SAFCA LEVEE ACCREDITATION PROJECT

Proposed Project Description & Justification

SAFCA's Levee Accreditation Project is the focus of a Draft Environmental Impact Report, which is being released for public review. It is a subset of the American River Common Features General Re-evaluation Report (GRR) Project being released in a similar timeframe by U. S. Army Corps of Engineers (USACE). The purpose of this Q&A is to explain the complementary nature and elements of both the Levee Accreditation Project and the GRR Project.

The Levee Accreditation Project addresses: (1) levee foundation and embankment stability problems (erosion and under seepage vulnerability) along portions of the Sacramento River east levee in the Pocket area and along the lower reaches of the Arcade Creek north and south levees, as well as the lower reach of the NEMDC east levee in North Sacramento; (2) removal of high hazard vegetation and encroachments in and along portions of the American River north and south levees and the Beach Lake levee; and (3) implementation of a corridor management plan (CMP) for the NEMDC/Steelhead Creek aimed at restoring the riparian character of the stream channel, removing invasive non-native plants, and reducing the roughness value so as to lower water surface elevations in large flood events.

The GRR Project addresses similar issues but also includes substantial erosion control measures along the lower American River and the Sacramento River in the Pocket area that are not included in the Levee Accreditation Project. In addition, the GRR Project includes widening of the Sacramento Weir and Bypass in Yolo County.

SAFCA is proposing to move forward with the Levee Accreditation Project ahead of federal authorization of the larger GRR Project and will secure credits for project expenditures that exceed the required non-federal (local) contribution to the GRR Project.

Why This Project is Necessary?

Early implementation of the Levee Accreditation Project is needed to reduce flood risk as quickly as possible and avoid mandatory flood insurance requirements in the areas protected by the project. As recently as 2007, the levees protecting these areas were judged by USACE to be adequate to meet minimum National Flood Insurance Program (NFIP) requirements.

However, in August 2013, nearly eight years after Hurricane Katrina, the USACE informed the City and County of Sacramento that this prior judgment as to the condition of these levees is no longer valid and retracted their certification of the levees. In response, the City and County asked SAFCA to undertake its own independent review of the affected levees.

Project Elements

SAFCA's review of the affected levees identified 6 miles of the Sacramento River east levee and 4 miles of the Arcade Creek and NEMDC levee system that did not meet minimum standards for foundation and embankment stability. In addition, portions of those same levees as well as portions of the Beach Lake and American River levees did not meet minimum standards for vegetation and encroachment management. Lastly, the conveyance capacity of the Natomas East Main Drainage Canal (NEMDC) was deemed to be unacceptably compromised by invasive weeds, beaver dams and dense low-lying vegetation. Based on this information, SAFCA formulated the Levee Accreditation Project as a vehicle for meeting minimum National Flood Insurance Program (NFIP) standards and bringing the levee system (outside the Natomas Basin) into compliance with the Urban Levee Design Criteria (ULDC) adopted by the State of California in connection with the Central Valley Flood Protection Plan (CVFPP).

Federal & State Standards

These federal and state standards overlap with respect to levee embankment and foundation stability criteria. The ULDC addresses hazardous vegetation and encroachment removal, the NFIP does not. Both standards have levee height (freeboard) requirements. The NFIP's freeboard requirement is tied to the 100-year flood while the ULDC freeboard requirement focuses on the State defined 200-year flood.

The Project & Objectives

1: What is Being Proposed?

A: SAFCA proposes to construct flood control system improvements along segments of the North Sacramento Streams Levees (North Sacramento) and the Sacramento River East Levee (Pocket and Little Pocket between downtown Sacramento and Freeport Water Intake Facility).

2: What triggered the need for the project?

A: SAFCA found through its independent review that some levees did not meet current seepage and stability criteria. As a result, SAFCA pursued an effort to construct improvements to the affected levee sections in order to accredit the levee systems. SB 5 established criteria needed for an urban level of flood protection. The elements of the plan need to be put in place by 2025 to prevent economic hardships to the community. On August 31, 2013 the U.S. Army Corps of Engineers, withdrew its certification of the levee systems along the lower American and Sacramento River and tributaries outside the Natomas Basin. This, coupled with the aged legacy levees in the Sacramento area encouraged SAFCA to pursue the proposed improvements.

3: What will the Project Accomplish?

A: The Project will reduce the risk of flooding to approximately 120,000 residential dwellings in the floodplain areas outside Natomas and enable certification of the levee systems protecting these areas as providing a minimum 100-year level of flood protection. Without the Project these levee systems will be rated as unacceptable and the protected areas will be mapped into the 100-year floodplain. In order to avoid this outcome, SAFCA has chosen to make the improvements necessary to allow for 100-year certification of the levees as quickly as possible.

In addition, the project will meet the minimum flood protection requirements needed for an urban area. The GRR and other projects will help Sacramento move beyond meeting the minimum criteria and provide a more robust and resilient flood protection system.

4: What Construction is proposed?

A: The Project will involve construction of cut-off walls along identified segments of the existing levee system in order to satisfy 100-year flood protection requirements. The Project needs to be completed as quickly as possible to maintain an acceptable FEMA flood insurance map rating and so that levees can be re-certified. Conversely, this Project can proceed while flood control interests are laying the groundwork to meet State of California Urban Levee Design Criteria (ULDC) protection standards for urban areas.

Public Outreach

SAFCA has released for public review and comment, a Draft Environmental Impact Report (DEIR) on the Levee Accreditation Project. The DEIR analyzes components of the Project that are proposed for construction**.** Residents and stakeholders can be as informed as they wish to be and are recognized in this outreach program with opinions and comments being sought.

This posting has been developed as a companion piece to the more formal DEIR document also posted on this webpage. SAFCA wishes to make the documents easily accessible to the public. The DEIR can be downloaded *by individual chapters* and is also available on DVD. This is your invitation and opportunity to learn about the Project and if you decide to do so, submit comments and observations. Any and all comments submitted will receive a Response to Comments reply that will be publicly published in the Final EIR.

The comment period begins on March 18, 2015 and ends on May 1, 2015. You may submit *comments* using the following methods:

Email
PeteGhelfi@saccounty.net

U.S. Postal Service
Mr. Pete Ghelfi
Sacramento Area Flood Control Agency
1007 7th Street, 7th Floor
Sacramento, CA 95814

In-Person
You may submit written comments at any of the community meetings SAFCA is holding on the DEIR. A stenographer will also be available at the community meetings to transcribe verbal comments.

SAFCA will NOT accept comments made via telephone.

You may request a DVD of the document by emailing PeteGhelfi@saccounty.net

Hard copies of the document are available for review at the following locations:

SAFCA- 1007 7th Street, 7th Floor, Sacramento, CA
Library Galleria, 828 I St, Sacramento, CA
Robbie Waters Pocket-Greenhaven Library, 7335 Gloria Dr, Sacramento, CA
North Sacramento-Hagginwood Library, 2109 Del Paso Blvd, Sacramento, CA
Del Paso Heights Library- 920 Grand Ave, Sacramento, CA

Next Steps

Once the environmental document process is completed, should the SAFCA Board of Directors vote to proceed with constructing the flood control improvements evaluated in the DEIR, **construction would start no earlier than 2016 in the North Sacramento Streams area and no earlier than 2017 along the Sacramento River East Levee**. In that event, focused outreach efforts, including email updates, would be conducted in respective neighborhoods in advance of and throughout construction.

Construction Required Under This Proposal

5. What levee improvements are being proposed under the Levee Accreditation Project?

A. SAFCA proposes to construct the following improvements:

- Sacramento River East Levee
  - Construct 6 miles of levee improvements along various segments between downtown Sacramento and Freeport
  - 3,000 feet of bank protection
- North Sacramento Streams
  - Construct 4 miles of levee improvements along Natomas East Main Drainage Canal East Levee, Arcade Creek North and South Levee

6. Why are the levee improvements necessary?

A. Through geo-technical analysis, SAFCA has determined that certain levee segments along North Sacramento Streams and the Sacramento River East Levee do not meet current foundation and embankment stability standards. These levee segments are prone to deep under seepage and require remediation so that the levees can perform reliably under sustained high flow conditions.

7. When would construction take place?

A. Should the SAFCA Board decide to certify the EIR and proceed with the levee improvements, construction would take place no earlier than the following years:

- **2016**- North Sacramento Streams
- **2017-2018**- Sacramento River East Levee

8. What type of construction impacts are expected?

A. Potential impacts depend on how close you live to the proposed construction area. Some areas of work proposed will not impact residential properties. Most of the levee improvements involve degrading the existing top of the levee and installing a deep cut-off or slurry wall up to 120 feet in depth.

While most of the work will be confined to the footprint of the existing levee, a certain amount of equipment noise and dust associated with construction can be anticipated. SAFCA contractors will be instructed to use Best Management Practices to reduce any impacts (e.g. use of water trucks, noise suppression methods). Other impacts include temporary restrictions on the use of recreational facilities (e.g. bike paths and park sites near levee construction).

9. How will any potential construction impacts or damage to property be addressed?

A. Prior to construction, SAFCA will offer adjacent property owners the opportunity to have a pre-project home inspection performed. This is intended to document the existing conditions of property and structures prior to the start of construction.

10: What about impacts on traffic, parks sites and staging areas necessary for construction?

A. Traffic circulation patterns that could be used by contractors to access the project site as well as trucks hauling material on and off site are shown in the DEIR. All potential routes are required to be identified in the DEIR, but not all of these haul routes may be used. SAFCA will advise neighbors when a contractor has been selected and haul routes designed through email messages, maps and neighborhood meetings as required.

Parks are recognized by SAFCA as a highly valued neighborhood amenity. The use of any park sites to store dirt or equipment will be designed to minimize impacts as much as possible. SAFCA and its contractors will coordinate closely with City Parks and Recreation staff and Bike Path Coordinator to find ways to reduce impacts to recreational facilities.

SAFCA Levee Accreditation Project
Draft Environmental Impact Report (DEIR)

11. Why is SAFCA proposing to construct levee improvements ahead of the U.S. Army Corps of Engineers (USACE)?

A. Typically, flood control projects are constructed by USACE with a local agency, such as SAFCA, providing planning and engineering support as the local sponsor. However, it is understood that it may take USACE several years to receive the congressional authorization and federal appropriations necessary in order to begin a project.

In order to reduce flood risk as quickly as possible and avoid federal and state land use restrictions and mandatory high cost flood insurance requirements, SAFCA intends to take advantage of available state funding to begin work well ahead of USACE. This will allow SAFCA to start making improvements as early as 2016 and complete this work by 2019 or 2020. USACE will do additional work as part of its General Reevaluation Report (GRR) Project once Congress has authorized the project.

12. What is an Environmental Impact Report (EIR)?

A. CEQA, or the California Environmental Quality Act, is a statue that requires state and local agencies to identify the significant environmental impacts of their actions and to avoid or mitigate those impacts, if feasible. An EIR serves to identify project impacts and proposed mitigation measures.

13: Why is SAFCA preparing a Draft Environmental Impact Report (DEIR) on Sacramento River and North Sacramento area levees?

A: SAFCA is seeking to construct improvements to the levee systems that protect these areas so as to enable these levee systems to be certified and accredited. Back in 2013, the USACE certification was withdrawn and the levee systems could not be recertified without additional improvements.

14. What does levee accreditation and certification mean?

A. Levee accreditation refers to the process through which cities and counties demonstrate to the Federal Emergency Management Agency (FEMA) that the levee systems in their communities meet minimum federal design standards for height (freeboard), embankment and foundation stability, erosion and other factors as necessary to provide at least a 100-year level of flood protection. Under FEMA's requirements a Federal agency or a licensed civil engineer must certify that these standards are met. .

15. Aren't most levee-protected areas in Sacramento already rated by FEMA as having a 100-year level of flood protection?

A. The current FEMA mapping was supported by levee certifications made by the U.S. Army Corps of Engineers (USACE). However, the USACE levee certifications that supported the current FEMA mapping are no longer valid.

16. Why are the previous USACE levee certifications no longer valid?

A. Over the past few years post Hurricane Katrina, the USACE has been updating the standards and procedures used to certify levees across the country. These procedures require that previous certifications be periodically renewed, typically every 10 years. Most of the North Sacramento area levees were certified in 1998. Theses certifications have expired. The levee systems along the American River and Sacramento Rivers (outside Natomas) were certified in 2004 and 2006. However, in August 2013, USACE determined that these segments of the Sacramento area levee system did not meet current criteria and as such, the certification was withdrawn in August 2013.

17. Why have there been significant changes to flood control standards and criteria?

A. After the flood of 1997 in the Sacramento Valley and Hurricane Katrina in New Orleans in 2005, USACE and other flood control engineers and organizations across the country have been studying the effects of water seepage through and under levees. It has been determined over the past several years that levees are more susceptible to deep under seepage than previously thought. Federal flood control standards have been updated in order to address this threat, as well as other issues like "high-hazard" encroachments (trees, pipes or any element that penetrates the levee and invites erosion or seepage).

18. What would the Levee Accreditation Project accomplish?

A. Flood control system improvements would be made by SAFCA so that a licensed civil engineer could certify that the levee system provides a minimum 100-year level of flood protection. These improvements would be made as quickly as possible to reduce flood risk and retain the community's FEMA Flood Insurance Rate Map status.

19. What happens if levee improvements are not made and the levees remain uncertified?

A. Under FEMA guidelines several areas in Sacramento (outside Natomas) would ultimately be remapped into a "high-hazard" flood zone. High-rate flood insurance would become mandatory for most property owners and federal building restrictions would be imposed.

20. What other actions are required to certify the levees?

A. In addition to constructing levee improvements, high-hazard encroachments and vegetation must be removed (see discussion below).

21. What qualifies as a high-hazard encroachment or vegetation?

A. High-hazard encroachments are those that could potentially affect levee performance and maintenance. SAFCA's engineering team has identified all of the encroachments that exist on the Lower American and Sacramento Rivers. Those that are determined to be high-hazard require removal or modification prior to levee certification. Typical high-hazard encroachments include man-made structures within the levee prism (e.g. retaining walls) as well as non-native vegetation that may impact the performance or maintenance of the levee.

22. How will I be informed if a levee encroachment I own or maintain is determined to be high-hazard?

A. Once it has been determined that an encroachment must be removed or modified in order to certify the levee, (i.e. that a particular encroachment will *preclude* certification) SAFCA will directly contact whomever it believes owns the property, in conjunction with the local maintaining agency, so the issue can be addressed.

Stay Informed

23: Where can I obtain more information on the risk of flooding in the Sacramento area and the proposed Levee Accreditation Project?

A: You can email Project Manager Pete Ghelfi at PeteGhelfi@saccounty.net or contact project ombudsman Jay Davis at jdavis@gualco.com or call (916) 351-0600. Project information is available on SAFCA's website at www.safca.org.

24: How will I know when this project is approved and will be built?

A: SAFCA offers an email information update program wherein you can sign up to receive email updates. In addition, a project Ombudsman will be assigned to take calls and email inquiries from the area residents.

25. What other efforts are going on to secure higher levels of flood protection for Sacramento?

A: Besides the Levee Accreditation Project, there are several other flood risk reduction efforts underway in Sacramento. These efforts are described below:

Natomas Federal Project

In 2014, Congress authorized the improvements that are needed to complete the project initiated by SAFCA in 2007. The federal phase of the Natomas Project will involve improvements to address under seepage vulnerability affecting more than 20 miles of the perimeter levee system around the Natomas Basin. USACE will complete the adjacent levee construction work begun by SAFCA along the Sacramento River east levee, close gaps in the completed improvements along the Natomas Cross Canal south levee, and extend the project to include under seepage improvements along the American River north levee, the NEMDC west levee and the Pleasant Grove Creek west levee. Design of these improvements has commenced. It is anticipated that USACE construction work will begin in 2016 or 2017.

Folsom Dam Joint Federal Project

The Folsom Dam Joint Federal Project (Folsom Dam JFP), which was approved by

Congress in 2007, will address both flood control and dam safety issues through construction of a new auxiliary spillway and control gates. The new facilities will significantly increase Folsom Dam's low-level outlet capacity, enabling the dam to meet applicable federal dam safety standards and provide higher levels of flood protection in the American River watershed. The Joint Federal Project is currently under construction and expected to be completed in 2017.

Folsom Dam Raise

In 2003, Congress authorized USACE to raise the height of the structures comprising Folsom Dam, including the main dam, wing dams and dikes that contain Folsom Reservoir. The current height of the main dam is 484.0 feet (Mean Sea Level) msl and the height of the wing dams and dikes is 480.5 feet msl. When initially authorized, the height of each of these facilities was to be increased to 487.5 feet. In 2007, as recommended by USACE, Congress reduced the scope of the project and directed that the wing dams and dikes be raised by 3.5 feet to equal the existing height of the main dam. This increased height will allow flood operators to store more flood water behind Folsom Dam when forecasted inflows are decreasing (resulting in no imminent threat to the safety of the dam) and the additional storage is required to maintain releases from the dam at a level that can be safely contained by the downstream levee system.

Folsom Dam Temperature Shutter Improvements

The Folsom Dam Temperature Shutter Improvements project (Shutter Improvements project) is an ecosystem restoration project authorized by Congress in 2003. The project involves reconstructing and automating one or more of the three temperature control structures at Folsom Dam that govern the elevation at which stored water enters the dam's hydropower penstocks. The goal of this operation is to maintain temperatures in the lower American River at a level that is tolerable for the Central Valley Steelhead occupying the American River during the spring and summer, and for the Fall-run Salmon entering the river to spawn in September through November.

Operators will thus be able to better manage the deployment of the cold water stored in the reservoir in order to keep water temperature in the river channel below levels deemed unsuitable for rearing juvenile Steelhead during the summer and for Salmon spawning in the late fall and winter. SAFCA is the non-federal sponsor of the Temperature Shutter improvements. These improvements will be constructed once the Folsom Dam Raise project is substantially complete in 2020 or 2021.

Folsom Dam Water Control Manual Update

In 1999, Congress directed USACE to implement a new water control manual for Folsom Dam once the modifications to the dam's outlet works have been completed. Under this directive, USACE is to perpetuate the variable storage operation initiated by Reclamation with a slightly reduced flood storage envelope (minimum 400,000 acre-feet – maximum 600,000 acre-feet) with the actual storage reservation to be determined not only by the availability of creditable upstream storage space but also by forecasted inflows to Folsom Dam. USACE and Reclamation along with the State and SAFCA are currently developing the new water control manual with the aim of having it ready when

the Folsom Dam JFP project is completed at the end of 2017. A key objective of the new manual is to ensure that Folsom Dam can safely contain a 200-year flood in the American River watershed without releasing in excess of 160,000 cfs into the American River channel.

Glossary of Terms and Agencies

26. Who and what is SAFCA?

A: The Sacramento Area Flood Control Agency (SAFCA) was formed in 1989 to address the Sacramento area's vulnerability to flooding. This vulnerability was exposed during the record flood of 1986 when Folsom Dam exceeded its normal flood control storage capacity and several area levees nearly collapsed under the strain of the storm. In response, the City of Sacramento, the County of Sacramento, the County of Sutter, the American River Flood Control District and Reclamation District No. 1000 created SAFCA through a Joint Exercise of Powers Agreement to provide the Sacramento region with increased flood protection along the American and Sacramento Rivers. SAFCA serves as the local sponsor for State and Federal partnerships in funding and constructing flood control improvement.

27. What is Levee Modernization?

A: In connection with the Levee Accreditation Project and the Common Features GRR, SAFCA has agreed to work with the City and County of Sacramento, American River Flood Control District, and State Maintenance Area 9 to bring the levees in the American River and Sacramento River areas into compliance with State urban levee design standards for landside levee access/visibility and long-term management of low risk encroachments and vegetation. Under these standards, the City and County have until July 2016 to adopt a plan for achieving the required conditions. The plan, which must be implemented over the ensuing 30-40-year period, may also serve as a System Wide Improvement Framework for meeting federal operation and maintenance requirements under PL 84-99.

28: What does "100-year" and "200-year" flood protection mean?

A. The term "100-year protection" means protection against a flood that has a one-in-one-hundred (1 percent) chance of occurring in any given calendar year; "200-year protection" means protecting against a flood that has a one-in-two-hundred (1/2

percent) chance of occurring in any given year. Higher protection levels equate to lessening of risk associated with a large flood event.

29: What is SB 5 and why is it relevant?

A: The California Legislature passed Senate Bill 5 in 2007 and later amended it in 2012 by SB 1278. SB 5 states that local government may not approve new development in areas that do not have a State defined 200-year flood protection unless adequate progress is being made to achieve that level of protection. A plan to achieve a State defined 200-year flood protection must be submitted by July 2016. SAFCA is drafting this plan for the floodplain managers, the City and County of Sacramento, for adoption. Any area of new development must have a State defined 200-year protection by 2025. SB 5 also directed the State to develop engineering standards for urban levels of flood protection (Urban Levee Design Criteria).

30: What are the State's Urban Levee Design Criteria (ULDC)

A: The State's ULDC were developed to provide criteria and guidance for design, evaluation, and operation and maintenance (O&M) of levees and floodwalls that provide an urban level of flood protection in California. Urban level of flood protection means the level of protection that is necessary to withstand flooding that has a 1-in-200 chance of occurring in any given year using criteria consistent with, or developed by, the Department of Water Resources. The ULDC establishes criteria for levee resilience by requiring factors of safety for slope stability and under seepage for a water surface elevation that is higher than the 200-year design water surface elevation. The purpose of this requirement is to increase the likelihood that the levee would hold water until it overtops but not breach suddenly, providing additional levee reliability and time for evacuation.

31: What is the General Re-Evaluation Report (GRR)?

A: The State and SAFCA are presently working with the U.S. Army Corps of Engineers (USACE) to prepare for the public release of the American River Watershed Common Features Project, Draft General Reevaluation Report/Draft Environmental Impact Statement/Draft Environmental Impact Report (GRR). The purpose of the GRR is to look at what else needs to be done to the system, in addition to the projects already authorized, to bring it up to the current Federal and State standards and to improve the performance of the flood risk reduction system protecting Sacramento.

The basic components of the Tentatively Selected Plan (TSP) in the GRR are:

1. American River: Construction of rock bank protection and launch able rock trenches to address erosion problems along 4 miles of the north bank and 7 miles of the south bank of the American River.
2. Sacramento River: Construction of about 9 miles of slurry cutoff walls to address levee seepage and stability problems and about 10 miles of rock bank protection to address erosion problems along the Sacramento River east levee, as well as about 2.5 miles of geotextile stabilized slope and 2 miles of slope flattening to address levee stability and less than 1 mile of levee raise.
3. Eastside Tributaries: Construction of about 4 miles of slurry cutoff walls to address levee seepage and stability problems and 7.5 miles of levee raises to address potential overtopping of floodwaters along the Natomas East Main Drain Canal, Arcade Creek, and Dry Creek levees.
4. Sacramento Bypass: Widen the Sacramento Weir and Bypass by 1,500 feet to reduce the water surface elevation in the Sacramento River and allow more water to flow into the Bypass system.

32: How does the GRR Project relate to the Levee Accreditation Project?

A: SAFCA's Levee Accreditation Project is a subset of the federal GRR Project. SAFCA is implementing key elements of the GRR Project ahead of USACE. SAFCA's project will address the highest risks to the community as quickly as possible including all seepage remediation work that is necessary to meet minimum federal and state standards for levee stability. Note this work will still leave the community vulnerable to certain risks such as erosion and levee overtopping in very extreme flood events. Accordingly, SAFCA supports the additional features of the GRR Project along with the completion of ongoing improvements at Folsom Dam (Dam Raise, updated Water Control Manual) that will provide the community with a more robust and resilient flood protection system.

The table below shows a comparison of how the SAFCA program fits within the GRR.

	USACE GRR	**SAFCA LAP**
North Area Streams		
-Seepage remediation	Up to 4 miles	Up to 4 miles
-Levee Raise	Up to 7.5 miles	No levee raises
American River		
-Erosion Protection	Up to 11 miles	Not part of LAP
Sacramento River		
-Seepage remediation	Up to 9 miles	Up to 6 miles
-Levee Raise	Up to 1 mile	No levee raises
-Embankment Stabilization	Up to 4.5 miles	Not part of LAP
-Erosion Protection	Up to 10 miles	Up to 3,000 feet
Sacramento Bypass	Widen Weir and Bypass	Not part of LAP
Magpie Creek	Various features	Not part of LAP
NEMDC/Steelhead Creek	Not part of GRR	Corridor Management Plan
Encroachments/ Vegetation	System Wide Improvement Framework	Levee Modernization Program

Acronyms

CFS- Cubic Feet per Second
CMP- Corridor Management Plan
CVFPB- Central Valley Flood Protection Board
LAP- Levee Accreditation Program
NEMDC- Natomas East Main Drainage Canal
NFIP- National Flood Insurance Program
PACR- Post Authorization Change Report
SAFCA- Sacramento Area Flood Control Agency
SWIF- System Wide Improvement Framework
TSP- Tentatively Selected Plan
UFRR- Urban Flood Risk Reduction
ULDC- Urban Levee Design Criteria
USACE- United States Army Corps of Engineers