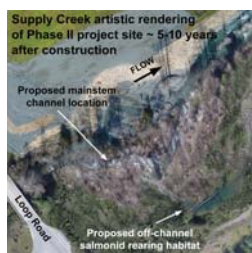
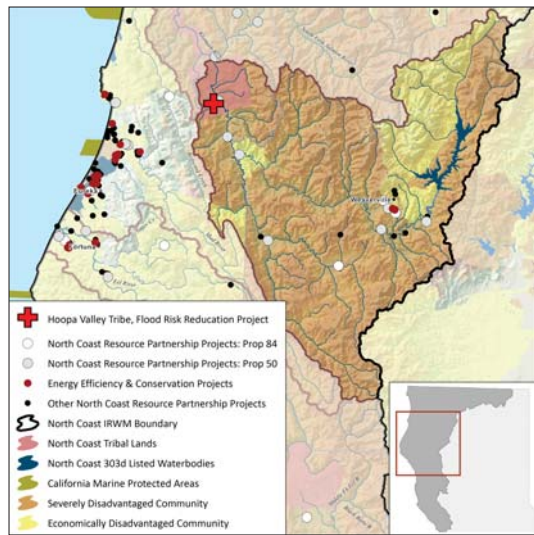


Lower Supply Flood Risk Reduction and Fisheries Habitat Improvement Project

HOOPA VALLEY TRIBE



COMPLETION DATE

March 31, 2019

STATEMENT OF THE PROBLEM

After the 1964 flood, the U.S. Army Corps of Engineers constructed high, artificial levees on both banks of Supply Creek. These berms disconnected Supply Creek from its former floodplain, impacting salmonid habitat.

PROJECT GOALS

- Reduce flood risk along Lower Supply Creek
- Restore and improve salmonid habitat in Lower Supply Creek

THE SOLUTION

Removal of the south bank Supply Creek berm targeted by this proposal will support flood risk reduction by enabling the design and construction of natural, fish-friendly floodplains for off-channel storage of flood peaks. The floodway will be widened, thereby slowing flood velocities. This will reconnect Supply Creek with its former floodplain, supporting a more complex and naturally-functioning stream corridor with a restored riparian overstory, which will substantially improve instream salmonid habitat.

PROJECT IMPLEMENTATION

Project planning, permitting, and design is underway with construction scheduled to begin in 2017.

PROJECT BUDGET

IRWM funds:	\$ 644,475
Leveraged funds:	\$ 648,000
TOTAL	\$ 1,303,475

BENEFITS

Economic benefits

- An estimated \$39,085 per year in increased quantity or quality of recreation; the project is centrally located in a well-used portion of the Hoopa Valley
- An estimated \$2,350 per year in increased groundwater recharge
- An estimated \$644 per year in benefits from riparian restoration
- About \$464 per year in avoided costs of sediment deposition
- A one-time benefit of approximately \$280,000 in the avoided costs of rebuilding Bair Road after a 100-year flood event

Water Quality

- Improved water quality due to avoided sediment reduction of 42 tons of

sediment discharged into the river system during a 100-year flood event

Water Supply

- Increased groundwater recharge of 47 acre-feet per year

Habitat and Ecosystem function benefits

- Riparian habitat restoration of 5.37 acres and floodplain restoration of 3.54 acres
- Species protection for coho salmon (*Oncorhynchus kisutch*) as a result of the restoration of high-quality rearing habitat

Cultural benefits

- An estimated 49% increase in the Supply Creek fishery due to improved habitat conditions
- Improved community capacity due to the education and technology benefits to at least 150 students per year who will participate in and tour the restoration project
- This project will help to restore the cultural and subsistence relationship between Tribal members and Supply Creek, which prior to project implementation, did not have public access
- Increased community resiliency due to climate change mitigation (riparian tree planting) and adaptation (flood plain restoration) measures

Jobs and Local Economic Benefits

- Flood damage reduction
- Over \$1.3 million spent locally using local supplies and labor when possible
- About 12 jobs created/maintained

NEXT STEPS

The Hoopa Valley Tribe will continue to develop projects that restore traditional fisheries and natural habitat to strengthen Tribal culture and connections and to increase community resiliency to challenges associated with climate change.

A movie of the project can be found at vimeo.com/163034422

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