SACRAMENTO DISTRICT AMERICAN RIVER COMMON FEATURES 2016 SACRAMENTO RIVER EAST LEVEE (SREL), CONTRACT 2 PROJECT OVERVIEW 2020 CONTRACT 1 SB CUTOFF WALL

12 March 2021

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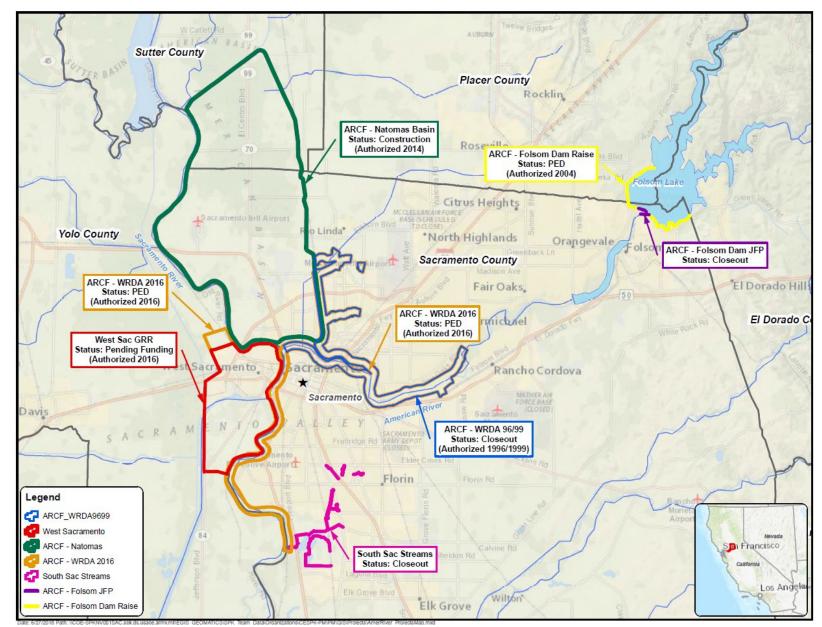


- System Overview
- ARCF 2016 Overview
 - Project Partners
 - Project Progress
- SREL C2 Contract Overview
 - Technical Overview
 - Haul Routes/Access Points
 - Alternative Bike Routes
 - Impacts
 - Schedule
- Contact Information



SYSTEM OVERVIEW



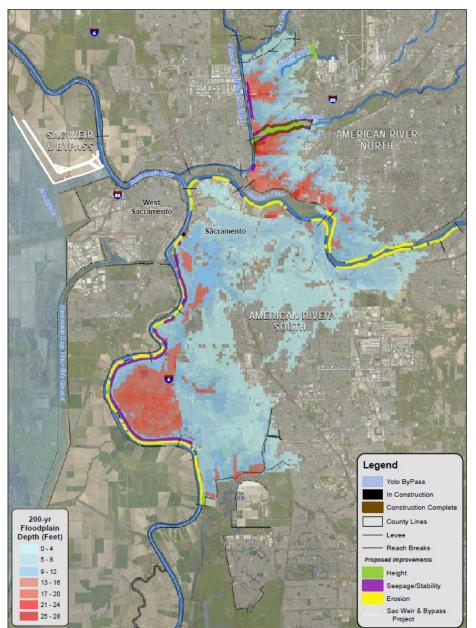


9/24/19 CLS



AMERICAN RIVER COMMON FEATURES (ARCF) 2016





SUPPLEMENTAL TARGET JAN 2024

Authorized Plan

Features	
North Area Streams Seepage	4 miles
Sacramento River Seepage	9 miles
American River Erosion	11 miles
Sacramento River Erosion	10 miles
Levee Stabilization	5 miles
Levee raises	5 miles
Widen Sacramento Weir and Bypass	1500 feet
Reduces Risk	500,000 people
	125,000 structures
	\$62 billion



PROJECT PARTNERS



Federal Government State Government US Army Corps of Engineers® **Central Valley** Local Government Flood Protection Board Sacramento Area Flood Control Agency



EOFCALIF

ey Department of ion Water Resources

9/24/19 CLS



SACRAMENTO RIVER EAST LEVEE C2 SCHEDULE

2021

8

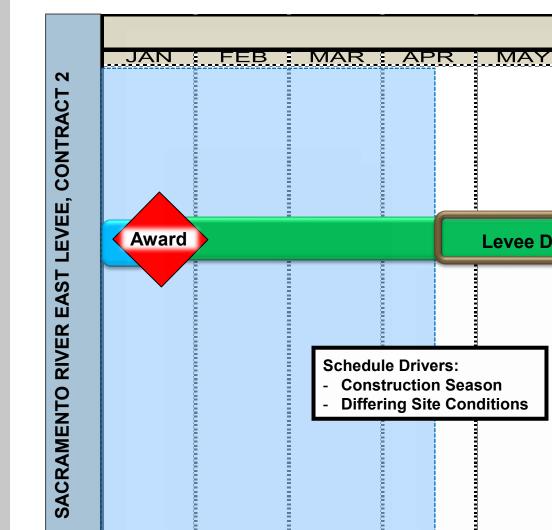
JUL

JUN

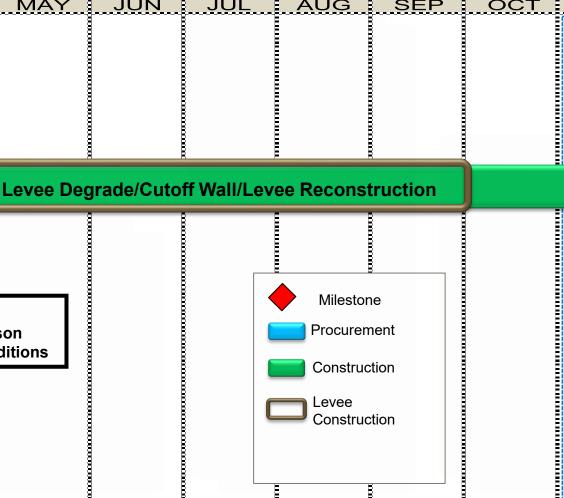


NOV : DEC

Flood Season Window



Flood Season Window



AUG

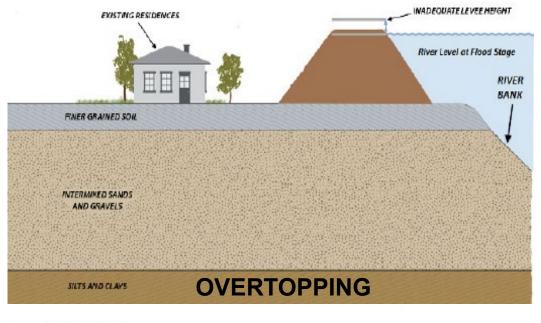
SEP

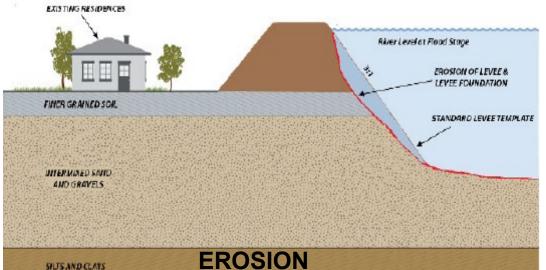
Completed

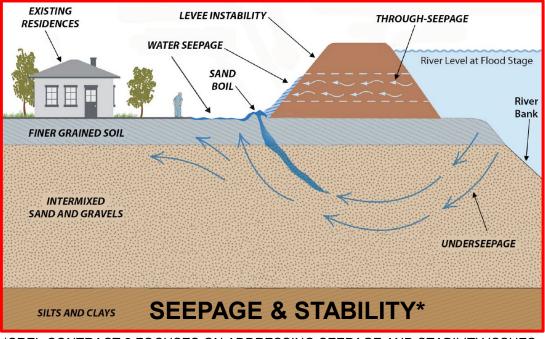
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CAUSES OF LEVEE FAILURE









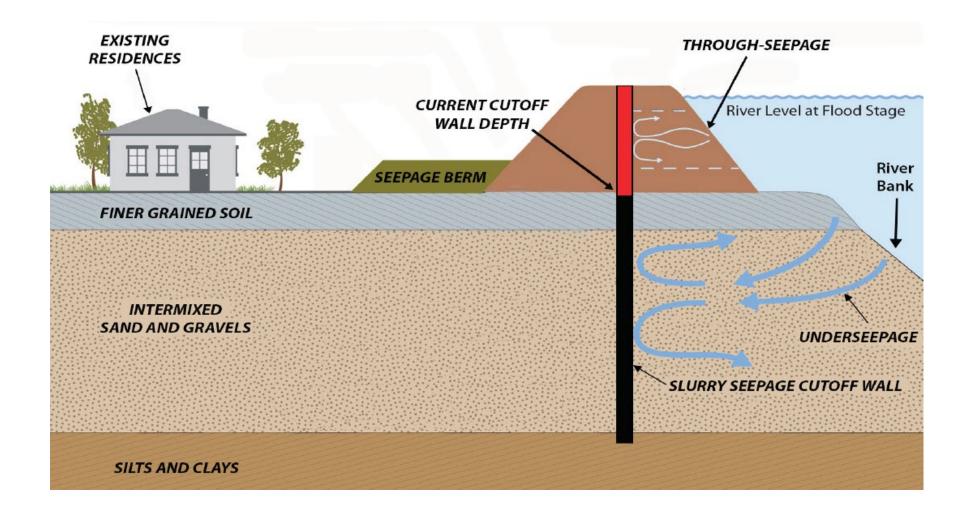
*SREL CONTRACT 2 FOCUSES ON ADDRESSING SEEPAGE AND STABILITY ISSUES



SEEPAGE & STABILITY ISSUES ADDRESSED



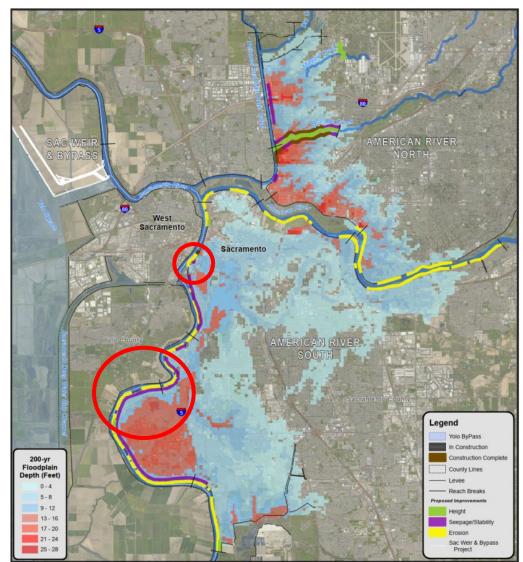
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SACRAMENTO RIVER EAST LEVEE (SREL) CONTRACT 2



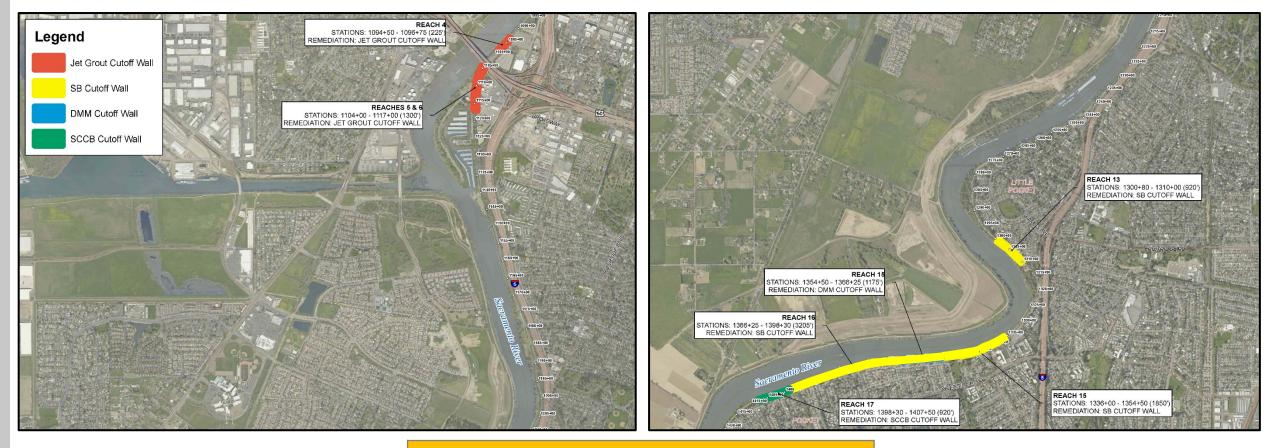


3/11/2021 HPC



SREL CONTRACT 2 OVERVIEW





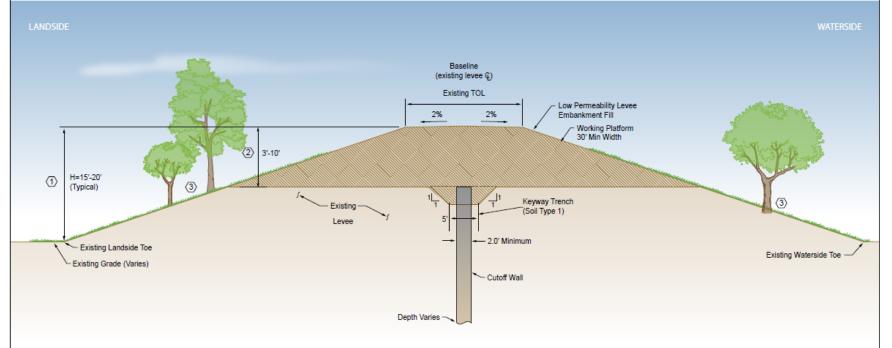
MARCH – DECEMBER 2021

Total Cutoff Wall	Approximately 9,920 feet (1.9 miles)
Conventional Cutoff Wall	Approximately 8,320 feet (1.6 miles)
Jet Grout Cutoff Wall	Approximately 1,600 feet (0.3 miles)

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TYPICAL CUTOFF WALL CROSS SECTION

POCKET WORK AREAS – CONVENTIONAL (OPEN TRENCH) CUTOFF WALLS



Notes:

- (1) Levee height shown at 20 feet. Dimensions will vary based on actual levee height.
- 2 Levee to be degraded by a minimum of 3 feet, up to 1/2 levee height, for cutoff wall construction and then rebuilt with low permeability levee embankment fill (Type 1).
- 3 Existing vegetation on the waterside and landside would not be disturbed unless designated to be removed.
- Crown resurfacing not shown.

Source: GEI & HDR 2014, adapted by GEI 2019



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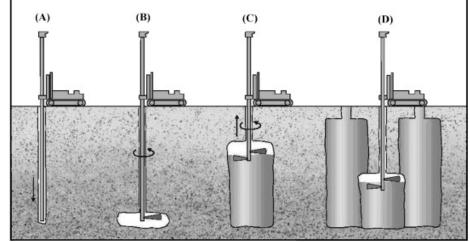


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WORK AREAS NORTH OF MILLER PARK – JET GROUT CUTOFF WALLS LANDSIDE EXISTING LEVEE CL RR TRACKS RR BALLAST EXISTING LEVEE CUTOFF WALL CL FR BALLAST EXISTING LEVEE (A)





Source: Science Direct https://doi.org/10.1016/j.ijrmms.2008.10.005

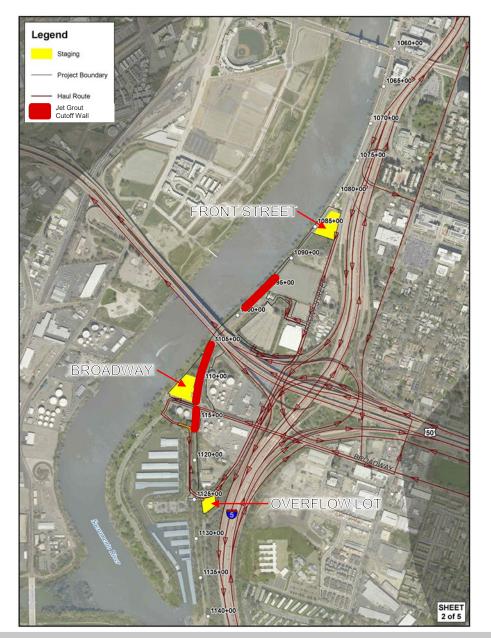
3/11/2021 HPC



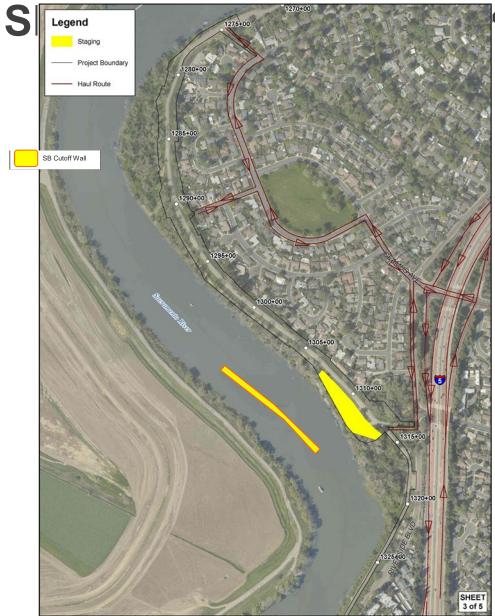
SREL C2 - MILLER PARK WORK AREAS



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Jet Grout Cutoff Wall	1,600 feet (0.3 Miles)
Hours of Operation	24 Hours / Day 5 Days / Week
Staging Area	Front Street; Broadway; Miller Park Overflow Parking Lot;
Access Points	Front Street; Broadway;



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KET WORK AREA



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MARCH – OCTOBER 2021

Conventional Cutoff Wall	920 feet (0.2 Miles)
Hours of Operation	12 Hours / Day 6 Days / Week
Staging Area	Waterside of Levee;
Access Points	Piedmont Drive; Seamas Ave; Riverside Blvd



SREL C2 – BIG POCKET WORK AREA





MARCH – OCTOBER 2021

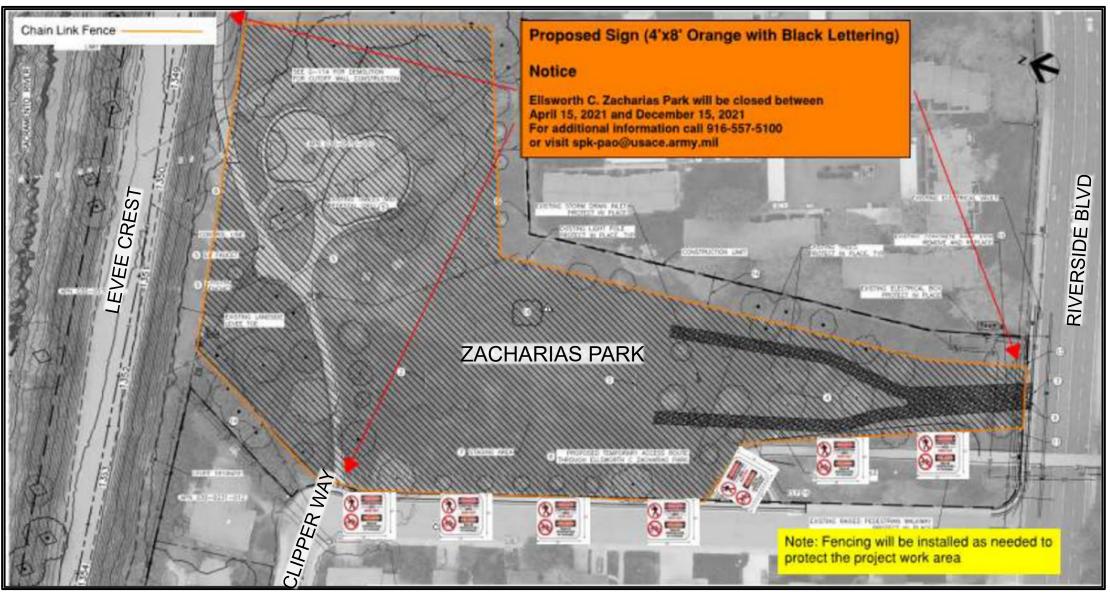
Conventional Cutoff Wall	7,400 feet (1.4 Miles)
Hours of Operation	12 Hours / Day 6 Days / Week
Staging Area	Zacharias Park; North Point Way Green Space;
Access Points	Riverside Blvd; Zacharias Park; Grangers Dairy Road; North Point Way

3/11/2021 HPC



ZACHARIAS PARK STAGING AREA



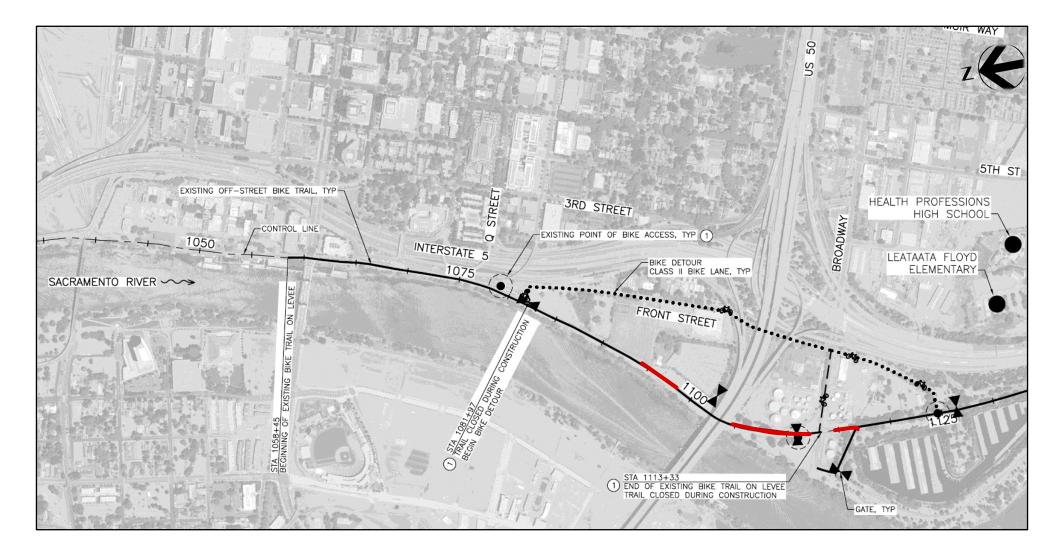


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ALTERNATE BIKE ROUTE

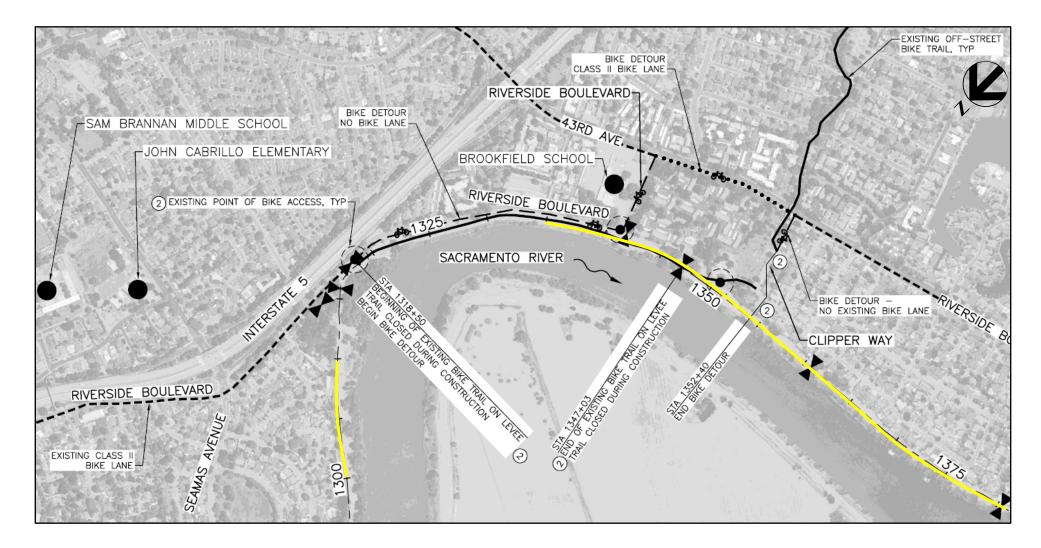


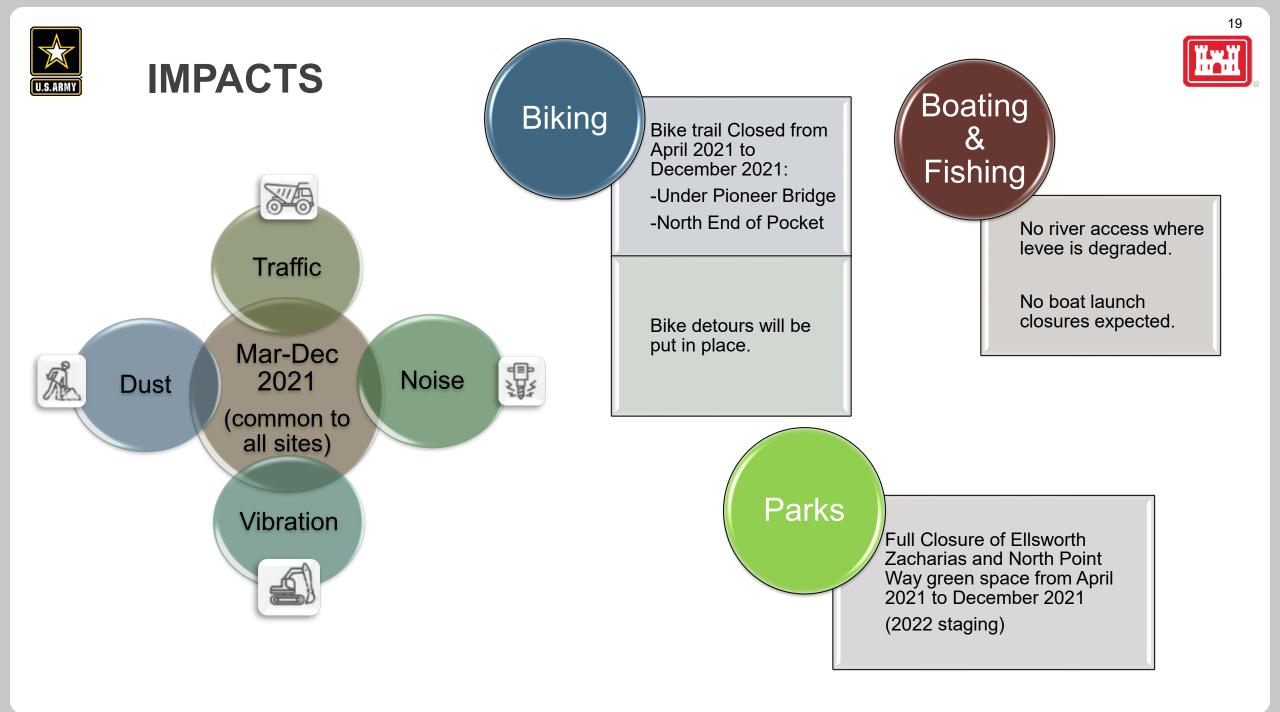




ALTERNATE BIKE ROUTE









MITIGATION MEASURES





Detour Routes



Dust Control



Vibration Monitoring



Water & Air Quality Monitoring



VEGETATION & WILDLIFE



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Trimming and Removing Trees Outside of Bird Nesting Season and to Protect Bats



No impact to fisheries



Comprehensive Monitoring by Qualified Biologists



Night Lighting that Reduces Impacts on Nocturnal Wildlife



HABITAT MITIGATION SITE COMPLETE





Beach Stone Lakes Mitigation Site (24.2 acres)

- Northern Woodland 18.5 acres (YBCU)
- Southern Woodland 5.7 acres (VELB and YBCU)
- Establishment Maintenance to the end of 2024





A male valley elderberry longhorned beetle on elderberry. Photo courtesy of Jon Katz and Joe Silveira, USFWS

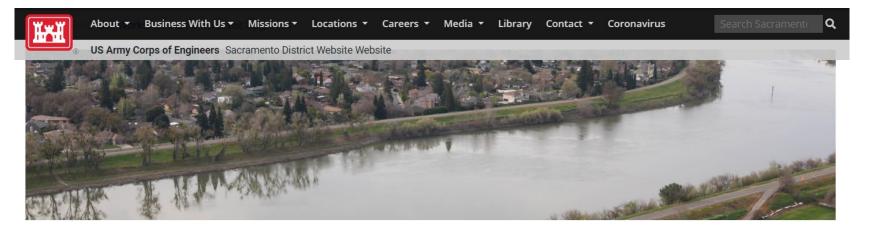


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Project Overview

American River Levees

Sacramento River Levees

Sacramento Weir

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Project Information Tri-fold

Reducing flood risk in Sacramento

Greater Sacramento, California, is often considered to be the most at-risk region in America for catastrophic flooding, relying on an aging system of levees, weirs and bypasses and Folsom Dam to reduce its flood risk. But that system, just like a chain, is only as strong as its weakest link. Together, the U.S. Army Corps of Engineers, California's Central Valley Flood Protection Board, California Department of Water Resources, and the Sacramento Area Flood Control Agency have made tremendous progress in reducing the flood risk, but more work remains. Through the Bipartisan Budget Act, the Corps has received full upfront funding to modernize Sacramento's aging flood infrastructure. This allows us to more efficiently implement nearly \$1.8 billion in upgrades to Sacramento's flood risk management system. The authorized work includes up to: 13 miles of seepage cutoff walls, 21 miles of bank protection, 5 miles of levee stabilization, 5 miles of levee raises and widening the Sacramento Weir and bypass.

Current Project Activities

Sacramento River East Levee Contract 1 Construction



Submit Questions to spk-pao@usace.army.mil





www.sacleveeupgrades.com

U.S. Army Corps of Engineers Sacramento District (916) 557-5100 <u>spk-pao@usace.army.mil</u>

- This is an **exciting opportunity**
- You are a part of it
- There will be **temporary inconvenience**
- We will mitigate and try to minimize
- We will be transparent
- We will be honest
- We will keep **communication** lines open

