

Trinity River Restoration Program

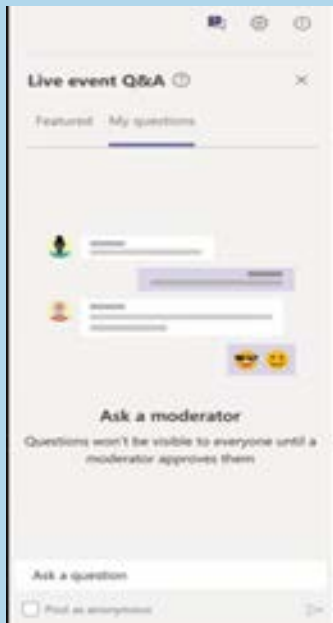
Oregon Gulch Scoping Meeting – Nov. 5, 2020

Participating in the Oregon Gulch Scoping Meeting Event

Because your microphone and camera will not be available to you for the live event, the only way you can communicate with the presenters or other attendees is to use the Q&A panel.

Using the Q&A Panel

To open the Q&A panel, select the Q&A button found on the upper, right side of the screen.



To ask a question, type your question in the compose box (located at the bottom of the panel), and then select the Send button or icon. If you want to ask your question anonymously, select “Post as anonymous.”

The questions that are sent to the presenters will be published and addressed at the end of the presentations.

Questions and comments specific to the Oregon Gulch project will be given priority.



Oregon Gulch Public Scoping Meeting Agenda

- **Meeting Guidelines** – Emily Thorn, *Ironwood Consulting*
- **Introduction** – Mike Dixon, *TRRP Executive Director*
 - Meeting Purpose & Program Partners
 - TRRP Background
 - Objectives: Overall and Proposed Project
- **Oregon Gulch Project Description** – Dave Gaeuman, *Project Designer (YTFP)*
Kyle De Juilio, *Fisheries Biologist (YTFP)*
 - Project Design and Purpose
- **Environmental Compliance** – Brandt Gutermuth, *Env. Scientist*
 - Lead Agencies
 - Project Schedule
 - How to submit questions or comments





Oregon Gulch Scoping Meeting

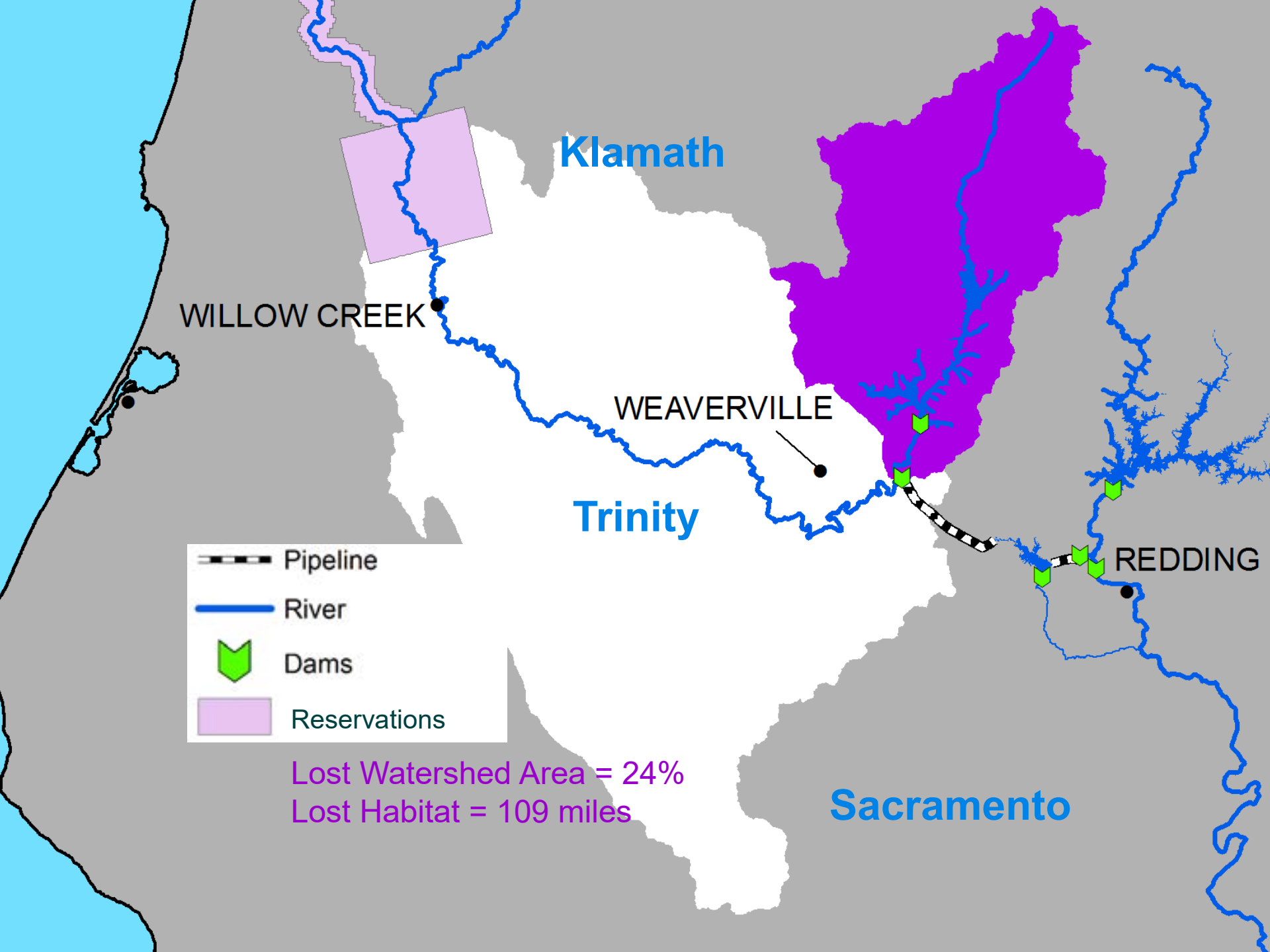
November 5, 2020

Mike Dixon, Ph.D. – Executive Director, TRRP

Dave Gaeuman, Ph.D. – Geomorphologist, Yurok Tribal Fisheries Program

Kyle De Juilio, Fisheries Biologist – Yurok Tribal Fisheries Program

Brandt Gutermuth – Environmental Scientist, TRRP



Anadromous Fish

Spring and Fall Run Chinook



Coho

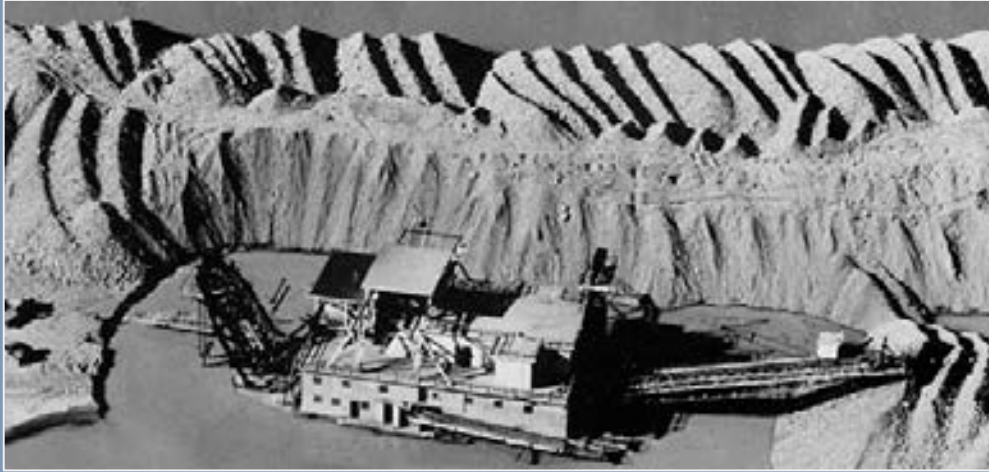


Steelhead



Pacific lamprey

Need for River Restoration: Loss of Natural River Function



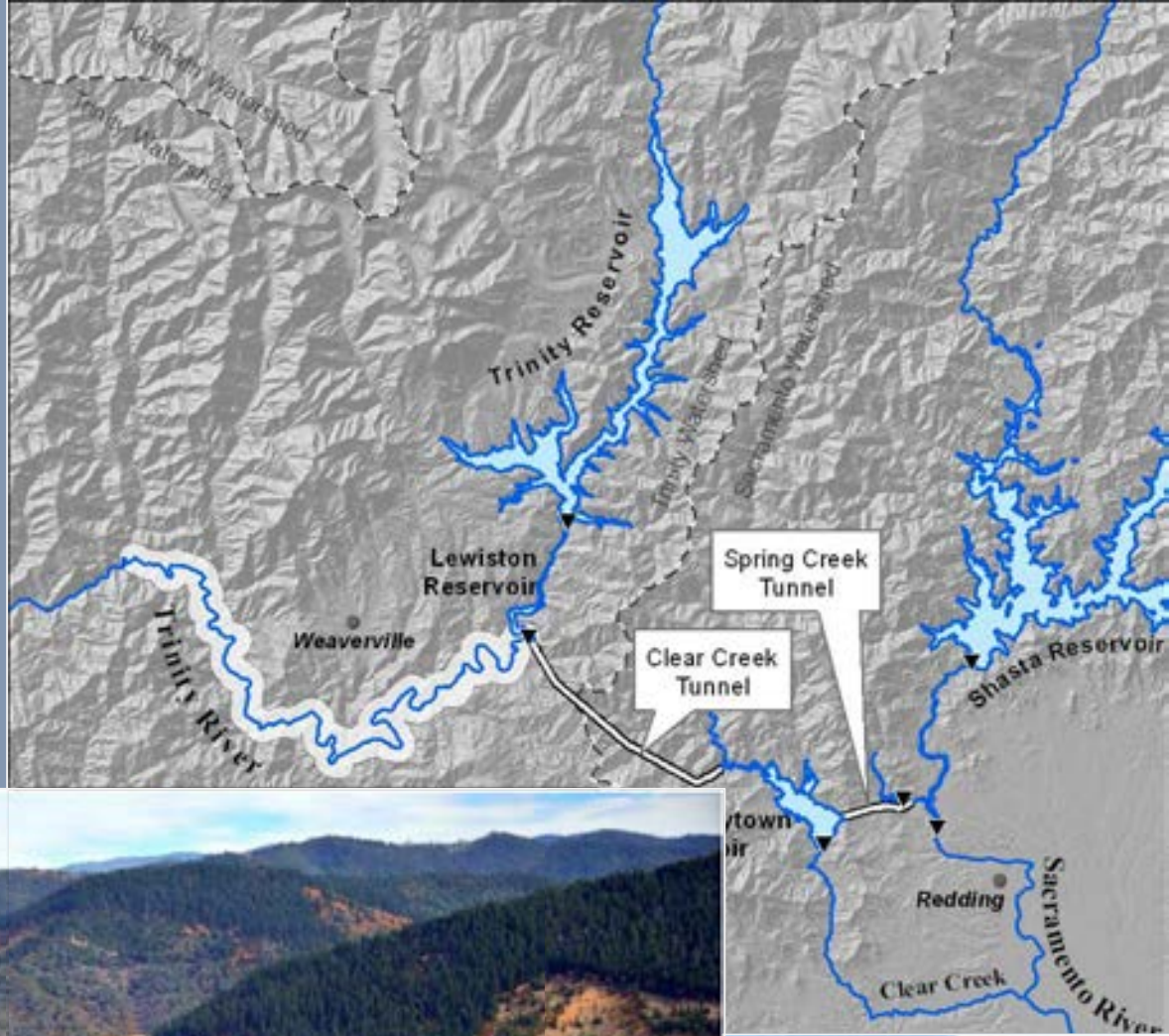
Hydraulic and dredge mining buried floodplain and obliterated the channel

Logging increased fine sediment and reduced wood recruitment



Loss of Natural River Function: Diversions to Central Valley

Initially took 80-90%
of the Trinity River.
Still takes over
50%.



U.S. Department of Interior Record of Decision 2000 Establishes the Trinity River Restoration Program



The long-term goals of this Program are to restore the form and function of the Trinity River; restore and sustain natural production of anadromous fish populations in the Trinity River to pre-dam levels; and to facilitate full participation by dependent tribal, commercial, and sport fisheries through enhanced harvest opportunities.

Our toolbox



Gravel Augmentation



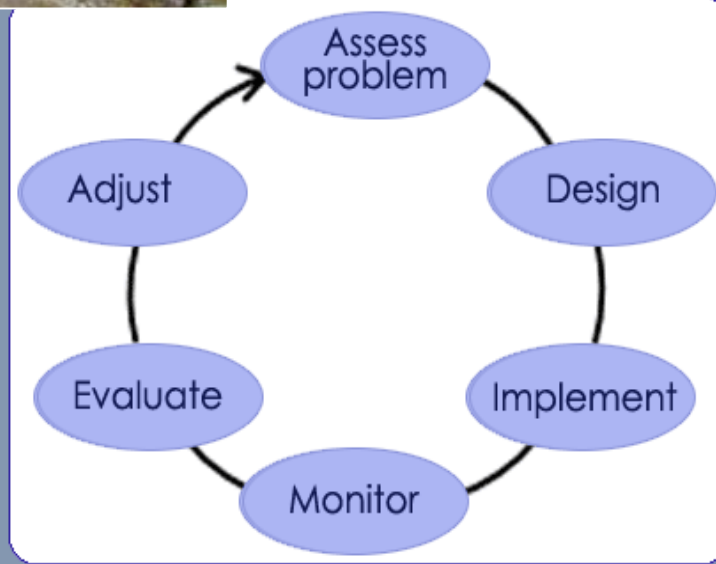
Channel Rehabilitation



Watershed Restoration

Adaptive Management

Restoration Flows



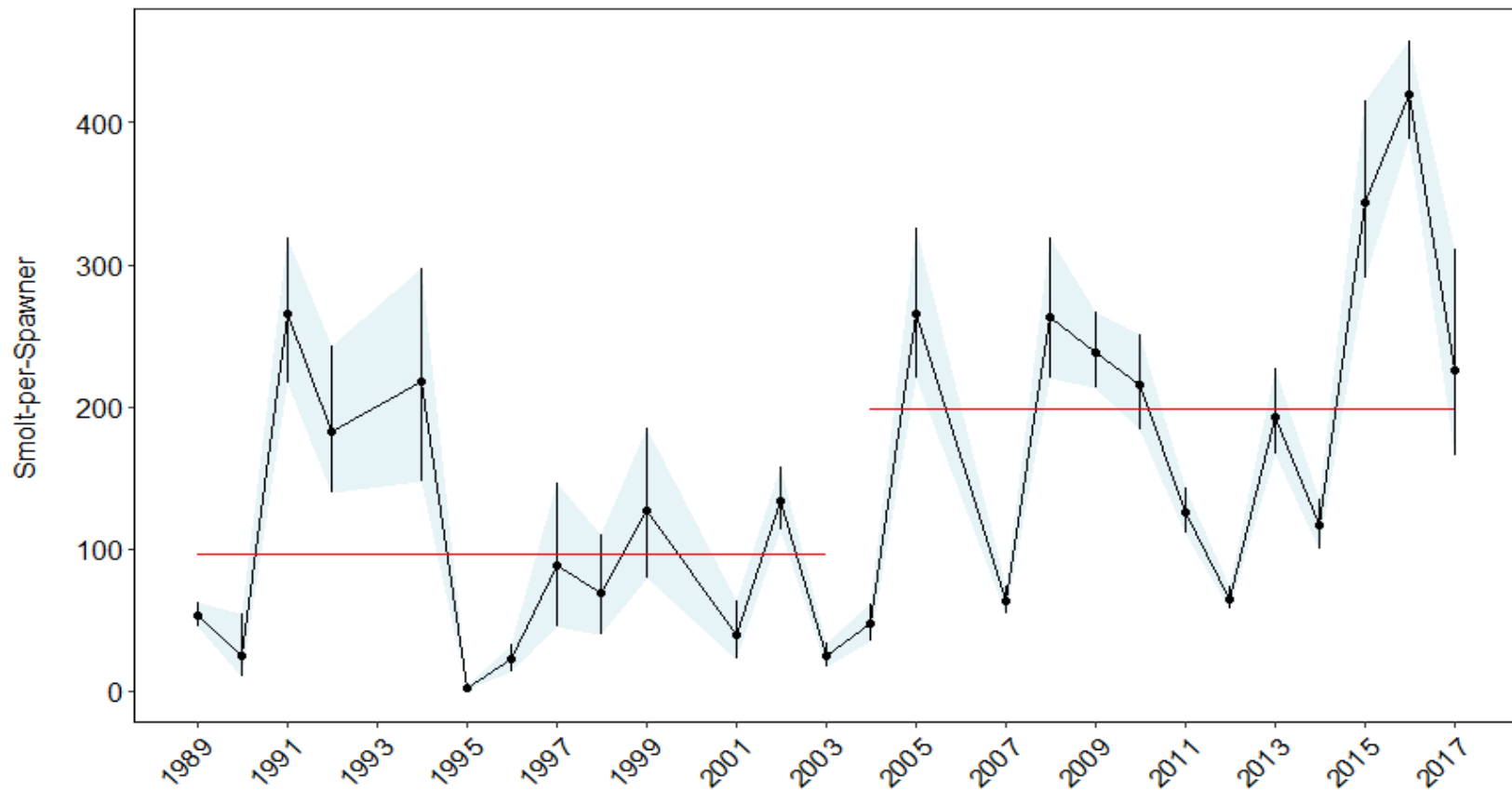


Channel Rehabilitation

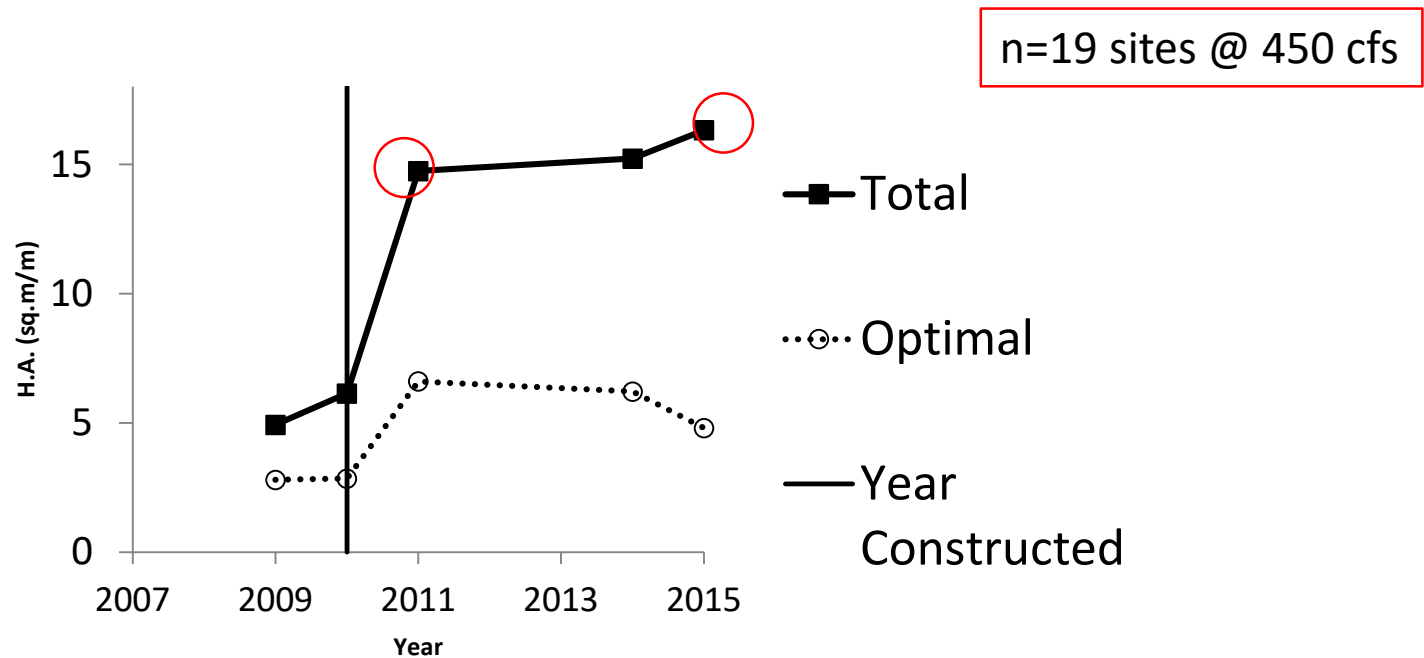


Restoration Results!

Smolts per Spawner – Change Point Analysis

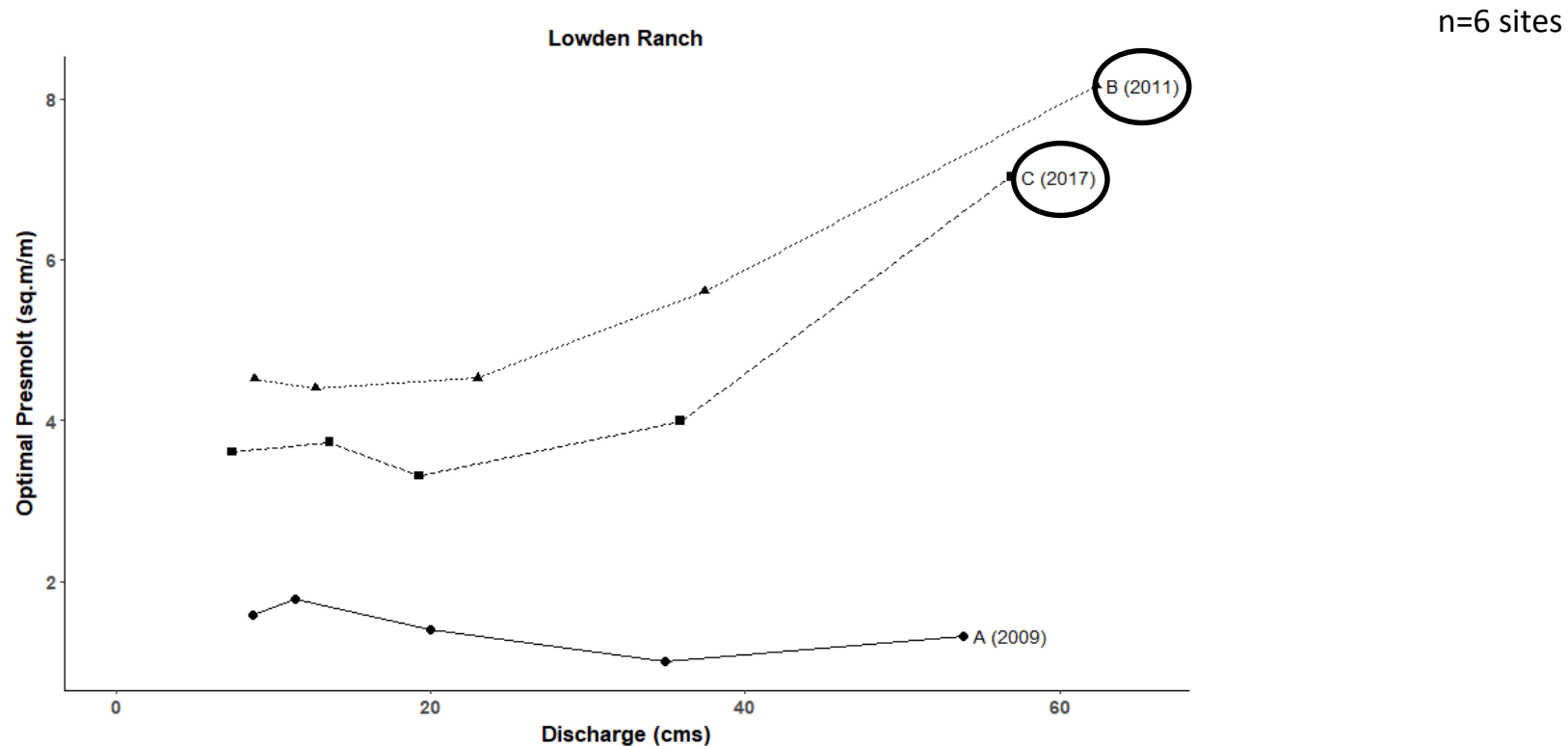


Boyce, J., D.H. Goodman, N.A. Som, J. Alvarez and A. Martin. 2018. **Trend Analysis of Salmon Rearing Habitat Restoration in the Trinity River at Summer Base Streamflow, 2005-2015.**

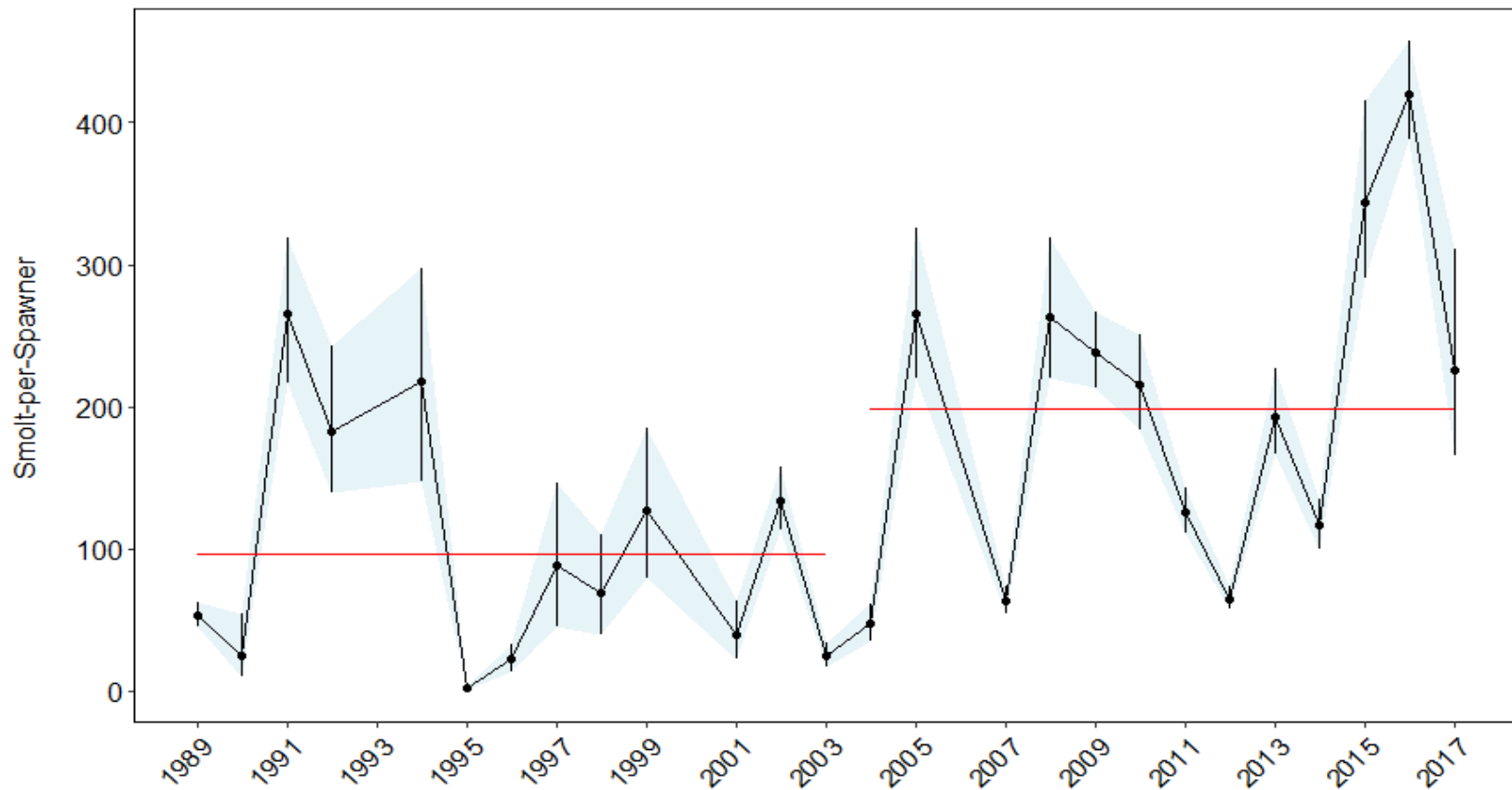


Boyce, J., D.H. Goodman, J. Alvarez, A. Martin and K. Hopkins.
2020. **Streamflow and Juvenile Salmonid Habitat Availability at
Six Rehabilitation Sites on the Trinity River, California 2008-2017.**

(300-2,000 cfs)



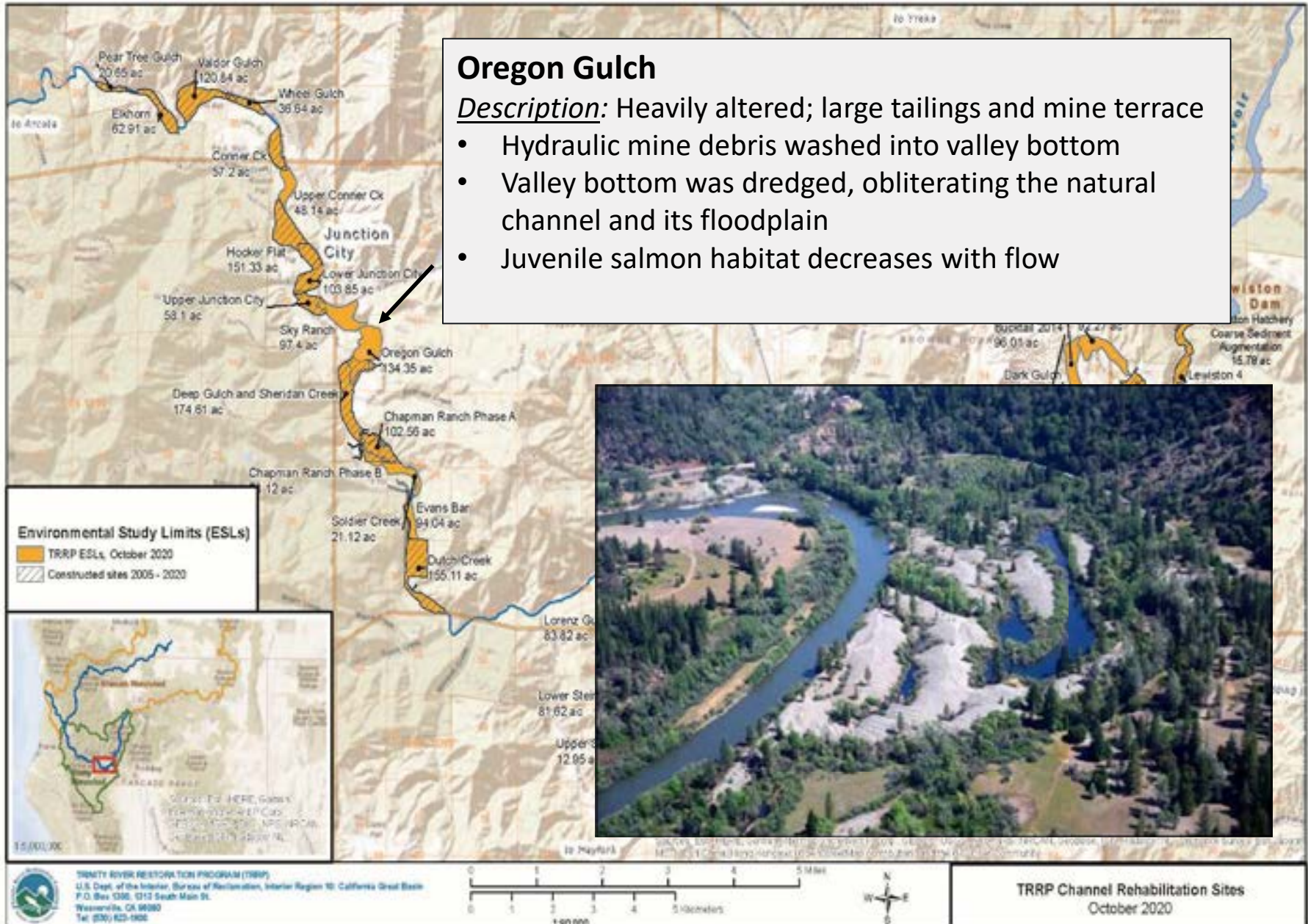
Smolts per Spawner – Change Point Analysis



Oregon Gulch

Description: Heavily altered; large tailings and mine terrace

- Hydraulic mine debris washed into valley bottom
- Valley bottom was dredged, obliterating the natural channel and its floodplain
- Juvenile salmon habitat decreases with flow





Oregon Gulch River Rehabilitation





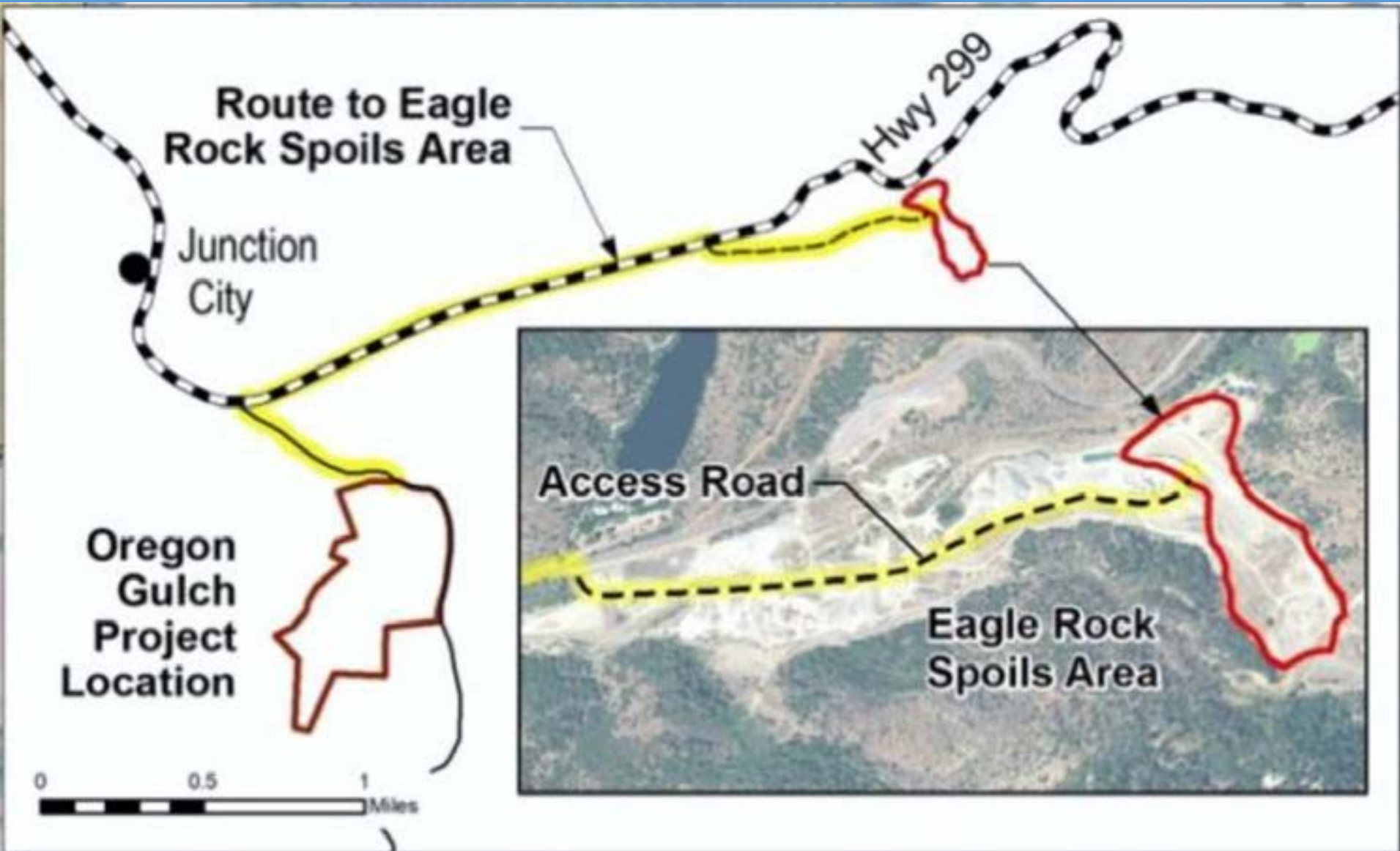
Overall Project Objectives

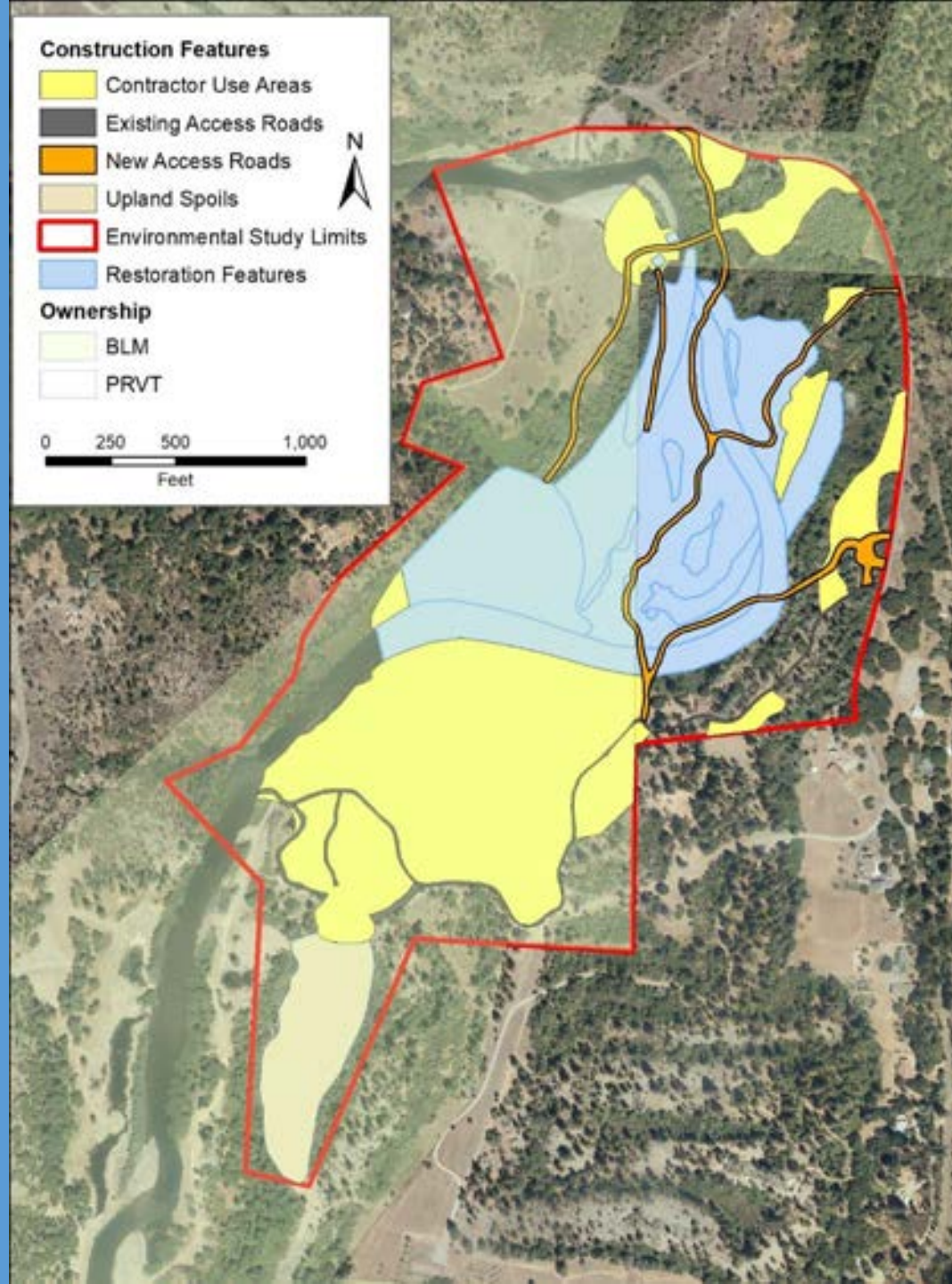
Remove tailings piles from 16 acres of valley bottom to:

- Greatly increase the extent and frequency of floodplain inundation
- Promote fluvial processes and channel planform change
- Greatly increase fry rearing habitat availability
- Greatly increase riparian biomass and abundance
- Enhance riverine trophic production and overall ecosystem function

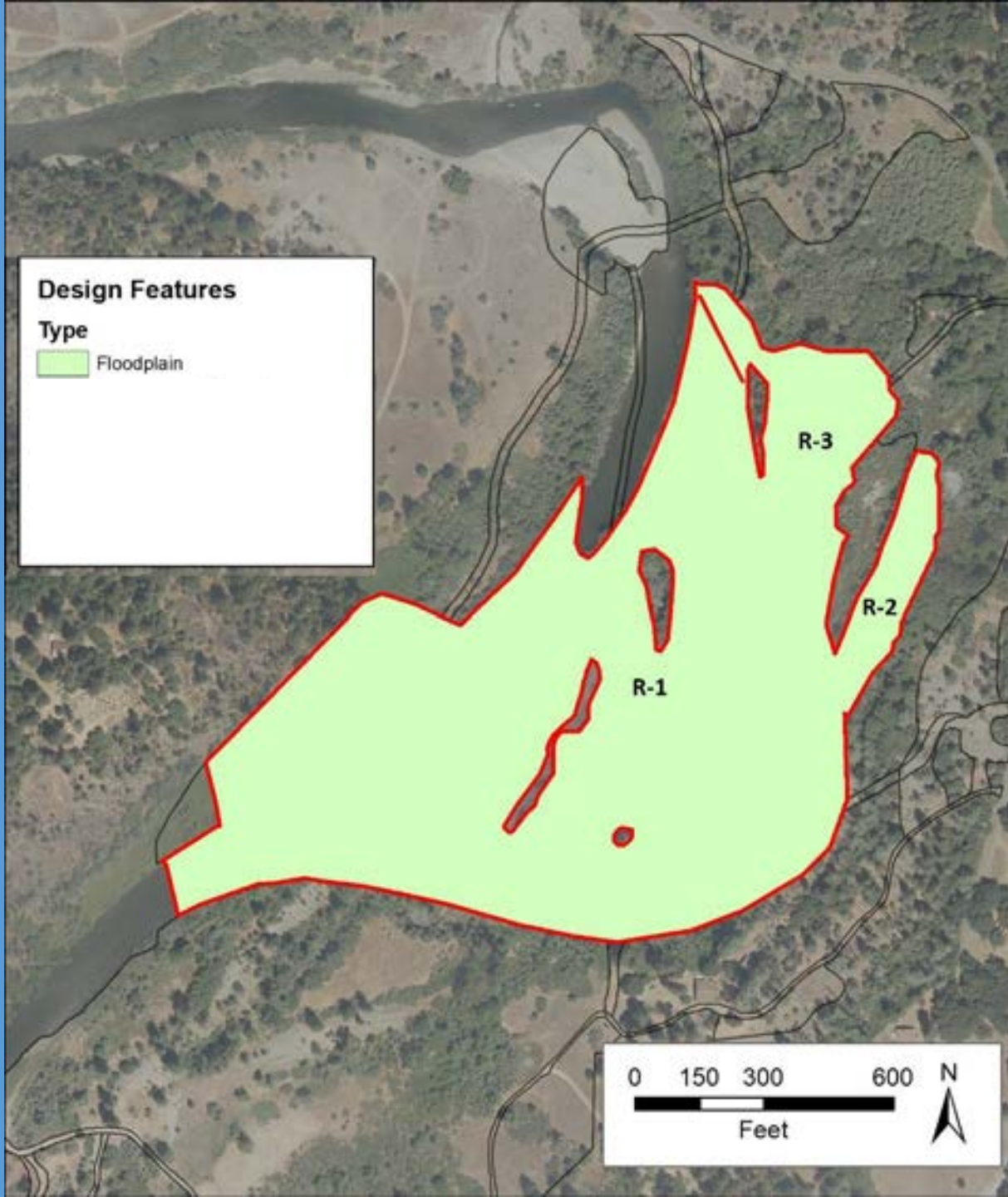
Where are the tailings going?

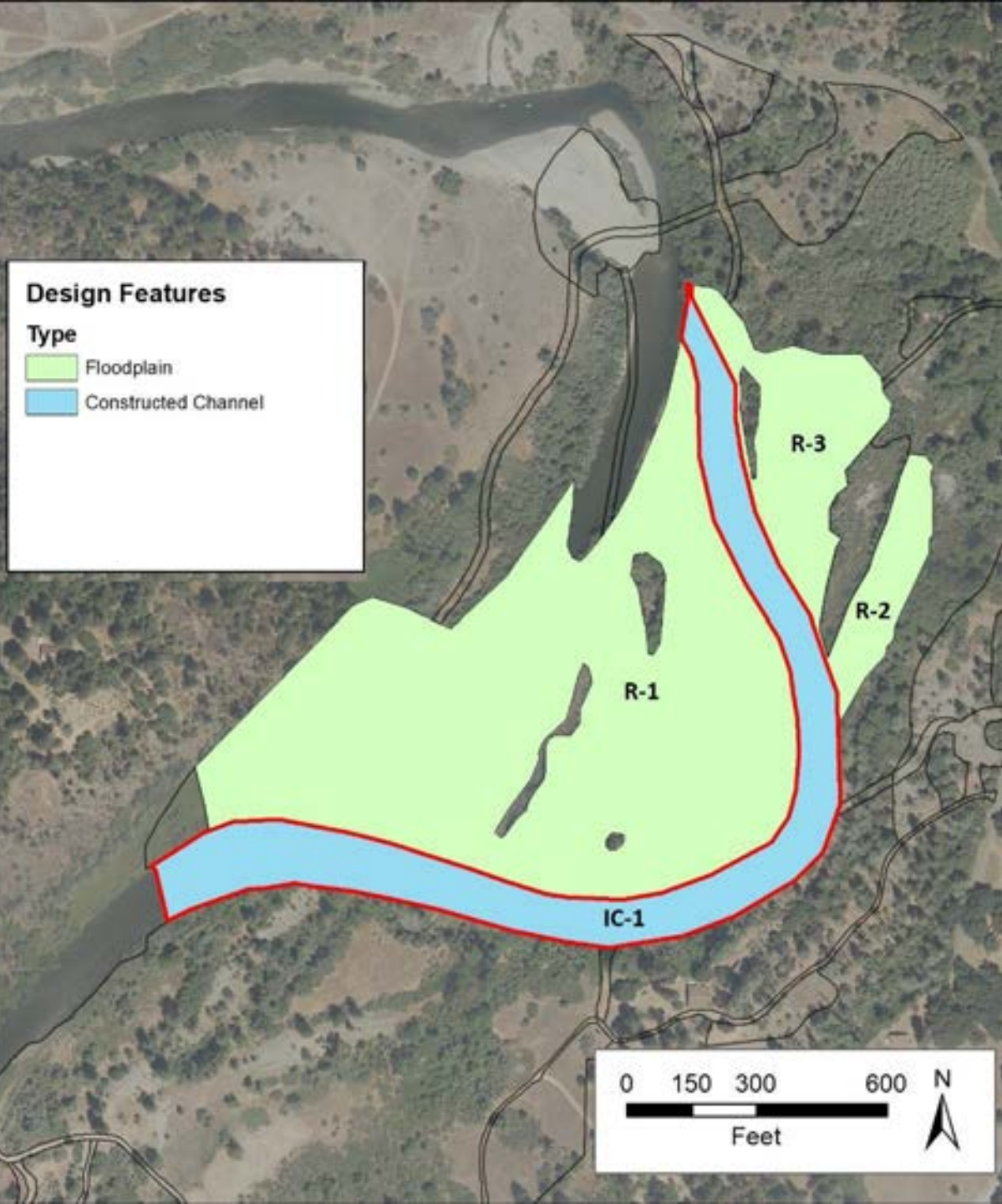
Between 320,000 and 500,000 cubic yards of tailings to Eagle Rock Quarry

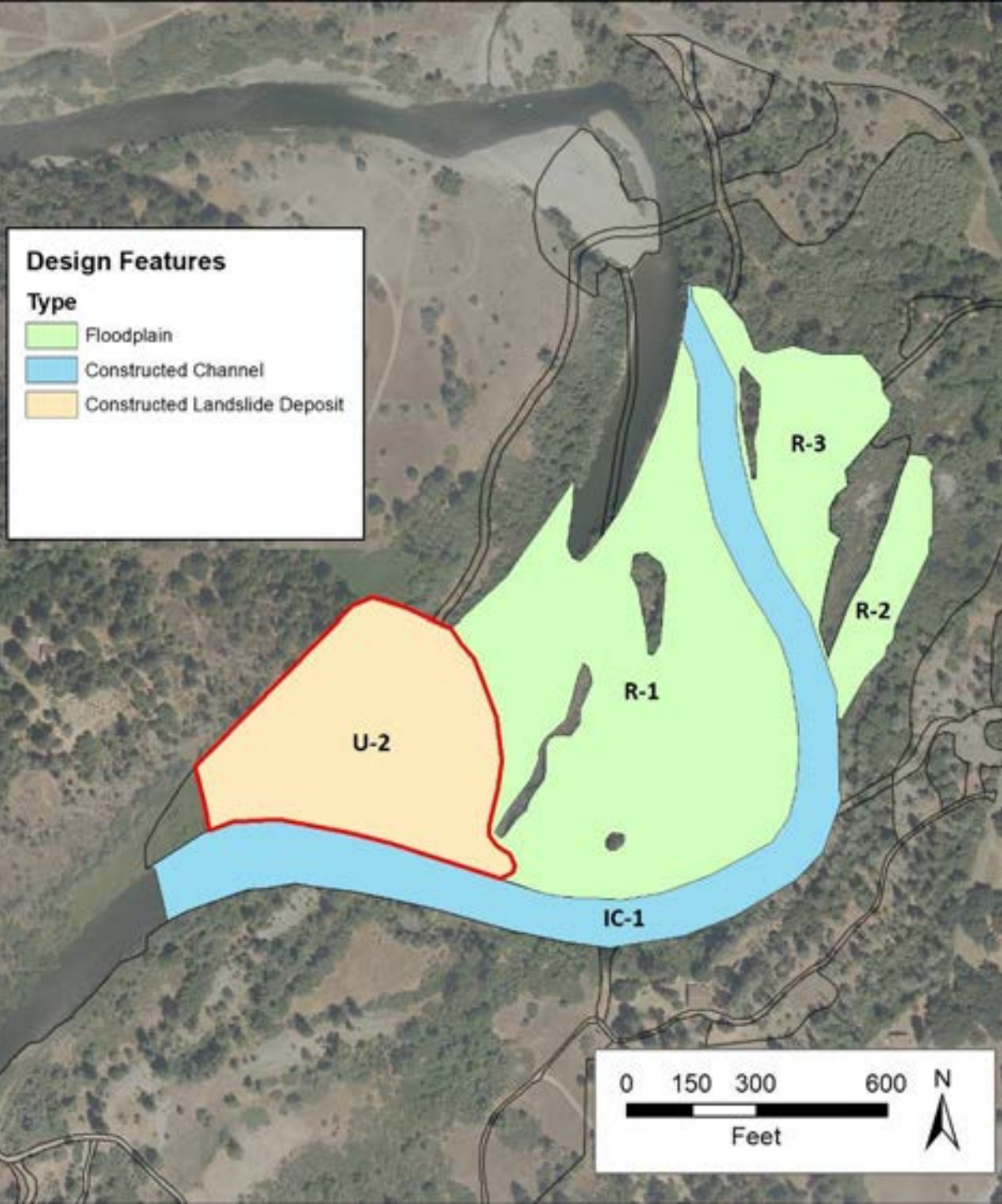


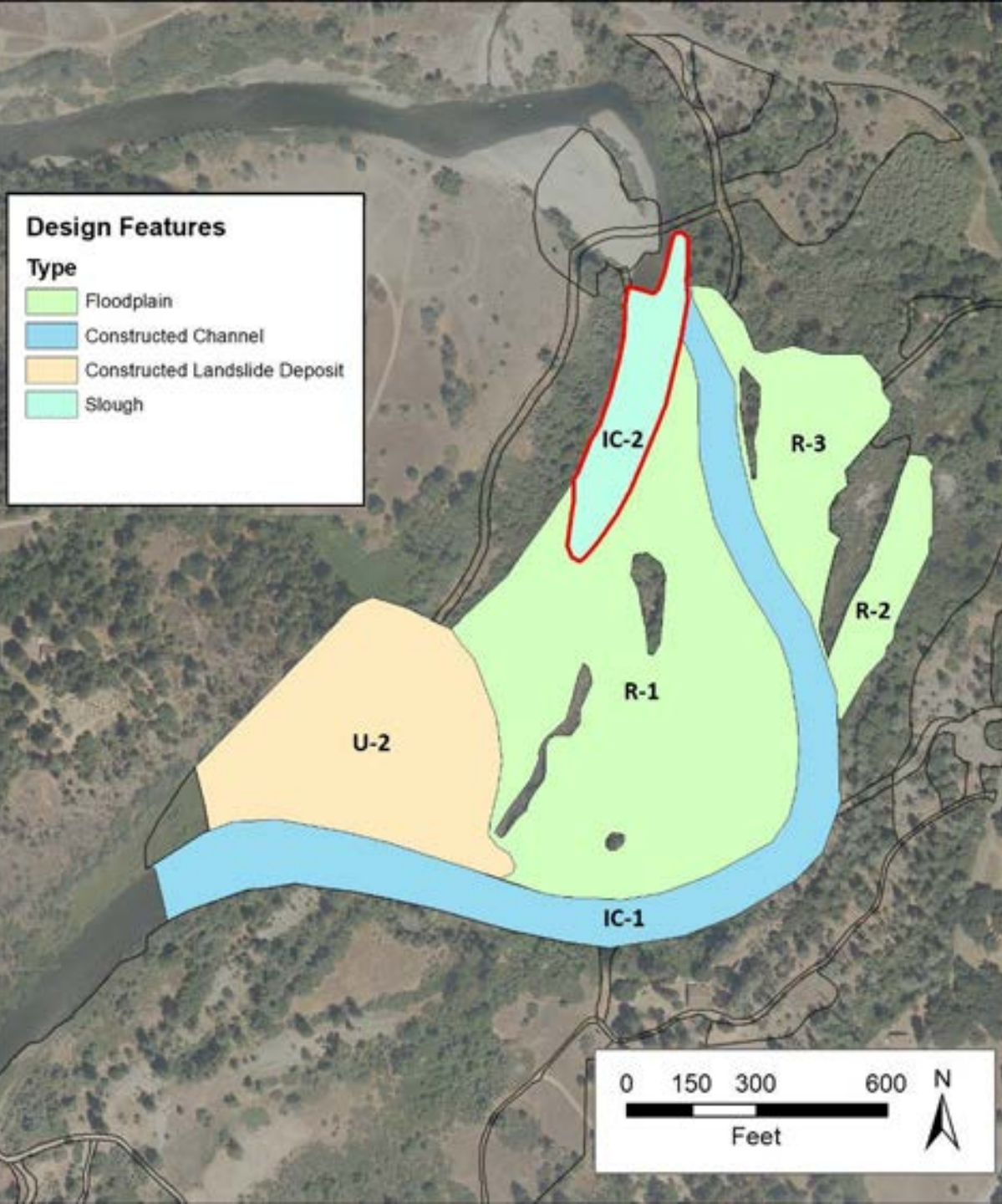


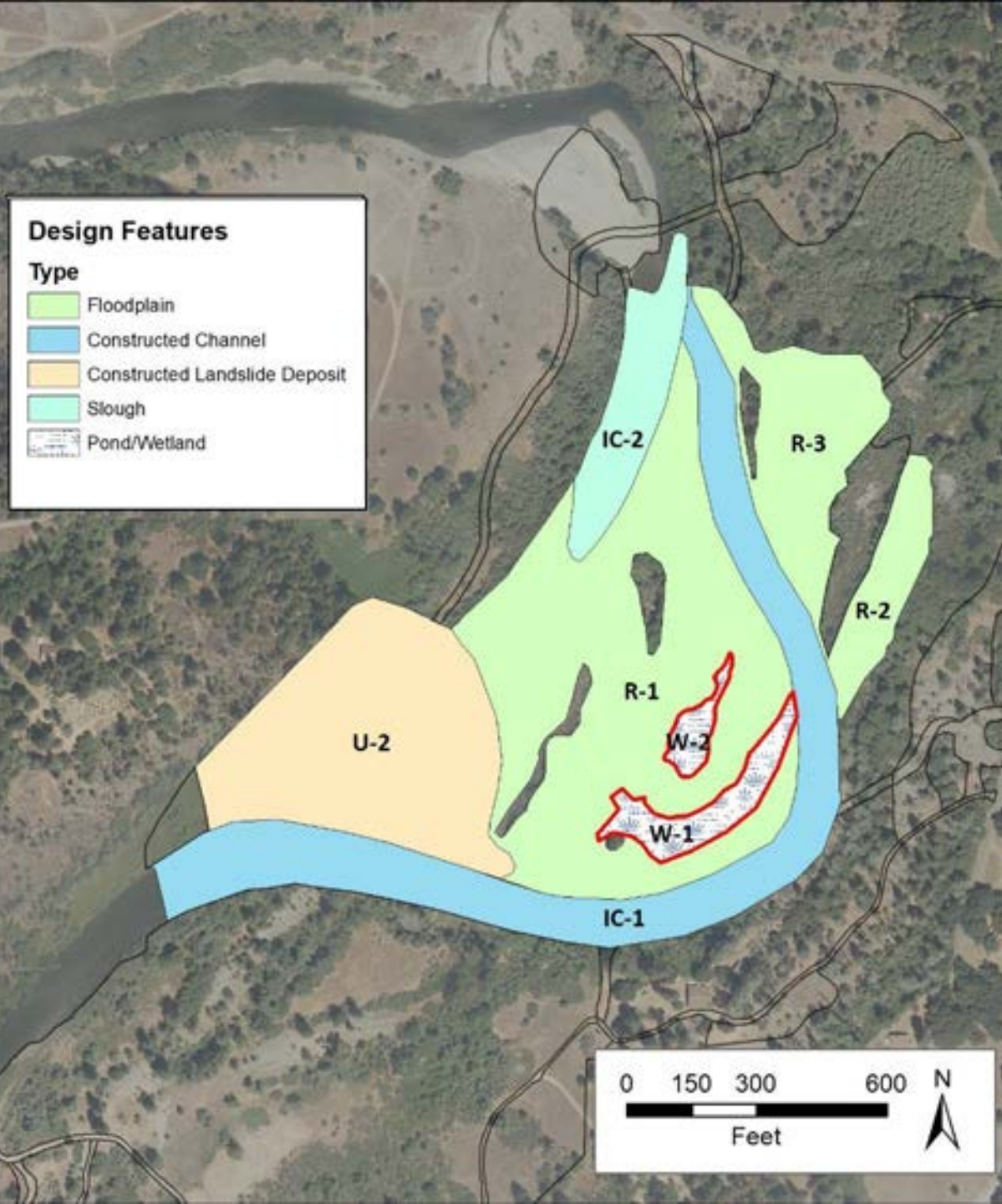


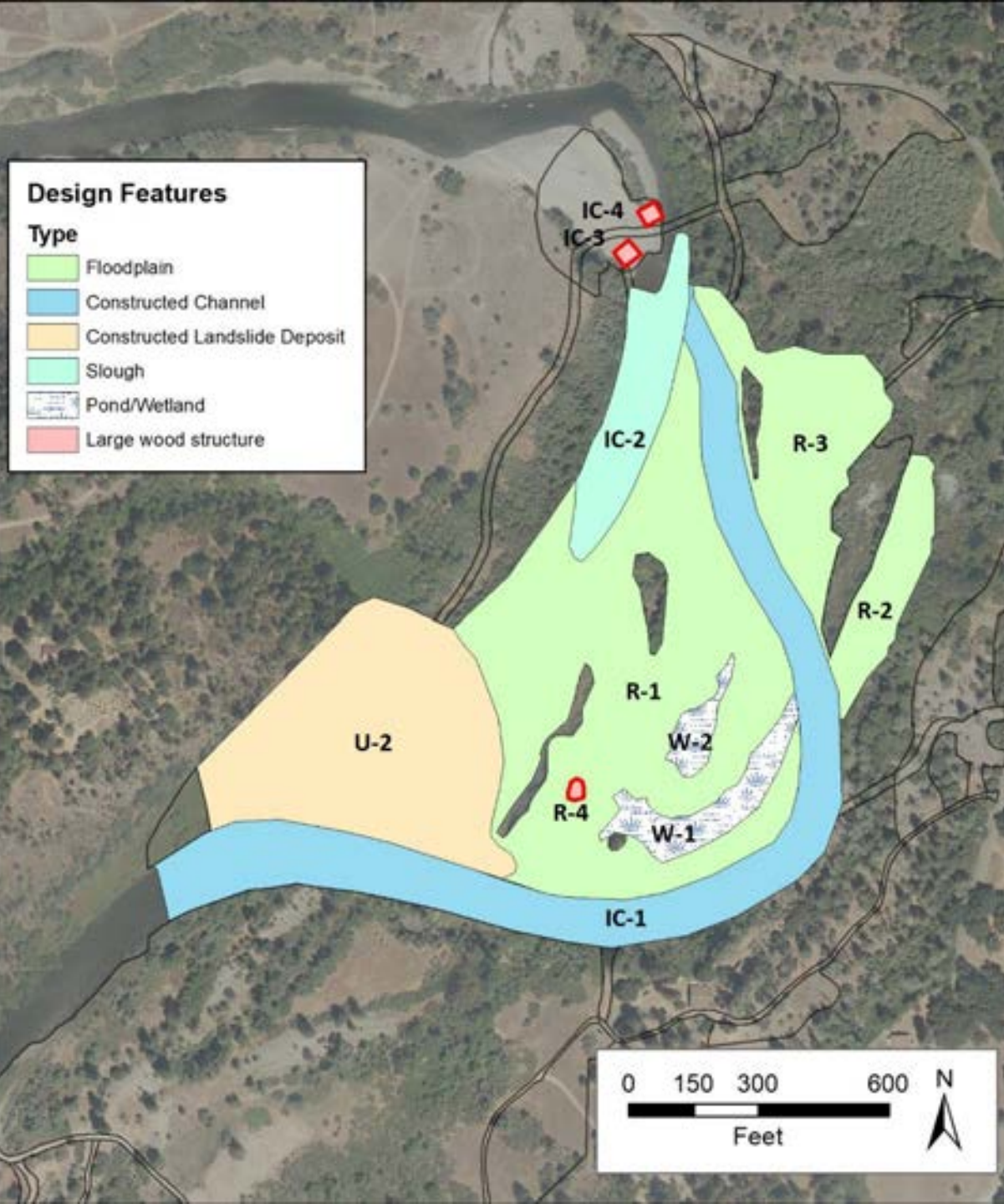




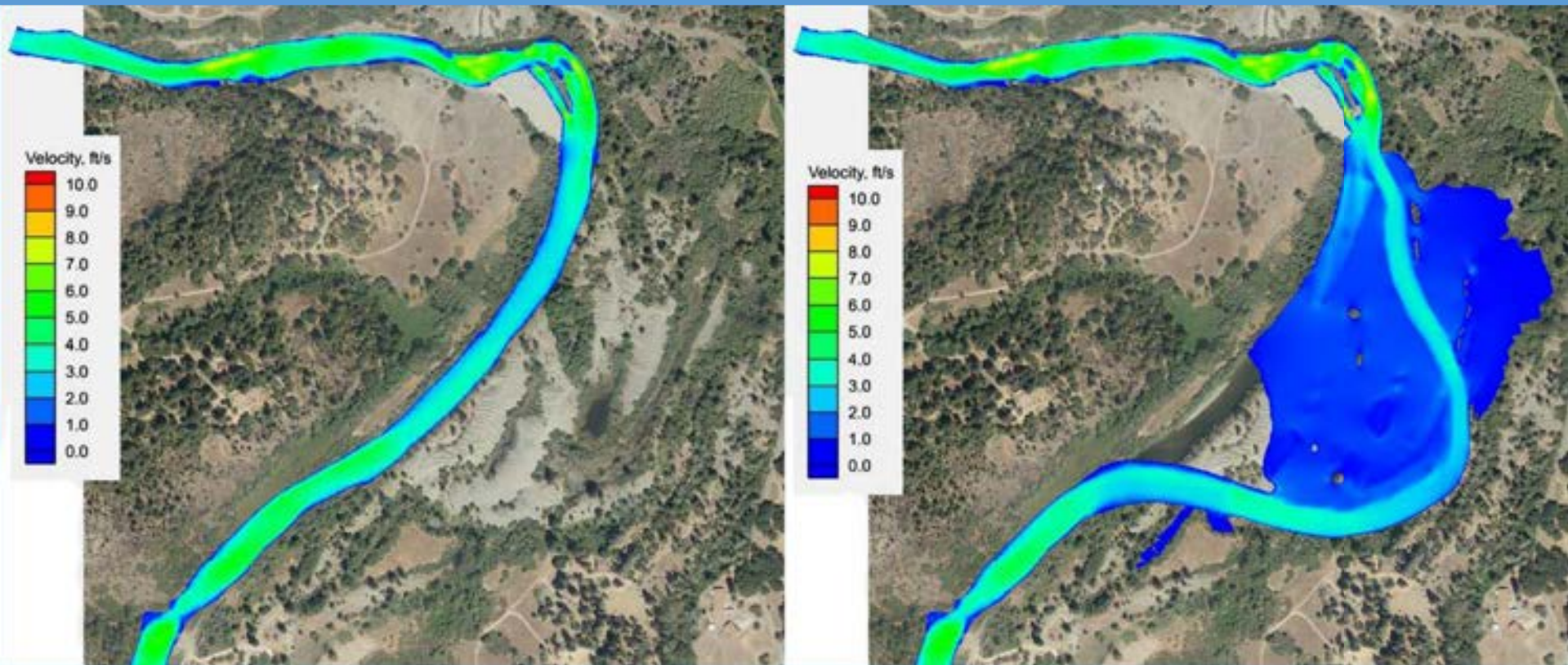








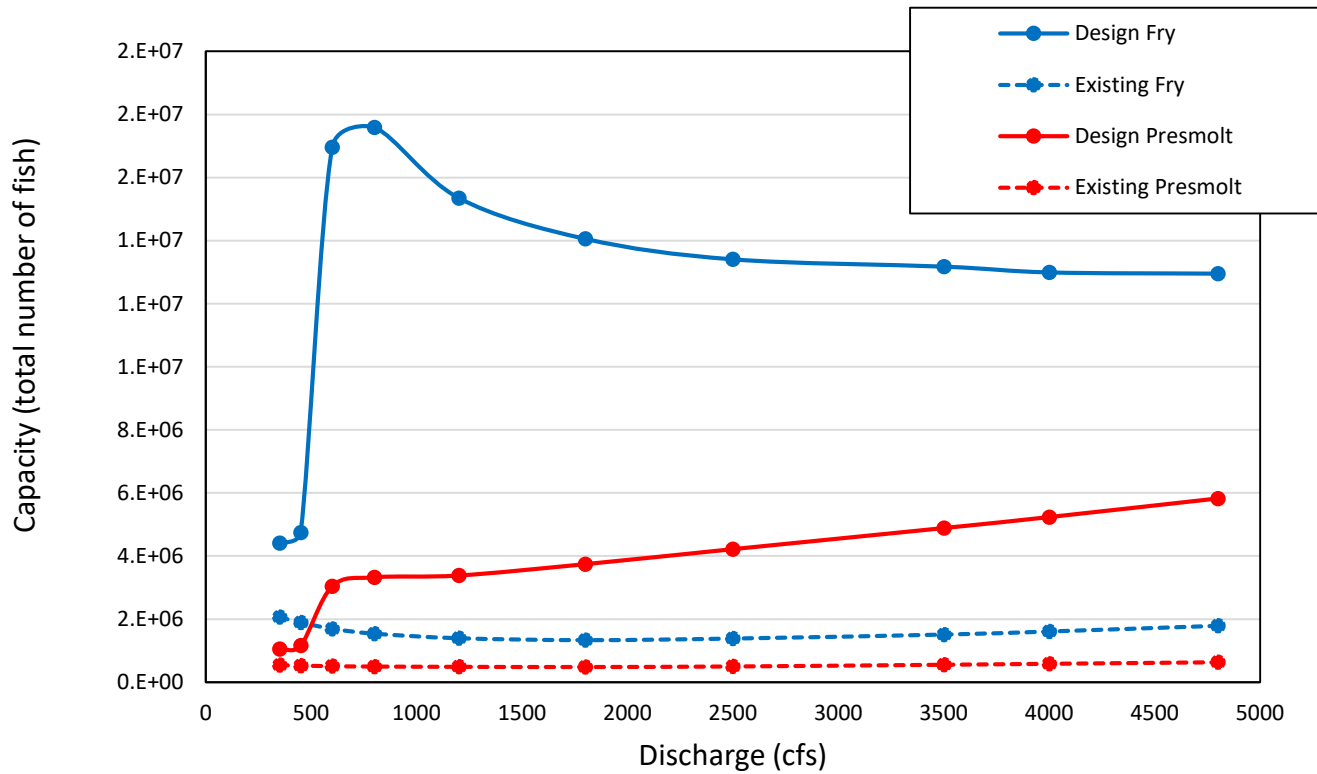
Modeled Inundation Extents and Flow Velocity 1,200 cfs



Existing Conditions

Design Conditions

Fish Capacity



River Discharge (cfs)	Existing Fry (millions)	Design Fry (millions)	Existing Smolts (millions)	Design Smolt (millions)	Percent Increase Fry	Percent Increase Presmolt
350	2	4.4	.54	1	114	94
450	1.9	4.7	.53	1.2	150	119
600	1.7	17	.51	3	900	496
800	1.5	17.5	.50	3.3	1,040	567
1,200	1.4	15.4	.49	3.4	998	591
1,800	1.3	14	.48	3.7	951	673
2,500	1.4	13.4	.50	4.2	866	742
3,500	1.5	13.2	.56	4.9	770	780
4,000	1.6	13	.59	5.2	706	794
4,800	1.8	13	.63	5.8	623	819



Oregon Gulch: Scoping is to INFORM DECISION MAKING

5 November 2020

Environmental Compliance

ASSESSMENT PROCESSES

- **National Environmental Policy Act (NEPA)**
 - Requires analysis and disclosure of environmental & human effects
 - **California Environmental Quality Act (CEQA)**
 - State equivalent to NEPA
 - Requires reducing environmental effects
- Both minimize environmental effects via public participation and documentation***

AGENCY ROLES

• NEPA: Federal

- Lead & Project Proponent = Dept. of Interior

**U.S. Bureau of Reclamation
(Trinity River Restoration Program)**

- Co-Lead =

U.S. Bureau of Land Management



• CEQA: State

- Lead = State Agency with primary project responsibility

North Coast Regional Water Quality Control Board

- Responsible Agency

Trinity County

- Trustee Agencies

California Dept. Fish & Wildlife



Schedule

Fall 2020

- Oct 21 – Nov 23: Public Scoping

➔ Virtual public meeting: Nov 5, 2020

Winter 2020-2021

- Dec: Draft Environmental Assessment/
Initial Study (EA/IS)
- Dec - Jan: Public Comment Period
INPUT based on EA/IS Project Description
- Feb: Final EA/IS and decision

Spring - Summer 2021

- Repairs to Sky Ranch Road
- Haul mine waste from
Oregon Gulch to Eagle Rock

How can the Oregon Gulch Project best meet Community and Restoration needs?

Project Contacts:

Brandt Gutermuth at 530.623.1806 or
Kevin Held at 530.623.1809

Submit input to Brandt at:

fgutermuth@usbr.gov