



Coos Basin Coho Partnership

Coos Basin Coho Strategic Action Plan Implementation

COHO HABITAT & POPULATIONS ALONG THE COAST



Kentuck Habitat Complexity (credit: Holden Films, courtesy of Wild Salmon Center)

The Coos Basin Coho Partnership

aims to enhance the independent population of Coho salmon entering the ocean through the Coos Bay jetty.

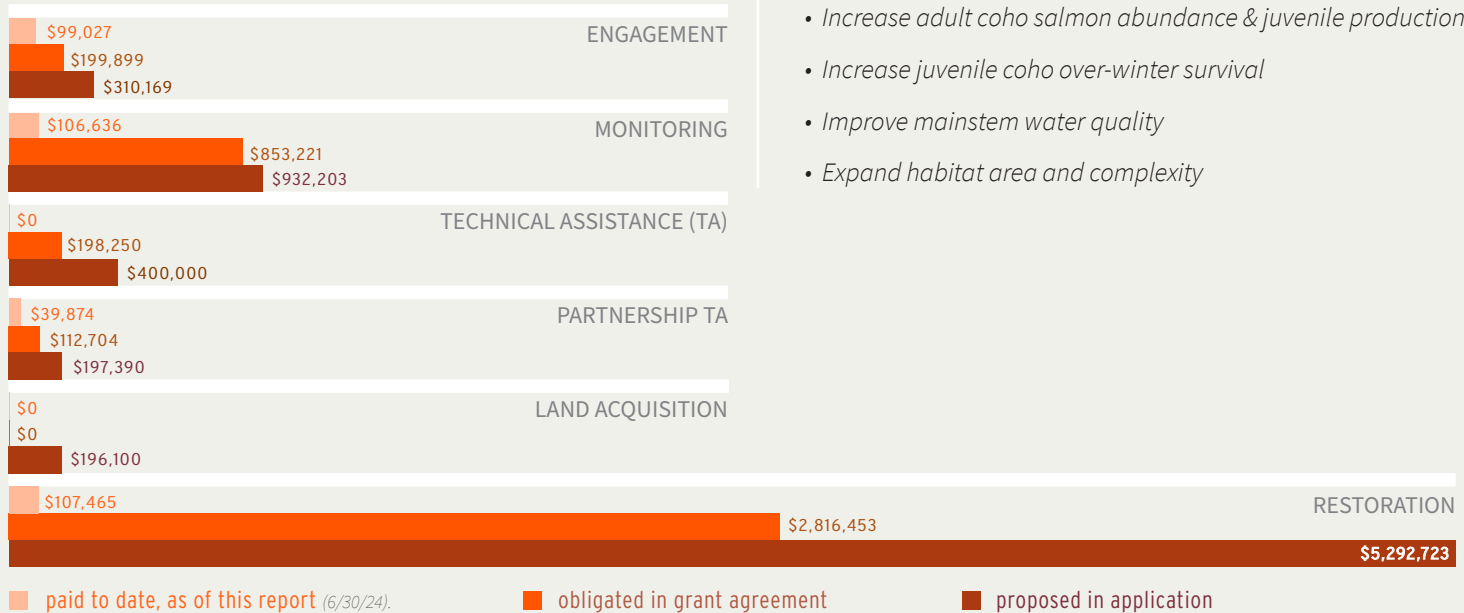


Key initiatives include improving lower tidally-influenced and upland habitats to boost juvenile coho production, enhance migratory connectivity for both juvenile and adult fish, improve mainstem water quality and habitat complexity, increase tributary habitats, and promote high-quality estuarine environments.

The ultimate goals are to improve juvenile coho survival and increase adult spawner abundance.

Funding

OWEB awarded \$7,328,585 in funding for the first two of an anticipated 3 biennia. At the time of application, the FIP anticipated leveraging an additional \$7,896,178 throughout the life of the initiative.



Benefits

- Increase adult coho salmon abundance & juvenile production
- Increase juvenile coho over-winter survival
- Improve mainstem water quality
- Expand habitat area and complexity

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 2022, the Oregon Watershed Enhancement Board (OWEB) awarded a FIP grant to the Coos Basin Coho Partnership. This report documents cumulative progress since the FIP was initiated in 2022. 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 Coos Basin. Accomplishments included in the report only reflect actions completed with OWEB FIP funding.

PARTNERS

Coos Watershed Association • Weyerhaeuser • Curry Watersheds Partnership • Bureau of Land Management • South Slough National Estuary Reserve • Wild Salmon Center • Department of Environmental Quality • NOAA Fisheries • Confederated Tribes of the Coos • Lower Umpqua and Siuslaw • Oregon Department of Fish and Wildlife • Coquille Indian Tribe • USDA • Wild Rivers Land Trust • Coos Soil and Water Conservation District.

GOAL

Restore habitat for native coho salmon through removing fish barriers, reconnecting tidal wetlands, riparian enhancements and adding instream complexity.

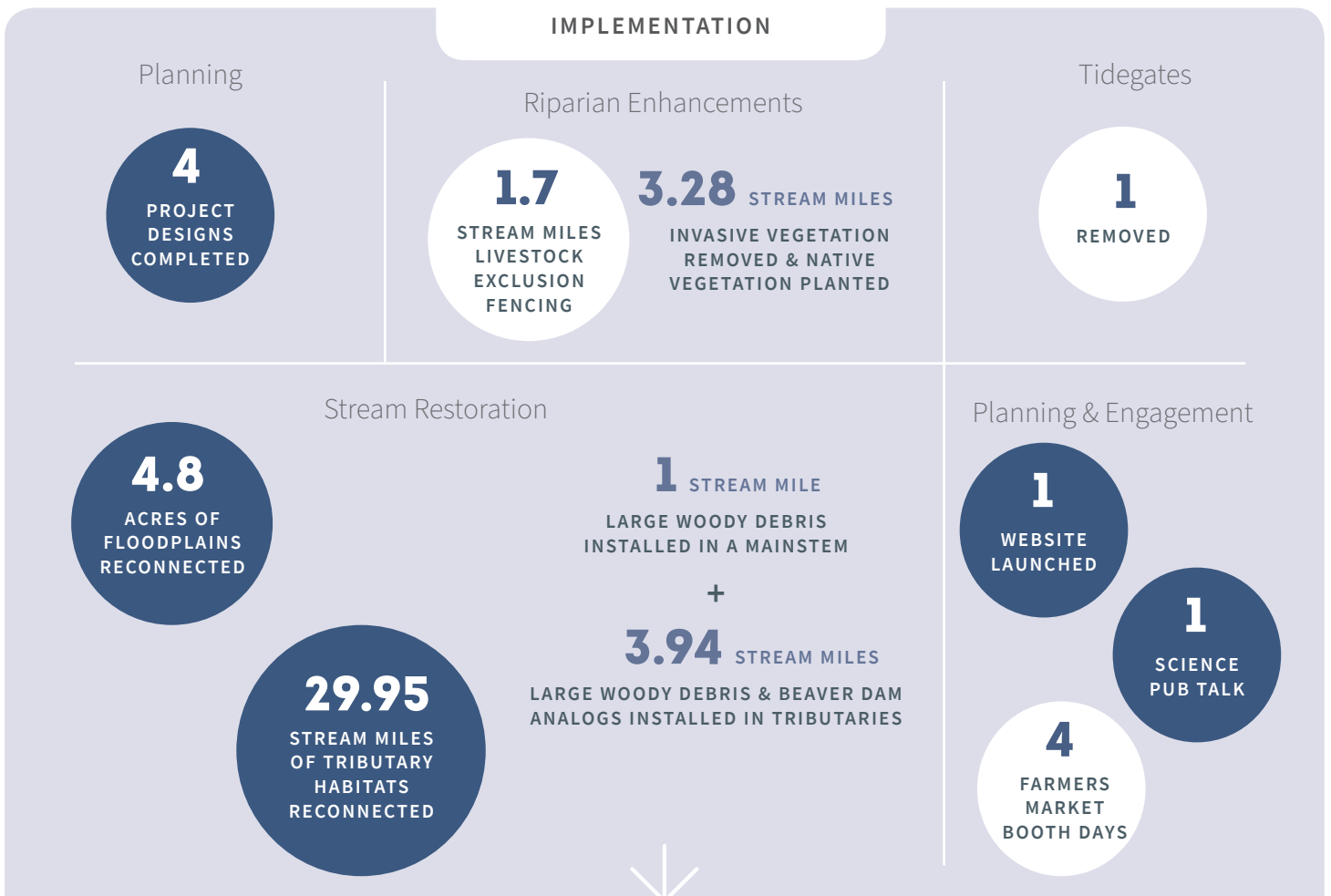


STRATEGIES

- Increase instream complexity in mainstems and tributaries with lateral connectivity in tributaries.
- Enhance riparian function.
- Reconnect tidal wetland and slough habitats.
- Increase longitudinal connectivity in tributaries and sloughs for coho spawning and rearing.



IMPLEMENTATION



OUTCOMES

Near Term 0-5 YEARS

- Reconnect stream miles and seasonal tidal floodplains.
- Enhance function of riparian areas.

Mid-Term 5-10 YEARS

- Increase in high-quality estuarine habitat.

Long Term 10+ YEARS

- Increased juvenile coho salmon production.
- Improved water quality in the mainstem.

FIP Initiative Progress, Biennia 1-2

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



Palouse primary tide gate upgrade
(Allison Tarbox, Coos Watershed Association)



Tioga Falls
(credit: Holden Films, courtesy of Wild Salmon Center)



Life Cycle Monitoring
(credit: Coos Watershed Association)

OUTPUTS	PROGRESS	OBJECTIVE TARGET
Install Large Woody Debris (LWD) & Beaver Dam Analogs (BDAs) in tributaries	2 miles completed	8.7 miles
Install Large Woody Debris (LWD) in mainstems	0 miles	22.2 miles
Enhance riparian vegetation by replacing invasives with natives	1 mile completed	28.4 miles
Enhance riparian function by fencing to improve water quality and bank stability	0 miles	28.4 miles
Reconnect floodplains	0 acres	93.7 acres
Reconnect tributary habitats	1 mile completed	38.3 miles
Remove fish barriers	0 barriers	3 barriers
Tide gates removed or upgraded	0 tide gates	8 upgraded 3 removed

Monitoring Approach

The partnership has developed a “Restoration Effectiveness Monitoring Plan” that will guide the collection, analysis, and reporting of progress by:

- Providing a framework to assess implementation and effectiveness of restoration projects and “lessons learned” information, if adaptive management is needed.
- Collecting water level and habitat data to monitor key ecological attributes that are currently limiting fish use and production in priority areas.
- Tracking riparian restoration planting success through increases in native plant abundance and survival and decreases in non-native species.
- Evaluating water quality improvements (e.g. decreased temperature and bacterial load) in lowland restoration projects.
- Conducting fish sampling to monitor habitat use in project sites and restored or improved access above passage barriers.

Adaptive Management

Restoration

CHALLENGES

Differing perspectives on how to balance ecologic and economic function in working lands projects among partnership members and stakeholders.

Unplanned adaptive management of projects.

LESSONS LEARNED

Acknowledging this difference exists and addressing this in the decision-making process allows for productive conversation and agency for members to provide meaningful feedback.

Expect that some adaptive management may be needed, from natural or unforeseen causes. Funding and partnership willingness to go back and address issues is important.

ADAPTATIONS

Early clarity and agreement on the details of this balance in practice, a collaborative decision making process, and bringing in diverse funding sources when needed helped navigate this challenge.

Allocating specific funds and finding creative funding solutions, being supportive of the project and partnership, and discussing project successes and setbacks regularly.

Monitoring

CHALLENGES

Establishing a monitoring coordinator and then effectively utilizing partnership capacity for robust data collection, analysis, and reporting is a challenge.

Identifying ecological responses and metrics of restoration success across different habitats and land uses is difficult.

LESSONS LEARNED

Staff turnover in the coordinator position severely limits the progress on establishing and enacting a monitoring plan.

Historic land use and restoration practices complicate establishing meaningful reference locations.

ADAPTATIONS

Establishing a monitoring committee helped decrease reliance on a single person/entity and foster collaboration across partnership members to maximize capacity and expertise.

Utilizing local experts and practitioners to give spatial/temporal context helped narrow metrics and methods across upland and lowland project areas.

Engagement

CHALLENGES

Delineating when partners are representing their own entity vs the full partnership.

Synthesizing complex scientific information for the general public.

LESSONS LEARNED

Clearly establishing a partnership identity and pathways for engagement helps clarify individual partner vs partnership roles.

Distilling pertinent, accurate, comprehensible materials requires time and diverse expertise.

ADAPTATIONS

Establishing an outreach committee, allocating funding for website and engagement tools, and addressing these issues as a partnership early.

Frequent meeting of the outreach committee for partnership launch, making room for an iterative process.

Partnership Capacity

CHALLENGES

Limited capacity of partnership participants makes full and timely collaboration, engagement, monitoring, and feedback challenging.

LESSONS LEARNED

Full and sustained collaboration is time consuming.

ADAPTATIONS

Modifying meeting schedules and communication tools for between meetings to better meet the needs of the participants for sustained and meaningful engagement.