



August 24, 2022

Jane Dolan  
Central Valley Flood Protection Board  
3310 El Camino Avenue, Ste 170  
Sacramento, California 95821

Subject: **SUBMITTAL OF SACRAMENTO AREA FLOOD CONTROL AGENCY  
2022 URBAN LEVEL OF FLOOD PROTECTION ADEQUATE PROGRESS  
ANNUAL REPORT PURSUANT TO CALIFORNIA GOVERNMENT CODE  
SECTION 65007(A)(5)**

Dear Ms. Dolan:

I am pleased to submit on SAFCA's behalf the subject 2022 Urban Level of Flood Protection Adequate Progress Annual Report, approved by SAFCA's Board of Directors on July 21, 2022. This Annual Report shows that SAFCA is meeting State standards for progress on achieving the Urban Level of Flood Protection for State Plan of Flood Control facilities within our jurisdiction. SAFCA has also provided this information to our partner agencies for their use in making land use findings in conjunction with any additional data and information they determine is appropriate.

If you have any questions or would like to discuss the enclosed, please feel free to contact me at (916) 874-7606 or [bardinig@saccounty.gov](mailto:bardinig@saccounty.gov).

Sincerely,

A handwritten signature in blue ink, appearing to read "Gary Bardini", is written over a horizontal line.

Gary Bardini, P.E.  
Director of Planning

Enclosure

cc (w/o enclosure):  
Jason Campbell  
Melanie Saucier  
Mick Klasson

2022

## Urban Level of Flood Protection

### Annual Report

Final  
August 2022



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## **1. INTRODUCTION**

California Government Code (CGC) Section 65007(a)(5) requires local agencies to “annually report to the Central Valley Flood Protection Board on the efforts in working toward completion of the flood protection system.” State requirements are further described in the Urban Level of Flood Protection Criteria (ULOP Criteria; DWR, 2013).

This report describes Sacramento Area Flood Control Agency (SAFCA)’s efforts in improving the regional flood protection system over the fiscal year ending on June 30, 2022. Section 5 of the SAFCA Final Urban Level of Flood Protection Plan and Adequate Progress Baseline Report (ULOP Plan) noted that the majority of funding for SAFCA’s projects comes from State and Federal agencies over which SAFCA has no control (SAFCA, 2016).

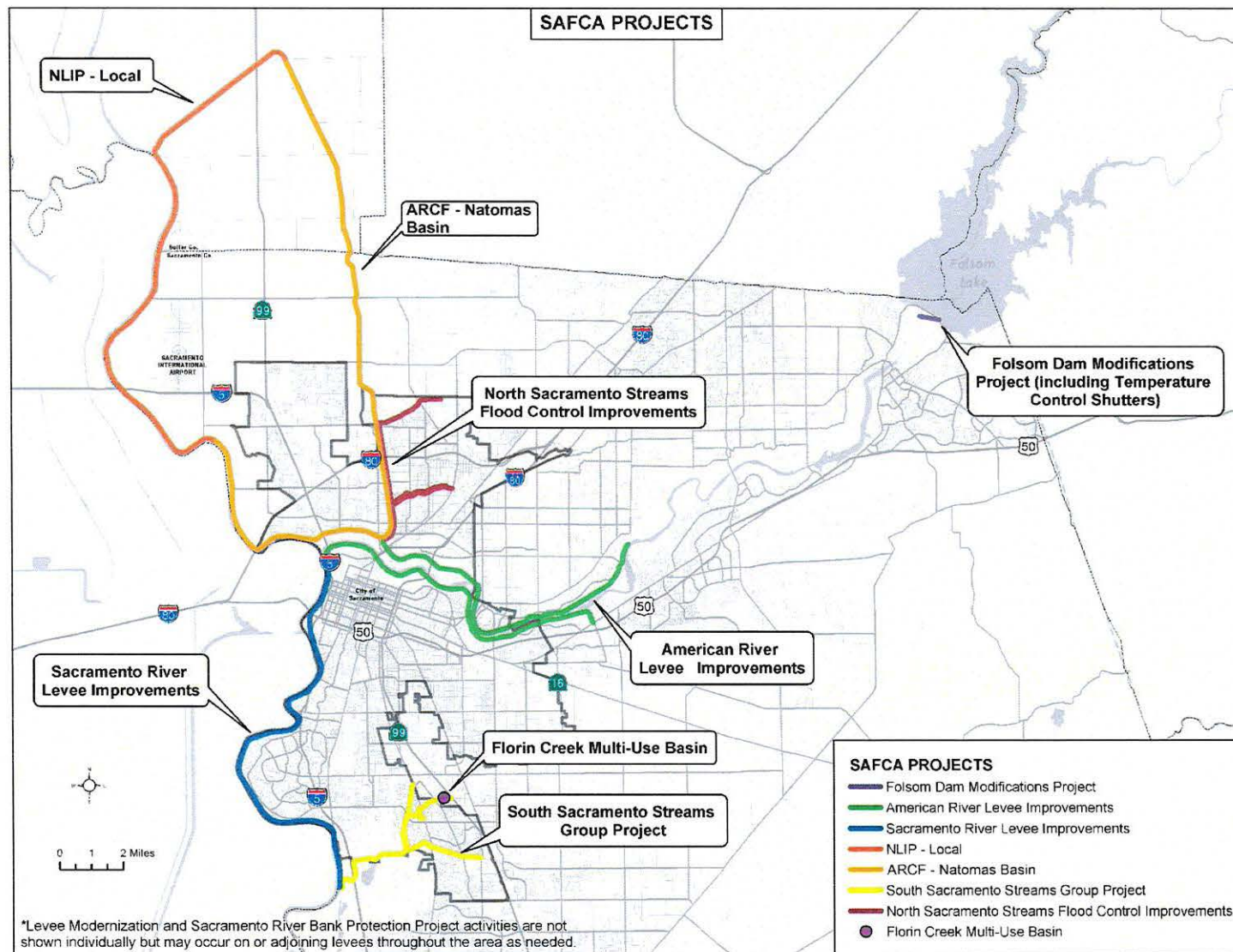
This annual report only addresses the State Plan of Flood Control (SPFC) facilities. The local land use agencies, acting as floodplain managers, must consider this plan along with their own data to determine whether residual risks, including interior drainage and flood sources not managed by SPFC facilities, affect development projects to such a degree that the projects would be subject to flood protection findings under state law. If a land use agency is required to make a flood protection finding, the finding must be selected from one of those summarized below:

- (1) Existing facilities provide ULOP in urban areas or meet the Federal Emergency Management Agency (FEMA) standard in nonurbanized areas;
- (2) Conditions on the project will protect it to the applicable standard;
- (3) The local flood management agency has made adequate progress on a flood system providing the applicable level of protection. For urban and urbanizing areas protected by project levees, ULOP will be achieved by 2025; or
- (4) The property in an undetermined risk area has met ULOP based on substantial evidence in the record.

Areas dependent of flood risk reduction projects that are still under construction typically rely on the third finding listed above. In the event that ULOP has not been or cannot be achieved by 2025 under one of the possible findings, the local agency may not approve the affected land use decision. This report is not intended to be a substitute for the independent judgment of the local agencies in adopting their findings.

## **2. PLANNED SCOPE, SCHEDULE, AND COST**

CGC Section 65007(a)(1) requires the local flood management agency to report “the total project scope, schedule, and cost” of meeting ULOP with the agency’s flood protection system. This information was detailed in the ULOP Plan and is summarized here.



**Figure 1: SAFCA Projects**

*South Sacramento County Streams Group (SSSG) Project* – USACE was the lead agency on this completed project, which consisted of improvements to levees and channels along Morrison Creek and its tributaries in South Sacramento, including Florin Creek, Elder Creek, and Unionhouse Creek. Physical work is now complete.

*Florin Creek Multi-Use Basin Project* – In moderate and larger flood events, the completed Florin Creek Multi-Use Basin Project can store up to 30 acre-feet of Florin Creek flows at Florin Creek Park on the north bank of Florin Creek (ESA, 2014). It provides at least 100-year flood protection within its floodplain in conjunction with the Florin Creek capacity improvements constructed by USACE as part of the South Sacramento County Streams Group Project.

*Non-Structural Actions* – The state’s Urban Levee Design Criteria (ULDC) (DWR, 2012) are incorporated by reference in the ULOP Criteria and require many actions that are good practices for the effective operation and maintenance of levee systems to sustain system performance. These actions include such measures as engineering evaluation and documentation, development of security and safety plans, and other items. The non-structural actions and their necessity are described in greater detail in the Adequate Progress Engineer’s Report (MBK, 2016). Ongoing operation, maintenance, repair, and rehabilitation may be considered ongoing non-structural actions that to the extent required are funded by SAFCA and its land use agency and local maintaining agency partners. Progress on these actions is not reported here unless they are “critical features” under the meaning of CGC Section 65007(a)(3).

## **2.2 Schedule**

The Urban Level of Flood Protection must be achieved by the year 2025 in order for land use agencies, in approving new development, to make a finding that adequate progress is being made on the construction of a flood protection system (CGC §65865.5, §65962, and §66474.5). Table 1 on the next page, from the ULOP Plan, lists the schedule for SAFCA projects. Table 2 provides additional detail on the ARCF 2014 Natomas Basin Project and Table 3 provides additional detail on the ARCF 2016 Project.

**Table 2: ARCF Natomas Basin Project Status Detail**

<b>Element</b>	<b>Status</b>	<b>ULOP Attainment*</b>
Reach A Gateway Oaks Dr to Farm Rd	Levee construction to begin Spring 2022. Improvements to Pumping Plant 1B, City Sump 160 and Pumping Plant 1A to begin in 2023	Complete by 2025
Reach B San Juan Rd to W. Elverta Rd	Levee construction began July 2020; expected to be completed Fall/Winter 2022. Pumping Plant #3 – Construction began July 2020; construction completed. Testing underway. I-5 Window - Construction to begin Spring 2022; expected to be completed Winter 2022/2023. Riverside/Pritchard Pumping Plants to begin in 2024.	Complete by 2025
Reach C W. Elverta Rd to Sankey Rd	Levee construction was completed in 2008/2009 by Sacramento Area Flood Control Agency. Elkhorn Pumping Plant to begin construction in 2023.	Complete by 2025
Reach D Sankey Rd to Howsley Rd	Levee construction was completed in 2008/2009 by Sacramento Area Flood Control Agency. Highway 99 Window – Construction expected to begin Summer of 2023. Pumping Plant #4 – Construction began August 2021; expected to be completed Fall 2022 / Winter 2023.	Complete by 2025
Reach E Howsley Rd to Sankey Rd	Levee construction expected to begin Spring 2023.	Complete by 2025
Reaches F&G Sankey Rd to NEMDC Stormwater Pumping Station	Levee construction and improvements to the levee slope expected to start Summer 2024 and Pumping Plant #6 expected to begin Summer 2023.	Construction underway by 2025
Reach H NEMDC Stormwater Pumping Station to Northgate Blvd	Levee construction and improvements to Pumping Stations #8 and #102 began 2018; expected to be completed Fall 2022.	Complete by 2025
Reach I Northgate Blvd to Gateway Oaks Dr	Contract 1: Levee construction and improvements to Pump Station #58 completed Fall 2022. Contract 2: Landside levee improvements and installation of maintenance road expected to begin Summer 2023.	Complete by 2025
<p>Sources: USACE 2022b, SAFCA.</p> <p>*Attainment status reflects the most current information at the time of this report. These estimates are subject to change. For projects led by other agencies, SAFCA may not have the capacity to control the schedule.</p>		

with actual expenditures. Table 4 demonstrates that expenditures are keeping pace with or exceeding the planned level.

**Table 4: Planned Expenditures (\$millions, all sources)**

Fiscal Year	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025
Original ULOP Plan Costs*	\$171.6	\$141.0	\$111.3	\$149.9	\$125.5	\$125.5	\$163.6	\$126.6	\$126.6	\$108.8
Actual Spent**	\$167.8	\$114.3	\$123.1	\$171.3	\$428.3	\$644.5	\$608.25	N/A	N/A	N/A
<p>* Original ULOP Plan Costs include capital projects and levee modernization. Values in the 2016 ULOP Plan included system operations and maintenance (O&amp;M) which are no longer shown.</p> <p>** Actual expenditures are SAFCA actuals plus estimates of other agency expenditures based on funding agreements and/or the progress of the projects. Actuals for 2020-2021 have been adjusted since the last annual report to correct a calculation error.</p>										

SAFCA, State, and Federal appropriations also remain consistent with the plan, as shown in Table 5. CGC Section 65007(a)(2)(A) specifies that adequate progress means that 90 percent of the revenues scheduled to be received by that year have been appropriated and are currently being expended. Table 5 shows this requirement has been met with over 100 percent of scheduled revenues appropriated to date. The Federal and State appropriations reflect Congressional authorizations and executed funding agreements. SAFCA appropriations reflect past spending and current year appropriations. Section 3 of this report will describe how these appropriations are being expended.

### **3. CONSTRUCTION OF CRITICAL FEATURES**

Pursuant to Government Code Section 65007(a)(3), adequate progress on construction of a flood protection system means that critical features of the system are under construction and progress is indicated by the expenditure of the budgeted construction funds. The preceding section documented that SAFCA expenditures are on track. This section provides a brief summary of the construction progress in each of the SAFCA protected areas. This report does not distinguish between expenditures for physical construction and those for pre-construction permitting, engineering, and design because the cash flow and planned expenditures in the ULOP Plan do not provide line items for construction alone; and the pre-construction work is a planned and necessary component of ULOP Plan implementation.

*All Protected Areas* – All of the SAFCA protected basins benefit from the Folsom Dam Modifications. The first element of the modifications, the JFP, was largely completed in 2016. In 2017 the completed project was turned over to the U.S. Bureau of Reclamation. On June 12, 2019 the Water Control Manual was formally executed. The Folsom Dam Raise construction contract for Dike 8 was awarded in 2019 and construction was completed in 2020. Design work for Dikes 1-6, the main dam, and wing dams is nearly complete; and SAFCA is currently relocating utilities located in the construction footprints for the dikes. Design is underway for

at Pumping Plant 3 in this reach is complete. No construction is currently occurring in Reach C. Levee construction in Reach D (Natomas Cross Canal South Levee) is complete except at Highway 99. Work continues at Pumping Plant 4. Improvements to Reach E (Pleasant Grove Creek Canal West Levee) and F and G (Natomas East Main Drainage Canal West Levee) are currently being designed. Seepage cutoff wells, levee slope flattening, and improvements to two stormwater pumping stations are under construction on USACE Reach H (along the NEMDC West Levee from Dry Creek to Northgate Boulevard). Reach I (American River North Levee west of Northgate Boulevard) included a blanket drain constructed under the I-5 overpass and a cutoff wall to the west along the Garden Highway. Both are now complete. Natomas benefits from the Folsom Dam Modifications discussed above.

*Dry Creek North Levee System* – No construction projects are required for the Dry Creek North Levee.

*Robla Creek South Levee, NEMDC East Levee, and Arcade Creek North Levee* – In 2017, 14 relief wells were constructed along the Arcade Creek North Levee. Construction of cutoff walls under SAFCA construction contract 4355 is now substantially complete. Improvements to the Magpie Creek Diversion Channel as part of ARCF 2016 may require minor freeboard maintenance activities on the Robla Creek south levee, which will be investigated and completed by 2025.

*American River North Levee* – Cutoff walls were constructed along the Arcade Creek South Levee and NEMDC East Levee and were completed by USACE in 2015. Erosion protection is being implemented by USACE and should be complete by 2025 (USACE, 2022a). Contract 2 on the right bank of the American River near H Street Bridge has been awarded. Contract 4A on the right bank near State Route 160 is planned to be through design by 2023.

*American River South and Sacramento River East Levee* – Structural improvements to the Sacramento River East Levee have been designed, and USACE has retained a construction contractor. Contract 1 included work in the Pocket area and a seepage berm near Front Street and Miller Park that is now complete (USACE, 2022a). The second contract along the Sacramento River East Levee in the Pocket area, includes cutoff wall construction, now complete, and relief wells to address seepage and stability issues. Construction is underway on Contract 3 this year. Final design is nearing completion for the fourth and final contract to conclude the SREL structural improvements in 2024.

Work is also planned north of Miller Park near U.S. 50. Encroachments in the construction footprint were removed by SAFCA. Under its “levee modernization” project, SAFCA acquired a property adjoining the levee and removed encroachments on it preparatory to splitting the property under the flood easement and conveying fee title to the State or City. A voluntary encroachment removal program has been initiated for other affected properties. Additional structural improvements recommended as a result of evaluations in 2018 included improvements to the Beach Lake Levee and the Sacramento River East Levee downstream of the Beach Lake Levee (MBK, 2018), and 35% design is underway. In 2019, SAFCA also constructed an oak woodland mitigation project to provide a wind-wave buffer for the levee.

DWR. 2017. Central Valley Flood Protection Plan 2017 Update. August.

EPS (Economic & Planning Systems, Inc.). 2016. Sacramento Area Flood Control Agency Development Impact Fee Program 2016 Update. Prepared for Sacramento Area Flood Control Agency (SAFCA). October.

ESA, 2014. Florin Creek Multi-Use Basin Project. Initial Study with Intent to Adopt a Mitigated Negative Declaration. State Clearinghouse No. 2014032030. Prepared for Sacramento Area Flood Control Agency. March.

MBK (MBK Engineers). 2016. Sacramento Area Flood Control Agency Adequate Progress Towards an Urban Level of Flood Protection Engineer's Report. Prepared for SAFCA.

MBK. 2018. Status of ULDC Evaluation of the Beach Lake Levee. Memo to Pete Ghelfi, SAFCA, from Ric Reinhardt, P.E., MBK Engineers.

SAFCA. 2016. Sacramento Area Flood Control Agency Final Urban Level of Flood Protection Plan and Adequate Progress Baseline Report. Prepared for the City of Sacramento and parts of Sacramento and Sutter counties. June 10.

SAFCA. 2017. 2017 Urban Level of Flood Protection Adequate Progress Annual Report. Prepared for the City of Sacramento and parts of Sacramento and Sutter counties. August 9.

USACE (United States Army Corps of Engineers). 2015. American River Common Features General Reevaluation Report. Final Report. Sacramento District. December. Available at: [http://www.spk.usace.army.mil/Portals/12/documents/civil\\_works/CommonFeatures/Final\\_ARC\\_F\\_GRR\\_Jan2016.pdf](http://www.spk.usace.army.mil/Portals/12/documents/civil_works/CommonFeatures/Final_ARC_F_GRR_Jan2016.pdf). Accessed June 3, 2016.

USACE. 2017. Record of Decision. Folsom Dam Raise Project. Placer, Sacramento, and El Dorado Counties, California. December 18. Available at: [https://www.spk.usace.army.mil/Portals/12/documents/civil\\_works/JFP/Raise/ROD\\_FolsomDam\\_Raise\\_Signed\\_18Dec2017.pdf?ver=2018-03-09-124144-317](https://www.spk.usace.army.mil/Portals/12/documents/civil_works/JFP/Raise/ROD_FolsomDam_Raise_Signed_18Dec2017.pdf?ver=2018-03-09-124144-317). Accessed 7/31/2019.

USACE. 2022a. Sacramento Levee upgrades. Available at: <https://www.spk.usace.army.mil/Missions/Civil-Works/Sacramento-Levee-Upgrades/>. Accessed 5/18/2022.

USACE. 2022b. Natomas Basin. Available at: <https://www.spk.usace.army.mil/natomas/>. Accessed 5/18/2022.

USACE. 2022c. Unpublished schedule information on American River Common Features 2016. May 19.

USACE. 2022d. Unpublished schedule information on Lower American River erosion contracts. June 17.