



John Day Basin

Fish Habitat Initiative

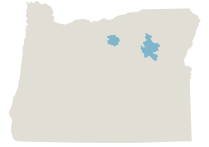
AQUATIC HABITAT FOR NATIVE FISH SPECIES



Vinegar to Vincent (credit: CTWS)

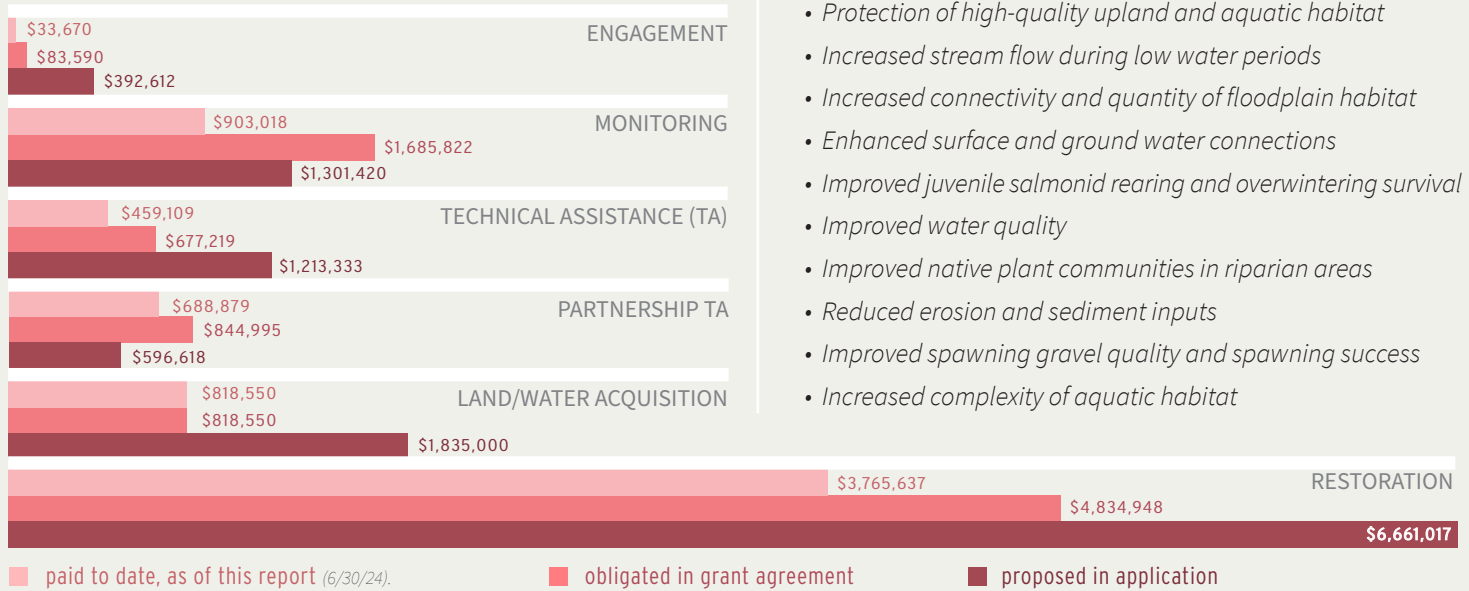
The John Day Basin Partnership (JDBP)

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 \$12,000,000 in funding. At the time of application, the FIP anticipated leveraging an additional \$22,223,478 throughout the life of the initiative.



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 July 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

GOAL

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.

STRATEGIES

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

- 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

IMPLEMENTATION

Restoration

46

MILES OF STREAM
CONNECTED &
IMPROVED

210

FLOODPLAIN
ACRES
RECONNECTED

1,399

LARGE WOODY
DEBRIS
STRUCTURES
PLACED

1

EASEMENT/
ACQUISITION

507

BDA
STRUCTURES
PLACED

20.83

MILES OF STREAM
TREATED TO INCREASE
RIPARIAN PLANT
COMMUNITIES

372 + 51

POOLS RIFFLES
CREATED TO PROMOTE
HABITAT COMPLEXITY

275

ACRES OF RIPARIAN
HABITAT PROTECTED
AND IMPROVED
BY EXCLUDING
LIVESTOCK

Monitoring

465

MILES
MONITORED

150

eDNA SAMPLES
COLLECTED

1

HYDROLOGICAL
ASSESSMENT MAP

+

1

UAV/GROUND
MONITORING PLAN

Outreach & Engagement

25

9,000

NEWSLETTERS
DISTRIBUTED

8

COMMUNITY
EVENTS

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



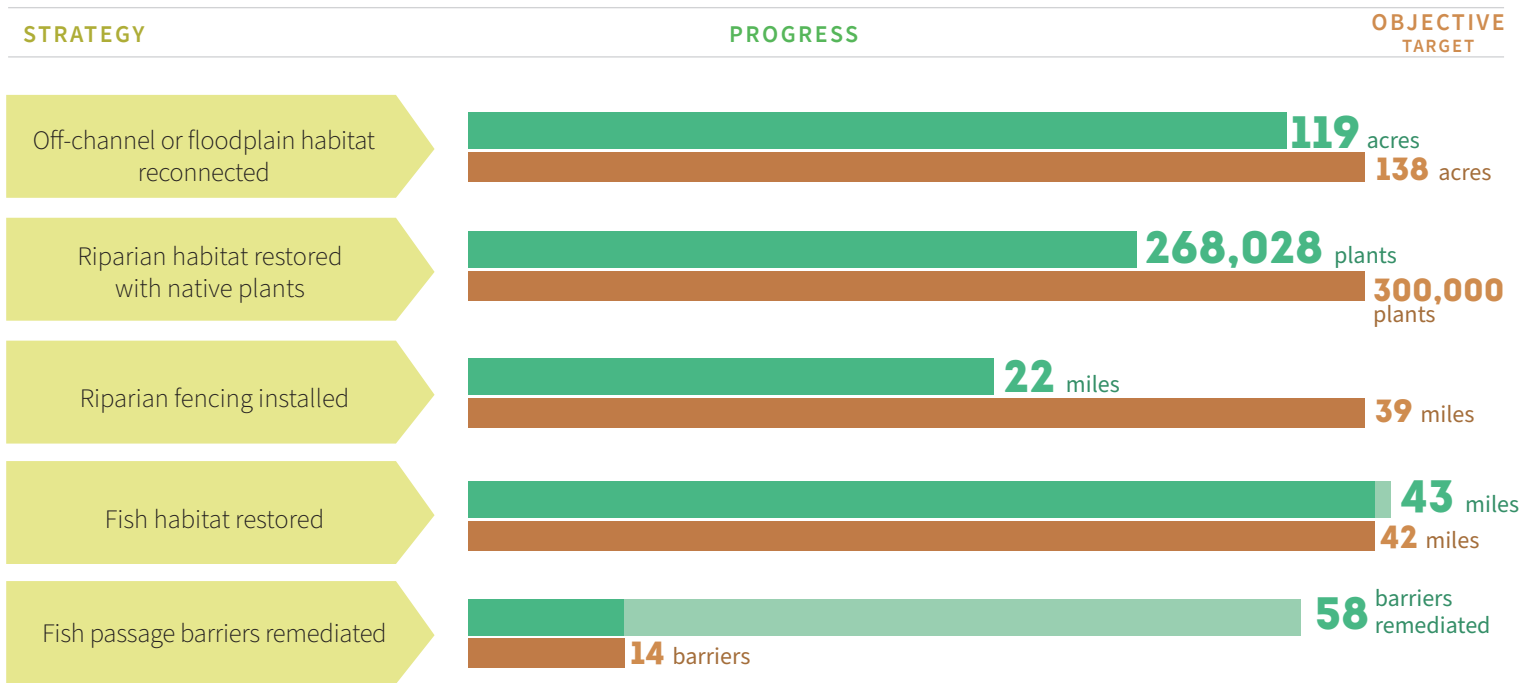
Camp Creek (credit: JDBP)



Bull Run (credit: JDBP)

FIP Initiative Progress, Biennia 1-3

Progress on outputs shown below represents actions completed through OWEB grants.



Beaver sign (credit: JDBP)

Monitoring Approach

The Partnership was awarded a supplemental monitoring grant that links our results chain model to our ecological outcomes. We are using this funding to design and conduct riverscape monitoring on restoration projects funded and implemented under biennium 1 or 2 of the FIP. This grant will address known data gaps in the FIP Progress Monitoring Framework, specifically effectiveness monitoring of results chain processes that are comparable across projects. The monitoring will leverage existing and new drone imagery acquisitions and include additional rapid field surveys of riverscape features where imagery based surveys are not possible.

Adaptive Management

Restoration

CHALLENGES

Riparian Planting Survival.

Due to the large amount of projects, restoration challenges are not always shared.

More frequent & severe climate change future causing catastrophic wildfires across large landscapes.

LESSONS LEARNED

Address site conditions, site prep, strategic placement, try different species – this adaptive management could be related to other restoration practices.

Information sharing amongst restoration practitioners can be a really valuable restoration tool.

We need to proactively incorporate wildfire resiliency strategies, contingencies, and monitoring into future JDBP FIP SAP, project design/implementation, & outreach/capacity.

ADAPTATIONS

Riparian planting workgroup and BEF/OWEB pilot project with roundtable discussion from multiple experienced partners.

Restoration site tours which involve the design process, visuals, providing challenges, and connecting partners with same challenges to work through solutions.

Submitted JDBP Fire TA to create a road map of best post-fire restoration practices for 8 effected organizations. Updating our Aquatic and Uplands prioritizations and incorporating them into our governance and another FIP.

Monitoring

CHALLENGES

There's a lot of data collected but most of it hasn't been analyzed.

LESSONS LEARNED

Summarizing data in the interim can change the way we implement projects.

ADAPTATIONS

Trying to summarize data often enough to show change and then adapt projects. In our last round of the FIP, we asked implementors to include updated summarization of data. In the future, we'll focus on frequently reporting the analysis of important findings at Partnership meetings.

Engagement

CHALLENGES

Keeping engagement with private landowners.

LESSONS LEARNED

Great need for capacity funding to develop projects from the start.

ADAPTATIONS

Strategic outreach to private landowners. As part of the ATLAS update, we will reevaluate the highest ranking polygons and make sure those private landowners are engaged in the process. Potential engagement grant in this last cycle to have success with this challenge.

Partnership Capacity

CHALLENGES

The Partnership size and complexity has outpaced our governance documents. We have encountered issues that don't fit our broad scope documents.

LESSONS LEARNED

We learned that as the Partnership grows, more projects come through from multiple funding sources, and requirements become more stringent we need to include various clarified procedures in our governance.

ADAPTATIONS

Funded OWEB Partnership TA to update our SAP, Operations Manual, & ATLAS prioritization and work towards updating these valuable tools more regularly. We are taking lessons learned from these past experiences and adapting them for the Partnership's sustained future.