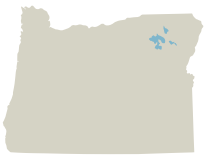
OWEB FOCUSED INVESTMENT PARTNERSHIP
PROGRESS REPORT / BIENNIA 2 & 3: 2017-2021

Grande Ronde
Restoration Partnership

Upper Grande Ronde Initiative

AQUATIC HABITAT FOR NATIVE FISH SPECIES

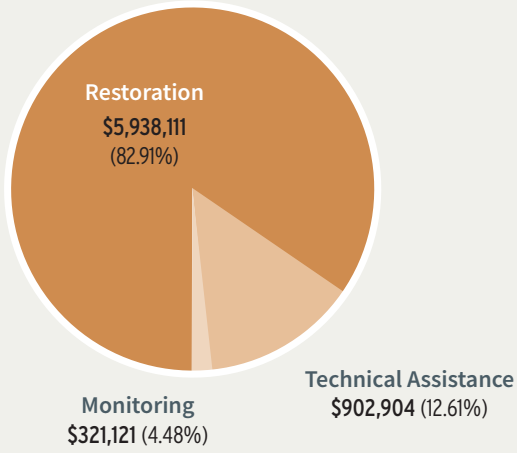


The Upper Grande Ronde Partnership is focusing restoration on 11 prioritized reaches of the upper Grande Ronde sub-basin, which includes sections of the Grande Ronde River, Catherine Creek, and several tributaries upstream of the confluence with the Wallowa River. Since the late 1800s, poorly-managed logging and grazing, road and railroad construction, urbanization, and irrigation withdrawals degraded streams and reduced fish habitat. These conditions threaten native fish species, including steelhead and salmon.

PHOTO Grande Ronde Restoration Partnership

Funding

OWEB awarded $7,162,136 in funding with $9,897,087 in matching funds.



Benefits

- *Improved understanding of how restoration actions impact steelhead and salmon in northeastern Oregon*
- *Organized approach among diverse partners to develop complex engineering designs*
- *Enhanced fish habitat through instream and floodplain projects*
- *Improved passage at diversion dams and culvert replacement that expands or improves access to habitats*
- *Coordinated monitoring approach to measure progress and quantify outcomes*
- *Engaged landowners, students and civic groups on the actions needed to restore habitat for native fish*

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 2016, the Oregon Watershed Enhancement Board awarded a FIP grant to the Upper Grande Ronde Partnership. This report documents projects for which funding was obligated in Biennia 2-3 (2017-2021) and cumulative progress since the FIP was initiated in 2016.

Work completed under the FIP grant program is part of a much larger on-going collaborative effort of Bonneville Power Administration, federal, state and local agencies, private landowners, and non-governmental organizations in the Grande Ronde River Basin. ***Accomplishments included in the report only reflect actions completed with OWEB FIP funding.***

PARTNERS

Core Partners: Union Soil and Water Conservation District, Grande Ronde Model Watershed, US Forest Service, Confederated Tribes of the Umatilla Indian Reservation, Oregon Department of Fish and Wildlife

Atlas Implementation Team Partners: Bonneville Power Administration, Bureau of Reclamation, National Oceanic and Atmospheric Administration, Trout Unlimited, Natural Resource Conservation Service

GOAL

Increased habitat quantity, quality, and diversity for all life stages of spring Chinook, summer steelhead, and other native species in Catherine Creek and the Upper Grande Ronde River

STRATEGIES

- Remove barriers and create additional aquatic habitat
- Restore natural habitat complexity and processes
- Reconnect floodplain habitats
- Conduct monitoring studies to fill knowledge gaps on juvenile salmon mortality and riparian restoration effectiveness
- Inform, educate, and engage relevant landowners and residents

IMPLEMENTATION ACTIONS FUNDED (2017-2021)

Restoration

183 POOLS CREATED OVER 11.8 MILES

83 STREAM MILES made accessible to juvenile and adult fish

2 FISH LADDERS INSTALLED providing passage at 2 diversion dams and 1 culvert with improved passage

851 LARGE WOODY DEBRIS STRUCTURES installed over 11.8 miles

103.4 RIPARIAN ACRES protected from livestock grazing

4.3 MILES OF NEW CHANNEL

141.2 ACRES OF NEW OR RECONNECTED FLOODPLAIN

Planning

4 TECHNICAL DESIGNS completed to support restoration project implementation

Scientific Investigation

7.5 MILES + **5,315** ACRES monitored for riparian recovery

45.7 MILES monitored for habitat quality and quantity

2 CHINOOK SALMON + **1** STEELHEAD populations monitored with PIT tag arrays

Engagement

1 EDUCATIONAL FILM PRODUCED

1 COMMUNITY SCIENCE PROGRAM ESTABLISHED

9 QUARTERLY NEWSLETTERS highlighting work and partners in the Grande Ronde Basin

11 LANDOWNERS ENGAGED resulting in 8 restoration projects

(The metrics shown reflect actions that have been completed or for which funding has been obligated in Biennia 2 and 3.)

OUTCOMES

Expected Near Term 0-10+ YEARS

- Access to aquatic habitats is increased
- Floodplain is reconnected to stream system
- Increased instream complexity

Expected Long Term 20+ YEARS

- Distribution of salmon increases in watershed
- Improved channel structure and processes to maintain habitat
- Spawning habitat and streamside plantings improve
- Summer stream temperatures decrease
- Productivity of salmonid species improves

FIP Initiative Progress, Biennia 1-3

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

OUTPUTS	PROGRESS	OBJECTIVE
Remove or replace barriers	6 barriers	8 barriers
Construct new main and side channels	8.29 miles	2.56 miles
Create new floodplain or wetland habitat	178 acres	15 acres
Construct high-quality pools along 20 stream miles	328 pools	70 pools
Install structures to enhance habitat complexity along 33 stream miles	17.7 miles	33 miles

Monitoring Approach

- Evaluates restoration techniques to make future projects more effective through adaptive management
- Improves knowledge of factors affecting salmon survival rates to prioritize projects
- Collects data on a consistent set of ecological metrics paired with snorkel surveys to measure restoration outcomes

For More Information About this Report:

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PHOTO David Herasimtschuk

Adaptive Management

Restoration

CHALLENGES / OPPORTUNITIES	LESSONS LEARNED	ADAPTATIONS
Changing project feasibility	Changing feasibility of originally targeted actions required some flexibility in the strategic action plan elements and progress tracking metrics Maintain flexibility and expect that plans will change	The partnership added new actions that were similar to those removed and adjusted implementation metrics
Past project effectiveness	Some early projects were not as successful in restarting natural processes (sediment transport, pool formation, floodplain engagement, riparian recovery) as expected Actions need to be more intense and cover a larger geographic area to achieve the desired outcomes	Over the last decade, the partnership revisited several restoration sites to implement additional restoration actions
Appropriate geography scope and scale	If the geographic area is too small it can be hard to replace projects that may no longer be feasible; if it is too large it can be hard to measure change over a six-year period	Maintain a landscape scale restoration approach

Partnership Capacity

CHALLENGES / OPPORTUNITIES	LESSONS LEARNED	ADAPTATIONS
Partnership composition and expansion	The FIP had hoped to add an additional partner to the Initiative in the first biennium to assist with flow restoration projects. Unfortunately, the partnership could not come to consensus on adding a partner and the objective of restoring flow by leasing water rights was not achieved.	Maintaining a small partnership has allowed the FIP to be very agile and adjust efficiently over the three biennia as plans changed.
Predictability of FIP funding	FIP funding eased the competitive nature of applying for restoration funding and allowed the partnership to focus on working collaboratively	Continue to seek long-term high funding sources that provide funding certainty
Evolution of staff roles	The part time FIP-supported position has evolved during the Initiative	The role initially focused on outreach and was shifted towards monitoring coordination
Partnership dynamics	A well-functioning partnership depends on personalities that show a willingness to compromise, express opinions respectfully, and an ability to rely on others when help is required	Continue to build and maintain partnership capacity and collaborative skills

Funding

CHALLENGES / OPPORTUNITIES	LESSONS LEARNED	ADAPTATIONS
FIP funding alignment with other sources	Aligning FIP support with other funding sources increased the partnership's ability to implement additional floodplain, habitat complexity, and fish passage projects	The partnership updated its progress tracking reporting to reflect unplanned actions The partnership plans to revisit the Atlas soon and it will likely result in a geographic shift of our restoration efforts as many of our goals and objectives have been achieved over the last six years
Leveraging multiple funding sources	A strategic plan allows partnerships to compete for multiple funding sources	Using the same strategic plan, the partnership leveraged Bonneville Power Administration, McNary Mitigation, Gray Family Foundation and US Forest Service grants

Adaptive Management, continued

Engagement

CHALLENGES / OPPORTUNITIES	LESSONS LEARNED	ADAPTATIONS
Landowner willingness to support or participate in restoration activities	Reduced trust has led to a shift in the public's support of salmon habitat restoration	The partnership shifted public outreach efforts from presenting to civic groups and schools to creating a community science project that gets kids, teachers and community members involved in collecting meaningful data. The partnership is planning to engage with social science experts to explore ways to better connect with the communities

Monitoring

CHALLENGES / OPPORTUNITIES	LESSONS LEARNED	ADAPTATIONS
Utility of the Progress Monitoring Framework	The results chain/theory of change has helped track progress and, along with the action plan, served as a reference and reminder of what the FIP expected to accomplish and monitor	The partnership's monitoring approach continues to track fish productivity metrics and survey habitat on a 10-year rotation The partnership will continue to utilize existing modelling efforts from our partners, i.e., the Life Cycle Model to evaluate result chain assumptions
Evolving field of aquatic habitat restoration and monitoring	The partnership endeavors to adapt to new and emerging monitoring techniques and approaches but these changes challenge the utility and management of long-term data sets	The partnership continues to develop monitoring program crosswalks to maximize the potential utility of varied monitoring approaches and programs
Research and monitoring efforts have informed strategies	The Meadow Creek ungulate grazing has improved understanding of impacts by cattle versus deer and elk and practices to guide how to manage those impacts The salmon carcass study helped confirm some knowledge and provided new information to guide management associated with adding marine derived nutrients to aquatic systems PIT Tag arrays have provided long term data on fish populations in Catherine Creek and the upper Grande Ronde, specifically abundance and productivity	Continue to prioritize monitoring and research to inform and refine strategies and actions

Addressing Climate Change

The partnership is fortunate to have robust data sets to support the prioritization of actions and locations to best address expected changes in water temperature due to climate change. The Columbia River Intertribal Fish Commission has produced both a heat source model and a riparian restoration prioritization plan for the upper Grande Ronde River. These data have helped the larger partnership in the Grande Ronde to focus on riparian recovery in the highest priority areas and also focus restoration efforts on floodplain connection and restoration of proper stream channel dimensions.

Addressing climate change presents similar constraints to those that affect the partnership's ability to implement projects in general. For example, one of the highest priority areas to implement restoration for both fish recovery and to counter climate change is located on private property where the landowner is not interested in participating. Additionally, our datasets in the Grande Ronde are based on 40- and 80-year climate projections and therefore present a high level of uncertainty. It may be challenging to tease out exactly how our restoration will have helped to reduce climate change impacts.