

Elk River Forum

Darren Mierau California Trout North Coastal Range

Pacific Ocean

Eureka

Eel River

To protect and restore wild trout, steelhead, salmon and their waters throughout California



Federal Endangered Species Act [1972]

There are 10 ESUs or DPSs of salmon and steelhead listed as threatened or endangered in California, three of which inhabit California's north coast watersheds, including:

- threatened SONCC coho salmon
- threatened NCC steelhead
- threatened CC Chinook salmon
- Core, Functionally Independent Population
- Moderate Extinction Risk
- 5,700 Spawners Required for ESU Viability



Elk River Recovery Assessment to Support Beneficial Uses and Abate Nuisance Flooding, Elk River, Humboldt County, CA

The North Coast Regional Water Quality Control Board CalTrout Northern Hydrology and Engineering Stillwater Sciences Jack Lewis





"It's time we face reality, my friends. ... We're not exactly rocket scientists."

Recovery Assessment Modeling Report and Recovery Plan

- identify the desired geomorphic, sediment, hydrologic, water quality, and habitat conditions
- recommend a suite of feasible implementation actions, supported by modeling, data analyses, and peer review
- describe an implementation strategy for regulatory compliance, engineering design, and potential funding scenarios



Pilot Sediment Reduction Projects

In support of the Recovery Assessment, the State Water Board requested pilot implementation projects be included

The Recovery Assessment will provide the basis for the design of three moderatescale pilot projects

Implementation projects will be designed to test key assumptions and predictions of the hydrodynamic and sediment analysis, and examine several treatment approaches

Three pilot projects are proposed for implementation:

- <u>Sediment Retention</u>: design and install a small facility for retention and removal of sediment delivered from upper-basin tributaries
- <u>Mechanical Removal:</u> design and implement a project to remove approximately 4,000 cubic yards of in-channel and floodplain sediment deposits
- <u>Riparian Removal:</u> experiment with riparian vegetation thinning and removal to demonstrate the effect on water surface elevation, water velocities, and stored sediment in the channel and banks.