

# AMERICAN RIVER COMMON FEATURES WATER RESOURCES DEVELOPMENT ACT OF 2016

## AMERICAN RIVER EROSION PROTECTION

UPDATE

CONTRACT 1 (SITE 2-1)

CONTRACT 2 (SEASON 1, SITE 2-3)

CONTRACT 3A (SITE 1-1)

PRESENTED BY WILLIAM POLK  
SR. PROJECT MANAGER  
LAR EROSION

13SEP22



US Army Corps  
of Engineers®





# PROJECT PARTNERS

## Federal Government



**US Army Corps  
of Engineers®**

## State Government



Central Valley  
Flood Protection  
Board



Department of  
Water  
Resources

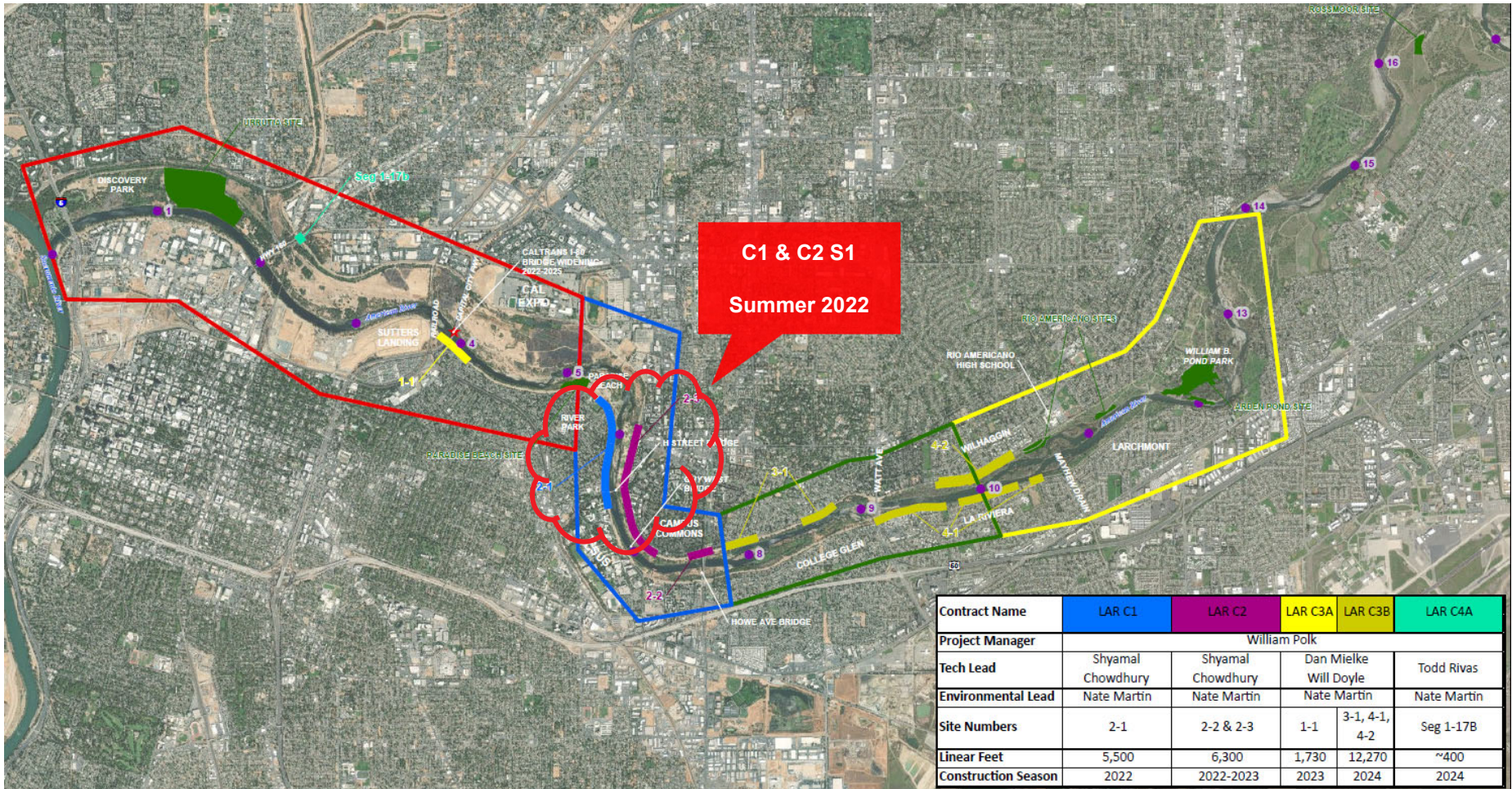
## Local Government







# LAR EROSION - BANK PROTECTION SITES

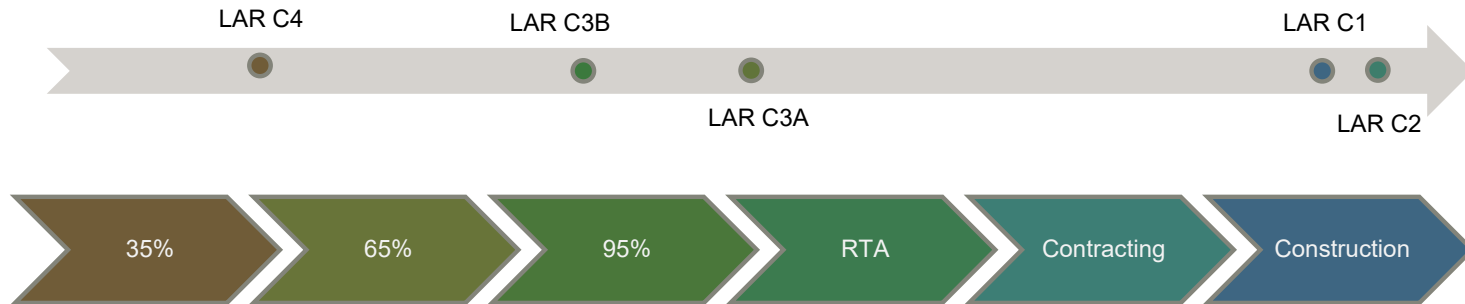


**C1 & C2 S1**  
**Summer 2022**

Contract Name	LAR C1	LAR C2	LAR C3A	LAR C3B	LAR C4A
Project Manager	William Polk				
Tech Lead	Shyamal Chowdhury	Shyamal Chowdhury	Dan Mielke	Will Doyle	Todd Rivas
Environmental Lead	Nate Martin	Nate Martin	Nate Martin	Nate Martin	Nate Martin
Site Numbers	2-1	2-2 & 2-3	1-1	3-1, 4-1, 4-2	Seg 1-17B
Linear Feet	5,500	6,300	1,730	12,270	~400
Construction Season	2022	2022-2023	2023	2024	2024



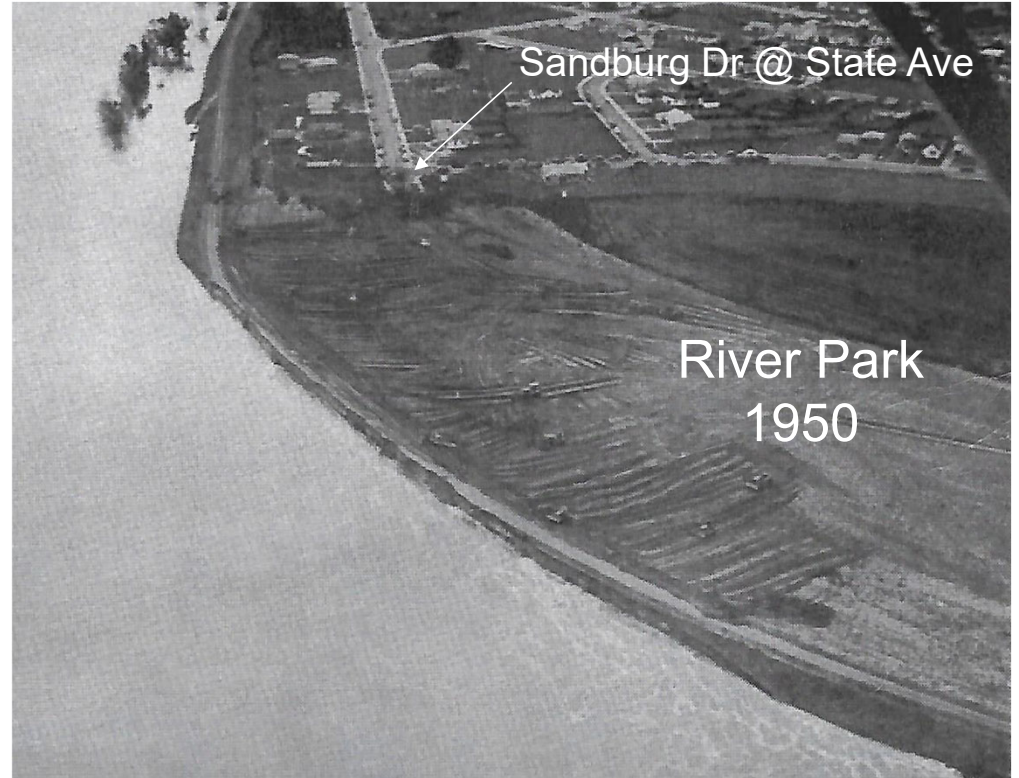
# AMERICAN RIVER EROSION STATUS OF DESIGNS







# EROSION PROTECTION - PROJECT NEED

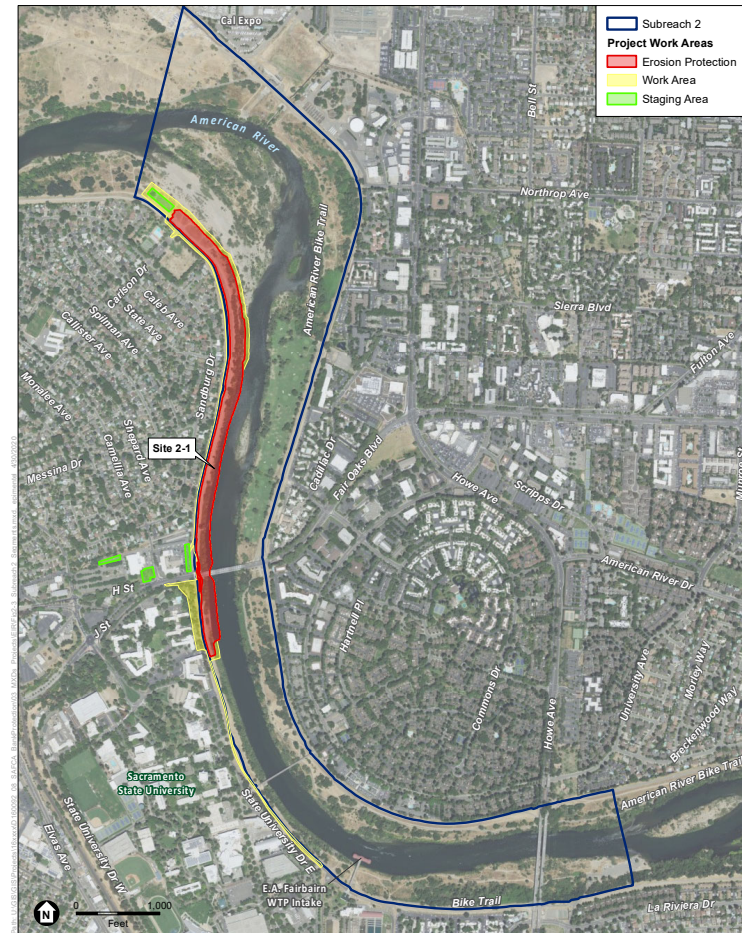


Flooding from levee failure threatens the safety of over 500,000 people in the Sacramento Region



# CONTRACT 1 (SITE 2-1)

- 5,500 linear feet of bank protection from just upstream of H Street bridge downstream to Glenn Hall Park
- Improvements include:
  - Launchable rock toe with a planting bench
  - Slope protection
- Includes on-site and off-site mitigation



Site 2-1





# CONTRACT 1 (SITE 2-1) PRE-CONSTRUCTION ACTIVITIES



## Vegetation Clearing

- Award: 7 Jan 22
- Clearing: Feb 22
- One elderberry cluster removed to Beach Stone Lakes





# CONTRACT 1 (SITE 2-1) CONSTRUCTION ACTIVITIES

- Contract Award: 25 Feb 22
- Mobilization & Site Prep: Apr – May 22
- Glenn Hall Park
  - Facilities & Parking remain open
  - Fencing & signage
- Levee Closure – GHP to H St. bridge
- Vibration monitoring baseline
- Pre-construction surveys complete for residences along Sandburg drive







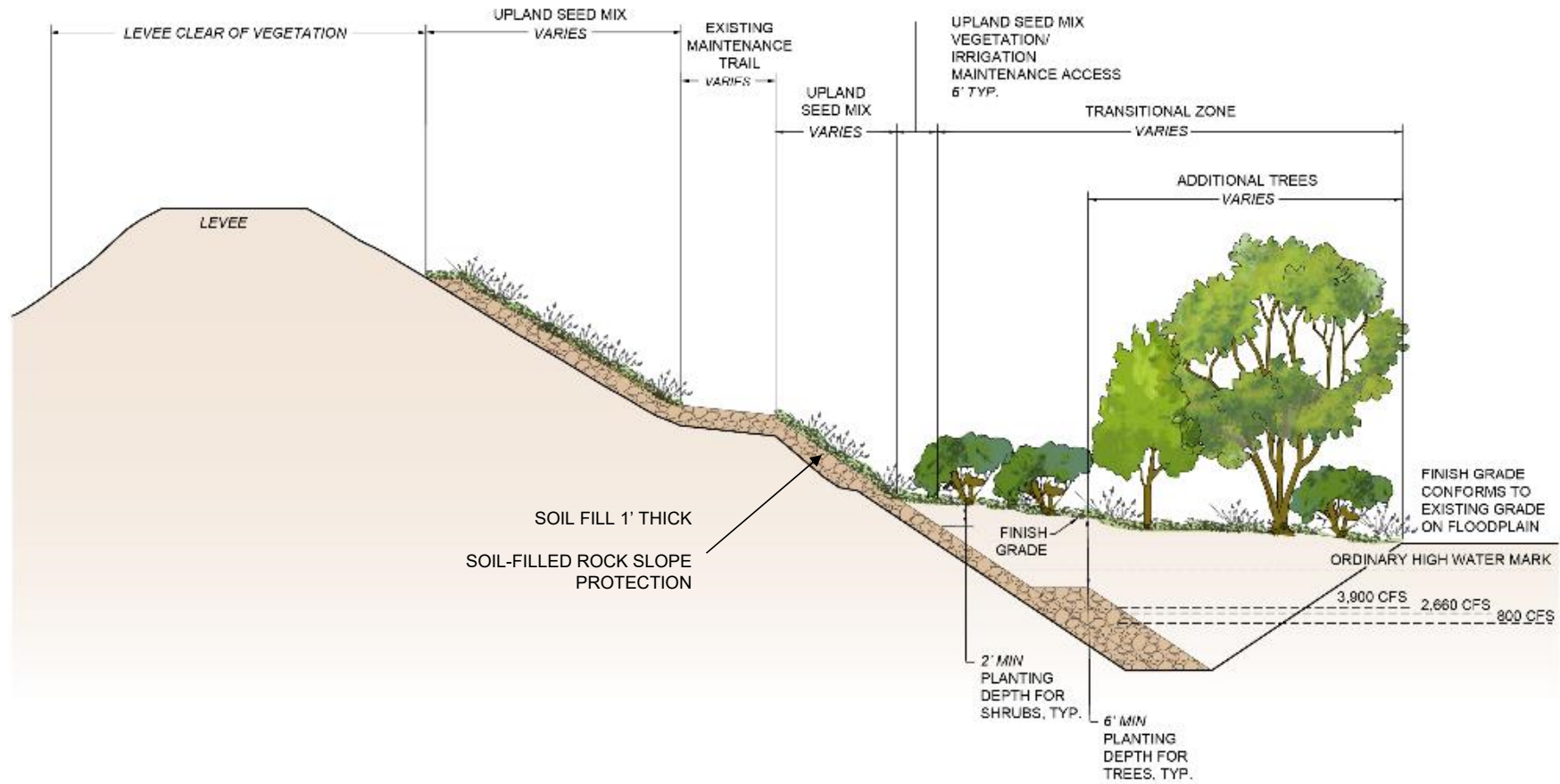
# CONTRACT 1 (SITE 2-1) CONSTRUCTION ACTIVITIES

- Upper slope - Bedding material complete to H st.
- Excavation and slope protection at Paradise Beach complete
- Water trucks and street sweepers
- Construction Complete: Fall 2022
- Site 2-1 Greening, Spring 2023





# TYPICAL CROSS SECTION – PARADISE BEACH



Launchable Rock Trench and Soil-filled Rock Slope Protection





# CONTRACT 1 (SITE 2-1) CONSTRUCTION ACTIVITIES







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# CONTRACT 1 (SITE 2-1) CONSTRUCTION ACTIVITIES





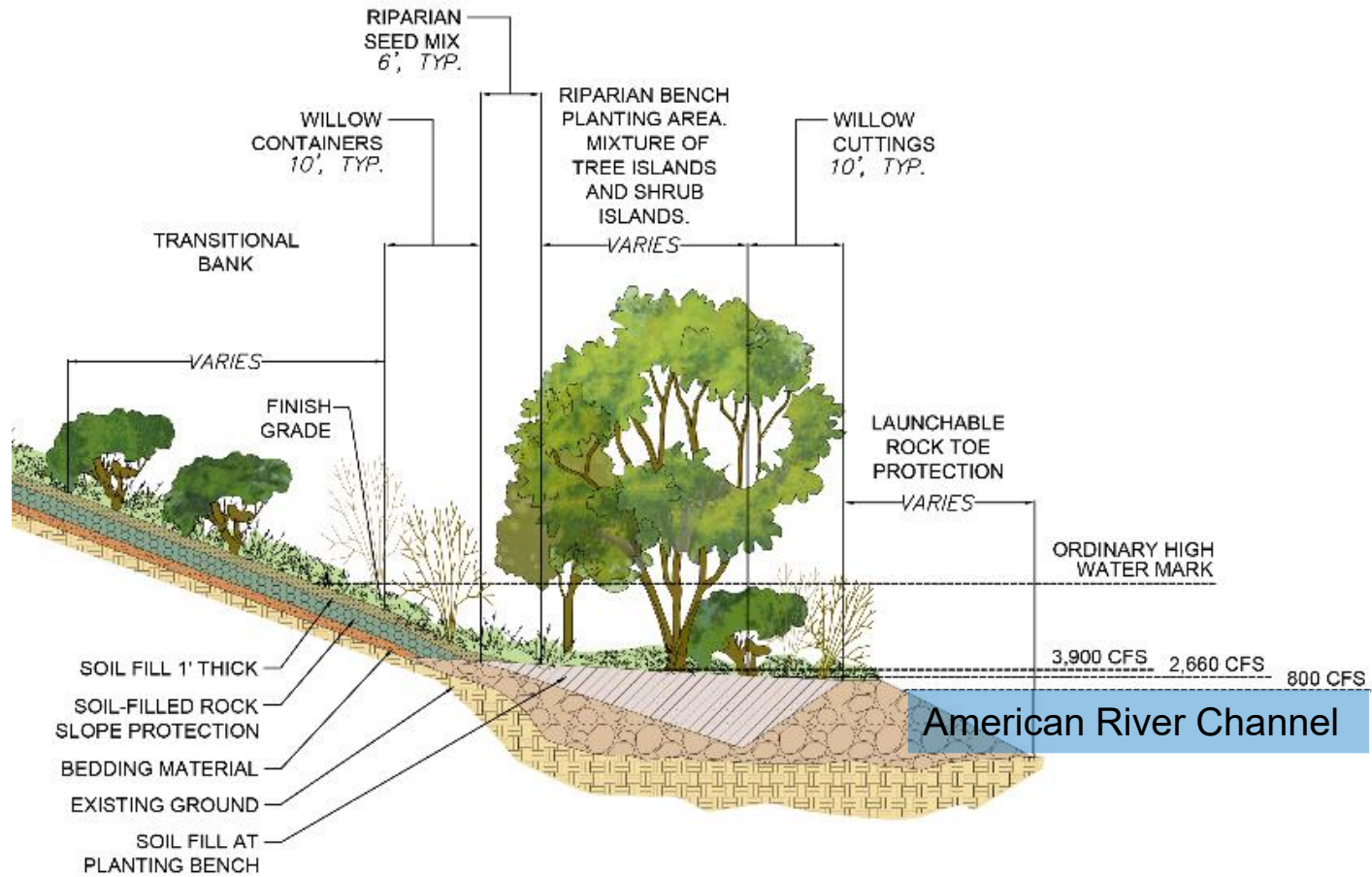


# CONTRACT 1 (SITE 2-1) CONSTRUCTION ACTIVITIES





# TYPICAL CROSS SECTION – UPSTREAM



Planting Bench and Soil-filled Rock Slope Protection (typical cross section)





# CONTRACT 1 (SITE 2-1) CONSTRUCTION ACTIVITIES







# CONTRACT 1 (SITE 2-1) CONSTRUCTION ACTIVITIES





# DART - DROWNING ACCIDENT RESCUE TEAM

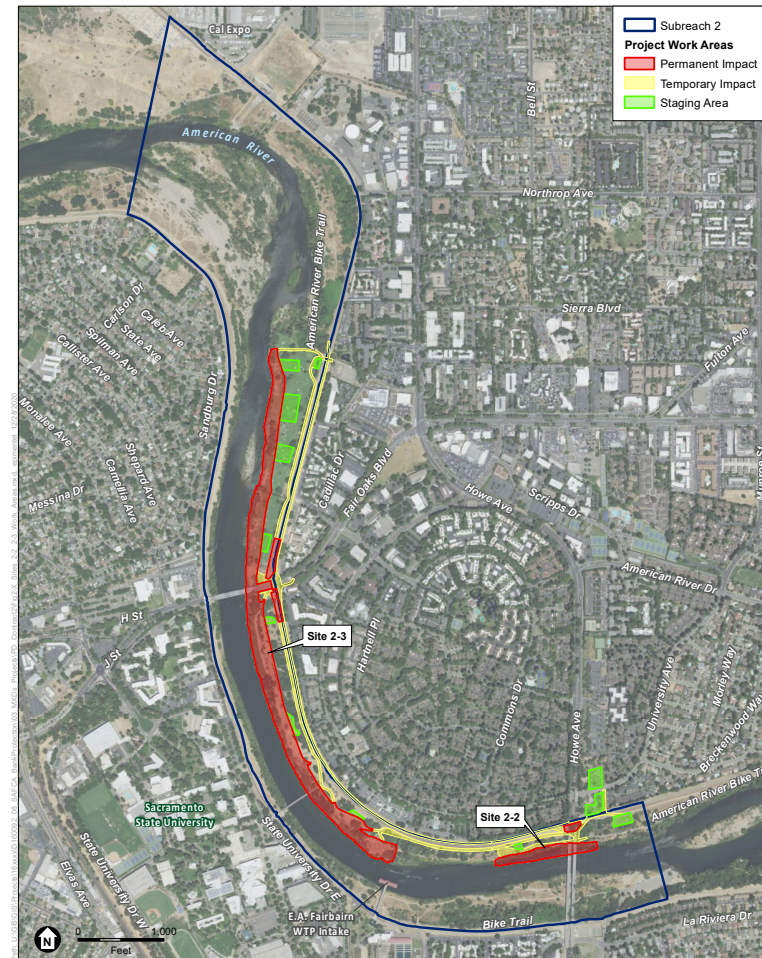






## CONTRACT 2 (SITES 2-2 & 2-3)

- 7,800 linear feet of bank protection from just upstream of Howe Avenue downstream through Campus Commons Golf Course
- Site 2-2 Improvements include:
  - Launchable rock berm
  - Planting bench behind rock berm
- Site 2-3 Improvements include:
  - Launchable rock spurs
  - Buried rock tie-back
  - Planting between spurs/tie-backs
- Includes on-site and off-site mitigation



SOURCE: USDA, 2018; NHC, 2020; ESA 2020

Sites 2-2 and 2-3





# SCHEDULE CONTRACT 2 (SITES 2-2 & 2-3)

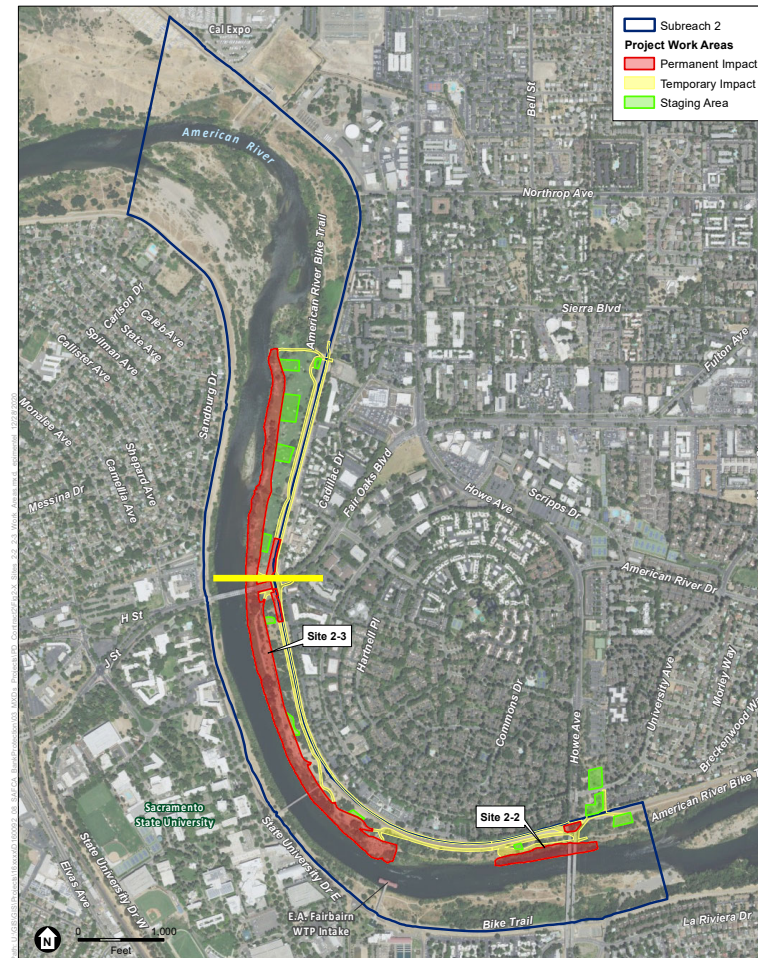


## Phase 1 (site 2-3 partial)

- Veg clearing, Jan 22 – Mar 22
- Construction, Summer 2022
- Greening, Spring 2023

## Phase 2 (site 2-2, 2-3 remainder)

- Veg clearing, Oct 22 – Jan 23
- Construction, Summer 2023
- Greening, Spring 2024



SOURCE: USDA, 2018; NHC, 2020; ESA 2020

Sites 2-2 and 2-3





# CONTRACT 2 (SITE 2-3, SEASON 1) PRE-CONSTRUCTION ACTIVITIES



## Vegetation Clearing

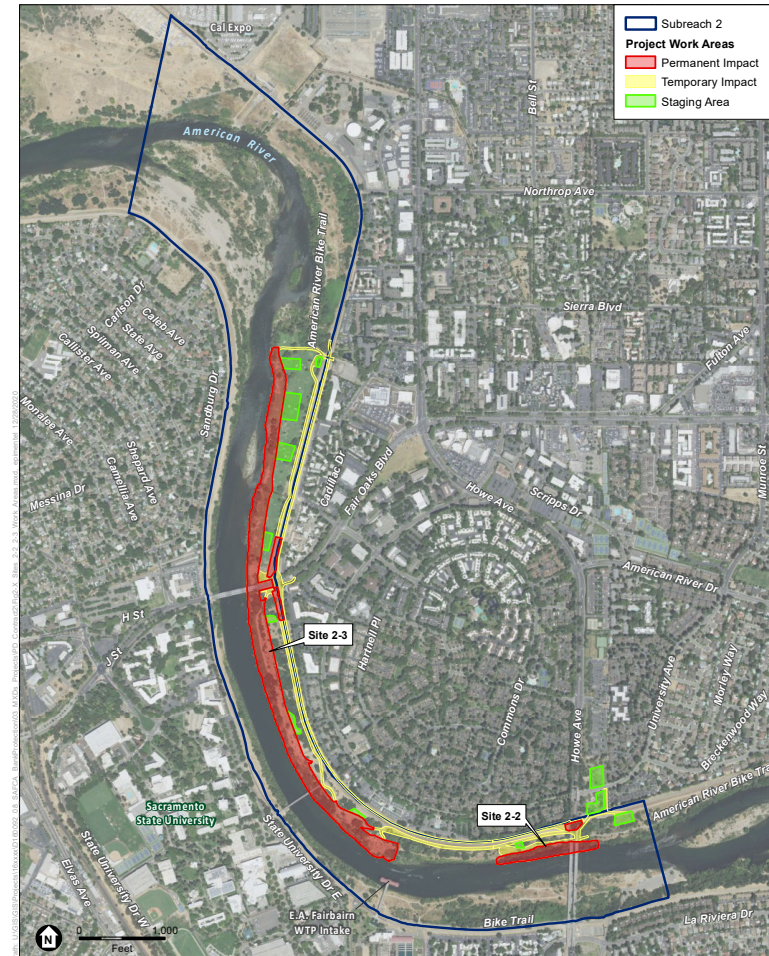
- Award: 28Jan22
- Sierra Nevada Forestry
- Clearing: Mar 22
- Elderberry removed to Rio Americana mitigation site





# CONTRACT 2 (SITE 2-3, SEASON 1) CONSTRUCTION ACTIVITIES

- Contract Award: 15 Apr 22 to Nordic Construction
- June 22 – Mobilization, Site Prep, Strip/Grub & Excavation
- July 22 - Excavation below OHWM, Bedding material and riprap placement



Sites 2-2 and 2-3







# CONTRACT 2 (SITE 2-3, SEASON 1) CONSTRUCTION ACTIVITIES

- Bike and pedestrian traffic is rerouted onto the levee top through the campus commons golf course area
- Construction will Complete: Fall 2022
- Greening, Site 2-3, season 1
  - Spring 2023



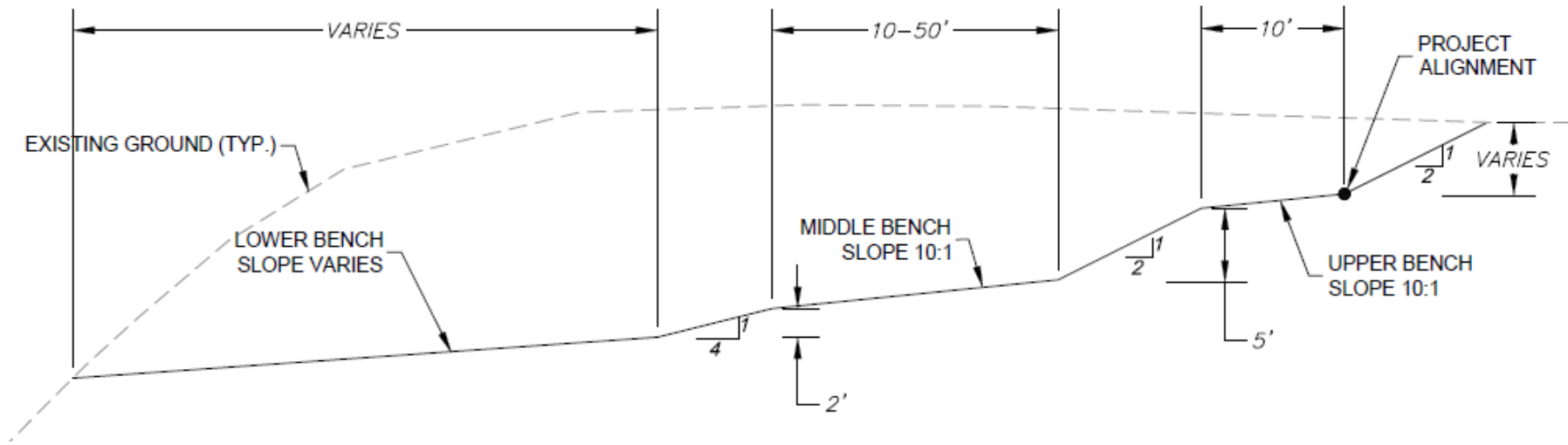
SOURCE: USDA, 2018; NHC, 2020; ESA 2020

Sites 2-2 and 2-3





# SITE 2-3, TYPICAL CROSS SECTION







# CONTRACT 2 (SITE 2-3, SEASON 1) CONSTRUCTION ACTIVITIES







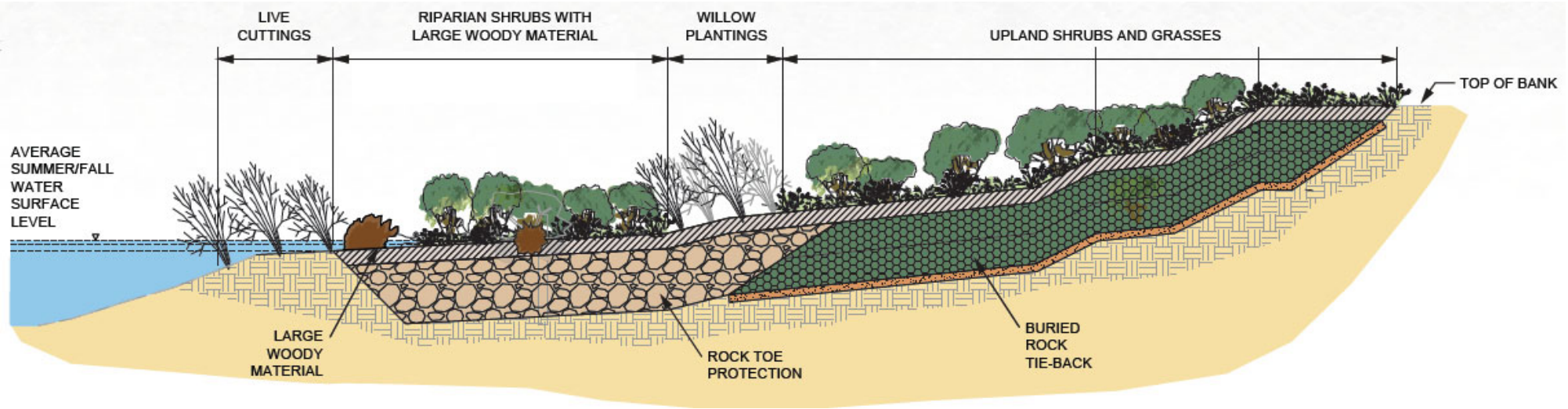
# CONTRACT 2 (SITE 2-3, SEASON 1) CONSTRUCTION ACTIVITIES







# SITE 2-3, TYPICAL CROSS SECTION





# CONTRACT 2 (SITE 2-3, SEASON 1) CONSTRUCTION ACTIVITIES







# CONTRACT 2 (SITE 2-3, SEASON 1) CONSTRUCTION ACTIVITIES







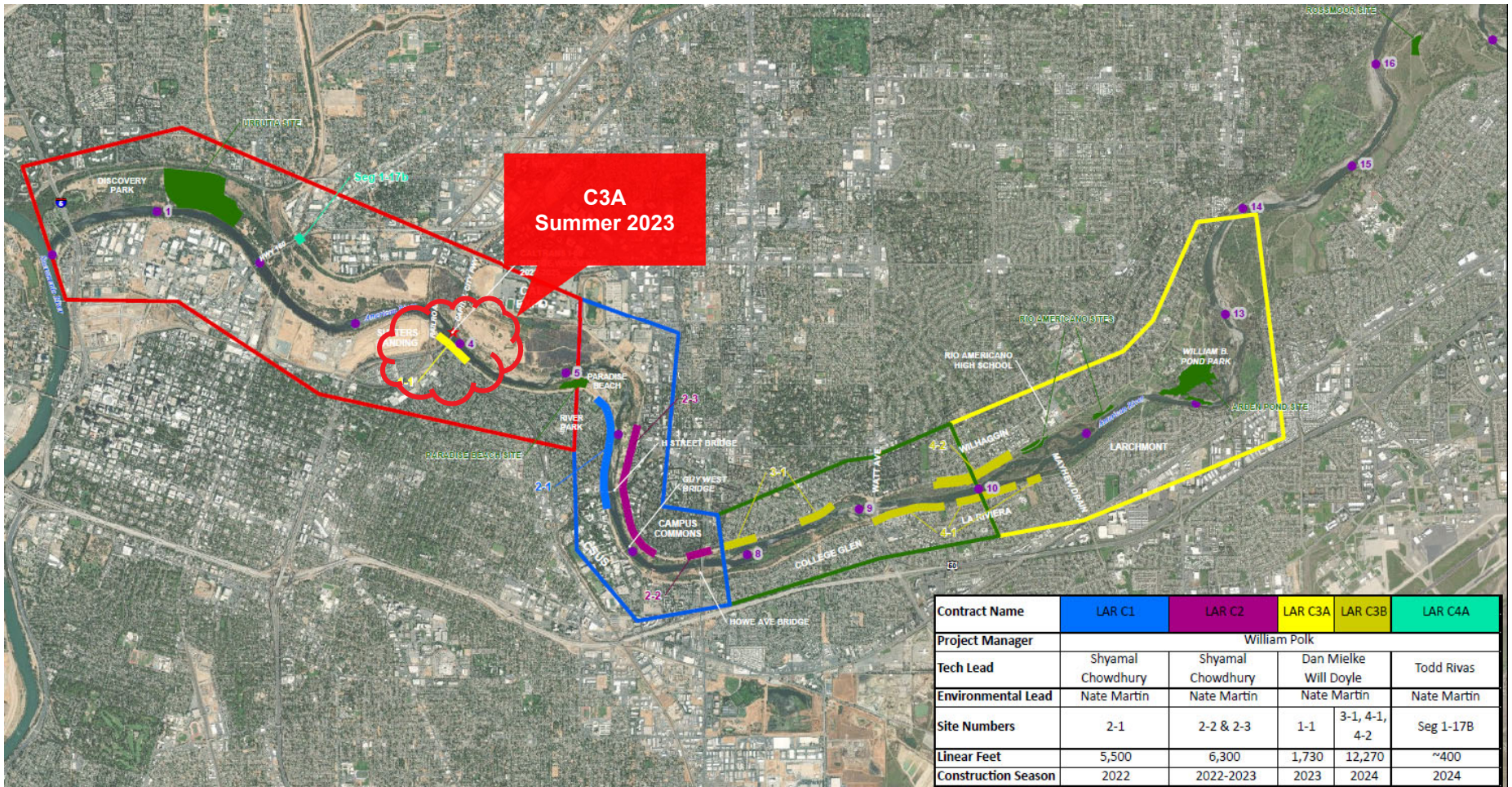
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# LAR EROSION - BANK PROTECTION SITES

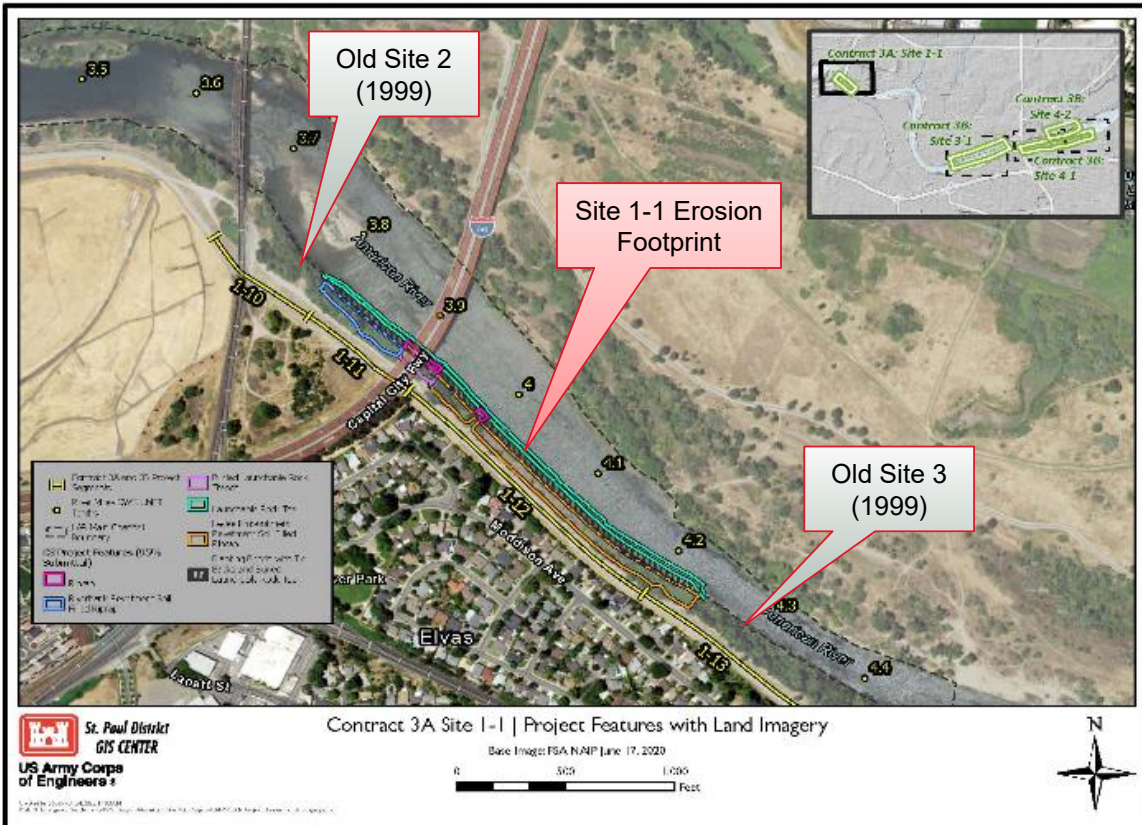


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## C3-A (SITE 1-1)

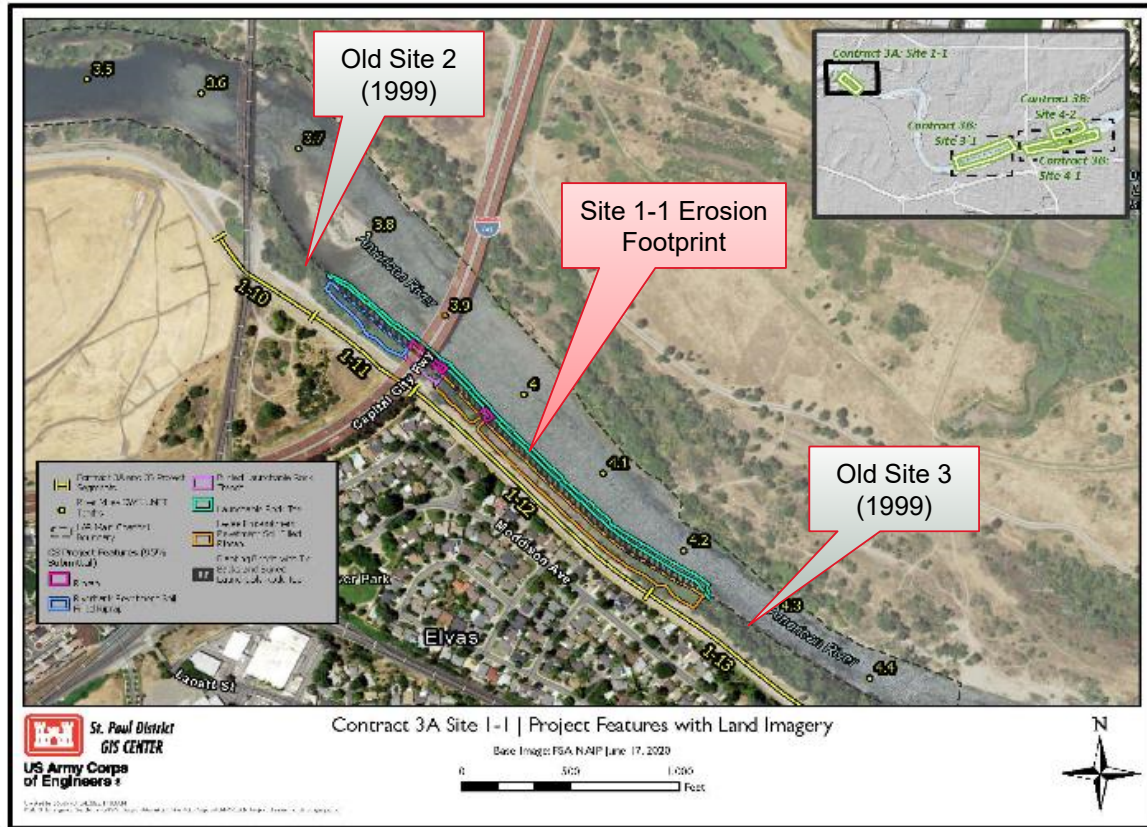


- Summer 2023
- Left/South Bank
- Business I-80 Bridge
- ~2,000 ft
- Launchable rock toe with a planting bench
- Slope protection





# DRILLING DOWN TO THE C3-A FOOTPRINT



## Work By Others:

- **Business I-80 Bridge (Caltran's)**
  - 95% Design
  - Widening northbound lane
  - Pier Extension
  - Local dredging under bridge
  - Planned Construction: Spring 2022 – 2025
  - Caltrans FG included as USACE EG
- **Two River Trail Project (City)**
  - 95% Design
  - Mainly trail improvements above erosion work.
  - Planned Construction:
    - Grading: Spring 2023
    - Asphalt Trail: Late Fall 2023
  - City FG (minus bit surface) included as USACE EG

## C3-A Haul Route Access:

- Levee Crown from Sutter's Landing to Glen Hall Park
- At-grade crossing over Union Pacific RR



# HOW TO STAY INFORMED



**Project Overview**

- American River Levees
- Sacramento River Levees
- Sacramento Weir
- Mitigation

**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 2 Construction
- Sacramento River East Levee Contract 3 Construction
- Sacramento River East Levee Contract 4 Design
- Sacramento River Erosion Contract 1
- Sacramento River Erosion Contract 2
- American River Contract 1
- American River Contract 2

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# QUESTIONS ?

