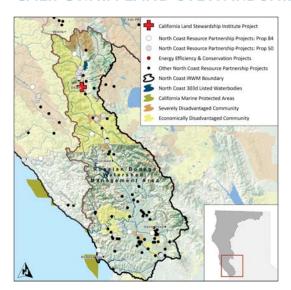
Agricultural Water Conservation and Water Supply Reliability Program — Russian and Navarro River Watersheds

CALIFORNIA LAND STEWARDSHIP INSTITUTE











COMPLETION DATE

May 2018

STATEMENT OF THE PROBLEM

In May 2014 the State Water Board curtailed all appropriative rights filed later than 1955 between Coyote Dam and Healdsburg on the mainstem Russian river and its tributaries and curtailed all riparian rights including groundwater uses in July 2014 in order to maintain sufficient flow for salmonids during critical life stages. These curtailments cut off all water supplies to agriculture while maintaining water supply to urban areas at unrestricted levels. There are only two solutions to improve the situation for agriculture - reduction of irrigation demand and creation of new supplies of water through reuse of recycled water.

PROJECT GOALS

- Reuse Ukiah municipal treated water for agricultural frost control and irrigation
- Improve agricultural water supply reliability
- Increase water conservation in irrigation through the use of continuous recording soil moisture monitoring systems
- Improve salmonid habitat quality
- Reduce conflicts over competing water uses

THE SOLUTION

This project provides long term relief of drought conditions and climate change adaptation by improving agricultural water supply reliability. The project implements agricultural water conservation practices and develops municipal recycled water as a source for irrigation water, thus lessening demand for instream water.

PROJECT IMPLEMENTATION

Project implementation is ongoing.

PROJECT BUDGET

IRWM funds: \$ 1,970,190 Leveraged funds: \$ 1,315,417 TOTAL \$ 3,285,607

BENEFITS

Economic benefits

- An estimated \$63,440 yearly from increased instream flow for environmental and municipal beneficial uses
- Approximately \$102,828 per year during periods of below average water supply (estimated at every 5 years)
- Approximately \$59,502 in avoided water supply purchased about every 7 years

- Avoided water supply projects totaling about \$396,000 per year
- Avoided costs of winegrape crop failure of approximately \$103,213 every seven years

Water Supply

 Increased agricultural water supply reliability, especially for frost control during spring

Habitat and Ecosystem function benefits

- Increased instream flow, especially during spring, reducing fish strandings
- Fishery improvement; NOAA estimated that up to 25,872 steelhead fry per year can be impacted by stranding in the Russian River – this project will alleviate spring drawdown for frost protection

Cultural benefits

Protection of the region's agricultural and natural resource heritage

Jobs and Local Economic Benefits

- Over \$3,000,000 spent locally using local supplies and labor when possible
- Maintenance/ creation of about 10 jobs

NEXT STEPS & RECOMMENDATIONS

California Land Stewardship Institute will continue to implement projects and conduct educational outreach to advance the sustainability of the region's agricultural while protecting aquatic, riparian, and upland habitat.

CONTACT

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