

Sulphur Creek Fish Passage Restoration Project

Napa River Watershed, CA

California Fish Passage Forum
November 7, 2023



Background



- Bridge apron inhibits passage to ~4.2 mi. of perennial spawning, rearing habitat
- Sulphur Creek supports threatened CCC steelhead, Chinook salmon, lamprey
- Bridge built 1916
- 1916-1950s: Restricted high flows, channel and footing scour



Background (cont.)



- 1950s-2000s: Further scour → armoring of bank & footing, rock revetment, wingwalls
- 2003: Downtcutting → CDFW funded Alaska steeppass fishway using best information available
- 2005: Deemed inoperable during most passage flows by CDFW

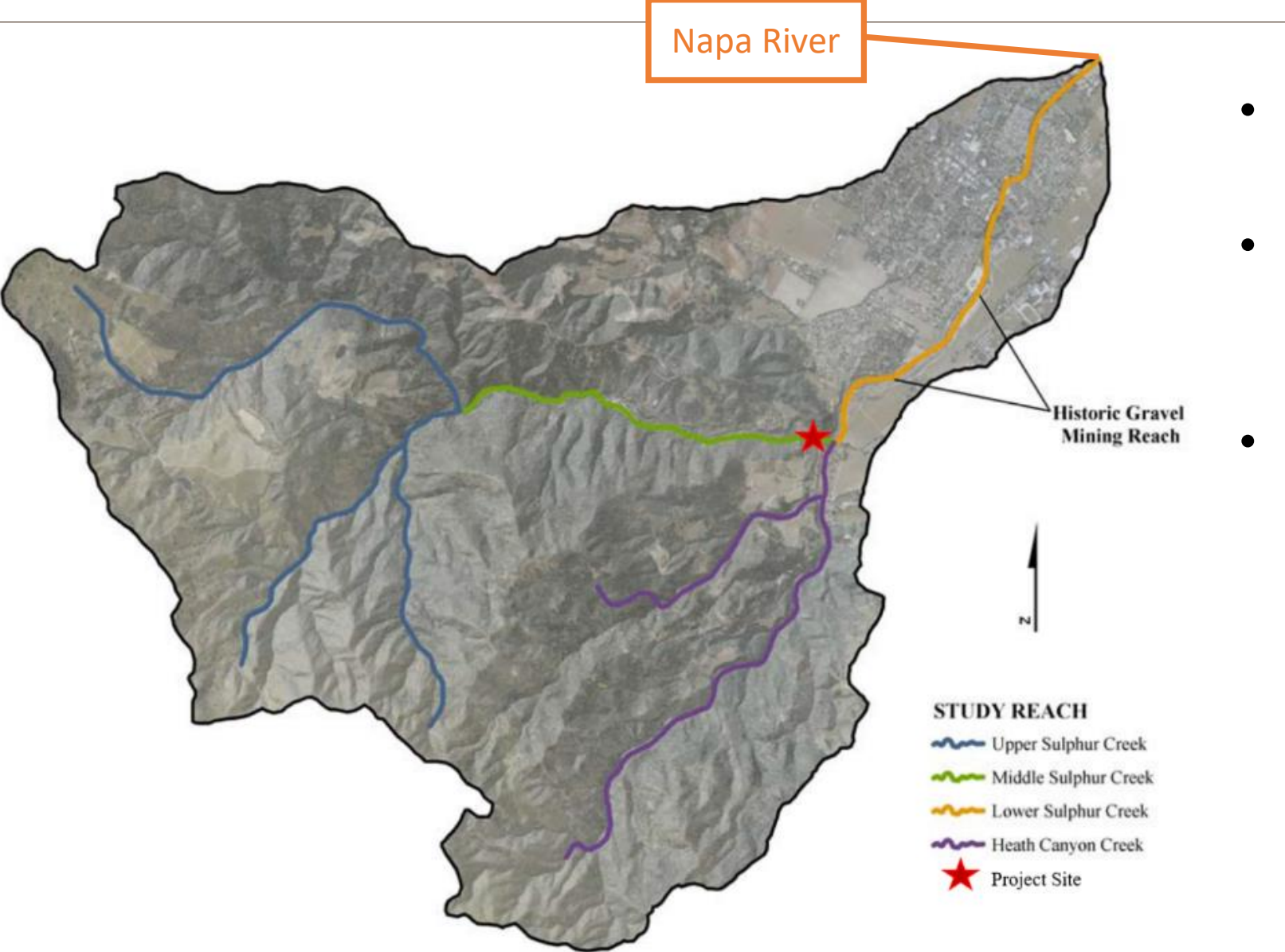


Path Forward

- 2010s - CEMAR, RCD assessment: bridge as priority barrier
- 2013 - Residents request help from RCD, feasibility study
- 2018 - RCD invites CalTrout to join team to help fundraise, manage
- Piecing together funding: 2019 – FRGP (RCD), Coastal Conservancy Prop 1 (CalTrout); 2020 – CDFW Prop 68 (CalTrout)
- Preliminary goals: restore passage, maintain access, keep current bridge



Project Site Context



- WRA involved starting late 2020 for design and permitting
- Project located just upstream of Heath Canyon Creek and Sulphur Creek confluence
- Property is privately owned with multiple landowners



Site Conditions

- Private bridge for residents constraining flow
- Fish ladder and eroding concrete casing disjointed
- Cabled rock weir for pool formation
- Nearby home on left bank
- Project site in intermittent transitional reach of Sulphur Creek (between high energy headwaters and low energy valley)

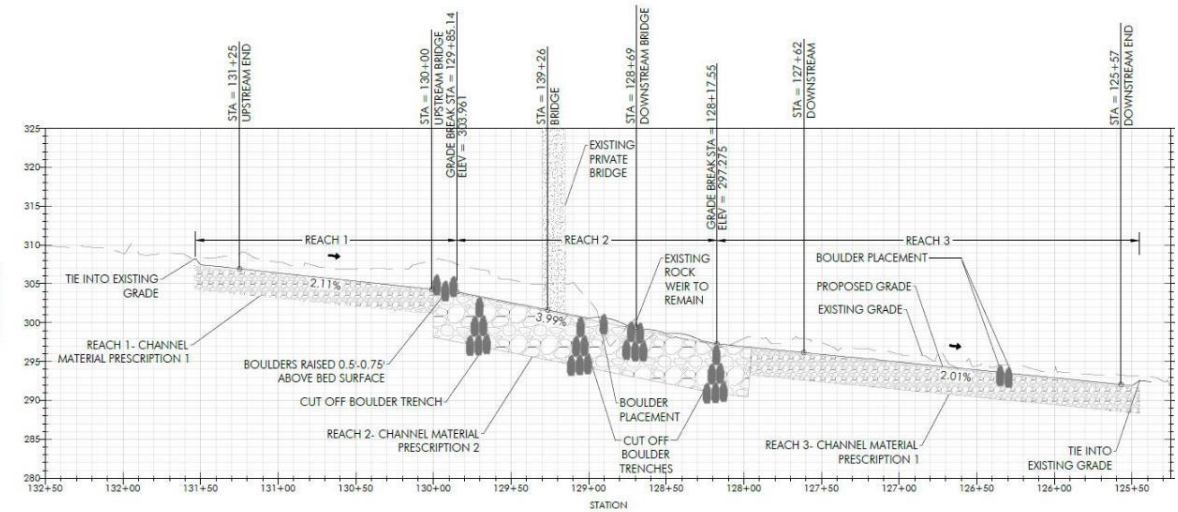
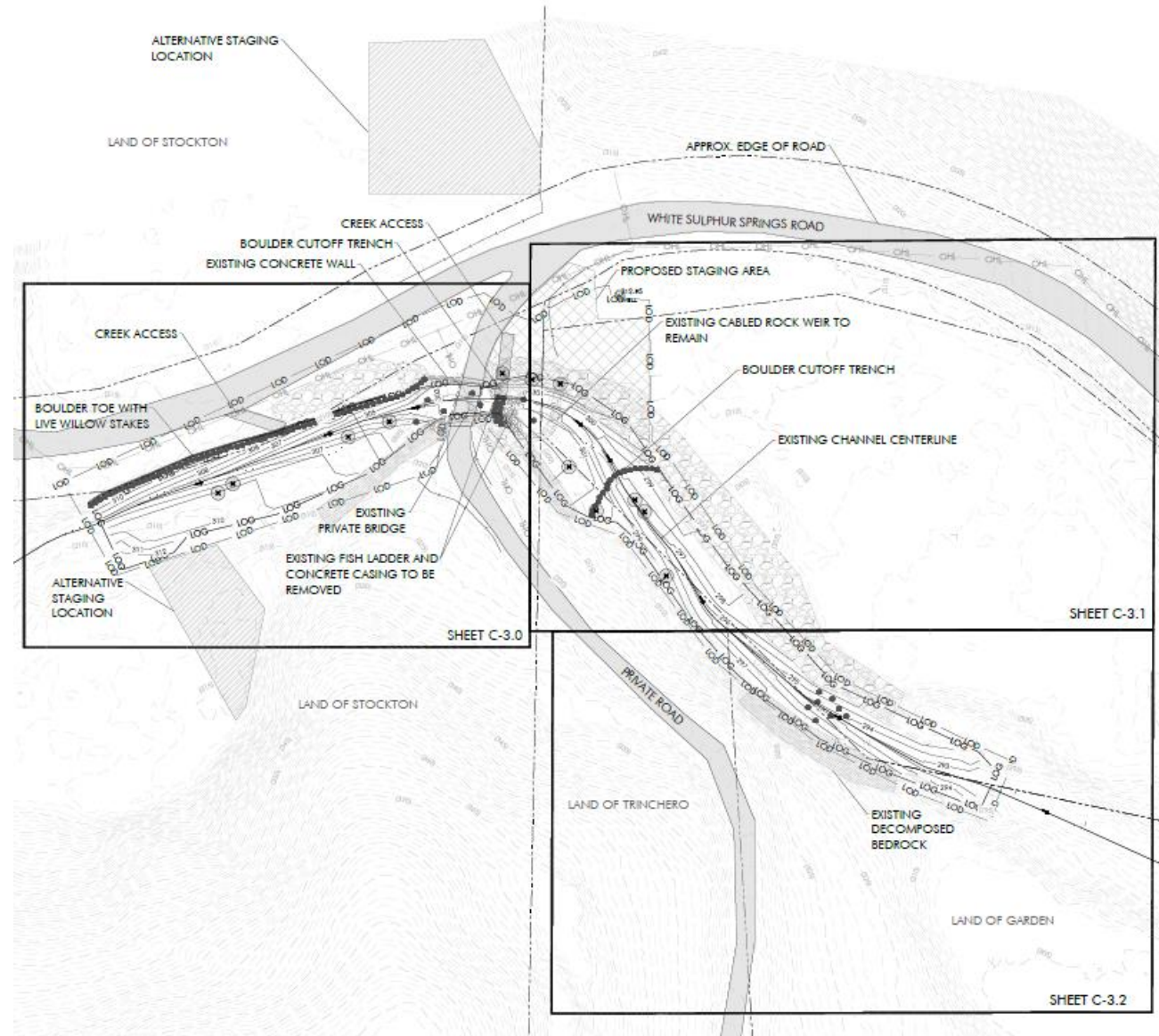


Design Objectives and Constraints

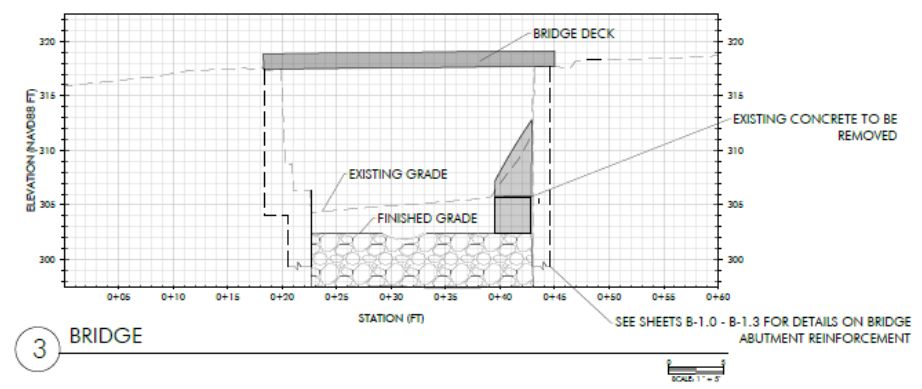
- Provide fish passage for all life stages
- Provide continuity of water and sediment flow
- Encourage fish transport through reach into high quality upstream habitat
- Avoid causing unstable bank conditions upstream and downstream
- Minimize the need for maintenance and debris removal
- Avoid worsening flooding of nearby infrastructure
- Appeal to landowner needs (site accessibility, fire concerns, aesthetics)



Early Design Prior to CDFW Review



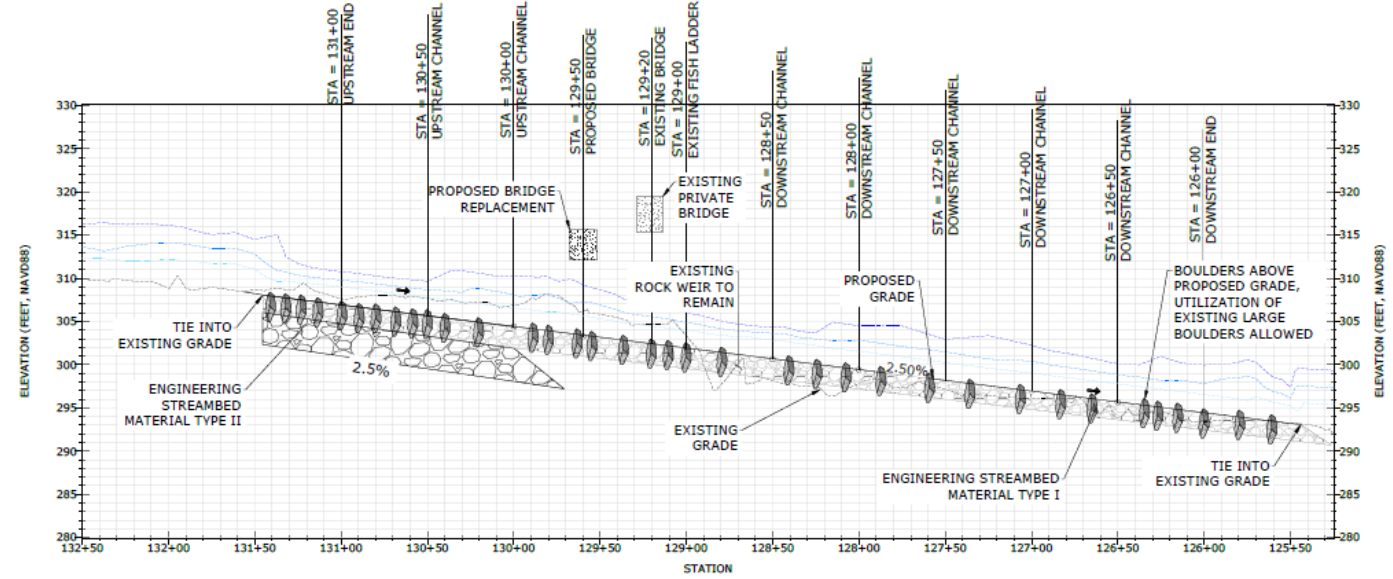
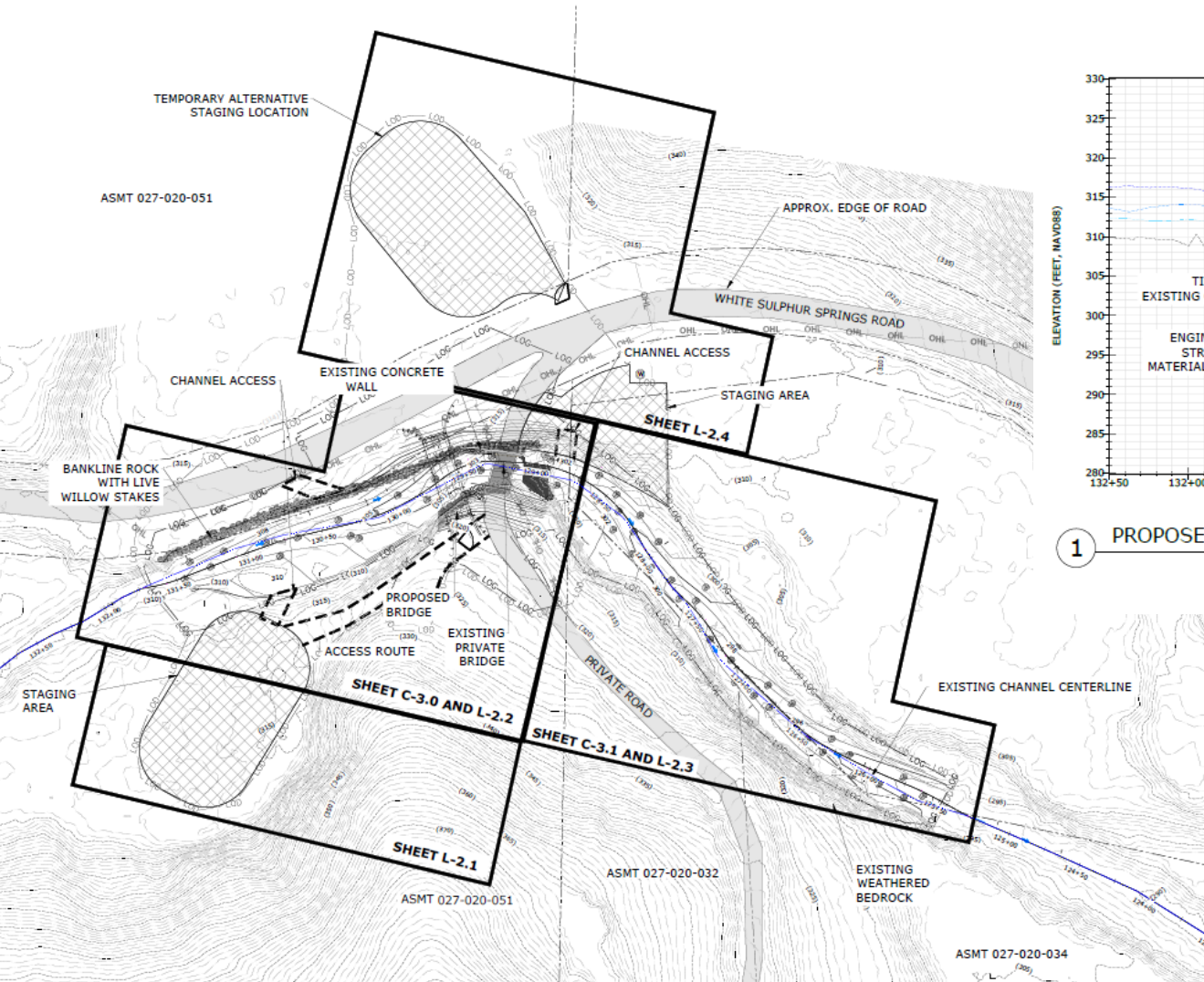
1 PROPOSED CHANNEL CENTERLINE PROFILE VIEW



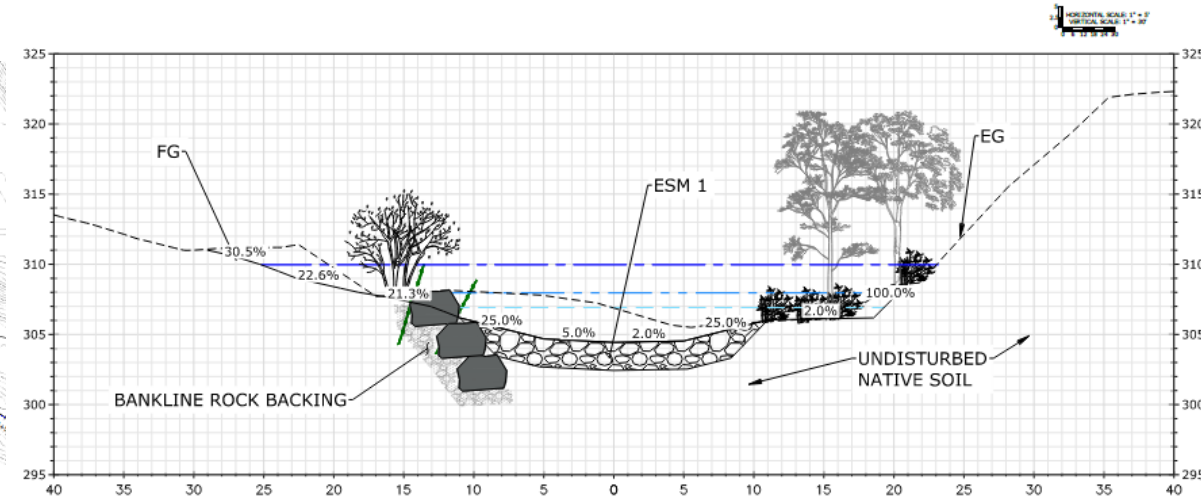
3 BRIDGE



Current Design

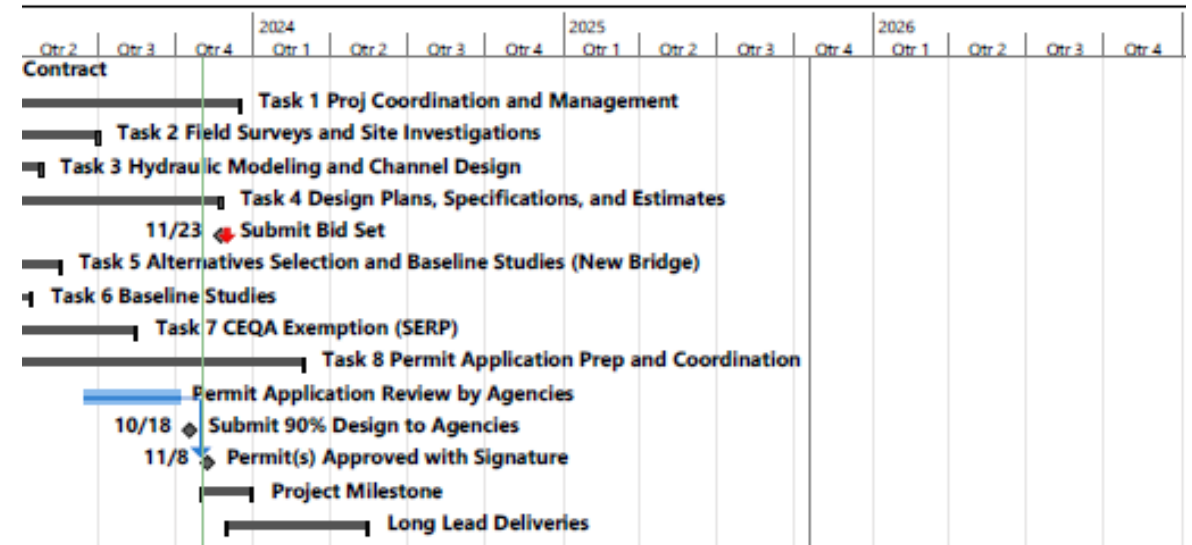


1 PROPOSED CHANNEL CENTERLINE PROFILE VIEW



Design and Implementation Timeline

- Agency Approve Permits ~ 11/7/2023
- 100% Design ~ 11/15/2023
- Bid Set Complete ~ 12/20/2023
- CDFW Grants ~ 12/31/2023
- Construction support contracting, long lead material procurement, local permit submission, and contractor selection ~2024
- Tentative Construction Start ~ 6/1/2025



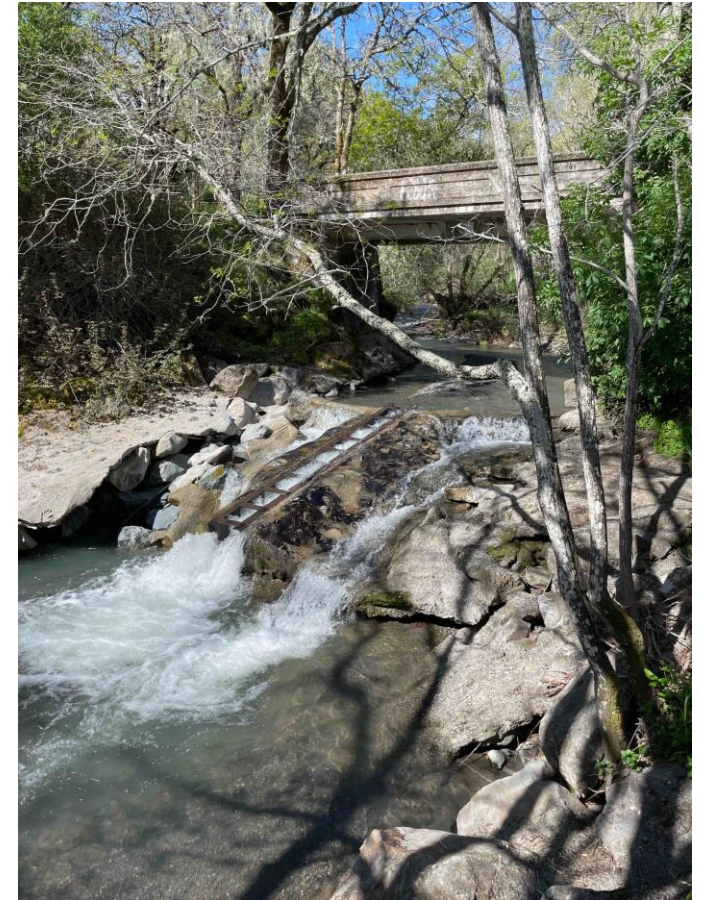
Regulatory Permitting and Environmental Review Process - Overview

- CEQA Environmental Review
- Corps 404 with Sec. 106/SHPO, Tribal Consultations
- Sec. 7 consultation with USFWS & NMFS
- RWQCB 401 WQ Certification
- CDFW 1602 LSA
- Local permits (County and City)



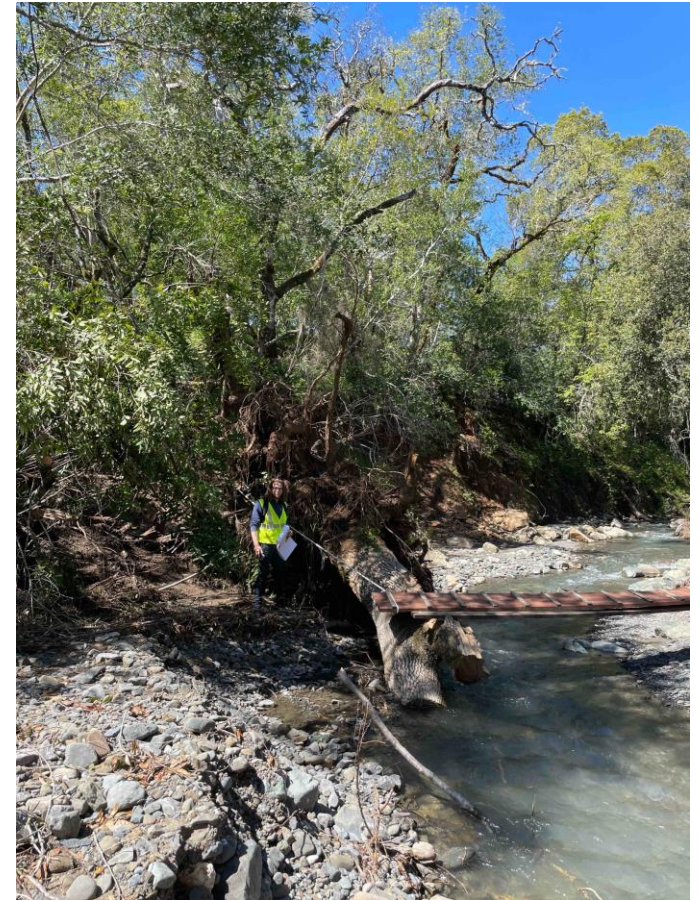
CEQA – Statutory Exemption for Restoration Projects (SERP)

- Planned: IS/MND; Bridge replacement → EIR
- SERP availability late 2021/2022 -- alternative pathway
- Early consultation -- CDFW Cutting Green Tape staff
- Technical studies to support SERP application
- Napa RCD (lead agency) determination – SERP qualified
- Application to CDFW concurrence in 60 days
- Time saved: 3 months (IS/MND), 6 months (EIR)
- Money saved: \$18,000 (IS/MND), \$40,000 (EIR)
- Collaborative process w CDFW



Regulatory Permitting – Corps Sec. 404 Process

- NWP 27 Habitat Restoration
- Sec. 106 & SHPO -- complicated
 - Draft Cultural report – 1916 bridge a historic resource, significant impact if removed
 - Corps did not support historic finding
 - Revised Cultural report, SHPO consultation underway
- 404 issuance pending – lengthy process



Regulatory Permitting – Section 7 Consultation

- NMFS Santa Rosa Office Programmatic BO with NOAA RC
 - Incorporated PBO conservation measures
 - NOAA RC approved coverage for project
- USFWS Informal Consultation for Northern spotted owl
 - Protocol surveys for NSO
 - If NSO detected, buffer zones to be observed



Regulatory Permitting – RWQCB

- 401 Statewide Restoration General Order (SRGO) eligibility
- Alternative pathway for efficient permitting
- Lengthy back-and-forth process with RWQCB
 - Channel and rock slope protection design
 - Bridge design
 - Stormwater management
 - Native plant success, invasive plant cover standards
 - Vegetation and channel morphology monitoring
 - Monitoring period



Regulatory Permitting – CDFW

- As a funder, CDFW attends regular project meetings
 - Project support and detailed involvement (permitting, engineering, funding staff)
- Collaborative communication and discussion of permitting issues
- Straightforward 1602 application through EPIMS



Key Lessons from CEQA/SERP and Permit Processes

- SERP time savings vs IS/MND or EIR significant; cost savings not so much
- SERP timeline provides greater certainty
- CDFW staff support and communication has been key
- Programmatic restoration permits are still new → learning curve
- Ultimately, multiple factors contributing to long project timeline:
 - Rescoping of design and budget
 - Complicated channel design
 - Developing landowner support and trust – 4 private property owners
 - Covid-19 and Glass fire disruptions
 - Permitting process remains lengthy – small but complex project



Thank you

Landowners, Residents, Project Partners, and Funders



California Department of
Fish and Wildlife



Coastal Conservancy
STATE of CALIFORNIA



wra
Environmental
Consultants