



Habitat Restoration for Anadromous Fish Reintroduction in the Upper Deschutes

Deschutes River in Central Oregon



Partnership Overview

The Deschutes Partnership seeks to protect important habitat for salmon and steelhead in the Metolius River, Whychus Creek, and the Crooked River. Improving stream flow conditions and habitat, and making sure that fish can migrate throughout their range helps fish thrive. Habitat restoration creates conditions where salmon and steelhead can be re-introduced to strengthen their populations. These same actions improve the health of the watershed, benefitting the local community. The partnership engages with the local community to implement these conservation actions and to increase awareness about fish conservation.

In January 2016, the Deschutes Partnership was awarded funding for implementation through the Oregon Watershed Enhancement Board's (OWEB) Focused Investment Partnership (FIP). A FIP is an OWEB investment that addresses a board-identified priority of significance to the state, achieves clear and measurable ecological outcomes, uses integrated and results-oriented approaches as identified through a strategic action plan, and is implemented by a high-performing partnership.

Initiatives are eligible for up to 6 years of OWEB funding. For the 2017-2019 biennium, OWEB has awarded the Deschutes Partnership \$4 million. When combined with investments from 2015 – 2021, the anticipated total investment is approximately \$12 million.

Ecological Outcomes

The Deschutes Partnership has identified specific strategies to restore fish habitat throughout the upper Deschutes Basin in central Oregon. Specific ecological outcomes will be assessed throughout this 6-year time frame, and monitoring will continue after the investment is complete.

Core Implementing Partners

- Crooked River Watershed Council
- Deschutes Land Trust
- Deschutes River Conservancy
- Upper Deschutes Watershed Council

Strategies and anticipated results in the Deschutes Partnership include:

Strategy

Protect spawning and rearing habitat through land conservation easements and fee purchases

Conservation Action

Focus restoration in critical areas of Whychus Creek and the Metolius and Crooked Rivers.

Intermediate Ecological Outcome

Prevent development and further degradation of stream and floodplain habitat in areas of the watersheds that are critical for supporting fish. Protected lands will become available for stream channel, floodplain, and riparian restoration.

Long-Term Ecological Outcome

Sustainable populations of native fish and aquatic species

Strategy

Restore stream habitat conditions necessary for successful spawning and rearing

Conservation Action

Design and implement stream, riparian, and floodplain restoration projects

Intermediate Ecological Outcome

- Successful fish spawning and juvenile rearing in historic floodplains and wet meadow reaches
- Improved stream channel, floodplain, sediment, and groundwater processes
- Abundant and diverse native riparian plant community

Long-Term Ecological Outcome

- Stream channels with a diversity of habitat types and conditions
- Sustainable populations of native fish and aquatic species
- Healthy riparian habitat slows floodwaters; stabilizes soil; and provides shade, food, and habitat for aquatic animals

Strategy

Restore stream flow to improve water quality and increase fish habitat

Conservation Action

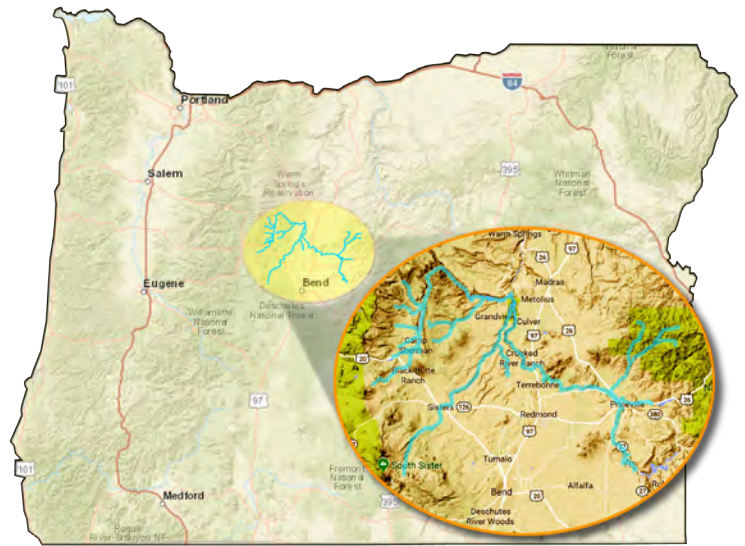
Implement infrastructure projects and transfer or lease water rights

Intermediate Ecological Outcome

- Increased water left in the stream, restored hydrograph, cooled instream temperatures, and improved water quality
- Successful spawning and rearing

Long-Term Ecological Outcome

Enhanced or improved stream habitat, water quality, and habitat connectivity



Strategy

- Restore fish passage
- Provide irrigation diversion screening to reduce mortality in juvenile fish

Conservation Action

- Remove or remediate dams in Whychus Creek and the Metolius and Crooked Rivers
- Screen irrigation diversions and decommission defunct diversions that may trap juvenile fish

Intermediate Ecological Outcome

- Enhanced connectivity and accessibility to spawning and rearing habitat
- Increased survival of juvenile salmon and trout

Long-Term Ecological Outcome

- Enhanced connectivity and movement for salmon and trout throughout Deschutes watersheds
- Increased availability of spawning and rearing habitat, enhancing fish productivity and populations
- Populations of trout and salmon are broadly distributed

Strategy

Engage the community in watershed restoration

Conservation Action

Community presentations, stewardship projects for students, watershed activities, stewardship hikes, and restoration tours

Intermediate Ecological Outcome

- Improved understanding about fish reintroductions, stream and river restoration throughout the local community
- Increased engagement and participation in restoration on private lands

Long-Term Ecological Outcome

Continued engagement in conservation and restoration projects throughout Deschutes watersheds