



UPPER DESCHUTES
WATERSHED COUNCIL

Whychus Creek Stewardship Program Report
Oregon Conservation and Recreation Fund
June 30, 2024

Project Name:

Whychus Creek Stewardship Program

Watershed: (Fifth field HUC)

Whychus Creek (Upper Deschutes River subbasin)

Oregon County:

Deschutes

Nearest Oregon Community:

City of Sisters

Lead Entity:

Upper Deschutes Watershed Council

Project Manager:

Kolleen Miller

Partners:

Deschutes National Forest
City of Sisters
Central Oregon Community College
University of Oregon
Sisters Schools
Community Volunteers
Deschutes River Conservancy
Deschutes Land Trust
Roundhouse Foundation
Local Business Partners

Initial Project Objective:

The project will engage at least 60 community members and 90 local students in multiple sessions of informational watershed presentations, riparian restoration trainings, hands-on stream stewardship, and restoration project tours.

Timeline: (beginning and ending dates of the project work)

Began in fall 2022- Ended June 30, 2024

Community Members Engaged to Date:

121 Community Members

820 Local Students

Total Project Cost:

\$90,500

Funds Awarded by Oregon Conservation and Recreation Fund:

\$41,000

Project Status Update:

A) Timeline: Project activities began in September 2022. Between 2022 and 2024, 121 community members were engaged in riparian stewardship and restoration activities on Whychus Creek. Community members helped restore 800 native riparian plants to degraded streambanks to restore habitat conditions for native fish and wildlife and decrease streambank erosion into Whychus Creek. 620 local students received watershed presentations about water quality, habitat conditions, native fish, and instream and riparian habitat restoration methods. Students also participated in riparian and wetland plantings to restore 2,700 native plants to streambanks along Whychus Creek. To date, over 100% of project goals and objectives have been completed. Spring 2024 project activities included additional community and student engagement in Whychus Creek stewardship projects. This spring, students and community members participated in additional watershed education and stewardship activities at multiple priority restoration sites along Whychus Creek.

B) Project Outputs and Community Outcomes:

- 121 community members and 820 students engaged in Whychus Creek stewardship activities
- 3,500 native riparian and wetland plants restored to priority restoration sites at Whychus Creek and its riparian areas.
- Two educational interpretive signs created and installed along Whychus Creek to educate community members about the history of Whychus Creek and the importance of stream restoration and habitat conservation.

C) Promoting Equitable Outcomes

Our education program prioritizes working with underserved schools in rural areas where hands-on stewardship education opportunities less common than in the City of Bend. We also have worked with our Board of Directors, staff, and a local facilitator to develop policies, programs, and procedures that are inclusive for previously underserved and/or under-resourced communities.

Expenditure Report

- A) Expenditures to Date: \$41,000
- B) Projects: Community members and students have participated in multiple riparian restoration trainings, riparian and wetland vegetation restoration projects, and watershed presentations.
- C) Primary Locations of Project Performance: Whychus Creek at Creekside Park, Whychus Creek at Rimrock Ranch, Whychus Creek at Plainview restoration project site, and Whychus Creek at Floodplain
- D) Detailed Expenditures: (see attached spreadsheet)
 - 1) Personnel (Education Director) = \$31,800
 - 2) Personnel (Project Assistant) = \$2,500
 - 3) Supplies and Materials = \$650
 - 4) Riparian Supplies= \$2,000
 - 5) Travel= \$750
 - 6) Administration = \$3,300

Program Pictures

Program pictures are attached.

WHYCHUS
COMMUNITY
STEWARDSHIP
PROGRAM:
OREGON
CONSERVATION AND
RECREATION FUND

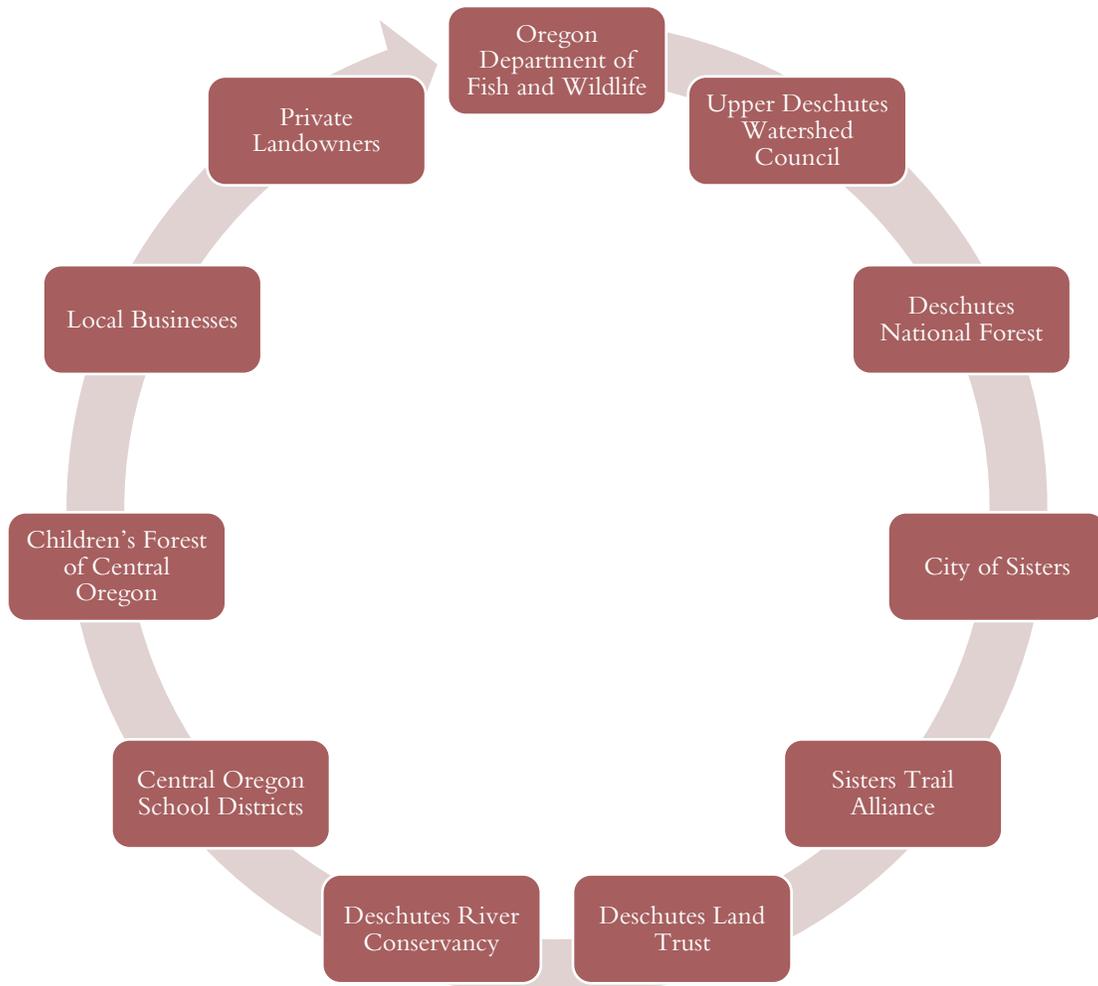


UPPER DESCHUTES
WATERSHED COUNCIL

Whychus Creek Community Stewardship



Collaborative Partnerships



PROJECT OUTCOMES

- 121 community members engaged in hands-on stewardship
- 820 local students engaged in conservation education and stream stewardship
- 3,500 native riparian and wetland plants restored
- Two educational interpretive signs installed to educate current and future community members about restoration and conservation of Whychus Creek
- Nine restoration project site tours for hundreds of community members and natural resource partners



WHYCHUS CREEK COMMUNITY STEWARDSHIP: CREEKSIDE PARK AND RIMROCK RANCH



Community Stewardship at Whychus Creek

- Partnership with City of Sisters
- Local Schools
- Riparian Restoration
- Community Outreach and Education
- Long-term education through restoration project interpretive signs



The Place We Cross the Water

"Listen to the sound. The calmness and safeness of the creek shines. It lets you be yourself and it allows you to let your emotions out. There is no judgement of any kind. There is just peace and freedom. It gives happiness and it is a place where you feel home."

BECCA, JUNIOR, SISTERS HIGH SCHOOL JUNIOR

We acknowledge and honor the indigenous people on whose ancestral homelands we live and work, as well as the Native communities who make their homes here today. We honor the first stewards of the Upper Deschutes watershed who have cared for the lands and waters of the Deschutes Basin since time immemorial.

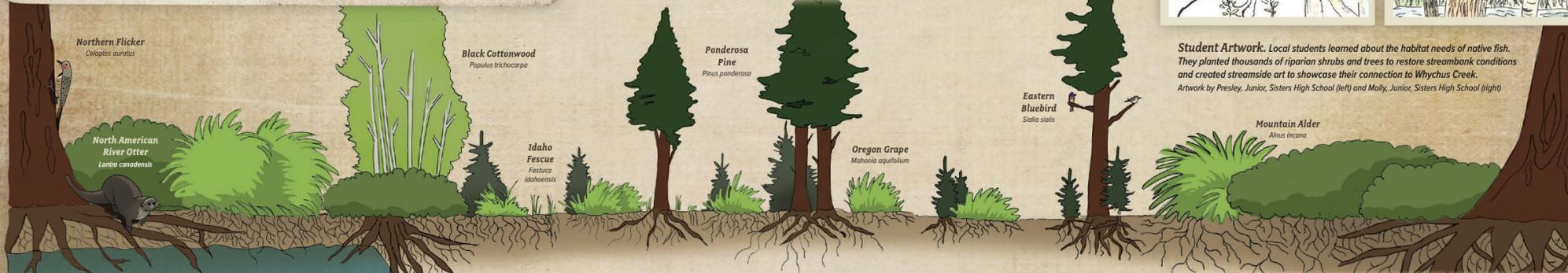
Thank you to the following partners and funders that made this project possible:



Sunderland Foundation
Oregon Watershed Enhancement Board
Pelton Round Butte Fund
Deschutes National Forest, Sisters Ranger District



Student Artwork. Local students learned about the habitat needs of native fish. They planted thousands of riparian shrubs and trees to restore streambank conditions and created streamside art to showcase their connection to Whychus Creek.
Artwork by Presley, Junior, Sisters High School (left) and Molly, Junior, Sisters High School (right)



Time Immemorial to the Early 1900s

Historically, before it was dewatered and channelized, Whychus Creek provided prime spawning and rearing habitat for wild anadromous steelhead and spring Chinook salmon as well as for resident redband trout.

Stream conditions included a valuable mix of cobble, gravels, and sand which provided an incredibly healthy habitat for native fish. Cool temperatures, shaded pools, and side channels provided an excellent home for coldwater trout, steelhead and Chinook salmon. It is estimated that Whychus Creek historically provided 42% of the total steelhead spawning habitat throughout the entire upper Deschutes Basin.

Steelhead Trout
Oncorhynchus mykiss

Mayfly
(Pale Morning Dun)
Ephemeraella exuvians

From Creek to Canal: 1913-2005

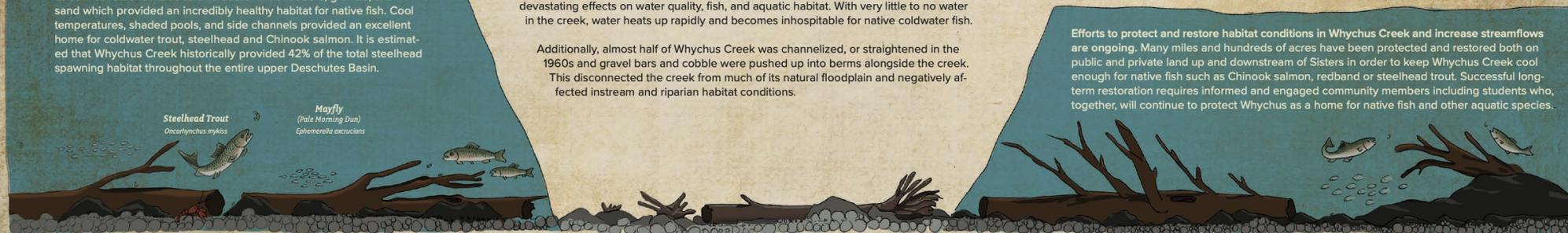
Not long after its historic name was changed by settlers in the late 1800's, Whychus Creek's waters were valued for their potential to grow crops. Diversions for irrigating farmland began in 1871 and by 1912, sections of the creek were parched, hot, and dry. For almost 100 years, Whychus Creek was treated as a virtual canal. The removal of most of the streamflow had devastating effects on water quality, fish, and aquatic habitat. With very little to no water in the creek, water heats up rapidly and becomes inhospitable for native coldwater fish.

Additionally, almost half of Whychus Creek was channelized, or straightened in the 1960s and gravel bars and cobble were pushed up into berms alongside the creek. This disconnected the creek from much of its natural floodplain and negatively affected instream and riparian habitat conditions.

Once Forgotten, Now Reborn

In 2005, the same year the creek was changed back to its historical name, local organizations and community members worked hard to bring balance back to Whychus Creek. A comprehensive approach was implemented that returned water to the creek and protected and restored critical instream floodplain habitat. By 2008, conservation organizations worked with water right holders to permanently protect 10 cubic feet per second (CFS) instream. Whychus Creek no longer ran dry in the summer. As of 2023, the creek was guaranteed minimum flow of 23 cfs.

Efforts to protect and restore habitat conditions in Whychus Creek and increase streamflows are ongoing. Many miles and hundreds of acres have been protected and restored both on public and private land up and downstream of Sisters in order to keep Whychus Creek cool enough for native fish such as Chinook salmon, redband or steelhead trout. Successful long-term restoration requires informed and engaged community members including students who, together, will continue to protect Whychus as a home for native fish and other aquatic species.



Habitat Restoration *and* Community Engagement

"I hope future generations understand how lucky we are to live in such a beautiful place. As our community continues to grow, I hope people will protect the creek and vegetation. We need to make sure that all the things that make Whychus so special and tranquil stay that way."

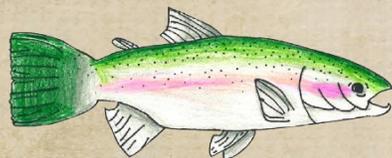
LILLY, JUNIOR, SISTERS HIGH SCHOOL



Steelhead Reintroduction.

Anadromous steelhead trout (*Oncorhynchus mykiss*) and Chinook salmon (*Oncorhynchus tshawytscha*) were extirpated from Whychus Creek in the 1960's due to the construction and management of dams on the Deschutes River.

With new relicensing requirements, steelhead trout and Chinook salmon have been reintroduced back into the system since 2007. Local conservation organizations partnered with state and federal agencies and are working tirelessly to restore habitat conditions in Whychus Creek and the Metolius River to ensure that the reintroduced native fish will return to a healthy home.



A Balance Between People and Place

Stream habitat restoration is only effective if our community is informed about the importance of watershed protection and engaged in active hands-on stewardship. As part of the large long-term watershed effort to return Whychus Creek back to a healthy, free-flowing creek, we have worked with our partners to improve habitat conditions here at Creekside Park.



Hundreds of Sisters students restored riparian vegetation to the banks of Whychus Creek. As a way to learn about the habitat both instream and alongside Whychus, students created stream-side art to represent their unique connection to the natural world. Artwork by Stella, Junior, Sisters High School.

Restoration activities and community engagement efforts have included:

- **Working with students and community groups to plant thousands of native riparian and wetland plants** to restore eroding streambanks, provide habitat and food for wildlife, and provide shade to the creek in order to minimize warming effects from the sun;
- **Educating community members and students** about the habitat, water quality, and flow conditions necessary to support native fish and aquatic macroinvertebrates;
- **Constructing an engineered riffle to improve habitat connectivity** by providing up and downstream fish passage at a buried utility line crossing;
- **Retrofitting the footbridge** to be more accessible for all;
- **Limiting bank erosion and loss of riparian vegetation** from user created trails by establishing four access points to improve and consolidate access to the creek from the park and campground;
- **Fencing the riparian area** in order to protect riparian and wetland plants along the creek; and
- **Designing and installing outreach signs** like this one to raise awareness about the importance of habitat restoration, protection, and long-term community engagement

Improved Habitat for Native Fish



Restored Riparian Vegetation



Renovated Accessible Footbridge



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