

Final Completion Summary

This project is located in the Southern portion of Wheeler County, above Mountain Creek; north of Waterman Road. Historic and land management practices of livestock pressure have degraded two major tributaries to the reservoir (Mathis Creek and Fopiano Creek) and the reservoir itself. Unrestricted livestock access to these areas are preventing any positive vegetative response. These current conditions were creating water quality and quantity concerns for the tributaries, reservoir, and Fopiano Creek below the reservoir, which is listed as steelhead habitat by ODF&W. This project funding was used to install exclusion fencing along Fopiano Creek, and the reservoir, remove encroaching Western Juniper from the floodplains of Fopiano Creek, and install riparian plantings along Fopiano Creek. The Confederate Tribes of Warm Springs worked as a collaborative partner in providing riparian plantings for the Fopiano stream system to enhance the riparian areas, and the Natural Resource Conservation Service provided partnership funding to develop two spring locations in order to provide off channel watering facilities. Project partners included Wheeler SWCD, The Confederate Tribes of Warm Springs (CTWS), NRCS, OWEB, and the landowner.

Background

Historic livestock pressure has left the riparian areas of two major tributaries to the reservoir and the reservoir itself in a state of degradation. Unrestricted access to livestock continued to prevent any positive vegetative response. These conditions were contributing to water quality and quantity concerns for the tributaries, the reservoir, and Fopiano Creek below the reservoir, which is listed by ODF&W as steelhead habitat. These two tributaries also lacked in riparian woody species resulting in inadequate shade, warm temperatures, and soil erosion creating poor habitat for wildlife and redband trout.

Work Done

The majority of Fopiano Creek was ineligible for CREP, as it is classified as timber soils. The ranch will not receive any rental payment in return for use exclusion. The Confederated Tribes of the Warm Springs (CTWS) agreed to partner on the project to provide plants and to provide a field crew to implement the planting however, schedules and work loads did not allow for the additional support from CTWS field crews to install the plantings. The planting stock was collected locally within the John Day Basin by CTWS and grown at their native plants facility in Prairie City. OWEB funding was used to install the plantings and associated HD caging erected around each individual plant. This project also used funds from OWEB to install the 20,918 feet of riparian exclusion fence to protect the plantings and exclude livestock from 1.87 miles of stream. The project used funds from OWEB in a similar way to install 4,426 feet of fence to protect the Fopiano Reservoir itself. The landowner incurred expenses that were donated to the project in order to complete 4,420ft of the total fencing that was a project modification and built in a location that works the best operationally, and will require less maintenance overall. The 25,344ft of fence has effectively protected all riparian areas of the headwaters of Fopiano Creek above the reservoir

in this mountain pasture of the ranch, and 10.25 acres below the reservoir. In total, 68.63 acres of riparian were fenced excluding the area around the reservoir. The fence and plantings will allow for all riparian areas in the project to begin to regenerate, and the off channel watering systems will help to promote proper grazing patterns and lessen the risk of concentrated grazing. An immediate restoration response is expected for herbaceous species along the streambanks to limit erosion and sediment inputs to the system. A long-term positive restoration response is expected with shrub and tree species planted, which will eventually provide shade to help improve water quality in the form of lower temperatures and provide improved habitat for resident redband trout.

The Natural Resource Conservation Service partnered on this project by providing funding for off channel watering systems through the districts Regional Conservation Partnership Program.

Changes from Proposed

During the implementation period of this project, the Fopaino Ranch was listed with a local real-estate company and shortly afterward sold to a new owner. With new management came new ideas. The new owners were not enthusiastic about constructing the long runs of piped stockwater systems to be supplied by extending the nearby power lines to a pump which would have to be retro-fitted to the current irrigation mainline. Instead, they choose to rework the partner funded stockwater systems to a more traditional gravity flow construction design. This also resulted in unappropriated OWEB funds that were earmarked for the purchase of the pump. Since CTWS wouldn't be able to provide hand crews for the installation of the riparian plantings, it was requested that those funds instead be used to hire a contractor to preform the work.

A location change to the original reservoir fence layout was also requested. This made for a longer run of fence, but was much straighter and easier to build. The new ranch owners also agreed to absorb any additional costs associated with the layout change.

Public Awareness or Education

No public awareness or outreach activities were related to the implementation of this project.

Lessons Learned

The riparian plantings were installed prior to the fence being constructed. In the past, this has not always been the case with riparian or CREP projects in Wheeler County. The planting contractor was pleased with the ease of access and ability to stage materials throughout the project area. This was not the case with removing the juniper from the riparian corridor however, and while only a few trees impacted the fencing, removing the junipers from and repairing damages to the fence line was still a step backwards towards project completion.

Recommendations

Riparian restoration projects can be tricky to coordinate, especially if multiple contractors are involved when it comes to site-prep, planting installation, and fencing. In order to maximize efficiency and

minimize costs, the order of restoration should be to perform site-prep, (i.e. juniper removal) first, planting and caging second, and exclusion fencing last.

Aquatic Habitat

The Wheeler SWCD has read the Oregon Aquatic Habitat Restoration and Enhancement Guide, and all project components are within compliance of the referenced document.

Special Conditions

All special conditions for this project have been fulfilled through the uploads section of the OGMS reporting system.

Funding Sources

Source	Identifier	Cash	InKind Type	Inkind
Confed Tribes Warm Springs (CTWS)	CTWS	\$0.00	Materials	\$12,056.00
Landowner		\$18,746.00		\$0.00
OWEB	217-6000-12866	\$72,568.80		\$0.00
USDA-NRCS	RCPP	\$7,818.00		\$0.00

Totals

OWEB Amount	Non OWEB Cash	Inkind Total	Non OWEB Amount	OWEB Match	Total Project Cost
\$72,568.80	\$26,564.00	\$12,056.00	\$38,620.00	53.0%	\$111,188.80

Uploaded Files

Image Type	File Name	Description
Photo Point	PC091136.JPG	Showing the southern extent of the reservoir.
Photo Point	PC156795.JPG	Overview of Fopiano Reservoir showing bunchgrass communities reestablish.
Photo Point	PC091140.JPG	Facing East, where Fopiano Creek runs into the reservoir.

Photo Point	PC091148.JPG	Fopiano Creek with limited riparian vegetation.
Photo Point	PC156773.JPG	View of Fopiano Creek with riparian species and vegetation regenerating.
Photo Point	PC091153.JPG	Fopiano Creek with limited streamside vegetation.
Photo Point	PC156752.JPG	Fopiano Creek with vegetation reestablishing and encroaching juniper removed.
Photo Point	PC091160.JPG	Showing streamside vegetation and juniper encroachment.
Photo Point	PC156745.JPG	View of streamside vegetation and riparian species.
Photo Point	PC091166.JPG	Showing juniper encroachment into the stream channel.
Photo Point	PC156736.JPG	Showing vegetation regenerating and creating floodplain connectivity.
Photo Point	PC091176.JPG	Juniper encroachment into the floodplain of the channel.
Photo Point	PC156709.JPG	Overview of floodplain with riparian species thriving.
Photo Point	PC091180.JPG	Fopiano Creek floodplain with juniper encroachment.
Photo Point	PC156692.JPG	Overview of Fopiano Creek and juniper removal from floodplain.
Photo Point	PC091182.JPG	Fopiano Creeks floodplain with juniper encroachment.
Photo Point	PC156673.JPG	View of Fopiano Creek and riparian vegetation restoring with exclusion fencing.
Photo Point	PC091188.JPG	Fopiano Creek floodplain, and future riparian planting location.

Photo Point	PC156652.JPG	Overview of riparian plantings throughout Fopiano Creek and the floodplain.
Photo Point	P1257194(1).jpg	Facing East, showing where Fopiano Creek runs into the reservoir.
Map	OWRI_Map.pdf	Map of Final Project Elements
Photo (other)	Supplemental Fence Photos.pdf	Supplemental Fencing Photos