

John Day Basin

Fish Habitat Initiative

AQUATIC HABITAT FOR NATIVE FISH SPECIES

The John Day Basin Partnership (JDBP)

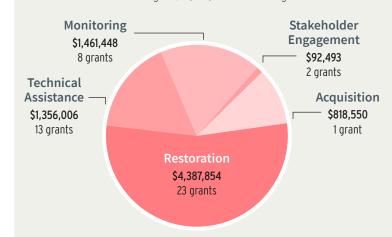
is focusing its FIP-supported native fish habitat initiative in three priority subwatersheds of the larger 8,100 sq. mi. John Day River Basin. These priority areas include



Butte-Thirtymile Creeks in the Lower Mainstem John Day; North Fork John Day Headwaters; and the mid-upper Middle Fork John Day. Historic and present-day land and water use practices and a changing climate have altered the condition of aquatic habitat contributing to the reduction in productivity and abundance of native fish populations.

Funding

OWEB awarded \$7,998,053 in funding that leveraged \$12,013,117 in matching funds.



Benefits

- Protection of high-quality upland and aquatic habitat
- Increased stream flow during low water periods
- Increased connectivity and quantity of floodplain habitat
- Enhanced surface and ground water connections
- Improved juvenile salmonid rearing and overwintering survival
- Improved water quality
- Improved native plant communities in riparian areas
- Reduced erosion and sediment inputs
- Improved spawning gravel quality and spawning success
- Increased complexity of aquatic habitat

ABOUT THIS REPORT

The Focused Investment Partnership (FIP) grant program supports high-performing partnerships to implement strategic restoration actions and measure ecological outcomes through coordinated monitoring. In January 2019, the Oregon Watershed Enhancement Board (OWEB) awarded a FIP grant to the JDBP. This report documents cumulative progress since the FIP was initiated in 2019. 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 John Day Basin. Accomplishments included in the report only reflect actions completed with OWEB FIP funding.

PARTNERS

Blue Mountain Forest Partners • Blue Mountain Land Trust • Bonneville Power Administration • Bureau of Land Management • Bureau of Reclamation • Burns Paiute Tribe • Confederated Tribes of the Umatilla Indian Reservation • Confederated Tribes of the Warm Springs Reservation of Oregon • Gilliam County Soil & Water Conservation District • Gilliam East John Day Watershed Council • Grant Soil & Water Conservation District • Mid John Day-Bridge Creek Watershed Council • Monument Soil & Water Conservation District • Morrow County Soil & Water Conservation District • North Fork John Day Watershed Council • Oregon Department of Agriculture • Oregon Department of Fish & Wildlife • Oregon Department of Parks & Recreation • Ritter Land Management Team • Sherman County Soil & Water Conservation District • South Fork John Day Watershed Council • Sustainable Northwest • The Freshwater Trust • Trout Unlimited • United States Forest Service: Malheur National Forest, Umatilla National Forest Wallow-Whitman National Forest • USDA: Natural Resource Conservation Service • U.S. Department of Interior, Fish & Wildlife Service • Wheeler County Soil & Water Conservation District

A John Day Basin with clean water and healthy watersheds sufficient to provide for the sustainable ecological, economic, and cultural well-being of the basin.

- Dedicate land and water to restoration and preservation of stream habitat
- Reconnect floodplains
- Riparian restoration and management

STRATEGIES

- Channel modifications and side-channel/ off-channel restoration
- Install large woody debris structures and rock weirs
- Fish passage restoration
- Water quality and water quantity impacts

MILES OF STREAM

CONNECTED AND

INSTALLED TO PROMOTE HABITAT COMPLEXITY

MILE OF RAILROAD **GRADE** REMOVED

HISTORIC PLACER MINE TAILINGS FROM 9.8 ACRES OF FLOODPLAIN REMOVED

FLOODPLAIN ACRES RECONNECTED Restoration

IMPLEMENTATION

20.83

MILES OF STREAM TREATED TO INCREASE RIPARIAN PLANT COMMUNITIES

POOLS

CREATED TO PROMOTE HABITAT COMPLEXITY

MILE SPAWNING **GRAVEL PLACED**

EASEMENT/ **ACQUISITION**

MILES MADE ACCESSIBLE TO **NEW HABITAT**

BARRIERS

HABITAT PROTECTED AND IMPROVED BY EXCLUDING

Monitoring

HYDROLOGICAL ASSESSMENT OF PERENNIAL STREAMS IN THIRTYMILE MAPPED

MILES MONITORED

9,000 **NEWSLETTERS** DISTRIBUTED

COMMUNITY **EVENTS**

Outreach & Engagement

LANDOWNERS IN PRIORITY RESTORATION **REACHES** ENGAGED

OUTCOMES

Near Term 0-10 YEARS

- Decreasing trend in summer instream water temperature
- Increasing trend in summer instream flow
- Improved habitat diversity index
- Increase in woody species density and stream shade potential
- Increasing trend in summer steelhead and spring Chinook freshwater productivity

Long Term 10+ YEARS

 Sustained increased productivity in summer steelhead and spring Chinook freshwater productivity

FIP Initiative Progress, Biennia 1-2

Progress on metrics includes actions completed as well as actions proposed through obligated OWEB grants. Progress reflects implementation supported by OWEB funding, and does not represent all progress achieved via other funding sources.



Monitoring Approach

To evaluate progress, the Partnership is using an integrated restoration-monitoring approach based in an adaptive management context. To establish baseline conditions and evaluate progress, the Partnership is using existing data, new monitoring, and well-documented professional judgment (e.g., through the BPA Atlas process).

The Partnership is grouping projects into three different monitoring tiers, with variable levels of monitoring effort for each tier. Communication between monitoring and restoration partners continues to be instrumental to ensure the appropriate monitoring tiers and targets are applied to each project. Appropriate milestones are set for each project to allow for cost effective monitoring which provides an assessment of progress and the ability to adapt subsequent implementation years if needed.

Yearly changes in Partnership operation and plan implementation will be undertaken based on compliance with milestones and any ancillary consideration, with a reevaluation of the Strategic Action Plan every two years.



CHALLENGES

A major challenge has been the lack of available qualified contractors: large projects require large bonds. Additional challenges include delays due to permitting and cultural clearance processes.

LESSONS LEARNED

Full project readiness takes time to achieve. Steps that require time include: permitting; cultural clearances; ensuring available equipment and contractors; and landowner support.

ADAPTATIONS

The Partnership has developed a more defined lens for considering new projects, asking questions to determine whether a project is 'shovel ready' to determine whether partners have all required permits and funding to implement within their deadline, if approved.

CHALLENGES

The initial implementation and initiative of repeat monitoring at the Tier 2 level remains a challenge for many restoration projects. This monitoring is essential to understand whether a project is making progress toward objectives.

Several factors may be contributing to this difficulty including: a lack of Tier 2 project effectiveness monitoring methods that can be applied economically and with little training; and a need to link monitoring methods to clearly defined indicators of project effectiveness that can be followed through time.

LESSONS LEARNED

In contrast to Tier 2 monitoring and reporting, much has been learned about implementation of restoration actions as well as the ecological benefits of specific projects through Tier 1 and Tier 3 actions. This is evident in the specification and reporting of implementation objectives at the Tier 1 level within the Project Tracker.

Work in the Middle Fork John
Day River Intensively Monitored
Watershed (IMW) continues to
inform restoration work being
implemented by the Partnership.
The IMW includes in-depth research
on restoration outcomes and fish
habitat relationships.

ADAPTATIONS

Partnership members continue to populate the Project Tracker with resources that support project monitoring. Emphasis has also been put on practitioners engaging with the Project Tracker's features for recording project outcomes and progress toward specified metric thresholds.

More emphasis should be placed on associating specific project types with accessible indicator metrics, making sure these metrics and associated survey methods are documented within the Project Tracker, and providing resources for practitioners to complete this work.

CHALLENGES

The Partnership experienced low event/landowner tour turnout due to COVID 19 concerns and scheduling difficulties. It was especially challenging to engage with everyone in a virtual format, and to plan in-person meetings in 2021 as conditions changed.

There still is not widespread local community understanding about the need for and benefits of local conservation efforts in the John Day Basin, and there have been challenges disseminating information about the Partnership throughout the greater community.

LESSONS LEARNED

The Partnership needs to build a base level of understanding of who we are, emphasizing local practitioners, landowners, and contractors implementing projects within the basin. With this understanding, the Partnership can meet the community where they are in terms of understanding watershed health and restoration success achieved so far.

Partners find great value from inperson meetings.

ADAPTATIONS

An in-person Partnership meeting paired with lunch and site tour demonstrated excellent attendance. As a follow up, the Partnership will plan to host 1-2 in-person meetings a year, pairing spring meetings with a site tour to showcase on-the-ground restoration projects and facilitate discussions to share ideas around other projects.

Partners are planning to use
Stakeholder Engagement grant
funds to develop a more robust
social media calendar and outreach
plan to develop an annual "impact
report" to disseminate to the
community. The report will include
metrics about restoration work
completed and financial benefits of
this work for local communities.