



# Winter Green Farm Riparian Fencing and Wetland & Savanna Restoration

## Project Background

This project involved three phases at Winter Green Farm, an organic, 180-acre farm located on Poodle Creek, a major tributary to Elk Creek. The property was purchased by landowners who wanted to graze cattle on their pasture but also wanted to reduce the impact of grazing on the riparian area and water quality of Poodle Creek. Both water temperatures and *E. coli* levels are high on Poodle Creek, presenting less than ideal conditions for native fish like cutthroat trout.

The first and second phases of this project addressed both of these water quality issues. We installed wire fencing between the pasture and riparian area along Evans and Poodle Creek to allow livestock to graze away from the stream. Native trees and shrubs were planted in the riparian area to establish a canopy for shade and wildlife habitat.

The third phase focused on enhancing the quality of wildlife habitat on an eight-acre portion of the property that includes a one-acre pond, a small stream, and several acres of former oak savanna. The pond was already an attractive site for migrating waterfowl, and pre-project monitoring indicated that the pond could potentially provide habitat for western pond turtles as well as for native amphibians such as the red-legged frog. **However, the pond's steep slopes left no shallow areas for breeding.** Additionally, Reed canarygrass dominated the riparian area around the pond and the stream tributary, and non-native blackberry had invaded a section of the oak savanna.



Before the project: Blackberry had invaded the oak savanna habitat.



Implementation: Blackberry is mowed in the oak savanna to allow the growth of native prairie vegetation.

## Restoration Techniques

During the first two phases, we installed 1,440 feet of five-strand barbed-wire fencing along Evans Creek and Poodle Creek to separate livestock from the riparian areas. Two 300-gallon off-channel watering stations were constructed to provide off-stream water. We also eradicated non-native species such as blackberry and scotch broom and replanted the riparian area with native trees and shrubs.

The third phase of the project included the excavation of two shallow pools adjacent to the existing pond designed for use by amphibians. The excavated areas were planted with native wetland species. The oak savanna was restored by mowing blackberry and grading steeper slopes and the mounds left by prior agricultural activities to allow for future mowing of blackberry re-growth.



Implementation: An excavator creates the shallow pools adjacent to the existing pond.



Implementation: Landowner Jack Gray plants a ponderosa pine on the banks of Poodle Creek.

## Ecological & Economic Benefits

- ◆ Riparian fencing diminishes the impact of livestock on water quality and riparian vegetation.
- ◆ Increasing the amount of native trees & shrubs provides wildlife habitat. As the trees grow, this will shade the stream and reduce water temperatures.
- ◆ Eradication of invasive species in the upland and oak savanna areas allows the growth of native vegetation.
- ◆ Planting native grasses & forbs in the wetland area provides food & habitat for native wildlife.
- ◆ The shallow water of the excavated pools create breeding habitat for native amphibians.
- ◆ The excavation of two ponds for wildlife habitat utilized the services a local contractor.



After the project: The riparian area was fenced and an off-channel watering station was installed.

## Project Funding & Partners

Project Cost:	\$ 34,144	Partners
Funding:OWEB Grants:	\$ 25,114	Oregon Watershed Enhancement Board
In-kind / Cash Match:	\$ 9,030	Jack Gray, Landowner
		Steve Smith, US Fish & Wildlife Service
		Oregon Department of Fish & Wildlife

The Long Tom Watershed Council thanks our partners and funders!