

**REPORT OF ACTIVITIES
OF THE
DEPARTMENT OF WATER RESOURCES**

By

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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.

Staff continued working on the Real-Time Inundation Modeling project. The project includes the development of hydraulic models and interface tools to predict flood inundation timing and extents in near real-time for the Sacramento and San Joaquin systems. Model development for the Sacramento system is nearly complete. Next, the models will be thoroughly tested, optimized for runtime efficiency, and integrated with the graphical user interface. Staff are coordinating with the California Nevada River Forecasting Center to incorporate forecasting data.

Staff continued working on the Feather River Conveyance Reevaluation project. The project will reevaluate the Feather River conveyance capacity downstream of Oroville Dam. Staff is updating models based on bathymetry and LiDAR data collected in 2017. Next, staff will calibrate the model, evaluate the channel capacity, and document findings in a technical memo.

Staff is making updates to the FERIX website for use during the upcoming flood season. Completed updates include all the serious and critical damaged sites in the Levee Vulnerabilities web-application. Future updates include uploading Levee Safety Plans and Contingency Plans.

Staff is working with Board staff to develop inundation maps and an emergency action plan for Chester Diversion Dam in Plumas County. The maps need to be submitted to the Division of Safety of Dams by January 1, 2019. Currently, staff are developing a Project Charter that describes the scope, schedule, and estimated budget.

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 October 31, 2017, statewide hydrologic conditions were as follows: precipitation, 30 percent of average to date; runoff, 95 percent of average to date; and reservoir storage, 115 percent of average to date.

Sacramento River Region unimpaired runoff, for Water Year 2018, observed through October 31, 2017 was about 0.4 million acre-feet (MAF), which is about 91 percent of average. In comparison to Water Year 2017, the observed Sacramento River Region unimpaired runoff through October 31, 2016 was about 0.9 MAF, or about 188 percent of average. San Joaquin River Region unimpaired runoff, for Water Year 2018, observed through October 31, 2017 was about 0.1 MAF, which is about 114 percent of average. In comparison to Water Year 2017, the observed San Joaquin River Region unimpaired runoff through October 31, 2016 was about 0.3 MAF, or about 436 percent of average. Tulare Lake Region unimpaired runoff, for Water Year 2018, observed through October 31, 2017 was about 0.1 MAF, which is about 125 percent of average. In comparison to Water Year 2017, the observed Tulare Lake Region unimpaired runoff through October 31, 2016 was about 0.03 MAF, or about 73 percent of average.

On October 31, 2017, the Northern Sierra 8-Station Precipitation Index Water Year total was 0.8 inches, which is about 25 percent of the seasonal average to date and 1 percent of an average water year (51.8 inches). During October, the total precipitation for the 8-Stations was 0.8 inches, or about 27 percent of average for the month. Last year on October 31, 2016, the Water Year 2017 seasonal total for the 8-Stations was 11.9 inches, or about 385 percent of average.

On October 31, 2017, the San Joaquin 5-Station Precipitation Index Water Year total was 0.4 inches, which is about 16 percent of the seasonal average to date and 0 percent of an average water year (40.2 inches). During October, the total precipitation for the 5-Stations was 0.4 inches, or about 18 percent of average for the month. Last year on October 31, 2016, the Water Year 2017 seasonal total for the 5-Stations was 6.3 inches, or about 263 percent of average.

On October 31, 2017, the Tulare Basin 6-Station Precipitation Index Water Year total was 0.4 inches, which is about 16 percent of the seasonal average to date and 0 percent of an average water year (28.8 inches). During October, the total precipitation for the 6-Stations was 0.1 inches, or about 8 percent of average for the month. Last year on October 31, 2016, the Water Year 2017 seasonal total for the 6-Stations was 1.6 inches, or about 126 percent of average.

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Daily Precipitation (in inches) for Selected Stations as of 10/31/2017					
Station	Water Year 2018 to 10/31/2017	% Average	Water Year 2017 to 10/31/2016	% Average	WY 2018 % of Avg WY (Oct 1 – Sep 30)
Mount Shasta	0.62	27	11.84	517	1
Eureka	1.63	73	9.56	427	4
Redding	0.33	16	6.22	296	1
South Lake Tahoe	0.47	26	7.30	406	2
Sacramento Executive Airport	0.15	16	4.64	488	1
Santa Rosa (Sonoma Co AP)	0.21	10	5.16	254	1
San Francisco	0.31	28	2.35	210	1
Stockton	0.12	15	2.32	283	1
Yosemite	0.50	25	6.58	327	1
Monterey	0.17	18	2.82	303	1
Paso Robles	0.09	15	1.34	216	1
Fresno	0.09	14	0.67	106	1
Bakersfield	0.00	0	0.24	80	0
Death Valley	0.00	0	0.03	43	0
Los Angeles	0.10	15	0.51	77	1
Riverside	0.00	0	0.86	307	0
Palm Springs	0.00	0	0.07	16	0
San Diego	0.00	0	0.03	5	0

Key Reservoir Storage (1,000) AF as of 10/31/2017								
Reservoir	River	Storage	Average Storage	% Average	Capacity	% Capacity	Flood Control Encroachment	Total Space Available
Trinity Lake	Trinity	1,753	1,591	110	2,448	72	---	695
Shasta Lake	Sacramento	3,177	2,674	119	4,552	70	-715	1,375
Lake Oroville	Feather	1,218	2,127	57	3,538	34	-1,945	2,320
New Bullards Bar Res	Yuba	650	541	120	966	67	-146	316
Folsom Lake	American	557	498	112	977	57	-167	420
New Melones Res	Stanislaus	2,000	1,340	149	2,400	83	30	420
Don Pedro Res	Tuolumne	1,599	1,309	122	2,030	79	-91	431
Lake McClure	Merced	663	449	147	1,025	65	-12	362
Millerton Lake	San Joaquin	314	195	161	520	60	-122	206
Pine Flat Res	Kings	470	345	136	1,000	47	-386	530
Isabella	Kern	170	164	103	568	30	0	398
San Luis Res	(Offstream)	1,502	1,080	139	2,041	74	---	537

The latest National Weather Service Climate Prediction Center (CPC) long-range, 1-month precipitation outlook for December 2017, issued November 16, 2017, suggests average precipitation for all of California.

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.

- No new information this month.

FLOOD EMERGENCY PREPAREDNESS & OPERATIONS

This element includes preparing the DWR 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.

Staff continued to make improvements to the Delta Emergency Response Tool which estimates the cost and time of repairs and export reductions caused by levee damage or failures in the Delta. The improvements include allowing more control over the prioritization of levee breach repairs. After the improvements are made, staff will evaluate response strategies to multiple-island breach scenarios and document recommendations in the *Delta Flood Emergency Management Plan: Supplement C*.

Staff continued to make improvements to the Flood Emergency Management System (FEMS) which is used by the Flood Operations Center staff to manage incidents, track resources and requests, and develop status reports and action plans.

Staff is coordinating with LMAs to develop Contingency Plans for critical levee sites that will not be repaired in time for this upcoming flood season. Staff have met with the LMAs individually to discuss the site-specific plans.

Staff is leading the Yuba-Feather Working Group with local agencies and partners in Butte, Sutter, and Yuba counties. The group meets quarterly to discuss flood preparedness activities in the region. The last meeting was held on November 9 in Marysville. Topics included LMA updates, Oroville Interim Operations, and a discussion-based tabletop exercise. The next meeting will be March 21, 2018 in Biggs.

Statewide Flood Emergency Response Grants - Round 1

Staff continued to manage 3 of the 14 executed grant contracts with local agencies to improve their flood emergency response capabilities. Eleven of the grant projects have been completed and closed-out. The deliverables from the completed grant projects include emergency operations

plans, flood contingency maps, decision support tools, communications equipment, flood fight supplies, and enhanced early warning systems.

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 which developed California's Flood Future: Recommendations for managing the state's flood risk (California's Flood Future) and the Central Valley Flood Management Planning Program, and which developed the 2012 Central Valley Flood Protection Plan (CVFPP) and 2017 CVFPP Update.

STATEWIDE INTEGRATED FLOOD MANAGEMENT PLANNING

*Statewide Integrated Flood Management Planning (SIFMP) is working on identifying flood risks facing Californians statewide and determining State investment levels required to achieve the intended outcomes necessary to progress the state's flood management system towards sustainability. In 2013, the SIFMP presented recommendations to improve flood management in a comprehensive report titled **California's Flood Future: Recommendations for Managing the State's Flood Risk** (Flood Future Report). The report was produced working jointly with 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. Currently, the SIFMP is developing a document titled **Investing in California's Flood Future: An Outcome Driven Approach to Flood Management**, which builds on the information from the Flood Future Report. The SIFMP is also assisting in the development of the 2018 Update of the California Water Plan (CWP).*

Investing in California's Flood Future: An Outcome Driven Approach to Flood Management

- SIFMP staff is working on developing the report, highlights, and accompanying technical attachments, which is anticipated to be released in February 2018.

California Water Plan, Update 2018

- SIFMP staff is assisting California Water Plan (CWP) staff in developing the Funding Plan (Chapter 4) and the Policy Recommendations for the CWP.

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). In August 2017, the Board adopted the first five-year update, as required by the California Water Code (CWC).

2022 Update to 2012 Central Valley Flood Protection Plan

- The 2017 CVFPP Update prepared by DWR is complete.
- DWR and Board staff are coordinating on developing the scope of the 2022 Update to the 2012 CVFPP.
- Work is ongoing on development of a CVFPP performance tracking framework.

Supplemental Program EIR for 2022 Update to 2012 Central Valley Flood Protection Plan

- On August 4, 2017, DWR certified the Final Supplemental Program Environmental Impact Report on the 2017 CVFPP Update.

Technical Services:

- No new information this month.

Public Engagement

Flood Planning Office (FPO) 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. Past presentations can be found on the CVFMP website at www.water.ca.gov/cvfmp/.

- No new information this month.

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 Conservation Strategy 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.

- The 2016 Conservation Strategy is complete.

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.

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 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 collaborate and work closely with U.S. Army Corps of Engineers (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 2014-15 – Sixty-one final claims for \$7.9 million have been processed for reimbursement. One unresolved claim requires CDFW approval before payment can be made.
- Subventions Program FY 2015-16 – Sixty-five final claims were received and are being reviewed. Of these, 60 final claims for \$8.3 million are being processed for reimbursement.
- Subventions Program FY 2016-2017 – The CVFPB approved \$12M for the FY 2016-2017 Funding Plan on August 26, 2016. CVFPB has executed 58 work agreements. Final claims were due November 1, 2017.
- Subventions Program FY 2017-18 – Seventy-two applications were received and reviewed. The CVFPB approved \$12M for the FY 2017-2018 Funding Plan on June 23, 2017.

USACE/CVFPB PROJECTS

The Central Valley Flood Protection Board (CVFPB), along with local agencies where applicable, participates with USACE to ensure that state flood management needs and mandates are met, and provides its required non-federal cost share funds and technical assistance to repair or upgrade the Central Valley's flood management systems. These congressionally authorized SPFC projects are being constructed to improve flood protection for urban or urbanizing areas; reduce flood risk in rural areas; reduce the risk to life, infrastructure, and property; and reduce the state's liability. The following are ongoing USACE/CVFPB projects:

American River Watershed Project - Common Features (WRDA 96/99 Sites)

The ARCF project improved levee systems along the American and Sacramento Rivers.

- No new information this month.

American River Watershed Project – Natomas Basin

The Natomas Basin Project was authorized in the 2014 Water Resources Reform and Development Act. It includes significant improvements to the Natomas Basin levees resulting in a minimum of 100-year level of flood protection for the basin. This project in combination with other projects will provide the Natomas Basin with 200-year level flood protection.

- No new information this month.

American River Watershed Project – WRDA 2016

This project consists of the design and construction of levee improvement measures to address seepage, stability, erosion and overtopping concerns identified for the Sacramento River, Natomas East Main Drainage Canal (NEMDC), Arcade Creek, and Magpie Creek as well as erosion measures for specific locations along the American river, as well as to widen the Sacramento Weir and Bypass.

- No new information this month.

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.

Post Construction status as of November 28, 2017, is as follows:

- USACE has substantially completed building an access ramp for maintenance access to the Stilling Basin.
- USACE has scheduled JFP commissioning testing to start in December 2017 and end in March 2018.
- The Right Bank Stabilization Project is currently under construction by US Bureau of Reclamation.

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.

- USACE has provided some preliminary economic analysis results. The Project Partners have requested a review of the economic analysis supporting documentation. USACE will continue work on refining the economic analysis.

Lake Kaweah Enlargement Project (Terminus Dam, Kaweah River Project)

The Lake Kaweah Enlargement Project was completed in 2006, and is near the closeout phase.

- No new information this month.

Marysville Ring Levee Improvement Project

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

- No new information this month.

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 areas to the south and east of the city of Sacramento.

- USACE issued the draft Operations and Maintenance Manual for the South Sacramento County Streams Project on November 13, 2017; the manual is currently being reviewed by DWR and the Sacramento Area Flood Control Agency (SAFCA). Review comments are due to the USACE by December 15, 2017.

Sutter Basin Preconstruction Engineering and Design (PED)

The Preconstruction Engineering and Design (PED) phase is for the design of the remaining portions of the federal project, authorized in the Water Resources Reform and Development Act of 2014 and modified in the Water Resources Development Act of 2016 that have not been already implemented by the Sutter Butte Flood Control Agency (SBFCA) and DWR through DWR's Early Implementation and Urban Flood Risk Reduction Programs.

- No new information this month.

USACE/CVFPB Studies

CVFPB, along with local agencies where applicable, 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 SPFC facilities; reduce the risk to life, infrastructure, and property; and reduce the state's liability.

The following are USACE/CVFPB studies:

Cache Creek Settling Basin Project GRR

This settling basin was initially constructed in 1937 and modifications were completed in 1993. As part of the federal authorization for the 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 percent.

- No new information this month.

Central Valley Integrated Flood Management Study (CVIFMS)

This Watershed Study identifies federal interest in the Sacramento River Basin by identifying opportunities to reduce flood risk and protect floodplain and environmental assets. The CVIFMS Watershed Plan, the final report of the study, will serve as a Federal companion document to the state's Central Valley Flood Protection Plan once approved by the Assistant Secretary of the Army for Civil Works.

- No new information this month.

Lower San Joaquin River Feasibility Study (LSJRFS)

The LSJRFS will evaluate feasible flood risk reduction alternatives focused in the city of Stockton and vicinity, identify a project having federal interest that is consistent with the Central Valley Flood Protection Plan and complete a Final Chief's Report.

- No new information this month.

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.

Sacramento River GRR

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.

- No new information this month.

Success Reservoir Enlargement Project (SREP) GRR

The Success Reservoir is a multi-purpose facility built to provide flood control, water supply, and recreation. USACE and the non-Federal sponsors intend to move forward with improvements which are intended to provide improved flood risk reduction, water supply, and recreation improvements. The enlargement project will add additional storage for water supply, increased flood protection, and improve dam safety.

- No new information this month.

Woodland/Lower Cache Creek Feasibility Study

This study is a USACE, state, 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.

- 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. The study is currently on hold.

- 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 of SPFC facilities. UFRR is based on competitively awarded 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 repaired 3.4 miles of levee along the left (east) bank of the Knights Landing Ridge Cutback to the USACE 1957 Design Profile.

- No new information this month.

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. The 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.

- No new information this month.

Reclamation District 17 (RD-17) – 100-Year Levee Seepage Area Project (EIP)

RD-17 levees have low safety factors 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 (LAP)

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.

- No new information for this month.

SAFCA – Natomas Cross Canal Project (EIP)

This Natomas Levee Improvement Program project installed 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 for this month.

SAFCA – Sacramento River East Levee Project (EIP)

This Natomas Levee Improvement Program project installed 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 completed components to element 12A (RM 67) along the Sacramento River and USACE will complete the remaining work.

- No new information for this month.

San Joaquin Area Flood Control Agency (SJAFC) – 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 and meet ULDC requirements for 200-year flood protection to a portion of the city of Stockton.

- No new information for this month.

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.

- Area C Gaps
 - Construction of Area C cutoff wall gaps were completed in August 2017 except for the Union Pacific Rail Road (UPRR) crossing which will be constructed in 2018.
- Laurel Avenue Project (a Flood System Repair Project managed by Flood Maintenance Office)
 - Levee reconstruction completed October 18, 2017
 - Post-levee reconstruction job walk held November 16, 2017.
 - As of November 28, 2017, final utility, finish grading and paving, and cleanup work continues, weather permitting.

- Reaches 14-16 Emergency Repair Work
 - Cutoff wall construction was completed November 11, 2017.

Three Rivers Levee Improvement Authority (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 for this month

TRLIA – Feather River Levee Improvement Project (EIP)

This project resulted in a 200-year flood protection from the Yuba River for Highway 65 and 70, and also improved flood protection from the Feather River 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 1,760 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 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 a portion of the Yuba River's south levee, as well as 200-year improvements to the Western Pacific Interceptor Canal.

- Amendment 5 to the funding agreement was executed on November 3, 2017. This Amendment extends the contract term 18 months to June 30, 2019 to complete project closeout and land transfer.

West Sacramento Area Flood Control Agency (WSAFCA) – Design (EIP)

Design agreement funded all design activities for project elements in the North basin and majority of the project design in Southport.

- No new information this month.

West Sacramento Area Flood Control Agency (WSAFCA) – Construction (EIP & UFRR)

Construction of 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.

- No new information this month.

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.

- No new information this month.

SMALL COMMUNITIES FLOOD RISK REDUCTION PROGRAM

The Small Communities Flood Risk Reduction (SCFRR) Program was created as a result of the adoption of the 2012 Central Valley Flood Protection Plan (CVFPP). The SCFRR Program objective is to reduce flood risks for small communities protected by the State Plan of Flood Control (SPFC) facilities. Small communities are defined as developed areas with between 200 and 10,000 residents, as described in the CVFPP. The SCFRR Program supports the continued viability of small communities within the SPFC Planning Area to preserve cultural and historical continuity and important social, economic, and public services to rural-agricultural populations, agricultural enterprises, and commercial operations.

- Four funding agreements have been executed to date, and ten funding agreements are pending Grantee signature.

SYSTEMWIDE FLOOD RISK REDUCTION PROGRAM (SFRR)

Consistent with the Central Valley Flood Protection Plan, SFRR works with in coordination with local and federal agencies to implement large-scale flood system improvements that have cross-regional benefits and that when packaged together offer multi-benefit opportunities.

Lower Elkhorn Basin Levee Setback (LEBLS) Project

This project will reduce flood risk by increasing the capacity of the Yolo and Sacramento Bypasses, and lowering flood stages in the Sacramento River. New areas of inundated floodplain will result from the construction of the levee setback that may benefit ecosystem function in the future.

- The 4th Administrative Draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR) was finalized by DWR and USACE staff, and transmitted to the USACE Southern Pacific Division (SPD) on October 30, 2017. The Public Draft EIS/EIR is expected to be released in early 2018, after SPD review.
- A Biological Assessment prepared by DWR and USACE was transmitted on October 25, 2017, to U.S. Fish and Wildlife Service and National Marine Fisheries Service for consultation under the federal Endangered Species Act. It was also transmitted to the California Department of Fish and Wildlife for state coordination under the California Endangered Species Act, and to the Central Valley Flood Protection Board, and State and Central Valley Regional Water Quality Control Boards.

Other Systemwide Projects

Folsom Dam JFP, Folsom Dam Raise, and Sacramento River GRR are covered under the Urban Flood Risk Reduction Mega Program above.

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 the 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 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 LEEVE ASSISTANCE PROGRAM (LLAP)

The LLAP was created to help fund projects implemented by flood management agencies, mainly outside of the Sacramento-San Joaquin Delta and excludes State Plan of Flood Control facilities. The goals of the LLAP include minimizing flood risk; identifying deficiencies in flood control structures and levees; by 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 facilities, or improvement, construction, modification, relocation of flood control levees, weirs, or bypasses, including repair of critical bank and levee erosion.

- No new information this month.

SAN JOAQUIN RIVER RESTORATION PROJECT (SJRRP)

The 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 selected fish species 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, as well as identifying potential remedies to address increased flood risks under Restoration flows in coordination with the CVFPP.

- DWR and the U.S. Bureau of Reclamation will release a Public Draft Initial Study/ Environmental Assessment for the Eastside Bypass Improvements Project (EB Project) on December 11 for a 30-day public review. The EB Project consists of two miles of levee improvements, modifications to the Eastside Bypass Control Structure, improving a low flow crossing, and removal of diversion weirs for the Merced National Wildlife Refuge. The project is within the Eastside Bypass between Sand Slough and the Mariposa Bypass and will increase

fish passage and Restoration Flow conveyance for the SJRRP. The EB Project is planned for construction in 2019.

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

- No new information this month.

FLOOD SYSTEM OPERATIONS AND MAINTENANCE (FSO&M)

FSO&M focuses on maintaining system features 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, USACE, and environmental resource agencies to ensure that operations 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:

Cache Creek and Cache Creek Settling Basin Hydraulic Model

- No new information this month.

Chico Area Streams Project

- No new information this month.

Feather River Hydraulic Model

- No new information this month.

Llano Seco Riparian Sanctuary (Butte Basin 2-D Model)

- No new information this month.

Mercury Characterization Studies

- The 2nd Report of Findings summarizing the mercury characterization studies performed for the Cache Creek Settling Basin was submitted to the Central Valley Regional Water Quality Control Board (CVRWQCB) on November 30.

Middle Creek Project (MCP)

- No new information this month.

Natomas East Main Drainage Canal (NEMDC)

- 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 started on November 1, 2016, and will end on October 31, 2017. 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.

In the month of November:

- At Big Chico Creek, debris removal is in progress.
- At Cache Creek Settling Basin, 50 cubic yards of vegetation debris was burned.
- At Comanche Creek, 50 cubic yards of debris removal was completed.
- At Elder Creek, 3,000 cubic yards of sediment removal was completed.
- At Linda Creek, rodent depredating is in progress.
- At Lindo Creek, 20 cubic yards of debris removal was completed.
- At Little Chico Creek, 10 cubic yards of debris removal was completed.
- At the Natomas East Main Drain, rodent den removal is in progress.
- At the Sacramento Bypass, debris was removed over 1 acre, and vegetation cutting and limbing is in progress.
- At Yankee Slough, rodent depredating is complete, and 2 miles of vegetation masticating was completed.

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.

For the month of November:

- No new information this month.

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.

For the month of November:

- At the Cache Creek Low Flow Outlet, 10 cubic yards of debris was removed.
- At the Cache Creek Settling Basin Drainage Structure, a 40-cubic yard scour repair was completed.
- At the Sacramento Bypass Weir, erosion repairs were completed, debris removal was completed, and structure repair was completed.

NON-ROUTINE PROJECTS:

Butte Slough Outfall Gates (BSOG)

- No new information this month.

Collecting Canal Bridge CC-2 and CC-4 Repair

- A California Department of Fish and Game Code, Section 1600, Streambed Alteration Agreement, was signed by DWR in mid-November 2017.

Knights Landing Outfall Gates Fish Barrier

- No new information this month.

Sacramento Maintenance Yard (SMY) Paving Project

- Staff performed a field survey to determine the status of the existing storm drainage system within SMY related to the current project study. Storm drain pipe sizes and invert elevations were measured and recorded.

West Borrow Canal Bridge WL-1 Evaluation

- Real Estate reported that the land (including the bridge) was sold to a private farming operation by CDFW in recent months. Real Estate has been tasked with documenting the transaction to assure DWR has no remaining liability.

LEEVE 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 waterside and landside 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, 2016, and ended on October 31, 2017. 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 November:

- At Cache Creek, the following activities occurred:
 - 1 gate was repaired,
 - Pipe inspections are in progress,
 - Vegetation broadcast spraying is in progress,
 - Vegetation spot spraying is in progress, and
 - Rodent baiting is in progress.
- At the East Levee of the Sacramento River, the following activities occurred:
 - 22 miles of vegetation broadcast spraying was completed, and
 - Rodent baiting was completed.
- At the East Levee of the Sutter Bypass, the following activities occurred:
 - Vegetation spot spraying is in progress, and
 - Vegetation dragging is in progress.
 - At Hamilton Bend, the following activity occurred:
 - Vegetation spot spraying is in progress.
- At MA 1, the following activity occurred:
 - Rodent baiting was completed.
 - At MA 3, the following activity occurred:
 - Rodent baiting was completed.
- At MA 4, the following activity occurred:
 - Vegetation cutting and limbing is in progress.
- At MA 5, the following activities occurred:

- 33.42 miles of vegetation broadcast spraying was completed, and
- 33.42 miles of vegetation spot spraying was completed.
- At MA 9, the following activities occurred:
 - Vegetation cutting and limbing is in progress,
 - Rodent grouting was completed, and
 - Rodent baiting was completed.
- At MA 12, the following activities occurred:
 - 7 drainage ditches were cleared, and
 - Rodent baiting was completed.
- At MA 13, the following activities occurred:-
 - 15 miles of road gravel placement was completed, and
 - 41.97 miles of vegetation spot spraying was completed.
- At MA 16, the following activity occurred:-
 - Rodent baiting was completed.
- At MA 17, the following activity occurred:-
 - Vegetation mowing is in progress.
- At Putah Creek, the following activities occurred:
 - Rodent baiting was completed, and
 - Road grading was completed.
- At Wadsworth Canal, the following activity occurred:
 - Rodent baiting was completed.
- At the West Yolo Bypass Units 1-4, the following activities occurred:
 - An 800-foot erosion repair was completed,
 - A 100-foot erosion repair was completed, and
 - Pipe inspections are in progress.
- At Willow Slough Bypass, the following activity occurred:
 - Rodent baiting was completed.

NON-ROUTINE PROJECTS

- No new information this month.

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)

This is a maintenance program to obtain all permits necessary to repair small levee erosion along DWR-maintained waterside areas. Up to 15 sites can be repaired annually. SERP permits are active as of May 2014 and expire May 2019.

- Levee erosion was identified in MA 9 in May 2017. The site fits the criteria to be repaired under the SERP program. All permit authorizations for the site were obtained on October 16, 2017. Sacramento Maintenance Yard staff determined that cutting into the levee at this point, near flood season, was too uncertain. The plan will be to construct the site next season. Contingency plans are in place to flood fight this location during flood season if needed.
- This site has all permits in hand as of November, and the repair will be constructed in 2018.

Deferred Maintenance Project (DMP)

DFM has developed the DMP to evaluate and repair levee penetrations, help implement systemwide rodent damage mitigation, and perform specific deferred maintenance actions for DWR maintenance yard facilities. Work will address known threats to levee integrity, enhance emergency response capabilities, and ultimately reduce the potential for catastrophic flooding.

Staff continues meeting with LMAs to deliver Notice of Eligibility (NOE) documents for the video inspection portion of the project.

As of November 2017:

- Seven DWR directed funding agreements for Phase 1 video inspections have been executed with Local Maintaining Agencies and are in final contract approval and processing.
- Twenty-four DWR directed funding agreements are in process with LMAs.
- One DWR directed funding agreement is currently in process for Phase 2 repair of a failed pipe in RD 784. RD 784 has provided a signed assurance agreement to the CVFPB for long term O&M of the pipe to be replaced.
- DWR has video inspected 57 of 330 pipes passing through levees in areas of DWR "O&M" responsibility.
- During mid-November, DWR Pipe Inspection crews (5 staff) were mission tasked by CalOES to provide video inspection services for culvers in fire damaged areas in the City of Santa Rosa, to ensure no integrity issues or obstructions existed (see Emergency Response Details for additional information).

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 on behalf of the CVFPB.

Flood System Repair Project (FSRP)

FSRP has completed a total of 9 construction projects consisting of one proactive erosion repair in State Maintained Area ST008, and 8 all-weather access patrol road repairs in RD 1500, RD 1600, RD 2063, RD 2085, RD 1001, RD 2102/RD 817, RD 10, and the Lower San Joaquin Levee District (109 miles total). The total project costs for these repairs included a paid state-share of approximately \$5.97 million and paid local-share of approximately \$824,000. Currently, FSRP has executed Project Agreements with 17 LMAs, committing approximately \$35.9 million for all-weather access patrol roads and critical levee repair projects in rural portions of the SPFC. These commitments include approximately \$4.8 million in local-share contributions. These projects are in various stages of permitting, design, and construction and include 7 all-weather access patrol road repairs (45 miles total), 11 critical erosion/seepage/stability repair projects (total length of 27,000 linear feet), and 1 control structure repair project. Staff is currently developing Project Agreements to commit additional funds with 111 LMAs for various types of rural levee repair projects within the SPFC.

Sacramento River Bank Protection Project (SRBPP)

The USACE has awarded a contract to construct a SRBPP rock revetment erosion repair project on the Sacramento River at river mile 71.3R (Yolo County). Currently they are reviewing contractor submittals and will be issuing a Notice to Begin Work in September. USACE and DWR/CVFPB staff is working closely with Reclamation District 1600 to ensure that all the District's concerns are addressed prior to the commencement of construction. The preliminary schedule has this work being completed by the end of November 2017.

2017 Storm Damage DWR Emergency Rehabilitation (SDDER) Program

SDDER has assessed over 300 reported damage sites on the Sacramento River and San Joaquin River State Plan of Flood Control (SPFC) levee systems. DWR has completed all major work at the 29 DWR sites. Remaining work at some sites includes hydro-seeding and pole plantings. DWR is funding the Sutter Butte Flood Control Agency (SBFCA) to construct one site in Yuba City.

Federal Public Law 84-99 Emergency Repair Project (PL 84-99)

As a result of the storm events of January, February, and March 2017, federal and state agencies have responded to numerous emergency erosion and seepage locations throughout the Sacramento and San Joaquin River systems. Coordination efforts have been initiated between the USACE, DWR, and the Board. DWR and the CVFPB have submitted a list of flood damaged sites to the USACE for PL 84-99 repair consideration. The USACE planned to repair 15 sites before the 2017-18 flood season and has broken the 15 sites into three contracts. Work at 10 sites is complete and the final 5 sites are set for completion inspection on December 8. Additional USACE PL 84-99 construction is planned for the early summer of 2018. Up to an additional 35 sites may be repaired by the USACE in 2018.

Environmental Permitting for Operations and Maintenance Project (EPOM)

- A Draft Environmental Impact Report (DEIR), prepared pursuant to the California Environmental Quality Act (CEQA), was sent out for public review on January 18, 2017. The proposed project would support a streamlined approach to permitting of Department of Water Resources mandated operation and maintenance (O&M) activities associated with maintaining the proper function of the Sacramento River Flood Control Project (SRFCP) and Middle Creek Project flood protection facilities, including but not limited to: levee maintenance, channel maintenance, flood control structure maintenance and repair, and data collection. The proposed project would allow the continuation of these maintenance activities within the regulatory limitations imposed by required permits. The SRFCP levees, channels, and structures are located along the Sacramento River and its tributaries between Red Bluff and the area just south of Rio Vista. The Middle Creek Project is located near Clear Lake in Lake County. The review period for the DEIR began January 18, 2017, and ended March 3, 2017, at 5:00 p.m. DWR staff continues to review and prepare responses to comments received on the DEIR.

Based on comments received on the Cultural Resources Section of the DEIR for EPOM, a revised chapter was recirculated for public comment on September 19, 2017. The public comment period for the revised Cultural Resources Chapter is 45 days and ended on November 3, 2017.

- On November 15, 2017, staff met with CDFW staff from Regions 2 and 3 to continue discussions on the development of Section 1600 Lake or Streambed Alteration Agreements that authorizes required maintenance on portions of the Sacramento River Flood Control Project that DWR is responsible for maintaining.
- On November 9, 15 and 28, 2017, staff met with the United Auburn Indian Community (UAIC) to continue tribal consultation under the Natural Resource Agency and DWRs Tribal Engagement Policies to discuss UAIC comments to the revised cultural resources chapter for the EPOM draft EIR.

OTHER ACTIVITIES INFORMATION:

Emergency Response Support

Five FMO staff and managers, along with several other staff from other offices, assisted CalOES complete a mission task to provide closed-circuit television (CCTV) crews and engineers/geologists in support of the post-fire recovery. The two CCTV crews operated in the City of Santa Rosa and helped identify potential issues with the storm drainage system, while the engineers/geologists provided evaluations and recommendations for watershed concerns. Two FMO managers will continue to support the CalOES Watershed Task Force for the near future.