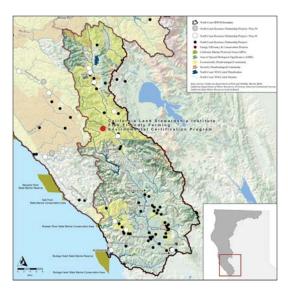
# Fish Friendly Farming Environmental Certification Program

## CALIFORNIA LAND STEWARDSHIP INSTITUTE















#### STATEMENT OF THE PROBLEM

The FFF Environmental Certification Program worked with three agricultural landowners to identify and assess pollutant sources, prescribe Best Management Practices (BMPs), and implement projects to ameliorate and prevent their recurrence.

#### **PROJECT GOALS**

#### Short-term Goals:

- Felta Creek: replace non-native invasive plants species with appropriate native plant species
- King Ranch: expand and enhance riparian corridor
- Summerhome Park: replace non-native species in the riparian corridor with appropriate native plant species

## Long-term Goals:

- Creation of dense native riparian corridors with habitat conditions that support listed salmonids and other wildlife
- Contribute to efforts to meet sediment and temperature TMDLs

### THE SOLUTION

The Russian River watershed is listed as impaired by two main pollutants: fine sediment and high water temperature. These pollutants affect beneficial uses including cold freshwater habitat, fish migration and spawning, rare and endangered species, wildlife habitat, agricultural and municipal water supply and recreation. This program worked directly with landowners to implement three habitat improvement and sediment and water temperature reduction projects.

## PROJECT IMPLEMENTATION AND ACCOMPLISHMENTS

Felta Creek. California Land Stewardship Institute (CLSI) worked with the landowner and contractors to remove invasive non-native understory and replaced it with native understory plants and trees.

King Ranch. CLSI worked with the landowner to remove non-native invasive yellow star thistle and install native trees to further enhance a riparian slough created in 2002.

**Summerhome Park.** This project removed invasive, non-native understory plants from riparian corridor in the Guerneville area and replaced them with native understory from local native stock.

#### **COMPLETION DATE**

March 31, 2013

#### **PROJECT BUDGET**

 IRWM funds:
 \$210,510

 Leveraged funds:
 \$112,811

 Total:
 \$323,321

#### **BENEFITS**

#### Fconomic

- Trees planted will provide an estimated economic benefit of \$303,366/yr for the air quality benefit provided by carbon sequestration
- Removal of invasive non-native plants will provide an estimated economic benefit of \$1,716 per/yr

### Habitat and Ecosystem Function

- 21.5 acres of habitat (6,366 linear feet of stream) restored
  - » 14.3 acres of invasive non-native plants eradicated
  - » 1580 native understory plants and trees planted
- Establishment of riparian forest with regenerative capacity to sustain the shade canopy and cold water conditions required by salmonids

#### Cultural

- This project supports the watershed's long history of agriculture. Working with landowners to implement TMDL requirements helped them avoid fines associated with noncompliance.
- Landowners learn BMPs that can be effectively applied in perpetuity, increasing the likelihood of continued invasive plant management and maintenance of healthy riparian habitat
- Implementation of the projects implements TMDLs, reducing potential for conflict.

## Jobs and Local Economy

- This project cost \$ 323,321, which was spent in the area to improve farming practices using local supplies and labor when possible, thus contributing towards State goals of environmental and social justice.
- Jobs created or maintained : 2.8 full time person years

## **NEXT STEPS**

Next steps include enrollment of other watershed landowners in the Fish Friendly Farming program and continued outreach and education of watershed residents.

#### CONTAC

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## ACKNOWLEDGEMENTS

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