. As a part of the federal authorization for the most recent improvements completed in 1993, the project authorization specified additional improvements to be considered at year 25, or when the sediment trapping efficiency fell below 30%.

No new information this month.

Lower San Joaquin River Feasibility Study (LSJRFS)
The LSJRFS will evaluate feasible flood risk reduction alternatives focused in the Stockton, Lathrop and Manteca areas, identify a project having federal interest that is consistent with the

Central Valley Flood Protection Plan and complete a Final Chief's Report.

- USACE has tentatively scheduled the Agency Decision Milestone (ADM) for August 28, 2015. The ADM will establish USACE HQ support for the Tentatively Selected Plan for the feasibility study.
- USACE is having difficulty meeting their requirements under vegetation ETL without risk of a Jeopardy Opinion from the resource agencies. The project development team continues to work toward resolving the Biological Assessment issues.

Merced County Streams Project – Bear Creek GRR
This project will evaluate options to increase the Merced urban area level of flood protection from a 50-year to 200-year event.

No new information this month.

Sutter Basin Feasibility Study
This multipurpose study will address levee improvement measures for existing levee systems protecting Yuba City and the surrounding communities in the Butte/Sutter basin, as well as environmental restoration and recreation opportunities.

No new information this month.

Sacramento River GRR (Sac Bank Phase 3)
The GRR will evaluate flood risk reduction alternatives within the Sacramento River Flood Control Project area, identify a project having federal interest that is consistent with the Central Valley Flood Protection Plan and complete a Final Chief's Report.
USACE planning Charrette will be held in the week of August 17, 2015.

West Sacramento Project GRR
The GRR will evaluate flood risk reduction alternatives within the West Sacramento area, identify a project having federal interest that is consistent with the Central Valley Flood Protection Plan and complete a Final Chief's Report.

USACE has tentatively scheduled the Civil Works Review Board on December 8, 2015.

Woodland/Lower Cache Creek Feasibility Study
This study is a state, USACE, and city of Woodland coordinated effort to investigate the feasible 200-year level flood protection and risk reduction alternatives and opportunities for floodplain restoration, recreational enhancements, and ecosystem restoration for the city of Woodland and surrounding areas. The study will continue efforts, suspended in 2004, after significant local resistance to the USACE-selected flood barrier option alternative halted the study.

No new information this month.

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

No new information this month.

URBAN FLOOD RISK REDUCTION PROGRAM (UFRR)
*This program was created to address state investment priorities as a result of the adoption of the Central Valley Flood Protection Plan (CVFPP). UFRR supports implementation of regional flood damage reduction projects for urban and urbanizing areas protected by SPFC facilities in the Sacramento-San Joaquin Valley to achieve at least a 200-year level of flood protection. UFRR provides cost-share funding to local agencies to repair and improve levees and facilities of the SPFC. UFRR is based on competitively awarded grants and directed funding. Projects must be multi-benefit flood projects consistent with the CVFPP and State Systemwide Investment Approach. The program evolved from the **Early Implementation Program (EIP)** developed in 2007 in response to the passage of Propositions 1E and 84. The following are EIP and UFRR projects:*

Knights Landing Levee Repair Project (EIP)
This project will repair 3.4 miles of levee along the left (east) bank of the Knights Landing Ridge Cut back to the USACE 1957 Design Profile.

Knights Landing received their USACE Section 404 permit on August 5, 2015. Construction is scheduled to begin August 10, 2015.

Lathrop Study and Preliminary Design (UFRR)
This project has a long-term plan to fully comply with SB5 requirements, which is well beyond the RD-17 seepage project funded under EIP. State is requiring the area to regain federal interest and meet the Central Valley Flood Protection Plan requirements, which will require looking at floodplain development and a multi-benefit project.

- City of Lathrop was given an extension until August 14, 2015 to submit a full project application.
- DWR continues to meet with local agencies to discuss multi-benefit concepts and potential design alternatives.

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

No new information this month.

Sacramento Area Flood Control Agency (SAFCA) – Levee Accreditation Project (UFRR)
SAFCA proposes levee improvements along 3-4 miles of levees along Arcade Creek and NEMDC in the Sacramento North area and 5-6 miles of levees along the Sacramento River between downtown and the town of Freeport. Improvements are required to meet requirements under the Urban Levee Design Criteria Program (ULDC) and FEMA standards. This project is still under review for state funding from DWR.

- SAFCA's Final Full Application is currently under review by DWR.
- SAFCA is incorporating DWR's comments on the North Area Streams Levee Improvement Project (NASLIP) 65% Plans and Specifications.

SAFCA – Natomas Cross Canal Project (EIP)
This Natomas Levee Improvement Program project will install cutoff walls to prevent seepage, under-seepage, and raise the levee to improve the Natomas Basin's flood protection and create a 200-year minimum flood protection level.

No new information this month.

SAFCA – Sacramento River East Levee Project (EIP)
This Natomas Levee Improvement Program project will install cutoff walls to prevent seepage, under-seepage, and raise the levee to improve the Natomas Basin's flood protection and create a 200-year minimum flood protection level. SAFCA plans to complete components to element 12A (RM 67) along the Sacramento River and have the USACE complete the remaining work.

DWR approved a construction payment to SAFCA in the amount of $2,058,755.

San Joaquin Area Flood Control Agency (SJAFCA) – Smith Canal Closure Structure Project (EIP & UFRR)
The Smith Canal Closure Project will construct a miter gate at the mouth of the Smith Canal on the San Joaquin River/Stockton Deep Water Ship Channel to provide a 100-year level of flood protection to a portion of the City of Stockton.

SJAFCA was given an extension until August 31, 2015 to submit a full project application.

Sutter Butte Flood Control Agency (SBFCA) – Feather River West Levee Project (FRWLP) (EIP & UFRR)

FRWLP repairs approximately 35 miles of levees along the west bank of the Feather River from the Thermalito Afterbay to the north end of Star Bend. This project includes construction of slurry walls and seepage berms to protect Gridley, Biggs, Live Oak, Yuba City, and parts of Sutter and Butte counties. FRWLP's highest priority segment is identified as Project Area C. DWR chose Project Area C for the first construction contract.

- SBFCA completed the Section 106 Cultural Resources Plan revisions; construction resumed on July 6, 2015.
- DWR approved a construction payment to SBFCA in the amount of $14,479,664 in July 2015.

TRLIA – 200-year Goldfields Levee Project (UFRR)
This project proposes to construct a new levee south of the Goldfields (Yuba River) area to complete 200-year flood protection for the Yuba Basin east of the Feather River.

No new information this month.

Three Rivers Levee Improvement Authority (TRLIA) – Feather River Levee Improvement Project (EIP)
This project will result in a 200-year flood protection level for Highway 65 and 70, and will also improve flood protection for 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 on-site mitigation, agricultural use, and habitat.

No new information this month.

TRLIA – Upper Yuba River Levee Improvement Project (EIP)
This project will result in a 200-year level of flood protection for Highway 65 and 70, and will also improve flood protection for Olivehurst, Linda, Plumas Lake, Marysville, and Yuba City. This project includes a portion of the Yuba River's south levee.

No new information this month.

West Sacramento Area Flood Control Agency (WSAFCA) – Design (EIP)
Design agreement funds all design activities for project elements in the North basin and majority of the project design in the Southport.

WSAFCA approved Amendment #3 to the Design Agreement for the West Sacramento Levee Improvement Project (WSLIP) at a special board meeting on July 30, 2015. The amendments will now be processed and executed by the state.

West Sacramento Area Flood Control Agency (WSAFCA) – Construction (EIP & UFRR)
Construction for the California Highway Patrol Academy, Rivers, and I-Street Bridge projects in the North basin is complete. These projects corrected through-seepage and foundation under-seepage that had excessive hydraulic gradients, embankment instability, and erosion problems. The Southport Improvement Project will construct flood risk reduction measures along approximately 5.6 miles of the Sacramento River right (west) bank levee. The project consists of approximately 1.6 miles of strengthen-in-place measures and 4 miles of setback levee. For setback levee areas, the work will include the breaching and degrading of the existing levee and allow for natural restoration of the Sacramento River floodplain.

WSAFCA approved Amendment #2 to the Construction Agreement for the WSLIP project at a special board meeting on July 30, 2015. The amendments will now be processed and executed by the state.

Woodland Study and Preliminary Design (UFRR)
This project's long-term objective is to provide flood protection to the City of Woodland while improving flood system elements in Yolo County. The state is requiring the city to continue to work with USACE to determine federal interest in the project and to meet Central Valley Flood Protection Plan requirements. The city is working to develop a multi-benefit project which will consider deep floodplain development, existing maintenance issues, and residual risk measures.

- The city of Woodland was given an extension until the end of August 2015 to submit the full project application.
- DWR staff will continue to work closely with the City of Woodland in support of developing a preferred plan.

FLOOD CORRIDOR PROGRAM (FCP)
The FCP is a statewide grant program in which non-structural flood risk reduction is the primary goal, with habitat and agricultural conservation incorporated as prominent program components. The goal of FCP is to reduce flood risk by enabling waterways to function more naturally, while enhancing native wildlife habitat, and preserving agricultural uses. To do this, the program provides grant funding to local agencies statewide for Flood Risk Reduction Projects (FRRP) that improve floodwater conveyance and transitory floodwater storage, using primarily non-structural methods while preserving or enhancing agricultural production and/or wildlife habitat.

No new information this month.

LOCAL LEVEE ASSISTANCE PROGRAM (LLAP)
The LLAP was created to help fund projects implemented by flood management agencies, mainly outside of the Sacramento-San Joaquin Delta. The goals of LLAP include reducing flood risk; identifying deficiencies in flood control structures and levees; and eliminating high flood insurance costs related to FEMA unaccredited levees. LLAP projects must fulfill at least one of the two goals of inspection and evaluation of the integrity and capability of existing flood control project facilities; or improvement, construction, modification, or relocation of flood control levees, weirs, or bypasses, including repair of critical bank and levee erosion.

No new information this month.

YUBA-FEATHER FLOOD PROTECTION PROGRAM
The Yuba-Feather Flood Protection Program provides Proposition 13 financial assistance to local entities that can demonstrate nonstructural flood management projects that show a peak flood

flow reduction, flood stage, and flood risk in the Yuba and Feather River and Colusa Basin (including wildlife habitat enhancement and/or agricultural land preservation).

No new information this month.

SAN JOAQUIN RIVER RESTORATION PROJECT (SJRRP)

Division of Flood Management has created the SJRRP to assist the United States Bureau of Reclamation (USBR) in assessing flood risks associated with the San Joaquin River Restoration Program. The San Joaquin River Restoration Program is a comprehensive long-term effort to restore flows to the upper San Joaquin River and restore a self-sustaining Chinook salmon fishery while avoiding adverse water supply impacts. USBR, lead agency for the SJRRP, has initiated Interim releases from Friant Dam and is evaluating alternatives for releases and routing of restoration flows up to 4,500 cubic feet per second to support reintroduction of fish into the San Joaquin River as required by the Stipulation of Settlement (Settlement). DWR has offered technical and funding assistance to the program in recognition of the DWR's role in habitat restoration and flood management.

The purpose of the SJRRP is to assist the San Joaquin River Restoration Program in assessing the flood risk impacts of Restoration flows under this program due to seepage and stability and identifying potential remedies to address increased flood risks under Restoration flows in coordination with the CVFPP.

Field exploration work on Priority 1, Reach O, commenced on July 27, 2015.

FLOOD SYSTEM OPERATIONS AND MAINTENANCE (FSO&M)

FSO&M focuses on maintaining individual elements such as levees, hydraulic control structures, pumping plants, bridges, and channels to continue to achieve risk reduction benefits the system was designed to provide riverside communities, rural areas and the state. Local agencies and the state share responsibility for this work. LMAs operate and maintain a majority of the system through management of their individual levee systems, while the state is required to operate and maintain those portions of the State Plan of Flood Control (SPFC) identified in the California Water Code (CWC). Local agencies and the state work closely with the CVFPB, the USACE, and environmental resource agencies to ensure that operation and maintenance activities meet statutory requirements that promote public safety, environmental stewardship, and economic stability.

CHANNEL EVALUATION AND REHABILITATION

As part of the FSO&M mega program, the Channel Evaluation and Rehabilitation Program is responsible for operating, maintaining, and repairing SPFC channels identified in assurances to the federal government and defined in CWC Section 8361. DWR operates and maintains approximately 1,200 miles of SPFC channels of the Sacramento River Flood Control Project to ensure proper flood protection function and conveyance capacity.

Proposition 1E funding is being used for extraordinary operations and maintenance activities, including SPFC channel evaluations, mercury characterization and control implementation, and channel conveyance capacity deficiency correction. Routine operations and maintenance requirements are ***funded by the General Fund****.*

Specific Channel Evaluation and Rehabilitation Program activities include channel inspections and evaluations, as well as developing and utilizing hydraulic models to identify critical areas within channels requiring the removal of vegetation or sediment to maintain channel capacity and flood protection function.

Channel responsibilities also include those under the Central Valley Regional Water Quality Control Board's adopted Total Maximum Daily Loads (TMDLs) and Basin Plan Amendment, wherein DWR is assigned responsibility for monitoring, evaluating and reducing total mercury and methyl mercury loads passing through the Flood Control System and into the Yolo Bypass and the Delta. DWR is mandated to conduct characterization and control studies for activities including flood control improvements, modifications, and wetland mitigation work with the potential to impact methyl mercury concentrations in the Yolo Bypass and Delta.

The Channel Evaluation and Rehabilitation Program reports progress within the following components:

- *Inspection and Evaluation*
- *Routine Operations and Maintenance*
- *Non-Routine Projects*

INSPECTION AND EVALUATION:

Bear River Hydraulic Model
Staff received QA/QC comments from The Northern Region Office (NRO). Relevant comments will be incorporated into the model.

Butte Creek Hydraulic Model
Staff is working on graphics for the Channel Management Plan (CMP).

Cache Creek Hydraulic Model
No new information this month.

Cache Creek Settling Basin
Staff is reviewing draft reports summarizing the control studies performed by the University of California, Davis, and the Unites States Geological Survey, in response to the Central Valley Regional Water Quality Control Board's (CVRWQCB) Total Maximum Daily Load (TMDL) requirements for the basin and adjacent Yolo Bypass. The draft reports provide calculated estimates on the sediment trapping efficiency of the basin and form the baseline conditions for feasibility study evaluations to improve the basins' trapping efficiency. Staff is synthesizing the

elements of these reports into a Control Study progress report to be submitted to the CVRWQCB in October 2015.

Cherokee Canal Hydraulic Model
Staff is working on graphics for the Channel Management Plan (CMP).

Chico Area Streams Hydraulic Model
No new information this month.

East Side Canal (aka Coon Creek Interceptor, Sacramento County)
No new information this month.

Knights Landing Ridge Cut/Colusa Drain Hydraulic Model
Staff is continuing to refine the model.

Llano Seco Riparian Sanctuary
River Partners provided additional model data used to support the Llano Seco Riparian Sanctuary project including the evaluation of the proposed Camp 2 Bend cutoff. Staff is reviewing the model output.

Middle Creek Hydraulic Model (Lake County)
NRO provided a briefing to FMO office and Yard staff on the results of the Middle Creek model evaluation. Staff is reviewing the model and model report.

Natomas East Main Drainage Canal (NEMDC)
No new information this month.

Putah Creek Hydraulic Model
No new information this month.

Tisdale Bypass Hydraulic Model
Staff is working on graphics for the Channel Management Plan (CMP).

Wadsworth Canal Hydraulic Model
Staff is working on graphics for the Channel Management Plan (CMP).

Willow Slough Bypass
No new information this month.

Yuba River Hydraulic Model
No new information this month.

ROUTINE OPERATIONS AND MAINTENANCE:

The Maintenance Yards' routine channel maintenance is limited to vegetation management through such methods as spraying, mowing, and trimming. These activities are planned at the end of flood season and are completed before the next flood season. Although DWR manages large areas in channels, only a small percentage is actively maintained by DWR. Reporting on planned activities in actively maintained areas starts on November 1, 2014 and ends on October 31, 2015. Additional work that is completed as needed includes removing debris, removing trees, removing sediment, and removing beaver dens. These activities are reported as they are completed.

The following activities were completed in the month of July:

- 60 cubic yards of debris was removed from Big Chico Creek.
- 40 cubic yards of debris was removed from Little Chico Creek.
- 60 cubic yards of debris was removed from Lindo Creek.
- 3 beaver dens were removed from Linda Creek.
- 8 beaver dens were removed from Natomas East Main Drain.

NON-ROUTINE ACTIVITIES:

No new information this month.

FLOOD CONTROL FACILITIES EVALUATION AND REHABILITATION (FCFER)

The FCFER program includes evaluating, operating, maintaining, and repairing Sacramento River Flood Control Project facilities defined in CWC Section 8361 and state assurance to the federal government. DWR is responsible for operating and maintaining SPFC facilities including 11 weirs, 5 gate structures, 4 pumping plants, and specific bridges associated with the east levee of the Sutter Bypass, ensuring proper flood protection functionality and facility condition. Rehabilitation and improvement work includes proactive repair of known and documented problems with prioritization based on flood risks and safety.

The Flood Control Facilities Evaluation and Rehabilitation program reports progress within the following components:

- *Inspection and Evaluation*
- *Routine Operations and Maintenance*
- *Non-Routine Projects*

INSPECTION AND EVALUATION:

Two times a year, once immediately after flood season and once prior to flood season, the Flood Maintenance Office (FMO) conducts inspections of structures, bridges, and pipes that penetrate the levee. Deficiencies are identified with corrective actions. Minor deficiencies can be remedied through maintenance practices while larger issues will require a project level effort.

The following activities were completed in the month of July:

- An inspection and recommendation report was drafted and submitted to each Maintenance Yard in July. Progress on repair recommendations will be checked and reported in the fall prior to flood season.

Butte Slough Outfall Gates (BSOG)
Plans are 95% complete and construction has been delayed due to funding limitations. Construction plans and permitting will be completed so that the project will be "shovel ready" when funding becomes available.

ROUTINE OPERATIONS AND MAINTENANCE:
The Maintenance Yards' routine maintenance for flood facility structures varies based on the type of structure. Pumping plants require periodic mechanical and electrical maintenance while weir maintenance primarily consists of concrete repairs. Additional work that is completed as needed includes removing debris and sediment, and emergency repairs. These activities are reported as they are completed.

The following activities were completed in the month of June:

No new information this month.

NON-ROUTINE PROJECTS:

Bridge CC-2 Repair
FMO is evaluating alternatives for repairing Bridge CC-2 in Sutter County. The bridge is part of the drainage system of Project No. 6 east of the Sutter Bypass. As part of the Sutter Maintenance Bridge Inspection Program, Bridge CC-2 was identified as needing immediate repair. DWR has operations and maintenance responsibility for the bridge and the collecting canal it crosses as identified in California Water Code, Section 8361(c). The bridge provides access for DWR to conduct required maintenance activities and for Westervelt Ecological Services to manage the Sutter Basin Conservation Bank for Giant Garter Snake mitigation.

Bryte Yard Groundwater Investigation
Under approval from the Central Valley Regional Water Quality Control Board, staff arranged for the destruction of seven groundwater monitoring wells and seven temporary observation points installed during characterization activities performed in association with former leaking underground storage tanks at the site. The well destruction activities were completed on June 19.

Butte Slough Outfall Gates (BSOG) - Completion Contract
This is a project to address issues with the latest projects including all three Sutter pumping plants, Weir 2, Willow Slough Weir, and Knights Landing outfall gates. The project should go out for public bidding late this summer.

LEVEE OPERATIONS AND MAINTENANCE COMPONENTS

The Levee Maintenance Program, like the Channel Maintenance Program, is generally organized around the continual and ongoing maintenance of specific levee structures in the Sacramento River Flood Control Project. Both the Sacramento and Sutter Yards have assigned responsibilities for specific levee reaches to provide performance-based levee operating and maintenance to help ensure the levee will perform satisfactorily during any high water flood event.

When a levee evaluation and inspection report indicates that a significant repair or rehabilitation is required, the design and construction will be turned over to the levee repair program and constructed as a capital outlay project under the flood risk reduction mega-program. Otherwise the three component activities are considered as "operations and maintenance".

The Levee Operation and Maintenance Program reports progress within the following components:

- *Routine Operations and Maintenance*
- *Non-Routine Projects*

ROUTINE OPERATIONS AND MAINTENANCE:

The Maintenance Yards' routine levee maintenance includes vegetation management through spraying, mowing, and trimming, maintaining levee geometry through dragging levee crown roads, dragging levee slopes, repairing minor erosion, and maintaining water side and land side toe roads where they exist, protecting levees from rodent damage and repairing damage that has occurred through FMO's Rodent Abatement/Damage Repair and Rehabilitation Program, and removing or remedying encroachments. Reporting on routine maintenance activities started on November 1, 2014 and ends on October 31, 2015. Additional activities that are completed as needed include repairing or replacing gates, barricades, and mile markers; placing gravel on crown roads; and repairing or replacing pipes that penetrate the levee. These activities are reported as they are completed.

The following activities were completed in the month of July:

- At Cache Creek (21.63 miles), the following activities were completed:
    - 12 miles of crown road were re-graded,
    - Tree trimming occurred along 1 mile of levee,
    - Spot spraying vegetation occurred along 4 miles,
    - Slope dragging occurred along 17 miles, and
    - 8 miles of slope were burned.
- At the upper 2 miles of the East Yolo Bypass Levee, the following activities were completed:
    - 1 mile of slope mowing, and
    - 2 miles of slope were burned.
- At Maintenance Area (MA) 4 (3.4 miles), the following activities were completed:

  - Tree trimming occurred along 1 mile of levee, and
  - Spot spraying vegetation occurred on along 3 miles.
- At MA 9 (19.61 miles), the following activities were completed:
  - 16 miles of slope mowing.
- At Putah Creek (16.29 miles), the following activities were completed:
  - 8 miles of slope burning,
  - Tree trimming along 5 miles of levee,
  - Spot spraying vegetation occurred along 8 miles,
  - 3 miles of slope dragging,
  - 6 miles of crown road were re-graded, and
  - 1 minor erosion repair was completed.
- At Sacramento Bypass (3.56 miles), the following activities were completed:
  - Tree trimming along 0.5 miles of levee.
- At the west Yolo Bypass levees Units 1-4 (15.42 miles), the following activities were completed:
  - 5.76 miles of slope burning,
  - Tree trimming along 1 mile of levee,
  - 6.04 miles of slope dragging, and
  - 3.5 miles of crown road were re-graded.
- At Willow Slough Bypass (12.82 miles), the following activities were completed:
  - 2 miles of crown road were re-graded.
- At the Colusa Bypass (4.58 miles), the following activities were completed:
  - 4.58 miles of levee slope burning, and
  - Rodent baiting along 4.58 miles of levee.
- At the East Levee of the Sacramento River (20.31 miles), the following activities were completed:
  - Rodent baiting along 20.31 miles of levee.
- At the East Levee of the Sutter Bypass (22.37 miles), the following activities were completed:
  - 22.37 miles of levee slope were burned,
  - Spot spraying vegetation occurred along 22.37 miles, and
  - Slope dragging occurred along 10 miles of levee.
- At MA 1 (17.12 miles), the following activities were completed:
  - 7 miles of slope burning, and
  - Rodent baiting along 7 miles of levee.
- At MA 3 (5.19 miles), the following activities were completed:
  - 3 miles of slope were mowed,
  - 5.19 miles of slope burning, and
  - Slope dragging occurred along 5.19 miles of levee.
- At MA 5 (33.42 miles), the following activities were completed:
  - 33.42 miles of slope burning.
- At MA 12 (11.31 miles), the following activities were completed:
  - 11.31 miles of slope burning,
  - Spot spraying vegetation along 5 miles of levee slope, and

  - Rodent baiting along 11.31 miles of levee.
- At MA 13 (41.97 miles), the following activities were completed:
  - 41.97 miles of slope burning.
- At Moulton Bypass (2.3 miles), the following activities were completed:
  - Spot spraying vegetation occurred on 2.3 miles of the levee slope.
- At Tisdale Bypass (9 miles), the following activities were completed:
  - 9 miles of slope were mowed, and
  - 9 miles of slope burning.

NON-ROUTINE PROJECTS:

No new information to report.

FLOOD SYSTEM EVALUATION AND REHABILITATION (FSER)

The FSER program includes evaluating, operating, maintaining, and repairing SPFC facilities pursuant to state assurances to the federal government. This FSER program supports implementation of the CVFPP-SSIA. The program improves DWR's integrated flood protection mission. Specific FSER activities include: program management; policy development; support for Board permitting and encroachment enforcement; corridor management strategy development; Title 23 regulation updates; easement identification and reconciliation; management of state-owned properties and easements; and integrated water management activities.

Lower Feather River Corridor Management Plan

No new information this month.

Small Erosion Repair Program (SERP)

FMO received all SERP agency authorizations for one SERP site to be completed this year. The SERP repair site is located north of the City of Colusa along the east levee of the Sacramento River, Levee Mile 10.5. FMO engineering, environmental, and Sutter Yard staff are collaborating to schedule pre-project site clearing, erosion control, sediment barriers, and environmental avoidance fencing in the upcoming weeks. The construction of the site should begin mid-August and be completed on or before September 31.

All SERP sites on Willow Slough Bypass and Wadsworth Canal are on hold until a California Endangered Species Act Incidental Take Permit (Department of Fish and Wildlife Code, Section 2081) is obtained for potential impacts to the Giant Garter Snake.

Staff provided information on flood stages and top of levee elevation for Willow Slough and Wadsworth Canal based on model results for use in the SERP Annual Notification Packet required for a vegetation analysis 500 feet upstream and downstream of all SERP project sites that are located in areas identified as Giant Garter Snake habitat.

LEVEE REPAIRS

The Levee Repairs Program in the Division of Flood Management, Flood Maintenance Office, makes repairs to the State Plan of Flood Control (SPFC) facilities (primarily levees) through several projects. Among these are the Flood System Repair Project (FSRP), the Sacramento River Bank Protection Project (SRBPP), and the Federal Public Law 84-99 Emergency Repair Project (PL 84-99). FSRP is a bond funded program that repairs rural SPFC facilities of the Sacramento and San Joaquin River Systems under a state-local cost share. SRBPP is a USACE-led program that repairs urban SPFC critical erosion sites along the Sacramento River and tributaries. PL 84-99 repairs minor damages incurred from a significant flood event. DWR is a cost-sharing partner and manages the state's responsibilities for the SRBPP and PL 84-99 projects.

Flood System Repair Project (FSRP)

The Flood System Repair Project continues to implement existing system repair projects as well as developing new project work agreements. FSRP is supporting approximately $15 million in executed repair projects currently in construction, and approximately $25 million in projects in contract development. The following table lists FSRP executed project information. Current executed repair projects are anticipated to be completed by the end of 2016, and developing projects are targeted for 2016/2017 implementation. Data from the 2014 reconnaissance and outreach has been finalized and incorporated into the FSRP database and planning process. Annual FSRP system reconnaissance and outreach for the rural areas of the State Plan of Flood Control will be completed this month (August).

Executed FSRP Agreements

	LMA Name	Repair Type	State Cost Share	Total Contract Amount	State Share
1	DWR 8361 Areas	Erosion	100%	$7,074,000	$7,074,000
2	Lower San Joaquin Levee District	All-Weather Access Road Repair (25 mi)	85%	$2,396,235	$2,036,800
3	Lower San Joaquin Levee District	Electrical Control Structure Repair	85%	$1,995,882	$1,696,500
4	RD 2085	All-Weather Access Road Repair (6 miles)	85%	$567,059	$482,000
5	RD 2085	Critical erosion repair at San Joaquin River LM2.24	85%	$620,000	$527,000
6	RD 1600	All-Weather Access Road Repair (13.6 miles)	89%	$1,209,037	$1,076,043
7	RD 1001	All-Weather Access Road Repair (10.60 miles)	85%	$944,000	$802,400
8	RD 2063	All-Weather Access Road Repair (10.63 miles)	90%	$589,950	$530,955
			TOTAL:	**$15,396,163**	**$14,225,698**

Sacramento River Bank Protection Project (SRBPP)

The U.S. Army Corps of Engineers has advertised and awarded a contract for erosion repair construction at Sacramento River Mile 26.0 located within Reclamation District 556.
Site construction is anticipated to begin week of August 24, 2015, and be completed by the end of October 2015. This site is being constructed under the SRBPP Phase II authority.

DWR has advertised, and will soon award, a contract for the construction of a setback levee on the left bank of Cache Creek at Levee Mile 2.8. This SRBPP project will be constructed by DWR as part of the Phase II authorization, and credit will be sought from USACE upon project completion. Site construction is anticipated to begin by the end of August 2015 and be completed by the end of October 2015.

Federal Public Law 84-99 Emergency Repair Project (PL 84-99)
No new information this month.