

SACRAMENTO DISTRICT AMERICAN RIVER COMMON FEATURES 2016 SACRAMENTO RIVER EAST LEVEE (SREL), CONTRACT 3 PROJECT OVERVIEW

March 29, 2022

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Technical Lead



2021 CONTRACT 2 SB CUTOFF WALL



2020 CONTRACT 1 SCCB CUTOFF WALL



2020 CONTRACT 1 DMM CUTOFF WALL



US Army Corps
of Engineers®





AGENDA



- System Overview
- ARCF 2016 Overview
 - Project Partners
 - Project Progress
- SREL C3 Contract Overview
 - Technical Overview
 - Haul Routes/Access Points
 - Alternative Bike Routes
 - Impacts
 - Schedule
- Contact Information



PROJECT PARTNERS

Federal Government



**US Army Corps
of Engineers®**

State Government



Central Valley
Flood Protection
Board



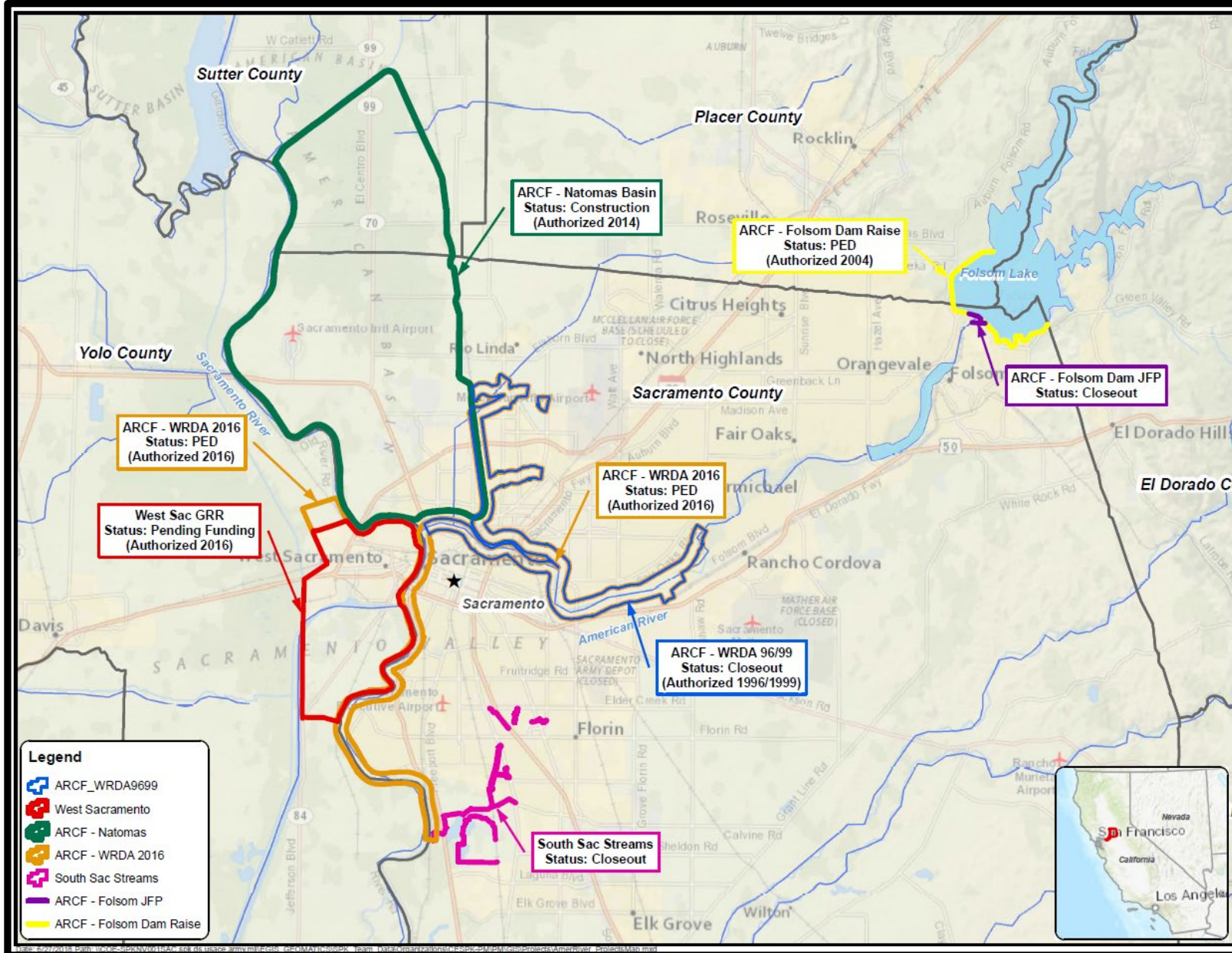
Department of
Water
Resources

Local Government



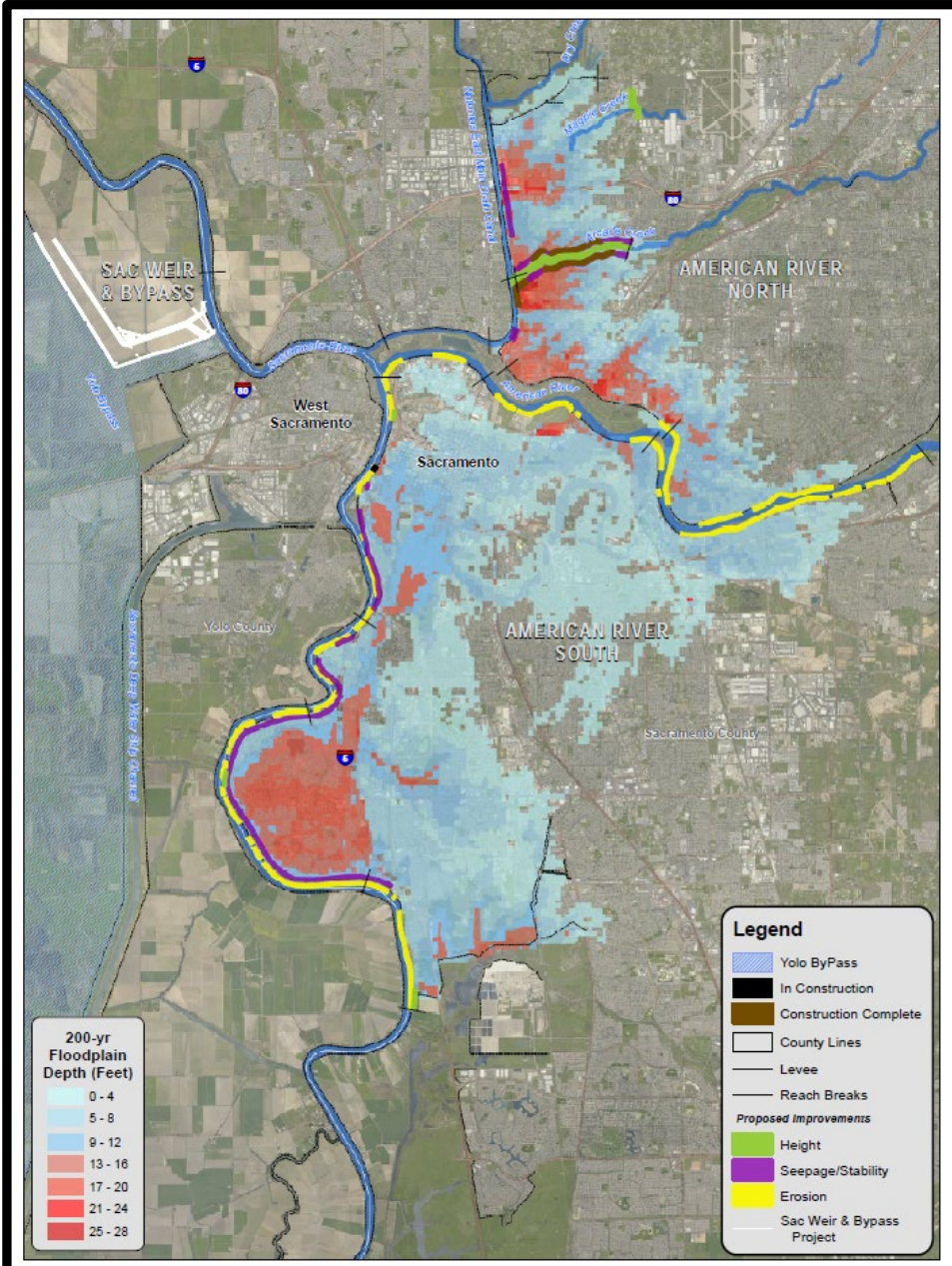


SYSTEM OVERVIEW





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 protection



CAUSES OF LEVEE FAILURE

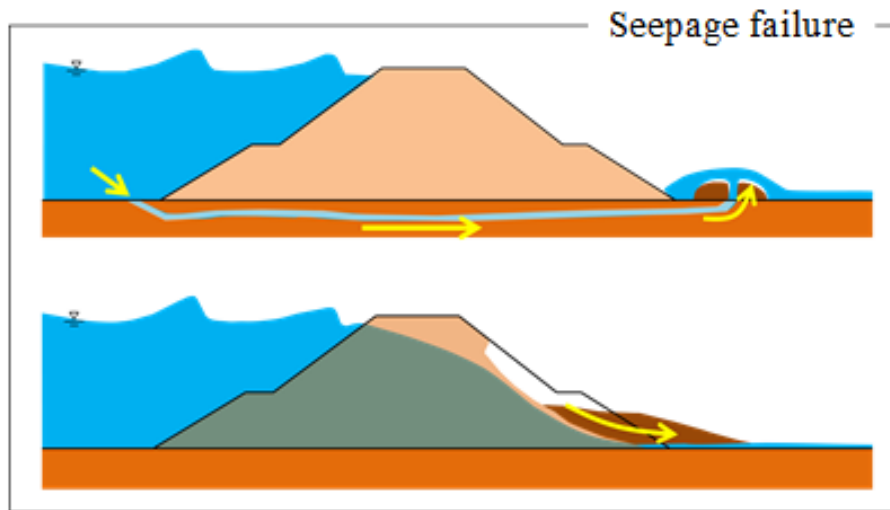
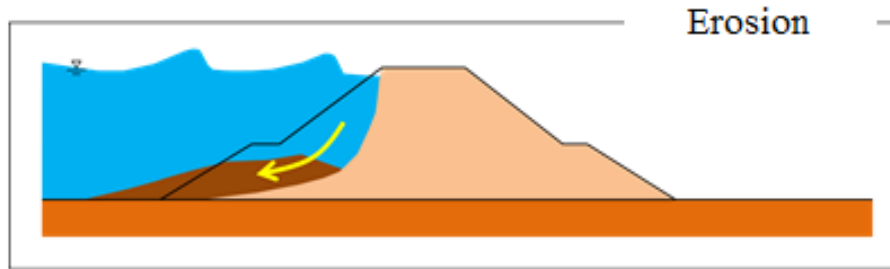
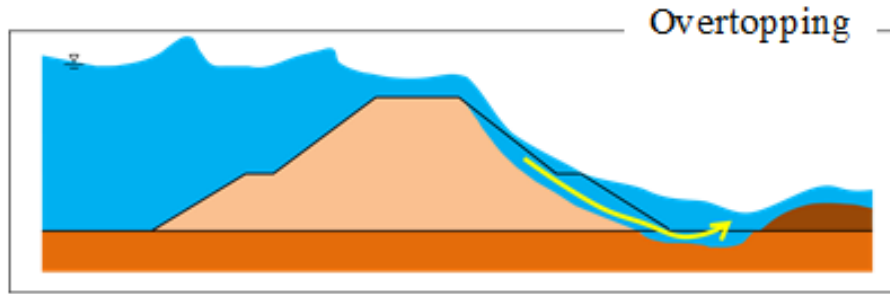


Image courtesy of PWRI Web Magazine



CAUSES OF LEVEE FAILURE

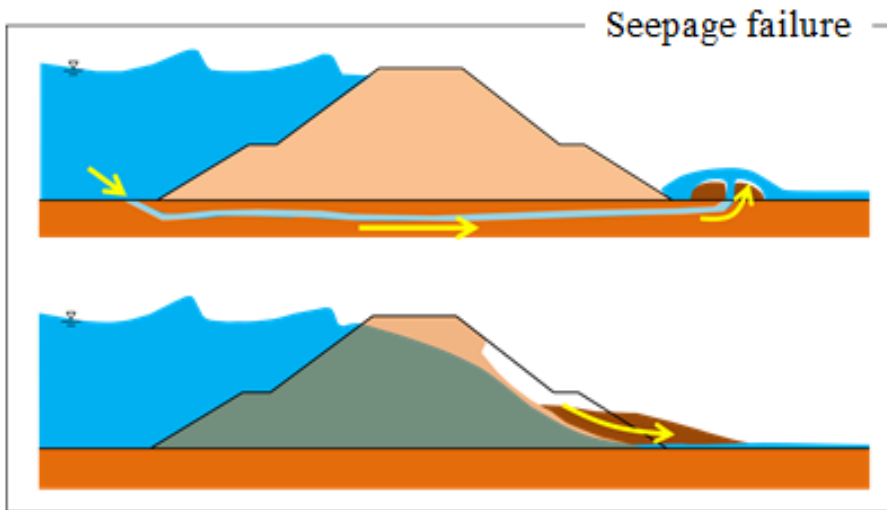
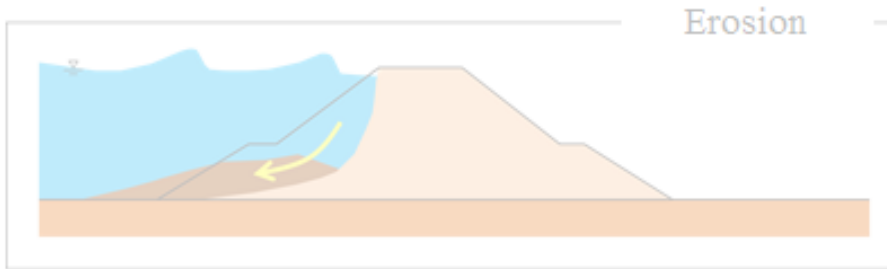
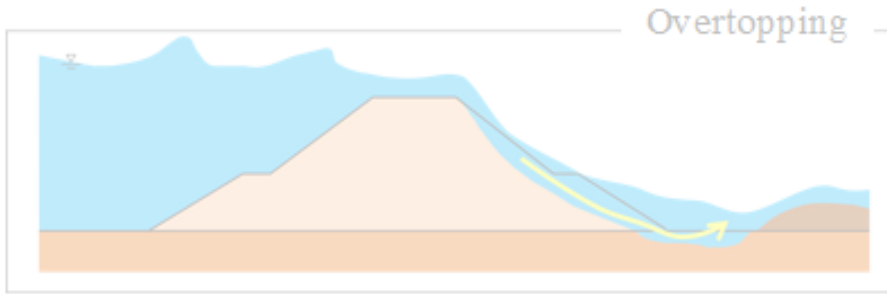


Image courtesy of PWRI Web Magazine



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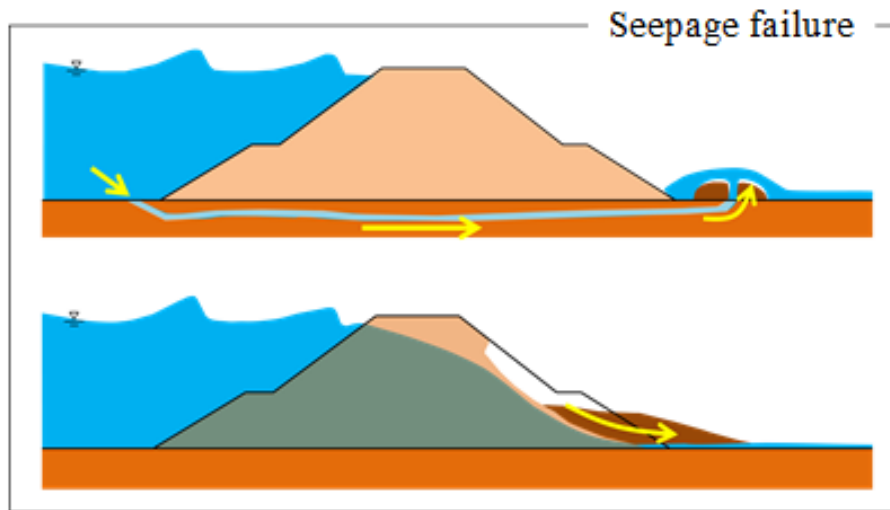
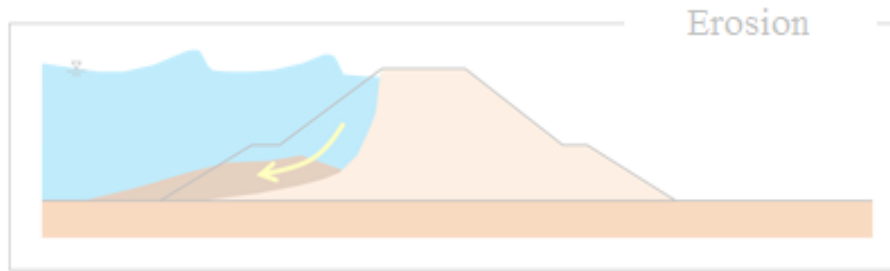
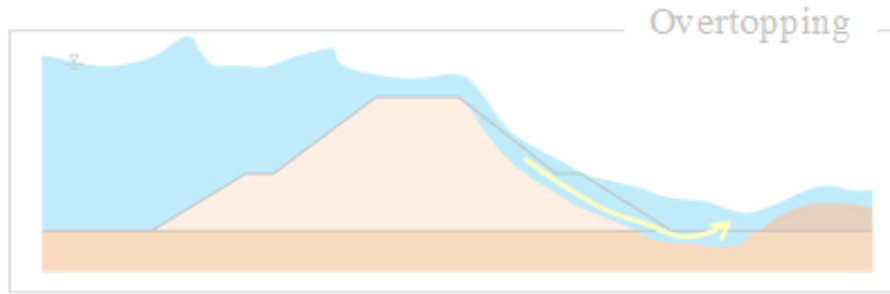


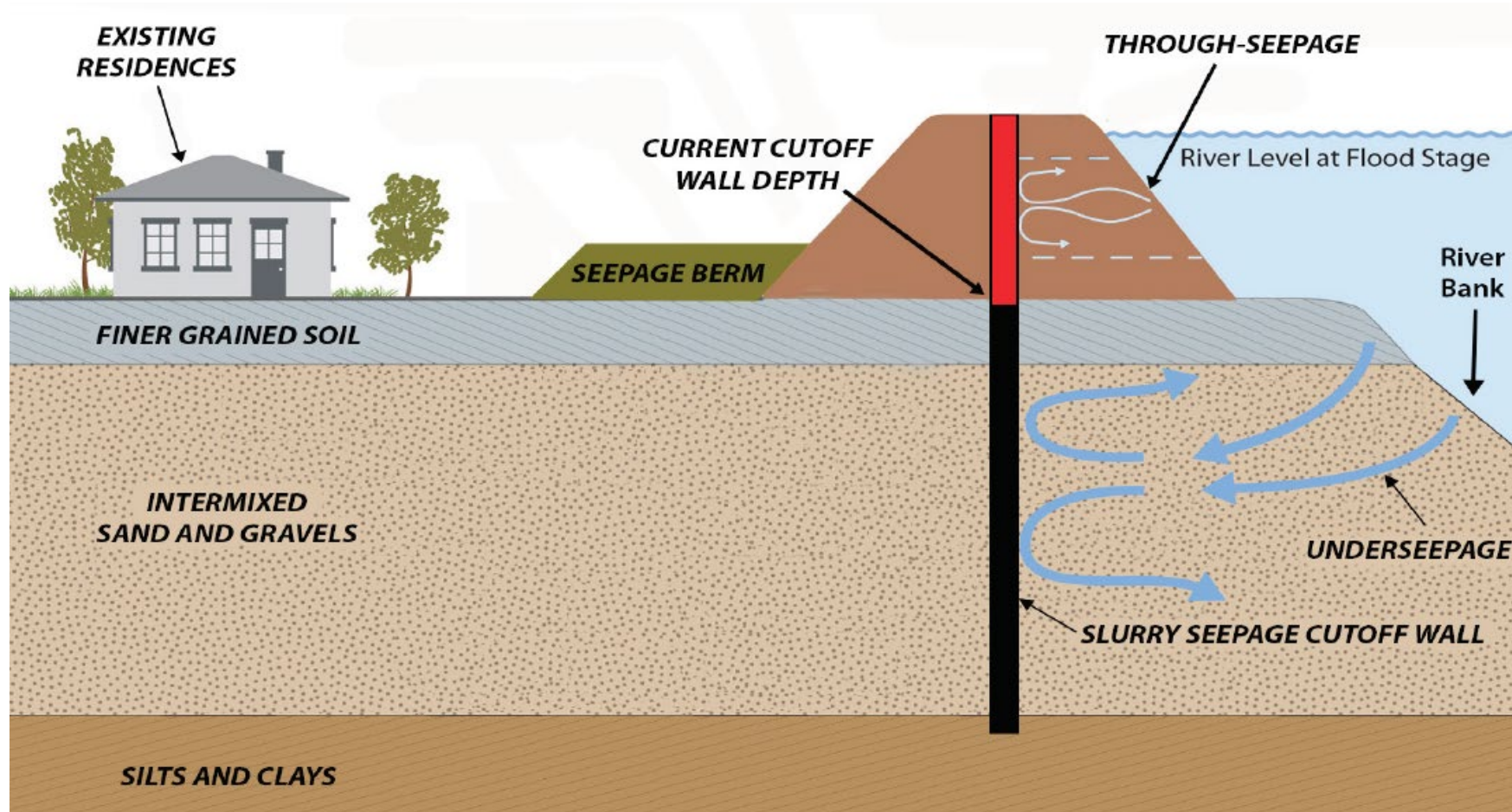
Image courtesy of PWRI Web Magazine



2017 Flood - Riverview Court, Little Pocket.

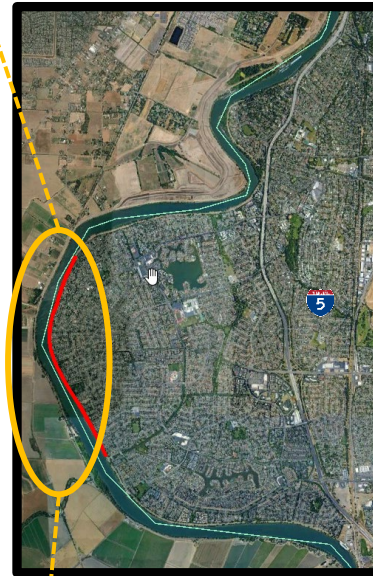
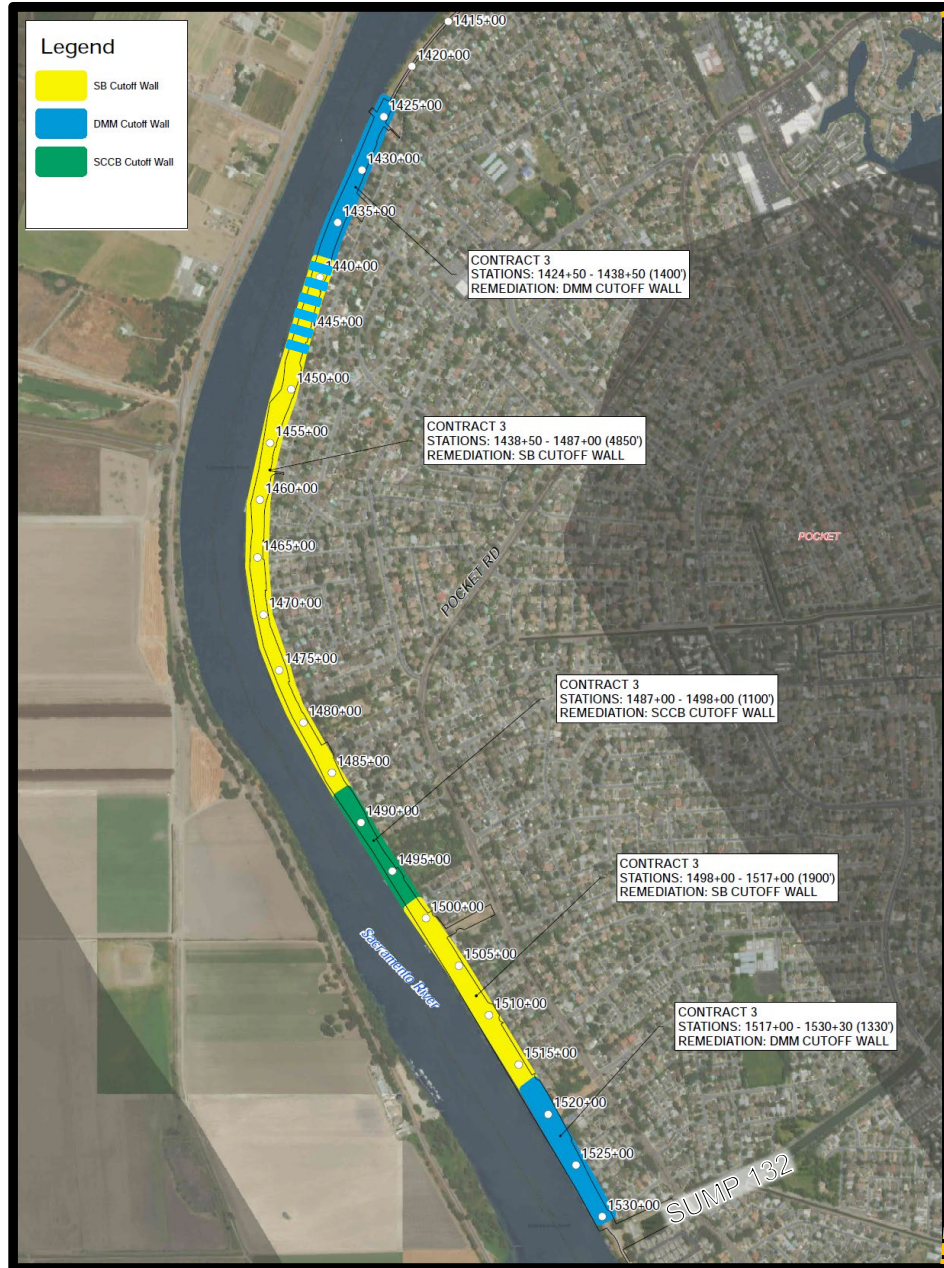


SEEPAGE & STABILITY ISSUES ADDRESSED





SREL CONTRACT 3 OVERVIEW



- 2.0 Miles of Seepage Cutoff Wall

2,730 LF DMM Wall

5,900 LF SB Wall

1,100 LF SCCB Wall

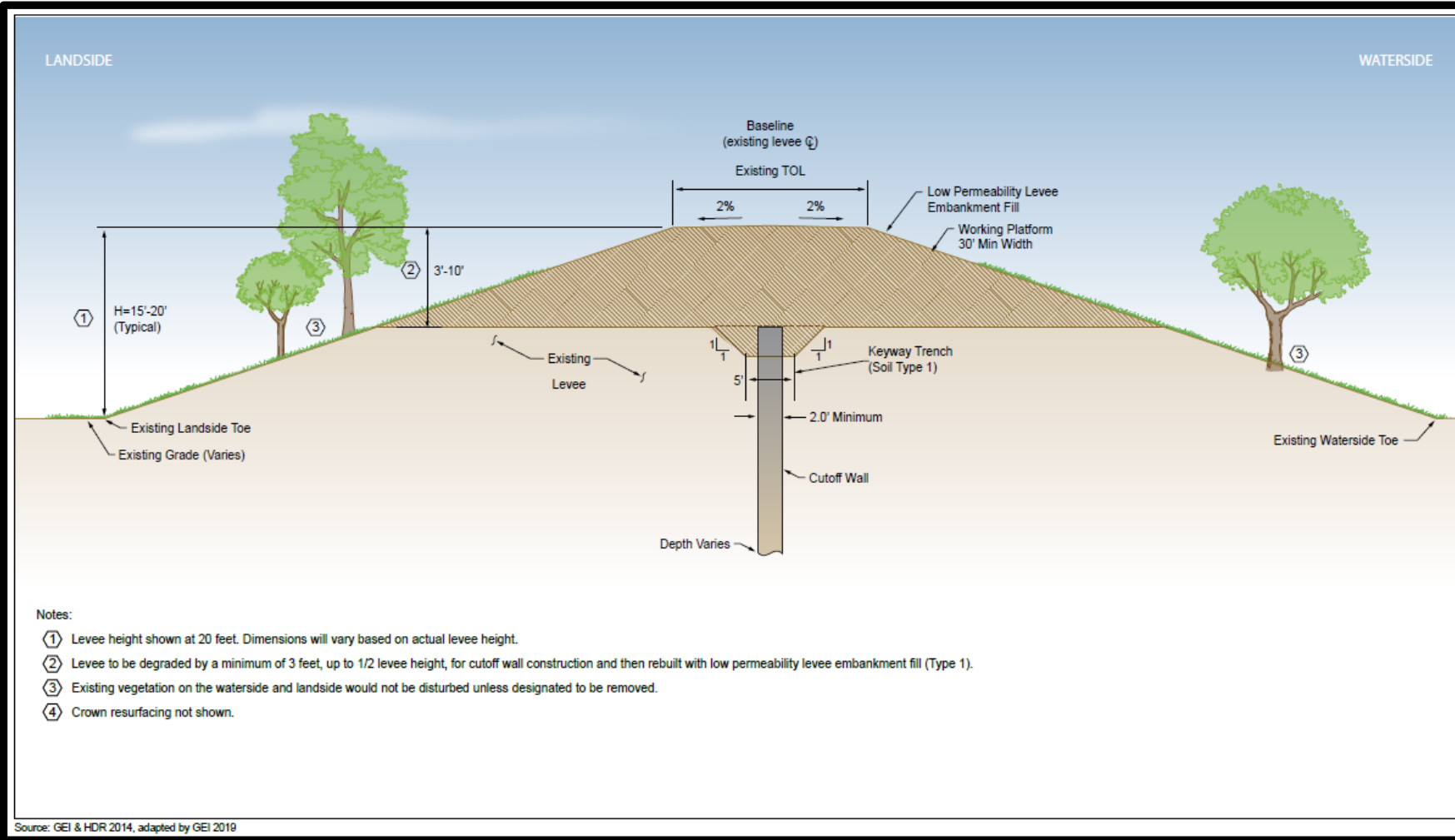
850 LF DMM or SB Wall



TYPICAL CUTOFF WALL CROSS SECTION



CONTRACT 3 CONVENTIONAL (OPEN TRENCH) AND DMM CUTOFF WALLS



2020 Contract 1 SB Cutoff Wall Excavation

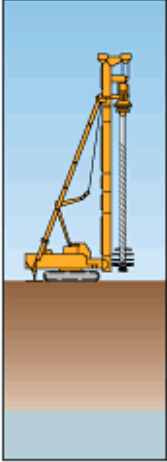
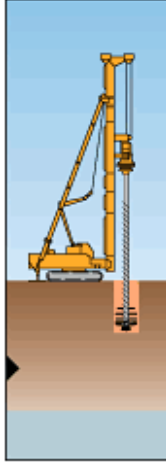
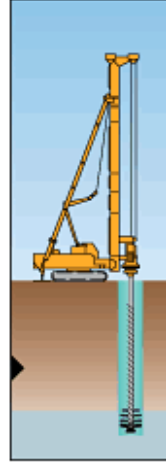
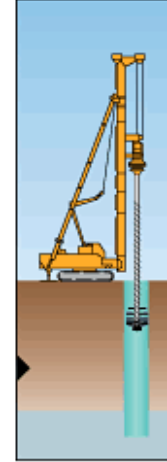


2020 Contract 1 SB Wall Material Mixing



TYPICAL DMM WALL CONSTRUCTION



Setup	Penetration	Churning	Completion
Position the rig at a pile position	After passing dry excavation zone, start injecting slurry. Drill down and mix with in-situ soil to a specified depth.	Move the head up and down to mix thoroughly so that each part of the soil receives the pre-defined number of cuts by mixing blades.	Withdraw and complete a soil cement column.
			



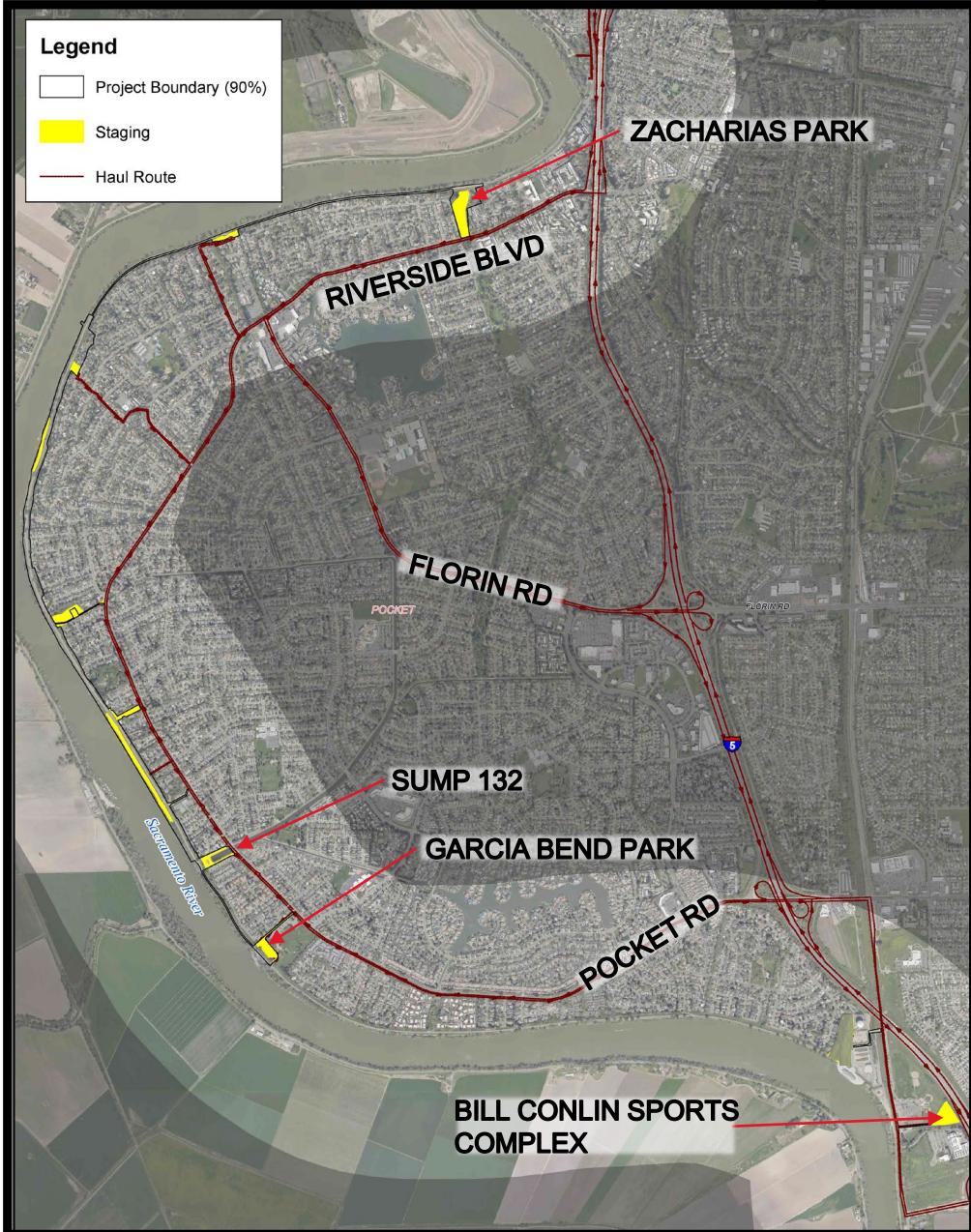
2020 Contract 1 DMM Wall Construction



2020 Contract 1 DMM Rig Augers



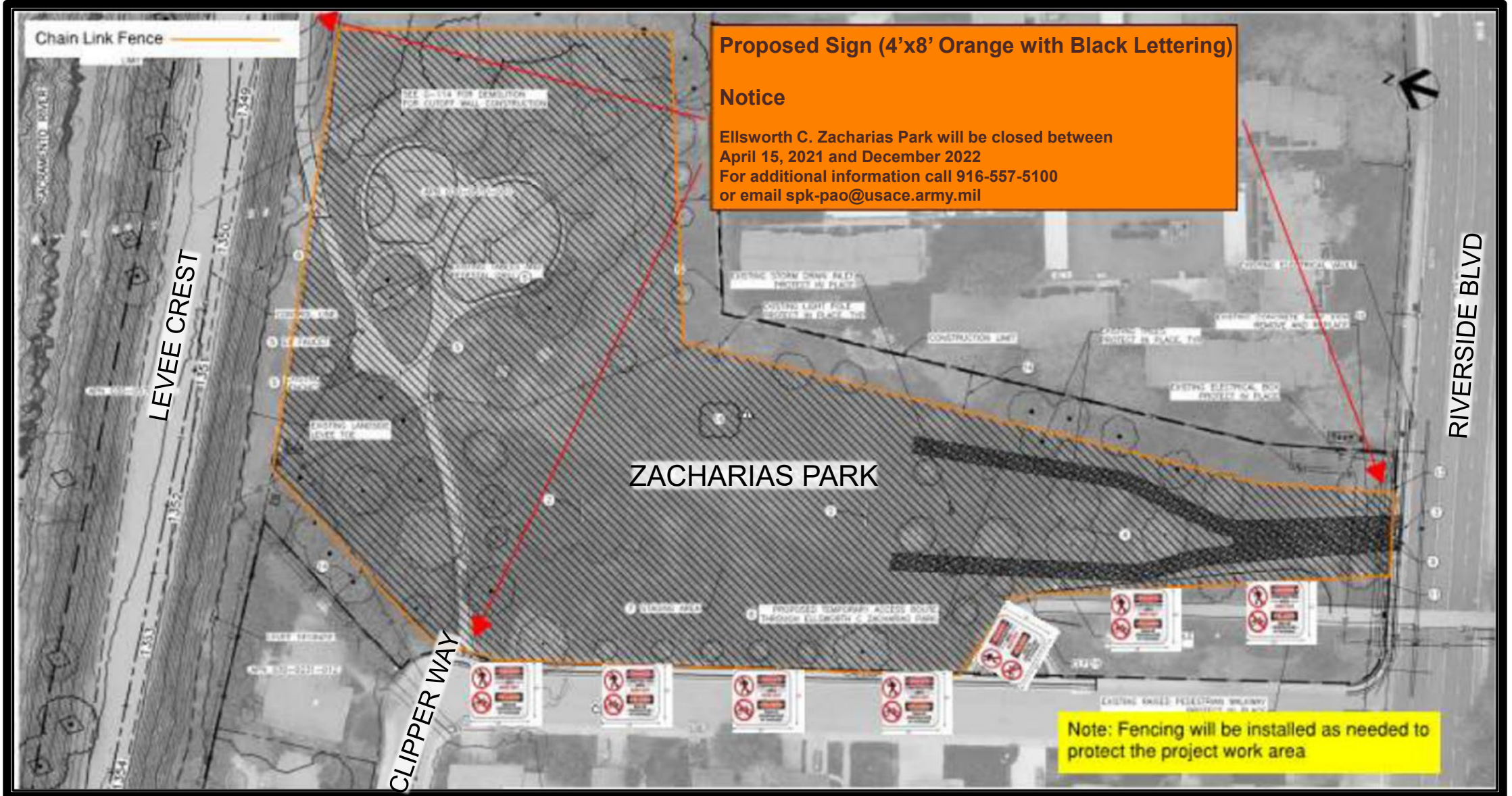
SREL C3 – ACCESS, STAGING, AND HAUL ROUTES



MARCH – DECEMBER 2022	
Cutoff Wall	10,580 feet
Staging Areas	<ul style="list-style-type: none"> • Ellsworth Zacharias Park • North Point Way Greenspace • 6534 Benham Way • 7150 Pocket Rd • 290 River Isle Way • Interior Drainage Sump 132 • Garcia Bend Park • Bill Conlin Sports Complex (Empty field) Not planned to be used • 2 Waterside Staging Areas
Access Points	<ul style="list-style-type: none"> • Ellsworth Zacharias Park • North Point Way via Grangers Dairy Road • Benham Way via Park Riviera Wy/Pocket Rd/Riverbrook Wy • Pocket Rd • Axios River Ct • Interior Drainage Sump 132 • Garcia-Bend Park • Freeport Blvd

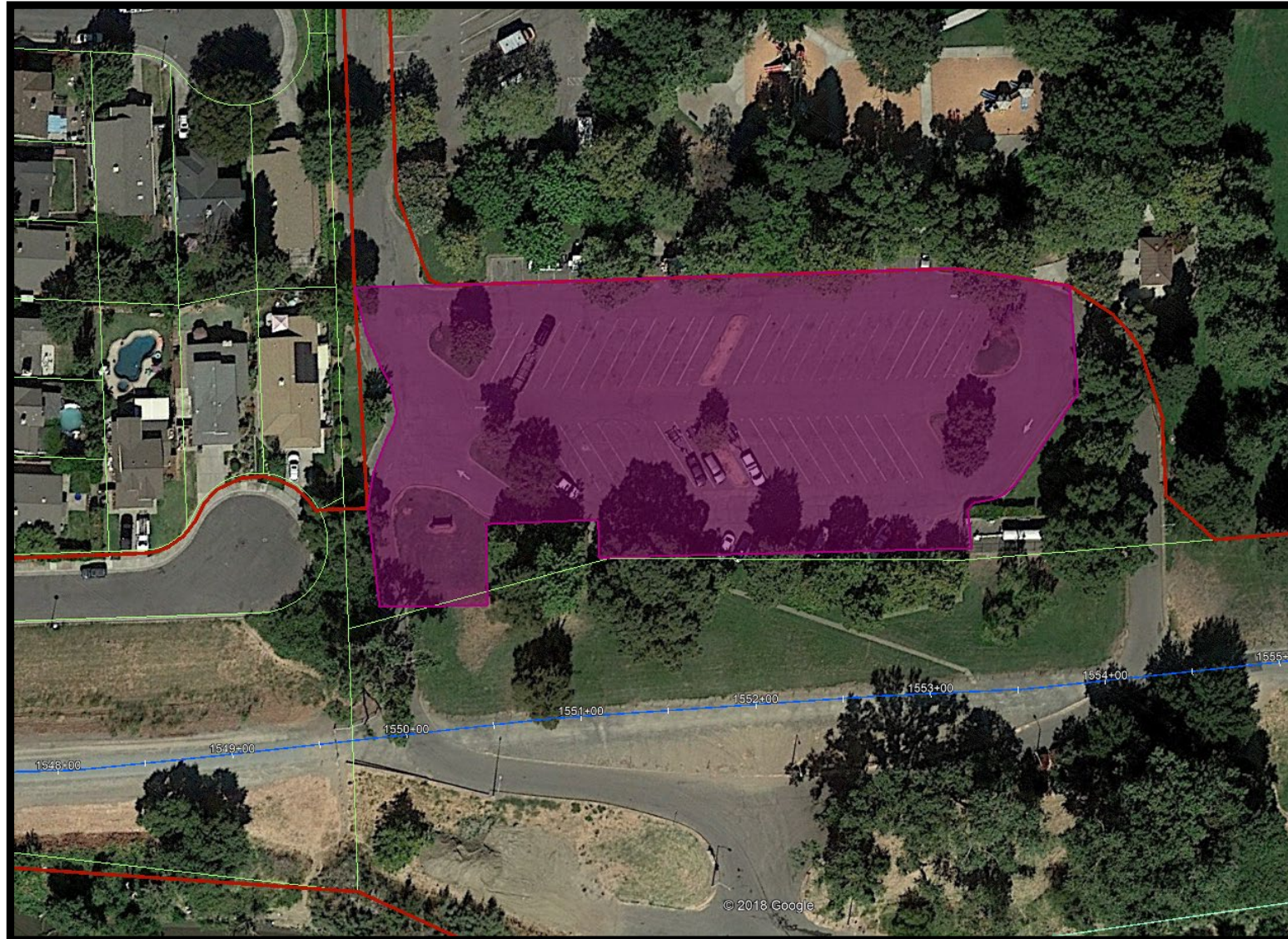


ZACHARIAS PARK STAGING AREA





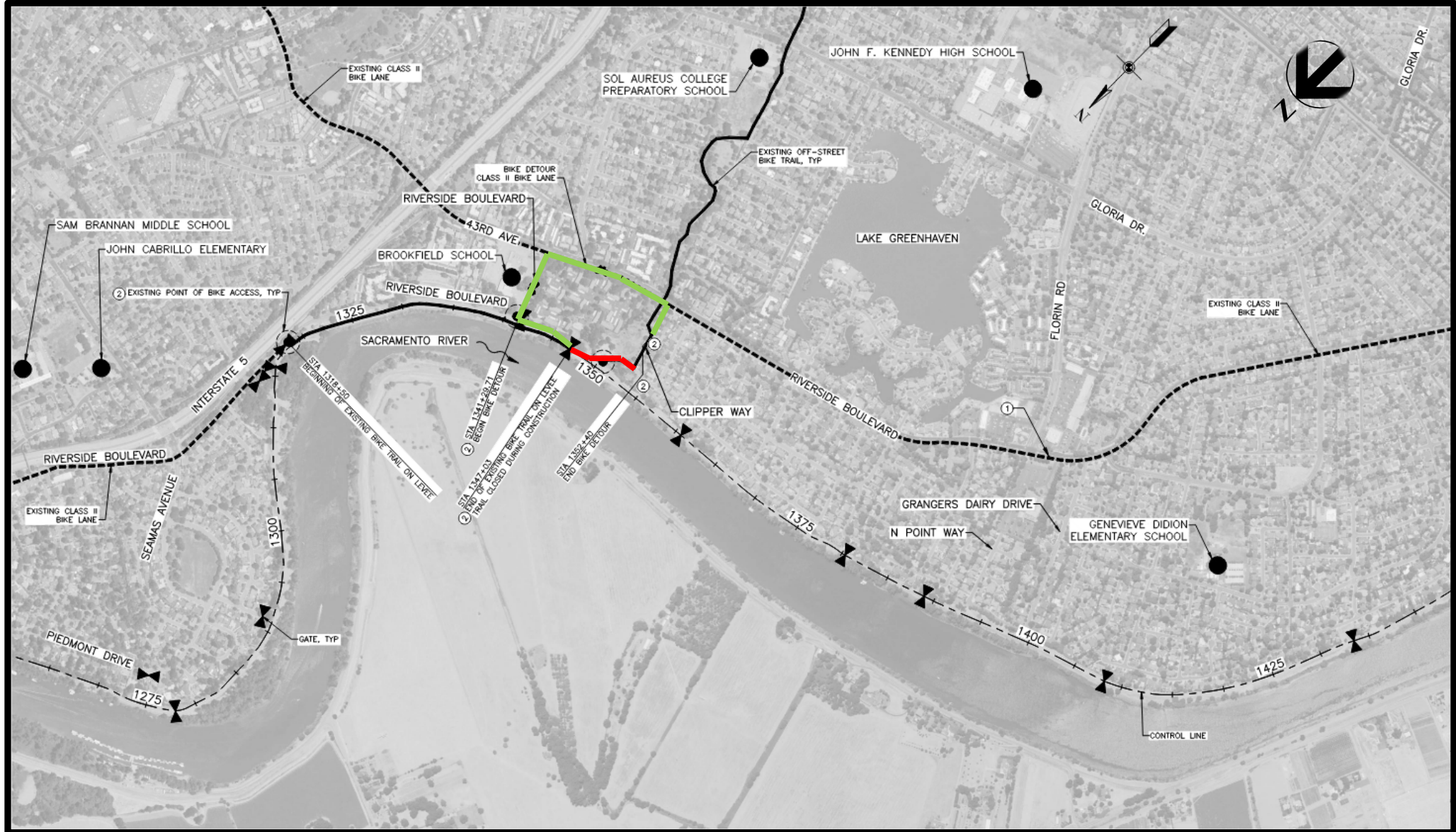
GARCIA BEND PARK STAGING AREA



- Boat launch parking lot partially closed to the public
- Boat launch will remain open for the public's use
- Intermittent boat launch and levee crest bike trail closures during peak hauling periods



ALTERNATE BIKE ROUTE





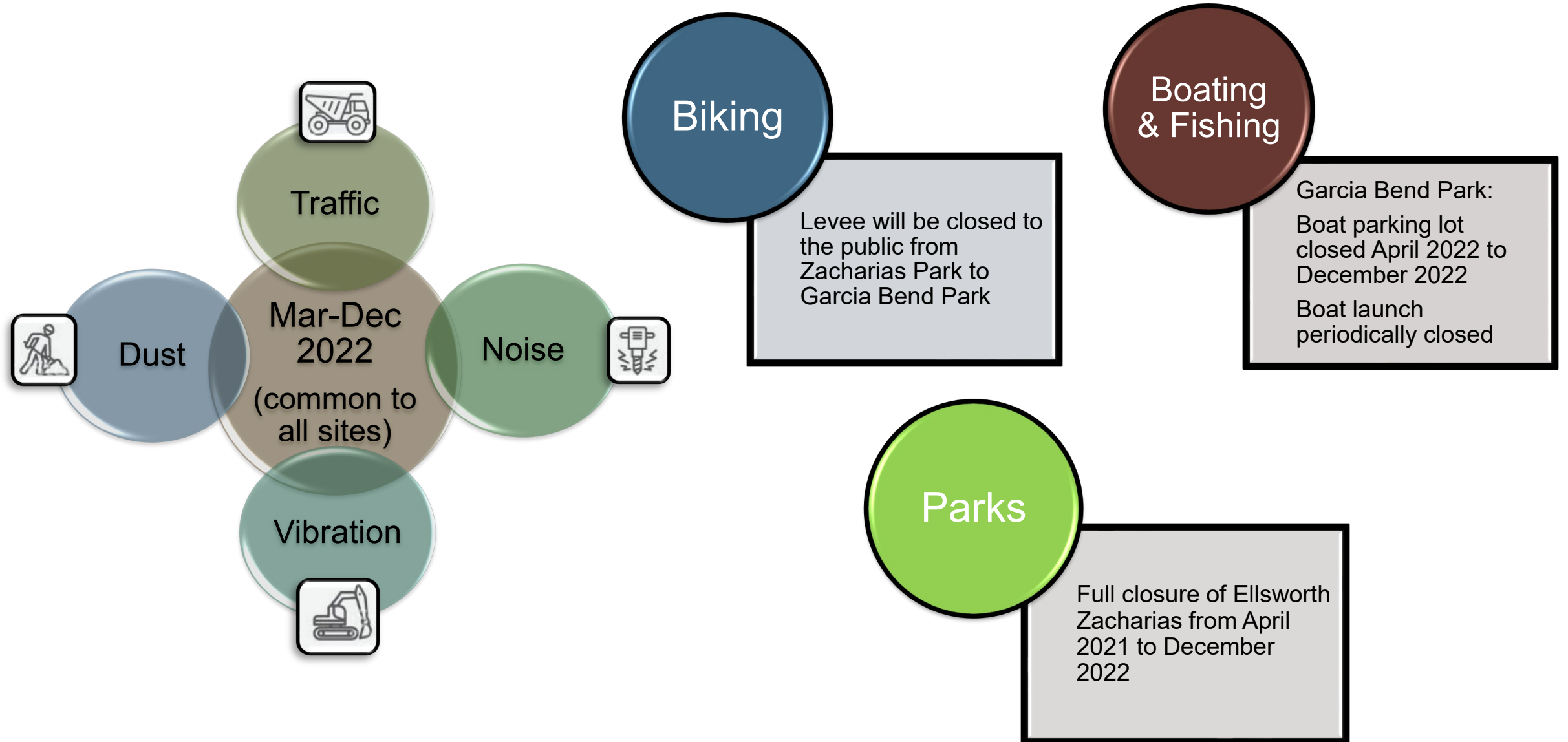
SUPPLEMENTAL EIR/EA

TOPIC AREAS ANALYZED



- Visual Resources
- Hydrology and Water Quality
- Vegetation and Wildlife
- Fisheries
- Special Status Species
- Cultural Resources
- Transportation and Circulation
- Geological Resources
- Air Quality
- Greenhouse Gas Emissions and Energy Consumption
- Noise
- Recreation
- Public Utilities and Service Systems
- Hazards and Hazardous Materials

IMPACTS



MITIGATION MEASURES



Detour Routes



Vibration Monitoring



Dust Control



Water & Air Quality Monitoring

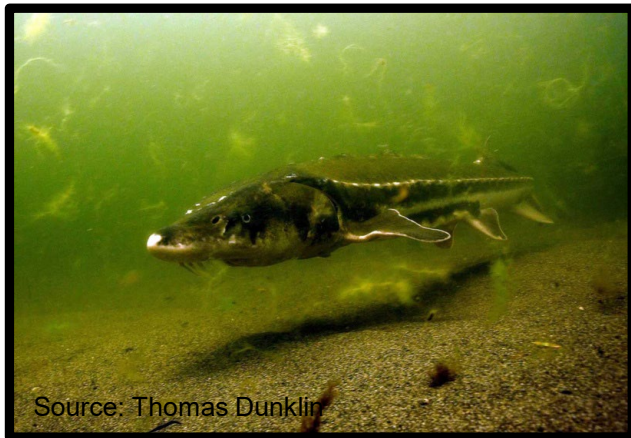
VEGETATION & WILDLIFE



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



Creation of new habitat



No impact to fisheries



Comprehensive Monitoring by Qualified Biologists

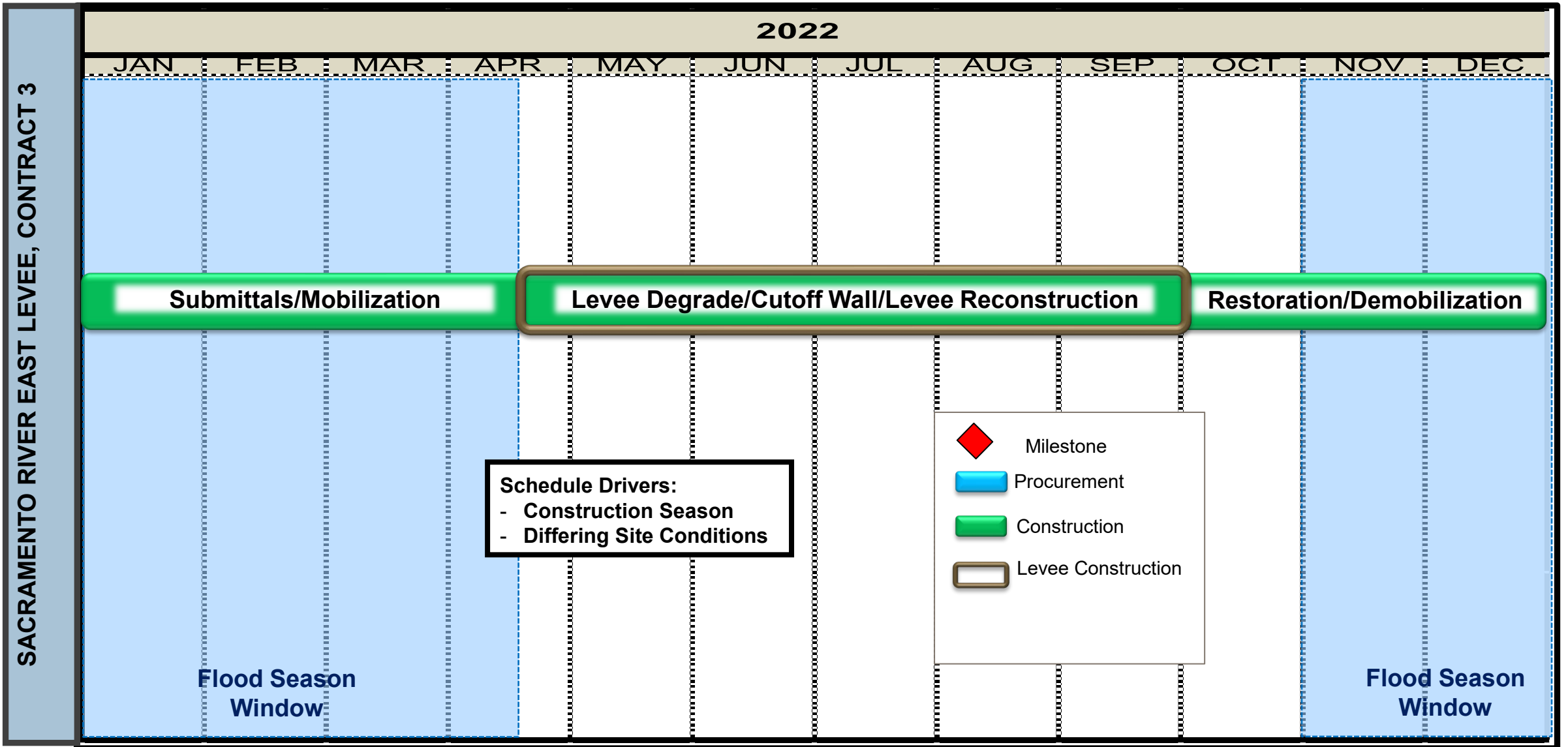


HABITAT MITIGATION SITE COMPLETE





SACRAMENTO RIVER EAST LEVEE C3 SCHEDULE





FOR MORE INFORMATION...

US Army Corps of Engineers Sacramento District Website

Project Overview

- American River Levees
- Sacramento River Levees
- Sacramento Weir

Subscribe for Construction & Traffic email updates

Current Project Activities

- Sacramento River East Levee Contract 1 Construction

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.

sacleveeupgrades.com



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



- *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*

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**U.S. Army Corps of Engineers
Sacramento District
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