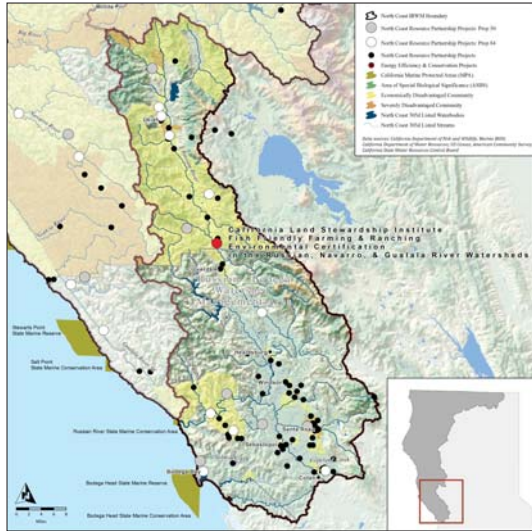


Fish Friendly Farming and Fish Friendly Ranching Environmental Certification in the Russian, Navarro, and Gualala River Watersheds

CALIFORNIA LAND STEWARDSHIP INSTITUTE



STATEMENT OF THE PROBLEM

Grazing and agriculture in the Gualala, Russian and Navarro River watersheds can generate sediment that erodes from pastures, cultivated land, roads and creeks, chemical runoff from fertilizer and pesticide application, and contribute to higher water temperatures. Sediment, chemical runoff, and increased water temperatures reduce instream habitat quality.

Many of the agricultural lands in the project watersheds are owned and farmed by individuals with low incomes and limited means to implement best practices to minimize environmental damage. If future regulations require farmers and ranchers to meet more stringent requirements, they may not be able to maintain their operations at current levels, reducing employment opportunities for residents of disadvantaged communities.

PROJECT GOALS

1. Improve water quality
2. Enhance riparian and aquatic habitat
3. Improve drought preparedness and encourage adaption to climate change
4. Preserve agricultural heritage in Sonoma and Mendocino counties

THE SOLUTION

The Fish Friendly Farming (FFF) and Fish Friendly Ranching (FFR) Environmental Certification Programs increase ecosystem function on agricultural and grazing lands while sustaining economic viability. They implement water quality improvements including: sediment source control, road and gully repair, water conservation and use efficiency, enhancement of riparian corridors through invasive species removal and revegetation, and widening riparian corridors. This project will improve 20,000 acres in the Russian, Gualala and Navarro River watersheds with a focus on disadvantaged communities.

PROJECT IMPLEMENTATION

CLSI and the farmer produce and implement a detailed Conservation Plan that reviews potential sediment sources including production lands, roads, creek channels, and ditches. The Plan inventories potential for chemical runoff, water supply facilities, and the stream network and aquatic habitats. BMPs and corrective projects are implemented and the site is certified by NMFS, NCRWQCB, and the County Agricultural Commissioner. To maintain certification, the participant must be recertified every 5 years.

PROJECT BUDGET

| | |
|------------------|-------------------|
| IRWM funds: | \$ 190,000 |
| Leveraged funds: | \$ 520,000 |
| TOTAL | \$ 710,000 |

BENEFITS

Economic

- Approximately \$23,639 per year from increased instream flows for 10 years
- Approximately \$718,133 per year from avoided costs of sedimentation for 10 years
- Approximately \$62,580 over 50 years for improved ecosystem services

Watershed Rehabilitation

- Improved fish and wildlife habitat
 - » Removing invasive species, increasing instream flows, reducing sediment loading, and restoring natural geomorphic processes will benefit wildlife habitat
 - » Reducing the number of livestock in streams will reduce bacterial contamination
 - » Requiring participating growers to use cover crops will increase carbon sequestration

Cultural and Social

- Bringing farmers together in a workshop may strengthen relationships, allowing them to transfer skills and information more efficiently
- The project will ensure additional water availability for environmental beneficial uses, reducing future water conflicts
- Assisting farmers/ranchers to comply with regulations helps safeguard the area's agricultural heritage

Jobs and Local Economy

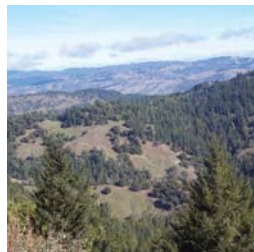
- Over \$700,000 will be spent locally using local labor and supplies when possible, contributing to State goals for environmental justice and social equity
- Increasing farmers' skills and technological understanding may translate into increased earnings as they develop more cost-effective, efficient, and productive practices.

NEXT STEPS & RECOMMENDATIONS

The California Land Stewardship Institute will continue to seek funding for and implement the FFF/FFR Environmental Certification Programs to increase environmental value and ecosystem function on agricultural and grazing lands while sustaining economic viability and preserving the Region's agricultural heritage.

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NORTH COAST RESOURCE PARTNERSHIP