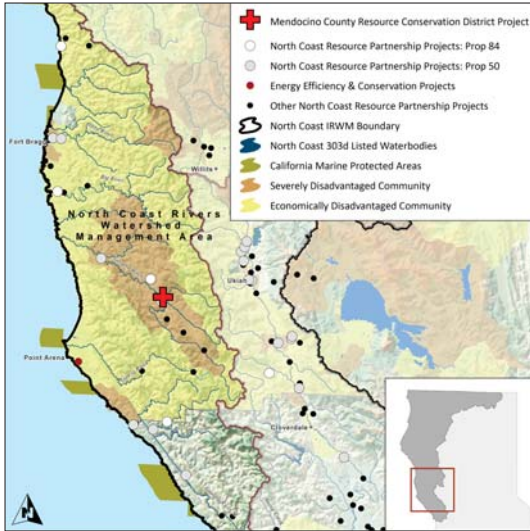


Implementing On-Farm Water Conservation Projects in the Navarro to Address Critical Low Flows

MENDOCINO COUNTY RESOURCE CONSERVATION DISTRICT



COMPLETION DATE

January 31, 2019

STATEMENT OF THE PROBLEM

During the recent extended drought, the Navarro River exhibited critical low summer flows, particularly from June-October when flows have dropped to 0.5 cubic feet per second (cfs) for more than 30 days at a time. This resulted in large dry sections of river with only residual pools available for fish and aquatic organisms. Low flows and corresponding elevated water temperatures, increase stress in endangered and threatened salmonids during a crucial life-stage. Locally, these conditions coincide with the time of year when there is also the greatest demand for on-farm water.

PROJECT GOALS

- Increase summer instream flow in the Navarro River
- Expand community awareness of water conservation technology

THE SOLUTION

This project will implement on-farm conservation projects to demonstrate water-saving technologies to the local agricultural community. These projects include water storage tank installation, irrigation system upgrades, and workshops and tours to disseminate project information.

PROJECT IMPLEMENTATION

Project implementation began in May 2016 and will continue through November 2018. The project will: 1) install a 40,000- gallon rainwater storage tank; 2) upgrade a failing irrigation system; 3) retrofit sprinkler heads on 13 acres of organic apple orchard; 4) retrofit a 61.1-acre commercial apple orchard to under-tree micro-sprayers; and 5) conduct a series of three workshops and tours to highlight agricultural production best management practices. Once completed, this project will conserve approximately 31.1 acre-feet of water per year.

PROJECT BUDGET

IRWM funds:	\$ 187,480
Leveraged funds:	\$ 64,045
TOTAL	\$ 251,525

BENEFITS

Economic benefits

- An estimated \$2,488 in benefits from increased instream flow for environmental purposes

- About \$660 per year in increased quantity or quality of recreation or public access

Habitat and Ecosystem function benefits

- Approximately 31.1 acre-feet per year conserved for instream flow, which improves salmonid habitat during critical summer months by providing connectivity, decreased stream temperatures, and improved habitat
- Species protection of coho (*Oncorhynchus kisutch*), Chinook (*Oncorhynchus tshawytscha*), and steelhead (*Oncorhynchus mykiss*)

Cultural benefits

- Conflict reduction between agricultural and environmental uses of Navarro River water
- Increased community resiliency to climate change by implementing water conservation measures and diversifying water supply sources

Jobs and Local Economic Benefits

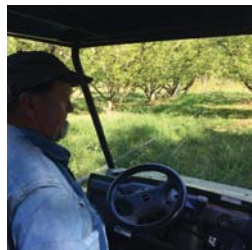
- Over \$250,000 spent locally using local supplies and labor when possible
- About 2 jobs created/ maintained

NEXT STEPS

The Mendocino RCD will continue to work closely with willing landowners to implement on-farm conservation measures and water storage solutions to improve conditions in the Navarro River watershed to benefit wild-life and human communities.

CONTACT

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NORTH COAST RESOURCE PARTNERSHIP