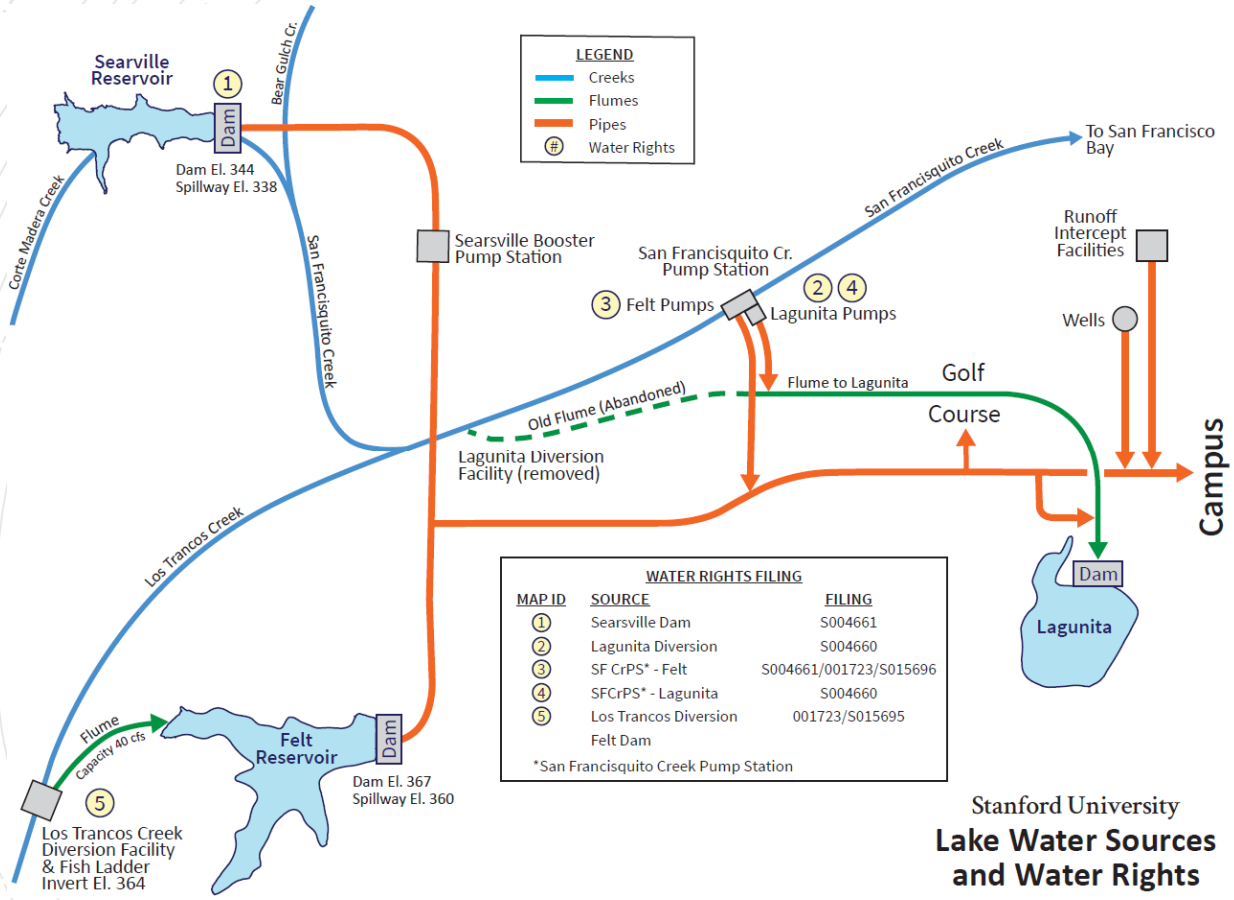
Searsville Watershed Restoration Project Overview

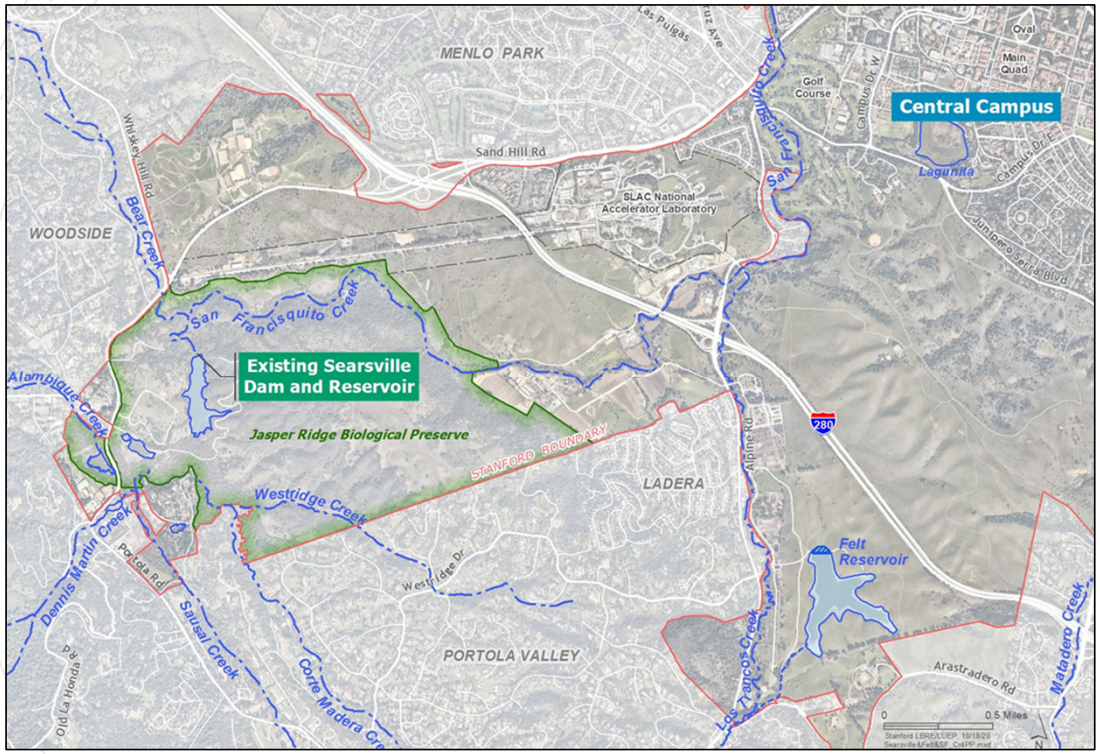
BACKGROUND AND HISTORY

Project Components – Lakewater System Schematic



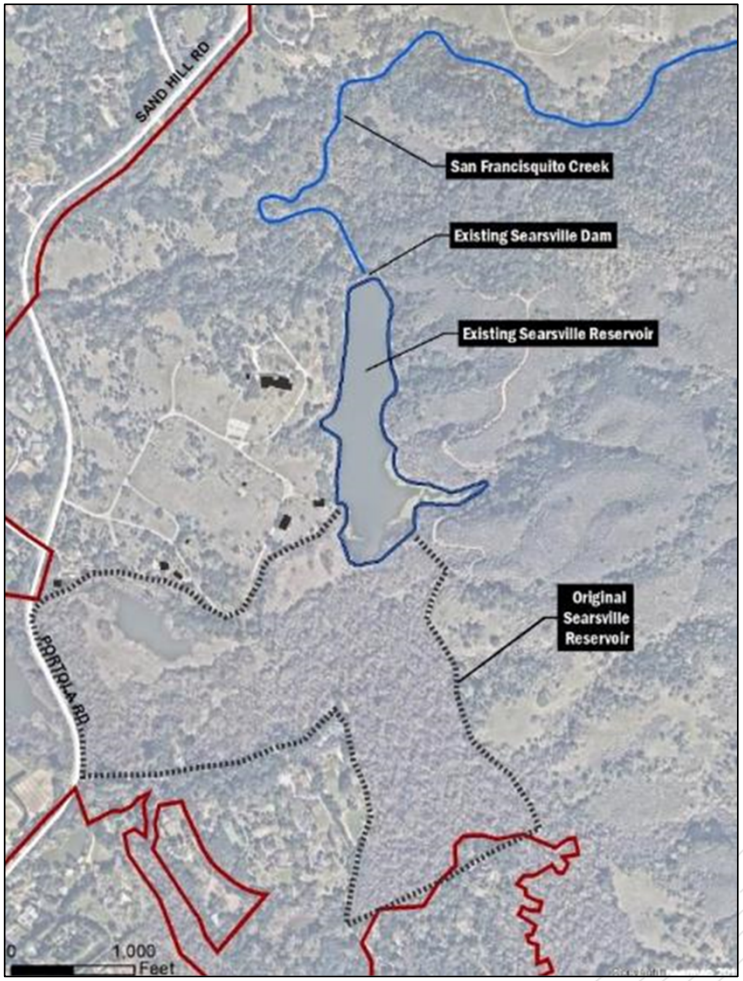
Searsville Dam and Reservoir - History

- Searsville Dam constructed in 1892 by Spring Valley Water
- Stanford purchased Searsville Dam in 1919 for water supply



Searsville Dam and Reservoir - History

- Reservoir has been filling with sediment ever since.
- Approximately 10% of original capacity remains.



Searsville Dam and Reservoir



Searsville Dam and Reservoir



Searsville Alternative Study 2011 - 2015

- 2011 – Provost established Steering Committee
- Steering Committee included faculty and senior administrators



Searsville Alternatives Study – Advisory Group

Formed in 2013, 27 participants from:

- Resource Agencies – NMFS, USFWS, CDFW, RWQCB
- NGOs (e.g., American Rivers, Beyond Searsville Dam, Committee for Green Foothills)
- Local Agencies (e.g., SFJPA, San Mateo County Public Works)
- JRBP Docents
- Local Watershed Residents

Searsville Alternatives Study – Goals

1. Protect/enhance **JRBP academic teaching/research**
2. Contribute to the long-term sustainability of Stanford's **water supply**
3. Support/enhance **ecological health of San Francisquito Creek**
4. Do not increase **flood risk**, and explore opportunities to reduce flood risk
5. Preserve important **cultural resources**
6. Maintain **land use flexibility** to support the University's future needs

In meeting these goals, include the following considerations:

- Address the accumulated sediment and future sediment load
- Focus on fiscally feasible actions that fulfill Stanford's stewardship responsibilities; to the extent that broader objectives are achieved that are shared with others, then share the responsibilities accordingly

Searsville Alternatives Study – Recommendations (2015)

1. Achieve **fish passage** in one of two ways, while avoiding an increase in flooding and also preserving/providing riparian and wetlands habitats:

    A. *modify the dam with an opening at its base to provide fish passage and attenuate high flows*

    B. *stabilize the sediment in place behind the dam and provide fish passage with a fish ladder or fishway or rerouted creek*

2. Restore the natural sediment process – **sediment flows downstream**.
3. Create a **replacement water diversion** downstream and relocate the Searsville storage functions to an **expanded Felt Reservoir**.

DESIGN & ENVIRONMENTAL OVERVIEW

Stanford | Searsville Watershed Restoration Project

Project Components

- Modifications to **Searsville Dam** to restore natural hydrologic and sediment flows and enable fish passage and other environmental benefits without increasing downstream flood risks

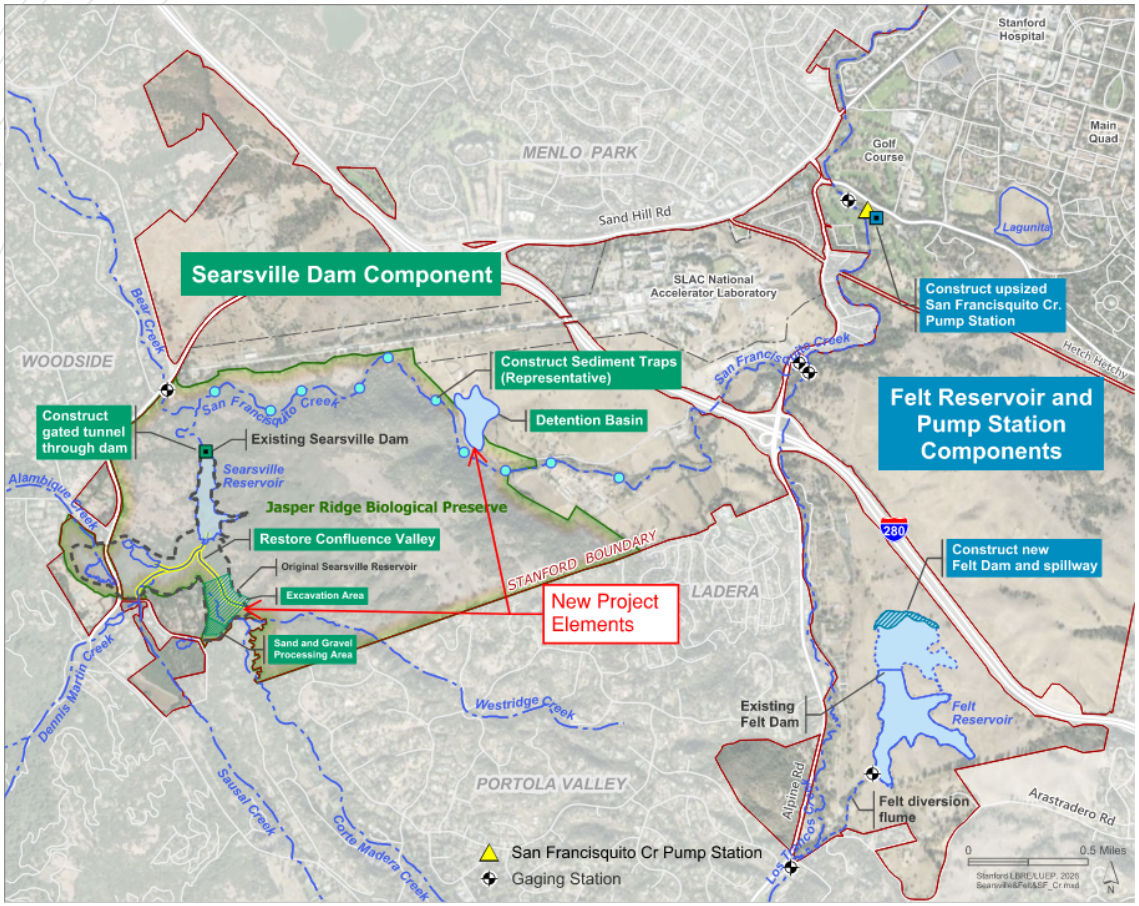
- Replacement of **Felt Dam** with a new, larger dam positioned to enable the capacity of **Felt Reservoir** to be increased so that Searsville water supplies can be relocated to an expanded Felt Reservoir

- Upgrades to the **San Francisquito Creek Pump Station** to enable the Searsville point of diversion to be relocated to the downstream San Francisquito Creek Pump Station

Project Updates

- Significant storm event on 12/31/22 prompted changes to hydrologic and hydraulic models
- Result on SWRP was reduction in peak flow attenuation via tunnel at Searsville reservoir
- Project modifications in response:
  - Coarse off haul of sediment in Corte Madera tributary
  - Old Boething detention basin
- NOI and NOP addendum issued in 2026

Project Components – Overview



Existing Felt Dam and Reservoir



Felt Dam Renderings

EXISTING



PROPOSED



San Francisquito Creek Pump Station Upgrades

- Modified facility design meets current fish passage criteria and proposed bypass/diversion is protective of various life stages of Steelhead as well as improving existing operational challenges
- Increases diversion at this facility to relocate diversion function at Searsville further downstream
- Once complete allows diversion to cease at Searsville





San Francisquito Creek Pump Station Upgrades



Searsville – Reservoir Delta Today



Searsville Component Phases/Timing of Work

Construction Phase – Tunnel construction, upstream pilot channels, detention basin, LWD habitat structures (2 years)

- Access improvements
- Dam and Tunnel
- Detention Basin
- Coarse material excavation and off-haul
- Downstream Habitat structures
- Upstream Pilot Channels
- Open gate and flush

Near Term Construction/Operations – Flushing and possible flushing enhancement (Up to 8 years)

- Mechanically assisted flushing
- Downstream sediment removal

Near Term Construction/Operations – Restoration (1-2 years)

- Final upstream confluence valley grading
- Fish passage elements
- Channel restoration and planting

Searsville Project – Engineer's Rendering* Phase 1



** Engineers rendering does not accurately reflect current design and is intended as a conceptual representation only*

Searsville Project – Engineer's Rendering* Phase 2



** Engineers rendering does not accurately reflect current design and is intended as a conceptual representation only*

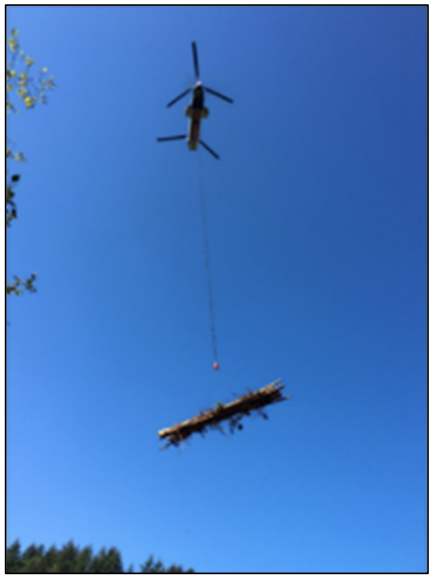
Searsville Project – Engineer's Rendering* Phase 3



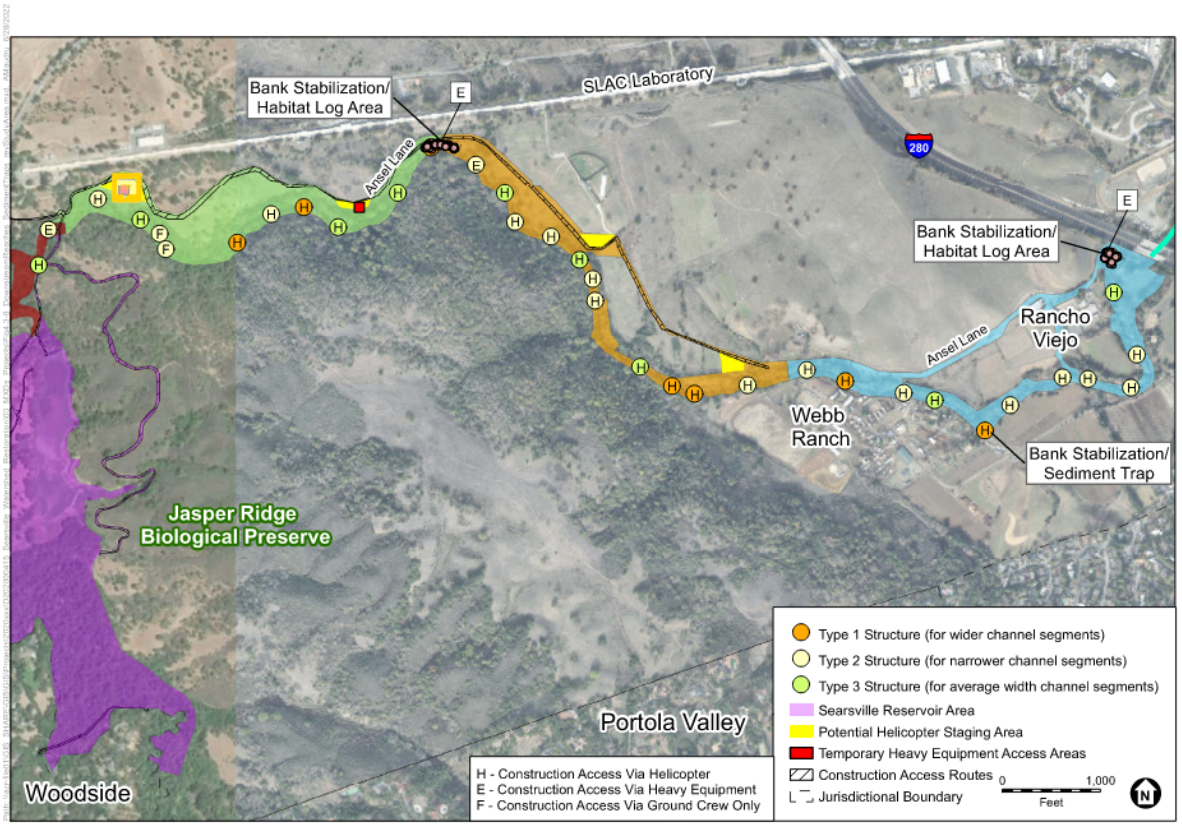
** Engineers rendering does not accurately reflect current design and is intended as a conceptual representation only*

Phase 1 - Downstream log & boulder structures/Habitat enhancements





Phase 1–Plan View of Downstream Sediment Traps/Habitat Enhancements



SOURCE: ESA, 2022; McMillen Jacobs, 2022

Searsville Watershed Restoration Poject

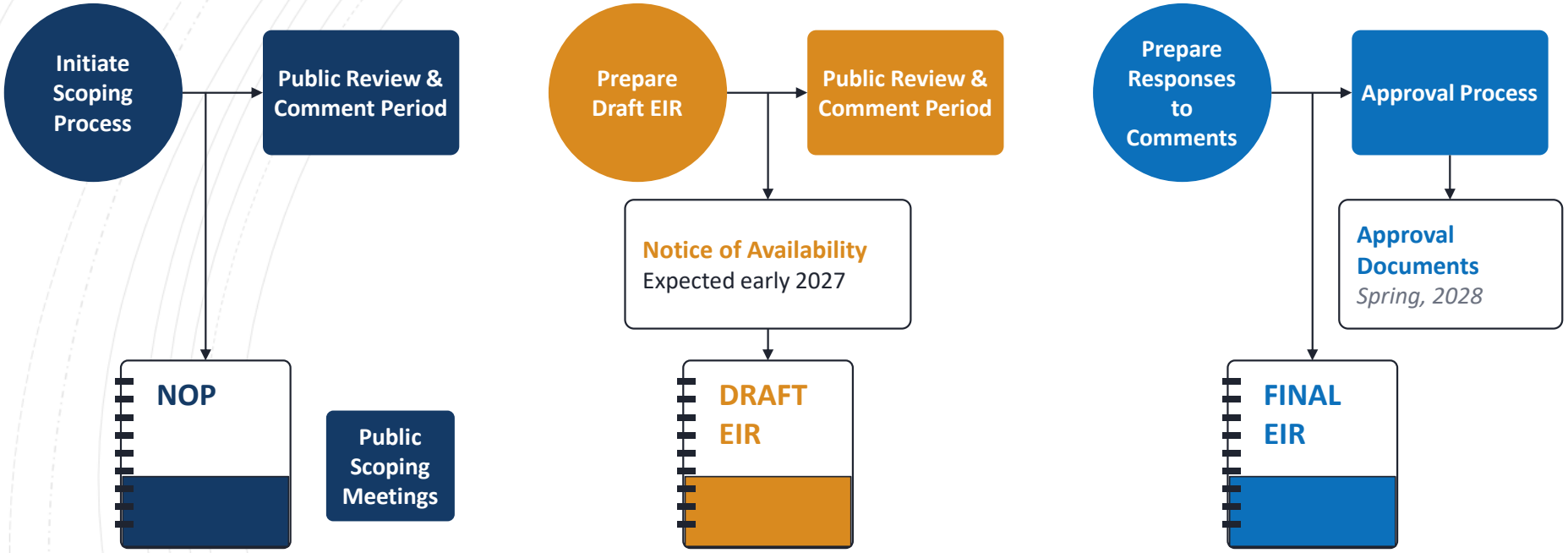
ENVIRONMENTAL COMPLIANCE & PUBLIC ENGAGEMENT OPPORTUNITIES

Stanford | Searsville Watershed Restoration Project

Alternatives

- **Bypass Channel** –Stabilize the majority of sediment in place and create a channel around the existing dam to provide fish passage
- **Dam Removal** – Implement the proposed project and after flushing remove the dam
- **Full Offhaul** – Added after the first scoping period in response to comments. Offhaul 900,000 cy of sediment rather than flush. Construct tunnel through dam to restore natural sediment process and create fish passage conditions upstream of dam

CEQA Process

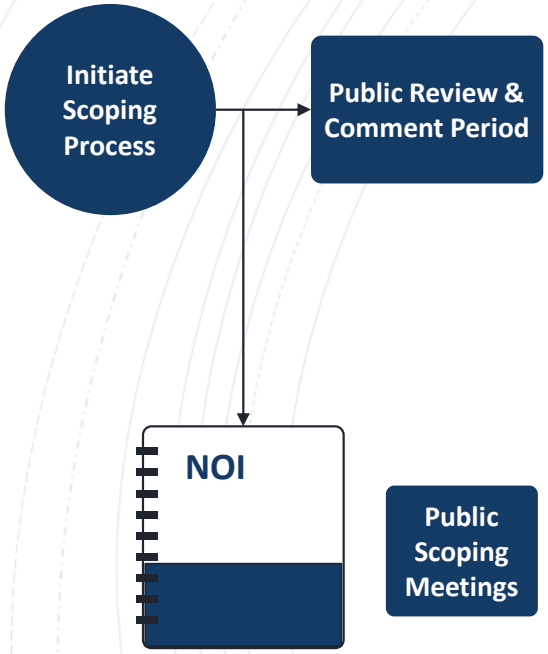


NOP: Feb 14, 2023
Amended NOP: Mar 17, 2026
Scoping meetings: Apr 7–8, 2026
Comments due to DWR: Apr 17, 2026

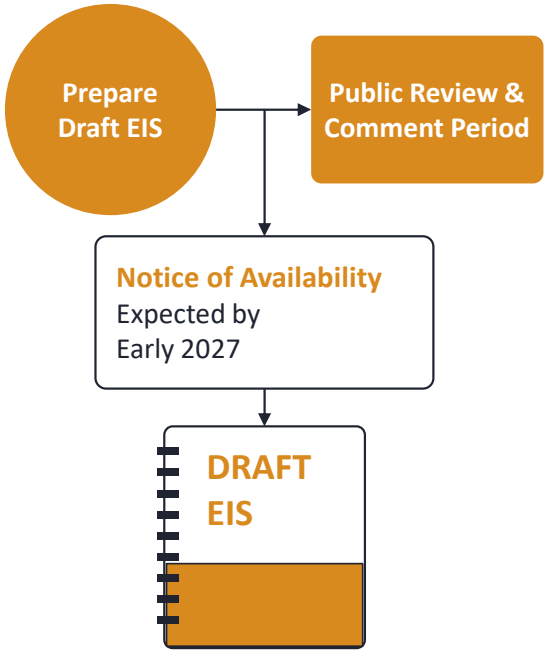
Draft EIR: early 2027

Final EIR: *late 2027*

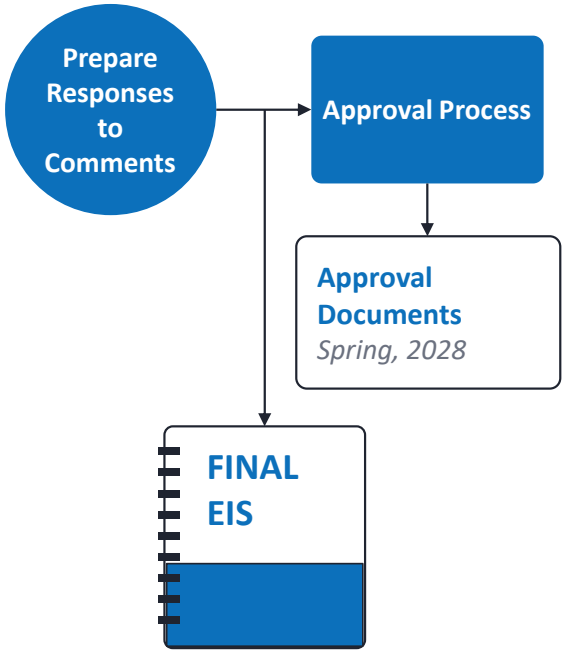
NEPA Process



NOI (original): Feb 2023
New NOI: Mar 13, 2026
Scoping meetings: Apr 7–8, 2026
Comments due to USACE: Apr 11, 2026



Draft EIS: expected by early 2027



Final EIS: *late 2027*

List of Permits/Approvals

Federal

- **US Army Corps of Engineers** Clean Water Act 404 SHPO/Section 106 (Federal Lead Agency – NEPA)
- US Fish & Wildlife Service/National Marine Fisheries Service Section 7

State

- **CA Department of Water Resources**, Division of Safety Of Dams (State Lead Agency – CEQA)
- Regional Water Quality Control Board Clean Water Act 401
- California Department of Fish and Wildlife 1600 Lake and Streambed Alteration Agreement

Local

- County Planning approval
- County Grading/Building
- Tree permits

DISCUSSION/QUESTIONS

Email: Searsville@stanford.edu
Website: searsville.stanford.edu