



Clackamas Partnership

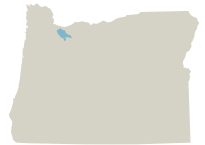
Restoration for Native Fish Recovery



Sidechannel Habitat at Eagle Creek Confluence

AQUATIC HABITAT FOR NATIVE FISH SPECIES

The *Clackamas Partnership's* Restoration for Native Fish initiative is built on the content and actions outlined in the Lower Columbia River Conservation and Recovery Plan for Oregon Populations of Salmon and Steelhead (2010) and contributes to the goals and objectives associated with the Clackamas Population area.



The Clackamas Partnership collaborates on coordinated aquatic, riparian and floodplain restoration, conservation, and habitat protection actions to enhance watershed health, support the recovery and sustainability of native fish populations, and contribute to the region's economic and social vitality.

Upper Clackamas River and Floodplain Reach:

Clackamas River headwaters downstream to Oak Grove Fork (31.7 miles)

Middle Clackamas River and Floodplain Reach:

Confluence of Oak Grove Fork downstream to River Mill dam (29.3 miles)

Lower Clackamas River and Floodplain Reach:

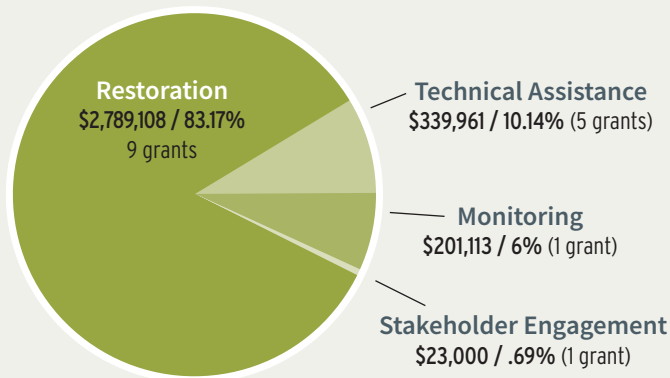
River Mill Dam downstream to the confluence of the Willamette River (23.3 miles)

Lower Willamette River and Floodplain Reach:

Willamette Falls downstream to and including the confluence of Johnson Creek (9.2 miles)

Funding

OWEB awarded \$3,353,182 in funding that leveraged \$2,376,354 in matching funds



Benefits

- Fish rearing and migratory habitat complexity and water quality in river corridors – channel floodplain, off channel, and tributary junctions improves
- Survival of downstream juvenile migrants increases
- Core native fish population performance at freshwater life stages improves
- Habitat quantity, quality, capacity, productivity, and diversity for all life stages of focal species improves

ABOUT THIS REPORT

The Focused Investment Partnership (FIP) grant program is a bold, new conservation approach that supports high-performing partnerships to implement strategic restoration actions and measure ecological outcomes through coordinated monitoring. In January 2019, the Oregon Watershed Enhancement Board awarded an Implementation Focused Investment Partnership grant to the Clackamas Partnership. This report documents projects for which funding was obligated during the first biennium of the initiative (2019 to 2021) to meet FIP initiative objectives. Work completed under the FIP grant program is part of a much larger on-going collaborative effort of federal, state and local agencies, tribes, private landowners, and non-governmental organizations in the Clackamas River Basin. Accomplishments included in the report only reflect actions completed with OWEB FIP funding.

CORE PARTNERS

Clackamas River Basin Council • Greater Oregon City Watershed Council • North Clackamas Watersheds Council • Johnson Creek Watershed Council • Clackamas Soil and Water Conservation District • Metro

OTHER PARTNERS

Clackamas Water Environment Services • Clackamas River Water Providers • Confederated Tribes of Warm Springs • North Clackamas Park & Recreation • Oregon Department of Environmental Quality • Oregon Department of Fish & Wildlife • Oregon Parks & Recreation Department • Portland General Electric • USFS – Mt Hood, Clackamas Ranger District

GOAL

The goal of the initiative is to achieve targets specified by the Lower Columbia River Conservation & Recovery plan by increasing rearing and migratory habitat complexity and improving water quality in the river corridors.



The Partnership's actions fall within three main integrated strategic programs including:

STRATEGIES



- 1 Habitat Restoration
- 2 Habitat Protection
- 3 Promoting Land Use and Landowner BMPs

IMPLEMENTATION (2019-2021)

Restoration



39
POOLS
CREATED

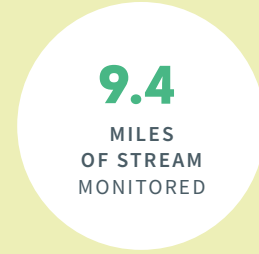


1
RIFFLE
CREATED



2
FISH PASSAGE
BARRIERS
REMEDIATED

Monitoring



8.3
MILES OF
SIDE CHANNELS
SURVEYED AND
SNORKELED

71
MACROINVERTE-
BRATE SAMPLES
COLLECTED

Technical Assistance

73
PROJECTS
IDENTIFIED &
PRIORITIZED

43.8
STREAM
MILES
ASSESSED

3
ACTION PLANS
DEVELOPED

Outreach & Engagement

1
STAKEHOLDER
PLAN COMPLETED

4
MEETINGS
HOSTED

OUTCOMES

Near Term 0-10+ YEARS

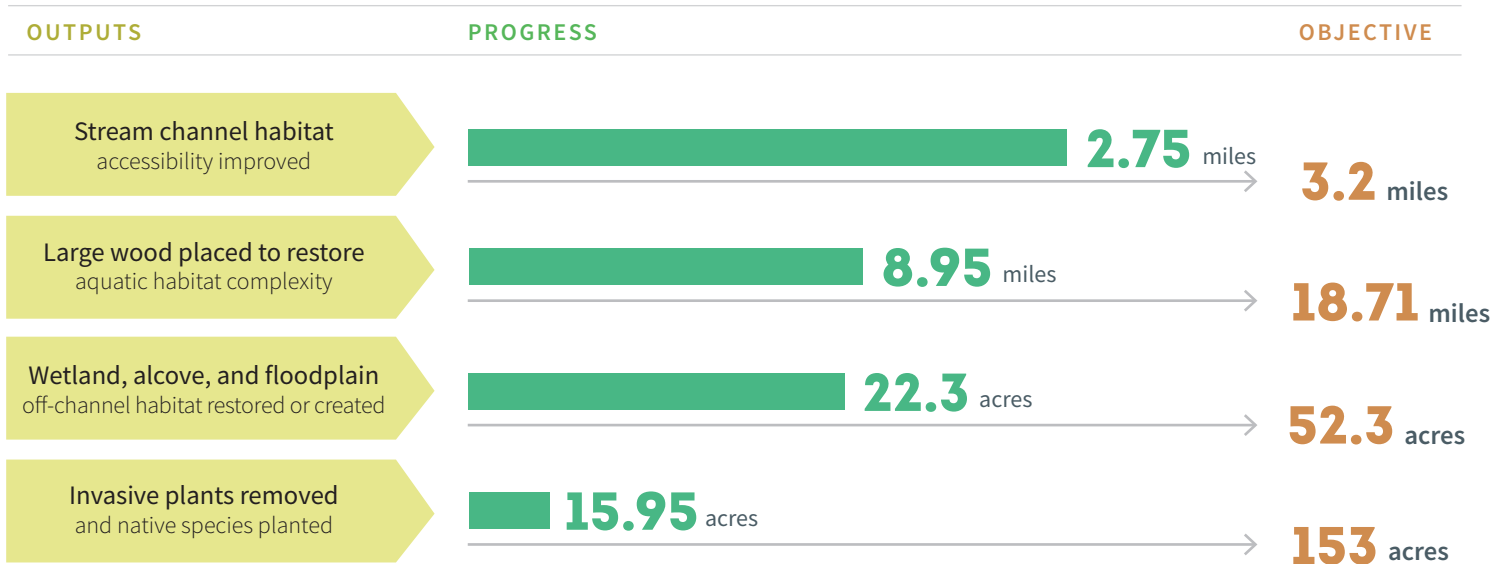
- Increased accessible habitat through enhanced passage at road crossings, small dams, and diversions.
- Channel structure and complexity including large wood is improved
- Reconnection of side and off-channel habitats
- Reduction of invasive plant species in riparian and upland habitats

Long Term 20+ YEARS

- Floodplain connectivity and function increases
- Increased large wood recruitment
- Increased habitat complexity, diversity, and persistence.

FIP Initiative Progress, Biennium 1

Progress on metrics reflects implementation supported by OWEB funding, and does not represent all progress achieved via other funding sources.



Monitoring Approach

The Partnership's restoration and conservation project outputs are tracked through established measures (e.g., volume of large wood placed, area planted with native vegetation) and tracked against measurable objectives. Implemented restoration project outputs, also called performance measures, will be documented in the Clackamas Project Tracker database.

Research, monitoring and evaluation (RM&E) of salmonid response to implemented projects are conducted by ODFW, PGE, the Corvallis Environmental Protection Agency (EPA) laboratory. OR DEQ has offered to assist the Partnership in the development of the macroinvertebrate sampling design, data collection approach, and data analysis methods.



Planting Volunteer



Constructed riffle and large wood at North Deep Creek



Chinook Salmon

Adaptive Management

Restoration

CHALLENGES

Implementation of 2019 projects did not occur due to application timing, TRT reviews, and funding agreements.

Project Tracker requires project proponents to complete proposal entries and update project information as progress is made.

LESSONS LEARNED

Project proponents observed procedures of the 1st application cycle and nearly all remaining project proposals were submitted in early 2020.

Partners, motivated by the project solicitation process, learn the features of Project Tracker as they enter project proposals

ADAPTATIONS

The Technical Advisory Committee strengthened its planning, review, and operational oversight in preparation for future project selections.

Refined project tracker to improve functionality making it the primary tool for managing, reporting, and sharing project information.

Monitoring

CHALLENGES

Control reach identification presented both challenges and opportunities. COVID and fire restrictions hampered ability to conduct monitoring.

Landowner agreements limited macroinvertebrate monitoring.

Lack of project sites that received restoration to monitor.

LESSONS LEARNED

Control reaches are important for quantifying measured objectives relative to inter-annual variability.

Landowner contacts need to happen much sooner.

Implementation of restoration projects remains uncertain due to issues beyond the control of the implementer.

ADAPTATIONS

Control reach criteria were developed to meet current and future monitoring needs.

Biennium 1 monitoring was reduced and monitoring effort will increase in biennium 2. More landowners will be contacted, and contacts will begin sooner.

Cost savings realized from postponement of initial monitoring effort rolled over to increase monitoring resolution of projects completed in the final biennium.

Engagement

CHALLENGES

Traditionally underserved populations have not shared in the benefits of stream restoration.

The COVID-19 pandemic protocols present challenges for in person meeting with landowners and partners.

LESSONS LEARNED

Incorporating DEI requires new ways of thinking.

Virtual meetings have been successful for the partnership and project implementation teams meeting with contractors.

ADAPTATIONS

Incorporate lessons learned from partner organizations to deliver on DEI objectives for inclusion.

Virtual meetings streamline processes precluding the need to meet in person, offering environmental benefits, and saving time.