

## FLOOD PROTECTION

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**Issue Experts:** As noted below for each project.

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## INFRASTRUCTURE INVESTMENTS TO REDUCE FLOOD RISK IN CALIFORNIA'S CAPITAL REGION

### Business Nexus

California's Capital Region lies at the confluence of two major rivers, with a combined watershed of 26,000 square miles, that includes the Sacramento Valley and the foothills and mountains of northern California. During winter storm events, runoff from this large watershed rushes past this region, often surging dangerously close to flood stage: threatening the capitol, surrounding cities, towns, and communities. Reducing this flood risk is critical to the social and economic stability of our region and will only be achieved through a streamlined process of improving the existing levee, bypass, and water conveyance system.

### Requested Action

To support Community Program Funding requests in Fiscal Year 2024 under Investigations to initiate two feasibility studies (the Cache Creek Settling Basin and the Upper Yuba River Basin Feasibility Study) and to support the U.S. Army Corps of Engineers (USACE) budget request to continue the Yolo Bypass Comprehensive Study.

To support Community Program Funding under Construction on Natomas, to provide technical, planning and design assistance under the Section 219 Environmental Infrastructure Program for Cosumnes River, and to support the USACE budget request for West Sacramento.

Finally, to support Community Program Funding requests for additional Operations and Maintenance funding for the Section 408 Regulatory program at the Fiscal Year 2023 level.

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## Background

These actions are necessary for the continued reduction of flood risk in the Sacramento Region. Ongoing projects in the planning, design, and construction phases are critical to significantly reduce life-safety risk for more than one million people living in the floodplain and to protect tens of billions of dollars of existing infrastructure, thus sustaining the region's rich agricultural productivity and supporting economic growth.

Thanks to the continued support of the region's delegation, the significant investment in this region over the past years has addressed a portion of the backlog in authorized projects. But sufficient annual appropriations are still required.

California's Central Valley has a long history of flooding and relies on an elaborate flood risk reduction system to store and convey flood flows. While local farmers and communities constructed some of the Valley's earliest levees, Congressional authorization of the Sacramento River Flood Control Project (SRFCP) led the USACE and the State of California to strengthen and expand that original system. The SRFCP consists of approximately 980 miles of levees, in addition to overflow weirs, pumping plants, and bypass channels that protect more than 2.3 million people within 50 communities, 1 million acres of land, and nearly \$38 billion worth of infrastructure. The Central Valley Flood Protection Board (CVFPB) serves as the non-federal sponsor and is responsible for the operations, maintenance, repair, replacement, and rehabilitation of the SRFCP. The CVFPB relies on local maintaining agencies to care for the system and share in the cost of federally authorized improvements.

While the typical approach to flood risk reduction relies primarily upon USACE to lead project development and implementation, the state and local agencies in the Central Valley have assumed a greater role since the passage of the Disaster Preparedness and Flood Protection Bond Act of 2006 (Proposition 1E). Proposition 1E authorized \$4.1 billion in general obligation bonds to improve California's most vulnerable flood infrastructure, which protects homes and prevents loss of life. Up to \$3 billion of the bond was specifically allocated for the evaluation, repair, improvement, or expansion of the Federally-authorized levee system.

The availability of these state funds resulted in the state and local agencies partnering for the implementation of levee improvements to protect high-risk areas. Nearly all these State funds, matched with local funds, have been invested in projects primarily focused on levee improvements in Sacramento, West Sacramento, Yuba City, Plumas Lake, Knights Landing and Wheatland.

## Ongoing Federal Programs, Projects, and Studies

To further reduce flood risk in the Central Valley, additional federal investment is needed for the USACE Projects listed in the following table. A detailed description of each project follows the table.

	<b>Program/Project/Study Name</b>	<b>Approp.</b>	<b>Phase</b>	<b>Const. Authority</b>	<b>Short-Term Goal</b>	<b>FY 2023 Allocation</b>	<b>FY 2024 Budget</b>	<b>FY 2024 Community Funding Request</b>
<b>1</b>	American River Watershed (ARW) – Common Features: WRDA 2016	C	C	YES	Project Fully funded.	N/A	N/A	N/A
<b>2</b>	ARW – Common Features: Natomas Levee Improvement	C	C	YES	Support FY 2024 Community Project Funding request to continue ongoing design and construction activities.	\$63,702,000	\$13,000,000	\$128,700,000
<b>3</b>	ARW - Folsom Dam Raise	C	C	YES	Project fully funded.	\$3,058,000	N/A	N/A
<b>4</b>	Cosumnes River Multi-Benefit Project	C	D	YES	Support FY 2024 Community Project Funding Request to initiate technical assistance, planning and design.	N/A	N/A	\$850,000
<b>5</b>	Cache Creek Settling Basin	I	F	YES	Support FY 2024 Community Project Funding request to initiate study.	\$0	\$0	\$1,500,000
<b>6</b>	Lower Cache Creek	I	D	YES	Fully funded to complete PED by 2025.	\$3,000,000	N/A	N/A
<b>7</b>	Sacramento River Bank Protection Program	C	C	YES	Received \$600,000 in IIJA in October 2022.	\$0	\$0	\$0
<b>8</b>	Upper Yuba River Basin Feasibility Study	I	F	NO	Support FY 2024 Community Project Funding request for new start funding to initiate cost shared feasibility study.	\$0	\$0	\$1,500,000
<b>9</b>	West Sacramento Project	C	C	YES	Support FY 2024 funding to continue construction.	\$72,313,000	\$52,758,000	\$0
<b>10</b>	Yolo Bypass Comprehensive Study	I	F	NO	Support FY 2024 funding to continue the Comprehensive Study.	\$500,000	\$600,000	\$0
<b>11</b>	Yuba River Basin Flood Damage Reduction – Phase 3 Marysville Ring Levee	C	C	YES	Project fully funded.	N/A	N/A	N/A
<b>12</b>	Review of Non-Federal Alteration of USACE Civil Works Projects (Section 408)	O&M	O&M	N/A	Support FY 2024 Community Project Funding request when submitted to process existing and planned Section 408 permissions.	\$21,000,000	\$10,500,000	\$0

2023 Capitol-to-Capitol

For additional information, please contact Jack Blattner, Director of Government Affairs at (530) 219-0804 or [jblattner@metrochamber.org](mailto:jblattner@metrochamber.org) | [www.metrochamber.org](http://www.metrochamber.org)

1. American River Watershed (ARW) - Common Features WRDA 2016: Non-Federal Sponsor: Sacramento Area Flood Control Agency (SAFCA) and CVFCB Contact: Pete Ghelfi, 916-874-7606, [ghelfip@saccounty.gov](mailto:ghelfip@saccounty.gov)

The project is fully funded. In December 2016, the work identified in the ARW Common Features General Re-Evaluation Report (GRR) was authorized for Federal construction. The authorized work addresses deficiencies along the Sacramento River east levee south of the American River and the north area streams levees, as well as a comprehensive assessment of erosion potential along the American and Sacramento Rivers. Beyond recommending standard levee improvements, the authorized work includes the benefit of broader improvements to the flood system, including widening of the Sacramento Weir and Bypass to reduce flood stages along the Sacramento River. It received full funding, \$1,565,750,000, from the Bi-Partisan Budget Act of 2018 (Public Law 115-123) and executed a Project Partnership Agreement (PPA) to complete the design and construction of the authorized project. The non-Federal sponsors have constructed a portion of the most critical components ahead of Federal construction to advance flood-risk reduction for the citizens. Federal construction has been underway for four years and has increased in scope. Levee construction is substantially complete and functioning as designed. Tree removal/trimming, in preparation for 2023 construction, is in process. Contract 4 for the Sacramento River East Levee to address seepage, stability and overtopping risks was awarded in January 2023. Erosion Contract 2 was awarded in February 2023. Design efforts for Sacramento River Erosion Contracts 3 and 4 are on track for construction in 2024 thru 2026. SAFCA and CVFPB appreciate the support for the deauthorization of a segment at the American River North levee upstream of Arden Way included in WRDA 2022.

2. ARW - Common Features, Natomas Levee Improvement Project: Non-Federal Sponsor: SAFCA and CVFCB: John Bassett, 916-874-8731, [bassettj@saccounty.gov](mailto:bassettj@saccounty.gov)

We request support for FY 2024 budget request for \$13,000,000 and a Community Project Funding request in the amount of \$128,700,000 for construction in FY 2024. In June 2014, the work identified in the Post-Authorization Change Report (PACR) for the Natomas Basin under the ARW Common Features authority was authorized for Federal construction. The authorized work includes improvements to the 42 miles of levee surrounding the basin, which are necessary to provide 200-year flood protection to the approximately 100,000 residents, and critical infrastructure such as the Sacramento International Airport and two interstate highways. The non-Federal sponsors have already completed more than \$400 million of advanced construction toward the authorized project. The remaining work will be completed by the USACE. The USACE has awarded the construction contracts for six of the nine reaches, has one pending award, and has the remaining reaches under design.

3. ARW - Folsom Dam Raise: Non-Federal Sponsor: SAFCA and CVFCB: Pete Ghelfi, 916-874-7606, [ghelfip@saccounty.gov](mailto:ghelfip@saccounty.gov).

Update only. In October 2022, it received \$37,792,000 from the Infrastructure, Investment and Jobs Act (IIJA) of 2022 to award the Temperature Control Structures contract and closeout the project. The project consists of a raise of 3.5 feet to the dikes and wing dams around Folsom Lake, as well as a modification of the gates on the existing spillway, constructed under this project authority in

conjunction with the Folsom Dam Modifications project. Raising the dam will increase the ability to manage storms larger than the 200-year event and improve the robustness and reliability at managing less than 200-year storm events. Ecosystem restoration is also an authorized component of this project, focusing on improving salmon habitat in the Lower American River through improved temperature control for Folsom Dam releases. The dam raise was fully funded in 2018. The PPA was executed in 2019 and construction began in 2020 and is expected to be complete in 2027 with the ecosystem restoration temperature control structures completed in 2028.

4. Cosumnes River Multi-Benefit Project (Section 219 Environmental Infrastructure Program): Non-Federal Sponsor: Sacramento County and Reclamation District 800 Contact: Rebecca Thornton Sloan, 916-874-5465, [SloanR@saccounty.gov](mailto:SloanR@saccounty.gov) or Nicole Ortega-Jewell, 916-456-4400, [ortega-jewell@mbkengineers.com](mailto:ortega-jewell@mbkengineers.com).

We request support for a Community Project Funding request in the amount of \$850,000 in Fiscal Year 2024 to provide technical, planning and design assistance to evaluate opportunities to reduce flood risk, water supply reliability and habitat benefits. The Cosumnes River is not a part of the SRFCP. The Cosumnes River drains 580 square miles on the western slope of the Sierra Nevada. The Cosumnes River is leveed along 34.05 miles in Sacramento County, beginning at Rancho Murietta in the north and ending at Freeman Road to the south, and levees are maintained by Reclamation District 800. There have been 19 federal disaster declarations from flood events between 1950-2020. After the 1997 flood the District expanded its boundaries to 25,435 acres and includes the lands along the left bank of the river down to the vicinity of Wilton. However, some landowners have created berms south of the District. During the January 2023 storm, there were breaks along the RD 800 levees and the private berms resulting in flooding and closure of evacuation routes to include Highway 99 and Dillard Road where three people died.

The proposed project would be funded under Section 219 Environmental Infrastructure program for the Sacramento Area (authorized under Section 8375 of Public Law 117-263). The project will leverage existing data from other groundwater, flood risk reduction and aquatic habitat studies.

5. Cache Creek Settling Basin: Non-Federal Sponsor: CVFCB and California Department of Water Resources (DWR) Contact: Corey Lasso, (916) 574-1041, [corey.lasso@water.ca.gov](mailto:corey.lasso@water.ca.gov) or Nicole Ortega-Jewell, 916-456-4400, [ortega-jewell@mbkengineers.com](mailto:ortega-jewell@mbkengineers.com).

We request support for a Community Project Funding request, when submitted in the amount of \$1,500,000 in Fiscal Year 2024, to initiate and complete a feasibility study. The Cache Creek Settling Basin (CCSB) is a part of the SRFCP constructed by the USACE in 1937 at the terminus of Cache Creek. It preserves the floodway capacity of the Yolo Bypass by entrapping the heavy sediment load carried by the Cache Creek before its waters release into the Yolo Bypass. The facility was re-authorized in 1987 and improved in 1993 to enlarge the basin to its current sediment management capacity. The USACE 1987 Final General Design Memorandum (GDM) included raising the weir by 6 feet to an elevation of 38.5 feet at year 25 of the project life, or in 2018, based on the anticipated rate of sedimentation within the Basin. The CVFPB sent a letter to USACE in March 2023 to formally request the USACE to initiate a study in order to not only address the federal interest in the proposed weir

raising and improve Basin deficiencies such as under seepage in the south and west levees, but to also evaluate flood impacts upstream and adjacent to the City of Woodland from changes in the Basins topography while improving sediment trapping efficiency and lifespan of the CCSB. This is in addition to enabling compliance with regulatory requirements to reduce mercury loads from the Basin.

6. Lower Cache Creek Project: Non-Federal Sponsor: CVFCB and City of Woodland Contact: Nicole Ortega-Jewell, 916-456-4400, [ortega-jewell@mbkengineers.com](mailto:ortega-jewell@mbkengineers.com) or Corey Lasso 916-574-1041, [corey.lasso@water.ca.gov](mailto:corey.lasso@water.ca.gov).

PED was fully funded in Fiscal Year 2023. The project was authorized in WRDA 2022. A feasibility study was completed in February 2021 and a USACE Chief of Engineers report was signed in June 2021. The 2017 rain events and flood fight efforts have heightened the flood risk concerns in the area. The USACE's project will extend horizontally above the north end of the city limits, starting just west of County Road 98 and tying into the Cache Creek Settling Basin levee east of Interstate 5. It includes the construction of 5.6 miles of new levee and seepage berms, installation of cutoff walls in 2.3 miles of existing levees, and construction of approximately 5.6 miles of drainage channels, among other features. The project will be augmented by the City's related Woodland Flood Risk Management Project, which proposes additional flood risk reduction actions for properties and structures north of the City and addresses state criteria for 200-year flood protection. Once the projects are completed, more than one thousand Woodland properties will be removed from special flood hazard areas, eliminating federal mandates for high-cost flood insurance and restrictions on improvements. The City of Woodland and CVFPB appreciate the project construction authorization and funding to complete design in FY 2023.

7. Sacramento River Bank Protection Program: Non-Federal Sponsor: CVFCB and DWR Contact: Dave Wheldon, 916-574-1243, [dave.wheeldon@water.ca.gov](mailto:dave.wheeldon@water.ca.gov) or Nicole Ortega-Jewell, [ortega-jewell@mbkengineers.com](mailto:ortega-jewell@mbkengineers.com)

The CVFPB is working with USACE to continue funding this program. Funding was provided in October 2022 from the IIJA for \$600,000 to execute a new PPA, prepare detailed surveys, real estate investigations and incorporate results into an implementation plan.

The Sacramento River Bank Protection Program (SRBPP) was authorized in Section 203 of the Flood Control Act of 1960. It was subsequently modified in 1974 to add 405,000 linear feet. Section 3031 of the Water Resources Development Act of 2007 (WRDA 2007) authorized an additional 80,000 linear feet. The SRBPP is a USACE-led program that evaluates the levees bordering the river and repair and rehabilitates stream bank erosion sites along the SRFCP. The authorization was based on the recommendation of the Chief of Engineers in a report dated May 9, 1960 (Chief's Report). When the SRFCP was turned over to the State by execution of the 1953 Memorandum of Understanding, there was a growing concern that the system that was constructed to flush hydraulic mining debris and maintain navigable waters was eroding the banks of the river and threatening the levees. The Chief's Report recommends an ongoing program to construct bank protection as "new work" and also makes clear that bank protection is a capital improvement and, therefore, beyond what can be funded by local agencies. USACE did conclude there was a maintenance element to the bank protection, which was the basis for a recommended 2/3 Federal cost share to cover the capital improvement cost and 1/3 local

cost share to cover the Operations and Maintenance repair along with the local share, including Land, Easements, Rights of Way, Relocations, and Disposal (LERRDs).

8. Upper Yuba River Basin Feasibility Study: Non-Federal Sponsor: Yuba Water Agency Contact: Willie Whittlesey; 530-741-5026, [wwhittlesey@ycwa.com](mailto:wwhittlesey@ycwa.com)

Request support for a Community Project Funding request in the amount of \$1,500,000 in Fiscal Year 2024 to initiate the comprehensive study. Yuba Water Agency proposes to enter a cost-shared feasibility study as the non-Federal project sponsor with USACE for the Upper Yuba River Basin Feasibility Study (Study). Yuba County sent a letter to USACE on March 10, 2023 that requests funding for this study. The Study will examine comprehensive flood damage reduction measures, including the proposed Atmospheric River Control (ARC) Spillway at New Bullards Bar Dam, that can protect recently improved Federal levees and reduce flood risk in many communities.

The ARC Spillway is a proposed new spillway at the New Bullards Bar Dam on the North Yuba River, the fifth tallest dam in the United States, which impounds a maximum capacity of nearly one million acre-feet. The new spillway gates will be 31.5 feet lower than the existing spillway gates, which enables management of an additional 117,000 acre-feet of reservoir space for earlier releases of up to 35,000 CFS in advance of storms, providing additional reservoir space to capture and store peak inflows. This enhanced flexibility improves the management of high flows through the system and enhances the integrity, performance, and protection of Federal levees by reducing peak river stage and flows on the Lower Yuba and Feather Rivers.

In addition, the ARC Spillway has significant benefits upstream of the Feather/Yuba confluence under Forecast Informed Reservoir Operations (FIRO). The Study will complement ongoing Federal actions to enable implementation of FIRO through updated Water Control Manuals at New Bullards Bar and Oroville dams. The ARC Spillway is key in achieving the full benefits of FIRO operations. Preliminary modeling demonstrates that the combination of new spillway infrastructure and operational enhancements provides significant regional flood risk reduction benefits.

9. West Sacramento Project: Non-Federal Sponsors: West Sacramento Area Flood Control Agency and CVFCB Contact: Greg Fabun, 916-617-4855, [gregf@cityofwestsacramento.org](mailto:gregf@cityofwestsacramento.org), or Eric Nagy, 530-665-8222, [eric@larsenwurzel.com](mailto:eric@larsenwurzel.com).

Request support for Fiscal Year 2024 budget request of \$52,758,000 for continued construction. The West Sacramento Project (Project) was authorized in the 2016 Water Infrastructure Improvements for the Nation Act with a total project cost of \$1.17 billion. In advance of federal funding, the City of West Sacramento (City), the West Sacramento Area Flood Control Agency (WSAFCA), and the State of California invested \$210 million in construction to immediately reduce flood risk to the City's 56,000 residents and to protect \$6.7 billion in damageable assets. This advanced construction included the first component of the authorized Project, the Southport Setback Levee Project. The City and WSAFCA appreciate the \$72.313 million in construction funding received in FY 2023.

10. Yolo Bypass Comprehensive Study; Non-Federal Sponsor: SAFCA and CVFCB Contact: Gary Bardini, 916-874-7606, [bardinig@saccounty.gov](mailto:bardinig@saccounty.gov)

Request support for Fiscal Year 2024 budget request of \$600,000 to continue the comprehensive study. The Yolo Bypass is a 40 mile long, 59,000-acre federal flood management facility constructed in the 1930s. It is designed to divert 80% of the Sacramento River watershed flood flows, which results in reducing risk to \$68 billion in property and 650,000 people in the Sacramento Metropolitan area. While located within the Sacramento-San Joaquin Delta National Heritage Area, it serves as a major project feature of the SRFCP and is central to a systems approach to reducing flood risk to the Sacramento metropolitan area, small communities, and adjacent non-urban areas. In 2016, the Yolo Bypass – Cache Slough Complex (YBCS) Partnership was formed between 15 federal, state, and local agencies to establish a new era of multi-benefit collaborative planning that encourages collaboration on regional solutions to implement landscape-level change. This partnership creates a unique opportunity for inter-agency collaboration in pursuit of a common plan of activities that would advance the national interest in flood risk reduction, ecosystem restoration, agricultural sustainability, resilient water supply and quality, and recreational opportunities. The State of California is currently developing a Master Plan to reflect how proposed improvements to reduce flood risk and restore vital ecosystems in the Yolo Bypass should be integrated. In 2020, Congress authorized the USACE to conduct a formal feasibility study called “Comprehensive Study of the Sacramento River, Yolo Bypass, CA”, to identify actions to be undertaken by the Secretary for the comprehensive management of the Yolo Bypass System for the purposes of flood risk management, ecosystem restoration, water supply and quality and recreation. The goal of the proposed federal comprehensive study is to align local, state, and federal agency interests around a vision of (1) providing essential conveyance capacity and improving the resilience, reliability, and adaptability of the flood system to climate change, (2) preserving agricultural land and promoting a strong, sustainable agriculture economy, and (3) conserving and improving the functionality of aquatic and terrestrial species habitat consistent with the paramount purpose of the flood system. This study will include a reexamination of the full scope of what constitutes “Federal Interest” among the various federal agencies in Yolo Bypass. SAFCA and CVFCB appreciate the funding provided in FY 2023 Omnibus Act.

11. Yuba River Basin Flood Damage Reduction Project – Phase 3 Marysville Ring Levee: Non-Federal Sponsors: Marysville Levee District and CVFCB Contact: Willie Whittlesey; 530-741-5026, [wwhittlesey@ycwa.com](mailto:wwhittlesey@ycwa.com) or Tom Engler 916-456-4400, [engler@mbkengineers.com](mailto:engler@mbkengineers.com).

The Yuba River Basin flood damage reduction project is an unprecedented initiative to provide more than a 200-year level of protection for Yuba County communities. To advance this Federally authorized project, the state and local interests (Yuba County, Yuba Water Agency, Marysville Levee District, and the Three Rivers Levee Improvement Authority) began an advanced construction program in the southern portion of the county. Improvements are now complete on 29 miles of levees (with an estimated cost of about \$450 million), including the construction of two setback levees: the 2-mile-long Bear River setback and 6-mile-long Feather River setback. These setbacks, besides providing greater regional flood protection, also resulted in the creation of nearly 2,200 acres of floodplain habitat along the Bear and Feather rivers.



The USACE is presently repairing sections of the Marysville Ring Levee. These improvements to the 7.5-mile-long levee which surrounds the City of Marysville are the final scheduled improvements of the entire project. Construction is complete on most of the project (Phase 1 (2012), Phase 4A (2017), Phase 2A-North (2018), Phase 2A-South (2019), Phase 2C (2020), and Phase 3 (2022)). Construction of Phase 2B opened bids in February 2023 and is expected to be awarded and constructed in 2023. The project was fully funded by the Fiscal Year 2019 appropriation of \$35.5 million and the \$13.586 million from the Bi-Partisan Budget Act of 2018 (P.L. 115-123). However, recent construction cost increases and design refinements resulted in an increase in the authorized Total Project Cost, the need for additional funding, and a potential increase in the project's 902 limits to complete. The project increases were approved by the Headquarters USACE Change Control Board and an additional \$47.7 million of funding was appropriated to complete the remaining construction and to complete a risk assessment of unrepaired reaches of levee.

12. Review of Non-Federal Alteration of USACE Civil Works Projects (Section 408 Program): Non-Federal Sponsor: Central Valley Flood Protection Board

Contact: Leslie Gallagher, 916-574-0609, [leslie.gallagher@cvflood.ca.gov](mailto:leslie.gallagher@cvflood.ca.gov) or Nicole Ortega-Jewell, 916-456-4400, [ortega-jewell@mbkengineers.com](mailto:ortega-jewell@mbkengineers.com).

Support is needed to continue the Fiscal Year 2023 funding level of \$21,000,000 provided by Congress to adequately enable the USACE to coordinate with the requester and review the proposed alteration. Through Section 408 reviews, USACE ensures that the alteration will not adversely impact the public interest and will not impair the usefulness of the authorized USACE projects. The number of Section 408 requests in any year is dependent on many factors – primarily actions, schedules, and resources external to USACE. In previous years, the allocated amount has been inadequate and the Sacramento District has continuously exhausted its funding by third quarter, delaying many locally led flood improvement projects. It is important to maintain the funding level provided in Fiscal Year 2023 into future years. We appreciate the members' support for the Fiscal Year 2023 funding increase from previous levels.