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May 9, 2023

MEMORANDUM

TO: Council Members

FROM: Mark Fritsch

SUBJECT: Update on Upper Columbia Programmatic Habitat Project

BACKGROUND:

Presenter: Sarah Walker, Natural Resource Program Manager, and Tracy Bowerman, Science Manager, Upper Columbia Salmon Recovery Board

Summary: Sarah and Tracy will provide an update and overview of the accomplishments administered by this umbrella¹ project administered by the Upper Columbia Salmon Recovery Board (UCSRB) to establish, cultivate and co-manage with Bonneville a strategic path for implementing habitat restoration actions in the Upper Columbia (Wenatchee, Entiat, Okanogan, and Methow subbasins).

Relevance: This activity is associated with [Project #2010-001-00, Upper Columbia Programmatic Habitat](#).

Workplan: Fish and Wildlife Division work plan 2023; Program planning & coordination.

Background: [Project #2010-001-00: Upper Columbia Programmatic Habitat](#)

¹ see page 3 for information regarding the Program's umbrella projects.

On March 2, 2010, the Bonneville Power Administration (Bonneville) submitted a 2008 Federal Columbia River Power System (FCRPS) Biological Opinion (BiOp) project narrative for review by the Independent Scientific Review Panel (ISRP). This new project replaces 14 Biological Opinion (BiOp) non-Accord habitat projects from the Fiscal Year 2007-09 solicitation cycle that represented approximately \$3.5 million in annual funding. This proposal outlines a programmatic process for funding projects that implement habitat improvement and protection actions in the Upper Columbia region (UC)² consistent with, and in support of, the Upper Columbia River Salmon Recovery Plan³. The Upper Columbia Salmon Recovery Board (UCSRB) is the project's proponent. The primary goal is to benefit ESA-listed UC spring Chinook and steelhead populations. To accomplish this goal, this proposal establishes a comprehensive framework to ensure strategic allocation of funds to priority recovery efforts throughout the subbasins of the UC.

On May 4, 2010, the ISRP requested additional information from the proponents in order to determine whether the proposal met scientific criteria ([ISRP document 2010-12](#)). No public comment was received on the ISRP review.

The ISRP requested additional detail on the following:

- a concise and brief description of how existing habitat projects have been implemented and how well they are working in the subbasins of interest,
- details about the objectives, work elements, methods, and metrics, and
- a completed BiOp RM&E plan.

On July 6, 2010, the Council received a response from Bonneville and on August 25, 2010, the Council received the ISRP's final review ([ISRP document 2010-28](#)). The ISRP found that the proposal met scientific review criteria ("qualified").

The ISRP found the proponents provided the necessary details and provided the assurance to the review panel for this new approach to habitat implementation in the UC to meet science review criteria.

On October 14, 2010, based on the ISRP review, the Council [recommended](#) the implementation of this project.

² The UC is located in north-central Washington, primarily within the Columbia Cascade Province in the Columbia River Basin. The UC is composed of the mainstem Columbia River from Chief Joseph Dam downstream to the confluence with Crab Creek (just downstream of Wanapum Dam). The UC includes the Crab Creek, Wenatchee, Entiat, Lake Chelan, Methow, and Okanogan subbasins.

³ The Recovery Plan was adopted by the National Oceanographic and Atmospheric Administration on October 9, 2007. The Recovery Plan is also aligned with Douglas County PUD and Chelan County PUD Anadromous Fish Agreement and Habitat Conservation Plans for Rocky Reach, Rock Island and Wells hydroelectric projects.

Umbrella Projects

Umbrella projects are a smaller subset of the projects (#7) currently being implemented through the Program. These umbrella projects are unique, because of the coordination role they play in a particular sub-region, and also because of their approach to their implementation in offering a solicitation and review process that can fund local entities to implement habitat projects. The funding, review and selection process is much like a mini-grant program for the area. The science review that would normally occur through an Independent Science Review Panel (ISRP) review occurs at the local level with ISRP-reviewed criteria and local technical teams. While the processes differ slightly in each area the umbrella projects under this recommendation are largely defined by their approach to: 1) serve as a coordinating entity among sponsors in a particular sub-region to identify, review, and select projects; 2) use a formal project solicitation process; and 3) allocate and administer Bonneville funds to other entities for implementation.

In 2013, as part of the Geographic Category Review in 2013, the Council formalized and established a set of principles to guide umbrella habitat projects were identified and discussed in the review decision document as Programmatic Issue B - *Evaluate and Improve Umbrella Projects*. Umbrella projects are a unique subset of the habitat projects implemented through the Program because of the coordination role they play in a particular subregion and their offering of a project solicitation and review process that can result in local entities implementing habitat projects with Program funds.

All the Program's Umbrella Projects (except the lamprey project⁴) were part of the recently completed Anadromous Fish Habitat and Hatchery Review in April 2022. As part of the Council decision associated with this review the Council confirmed the importance of the umbrella projects and the principles as established in 2013 and 2017, with the exception that the report that was requested by Council annually (i.e., Principle #6) will no longer be a required, but requested that the sponsors of the umbrella projects to present to the Council biennially on their accomplishments and results at appropriate times for the region.

More Info:

- Upper Columbia Salmon Recovery Board [website](#)
- [2021 Annual Implementation Report](#), October 2022

⁴ In 2017, Project #2017-005-00, Pacific Lamprey Conservation Initiative was included with the original umbrella projects. It is implemented with the guidance established in the Council's 2013 recommendation through the established principals for the benefit of Pacific Lamprey.

Upper Columbia Programmatic Habitat Update

BPA Project #2010-001-00

Northwest Power and Conservation Council Meeting
17 May 2023

Sarah Walker & Tracy Bowerman
Upper Columbia Salmon Recovery Board





Presentation Overview

- Who Are We?
- Meet the Region
- Upper Columbia Programmatic
- Prioritization
- Projects
- Linkages to Monitoring & Evaluation
- Lessons Learned
- Future Work



WHO ARE WE?

Regional
Non-Profit

Two Tribes,
Three Counties

Five Member
Board of
Directors

Upper Columbia Salmon Recovery Board

Mission:

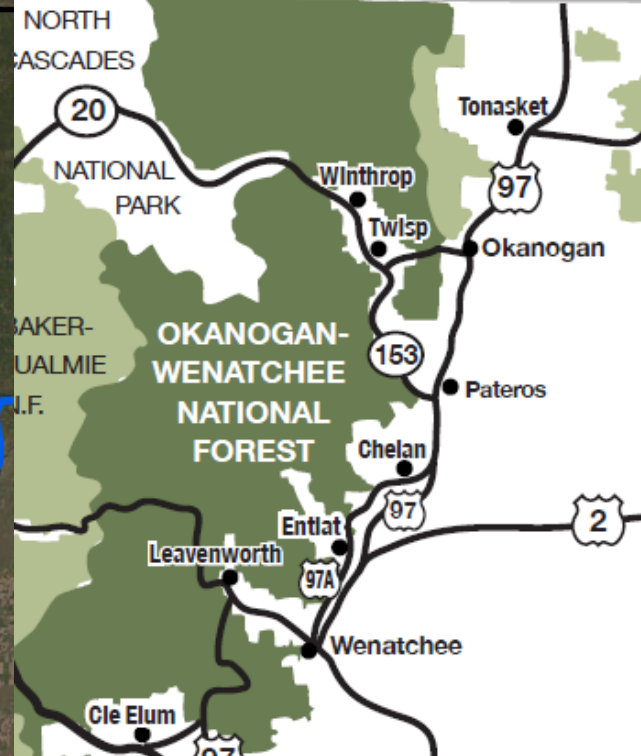
“To restore viable and sustainable populations of salmon, steelhead and other at-risk species through collaborative, economically sensitive efforts, combined resources, and wise resource management of the Upper Columbia region.”

Upper Columbia

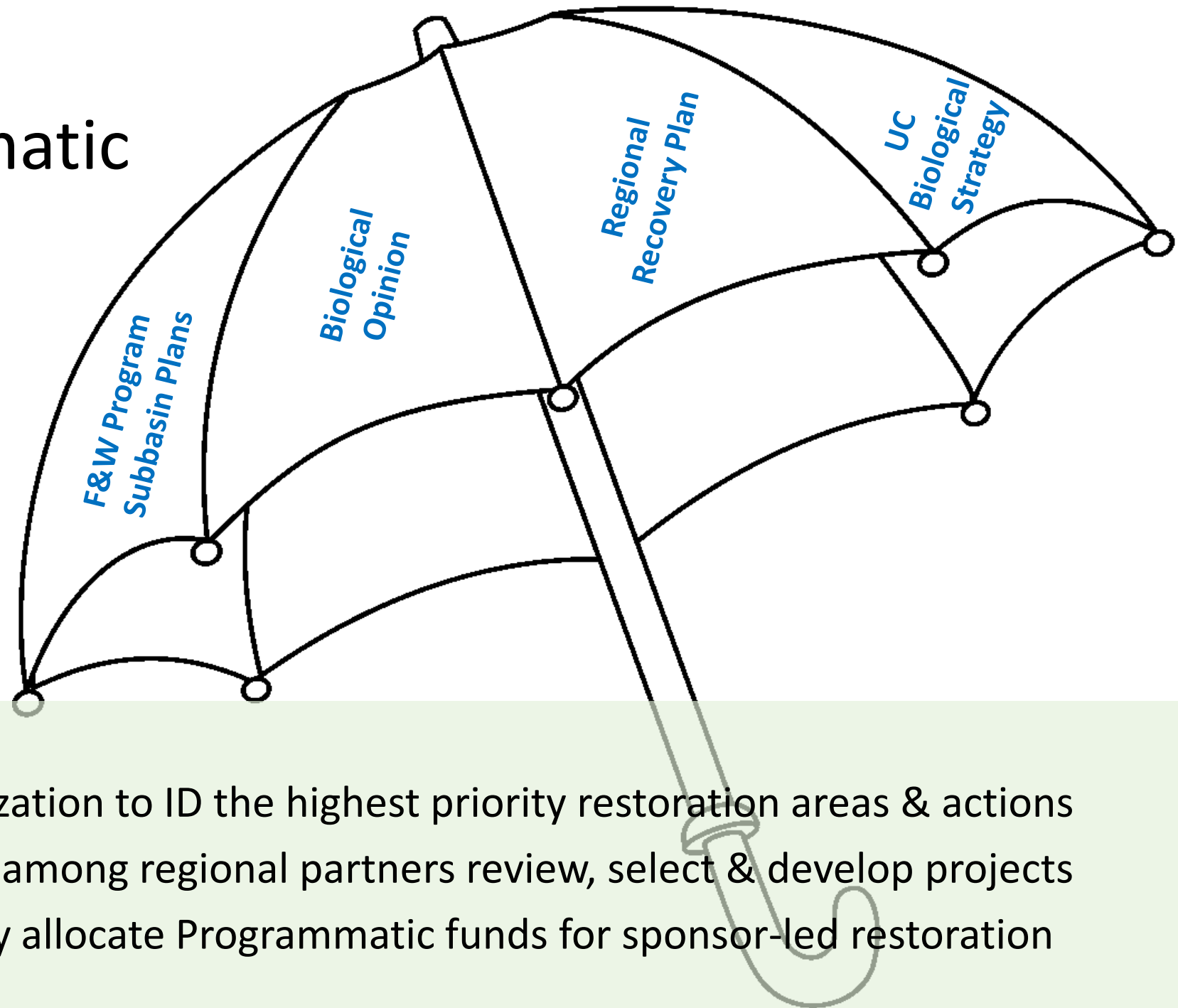
BiOp Area:
~10,000 sq mi

Spring Chinook
Endangered

Summer Steelhead
Threatened



Our Programmatic



- Use Prioritization to ID the highest priority restoration areas & actions
- Coordinate among regional partners review, select & develop projects
- Strategically allocate Programmatic funds for sponsor-led restoration

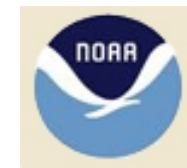


Programmatic Sponsors

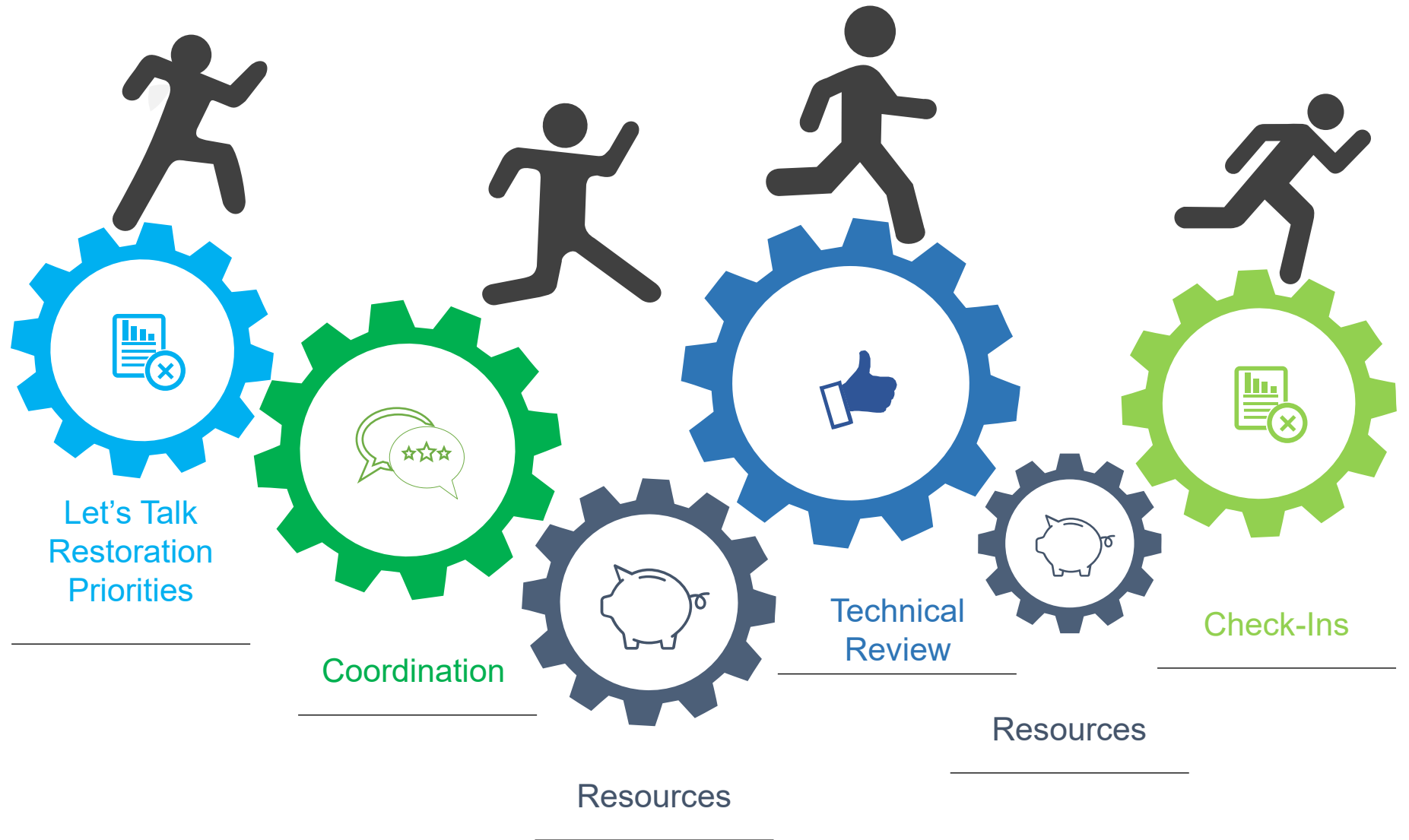
Technical and/or Funding Partners



Tribes



A Dynamic Process



Upper Columbia Biological Strategy

Developed by the Upper Columbia
Regional Technical Team
to Prioritize Habitat Restoration

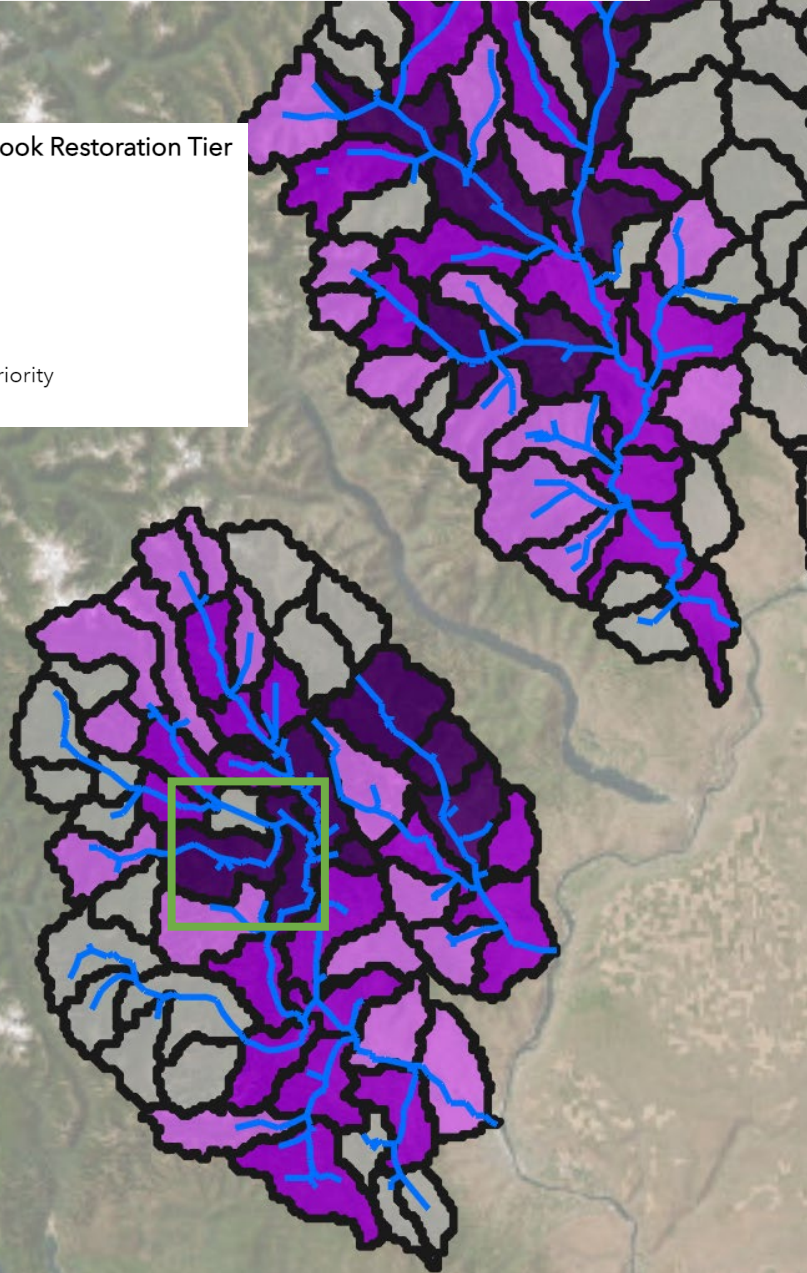
- Focused on:
 - Limiting Factors and life stages
 - Habitat quality
 - Reach Function
 - Results by Species
- Data driven



Prioritize Watersheds

Spring Chinook Restoration Tier

- Tier 1
- Tier 2
- Tier 3
- Not a Priority



Prioritize Reaches and Actions

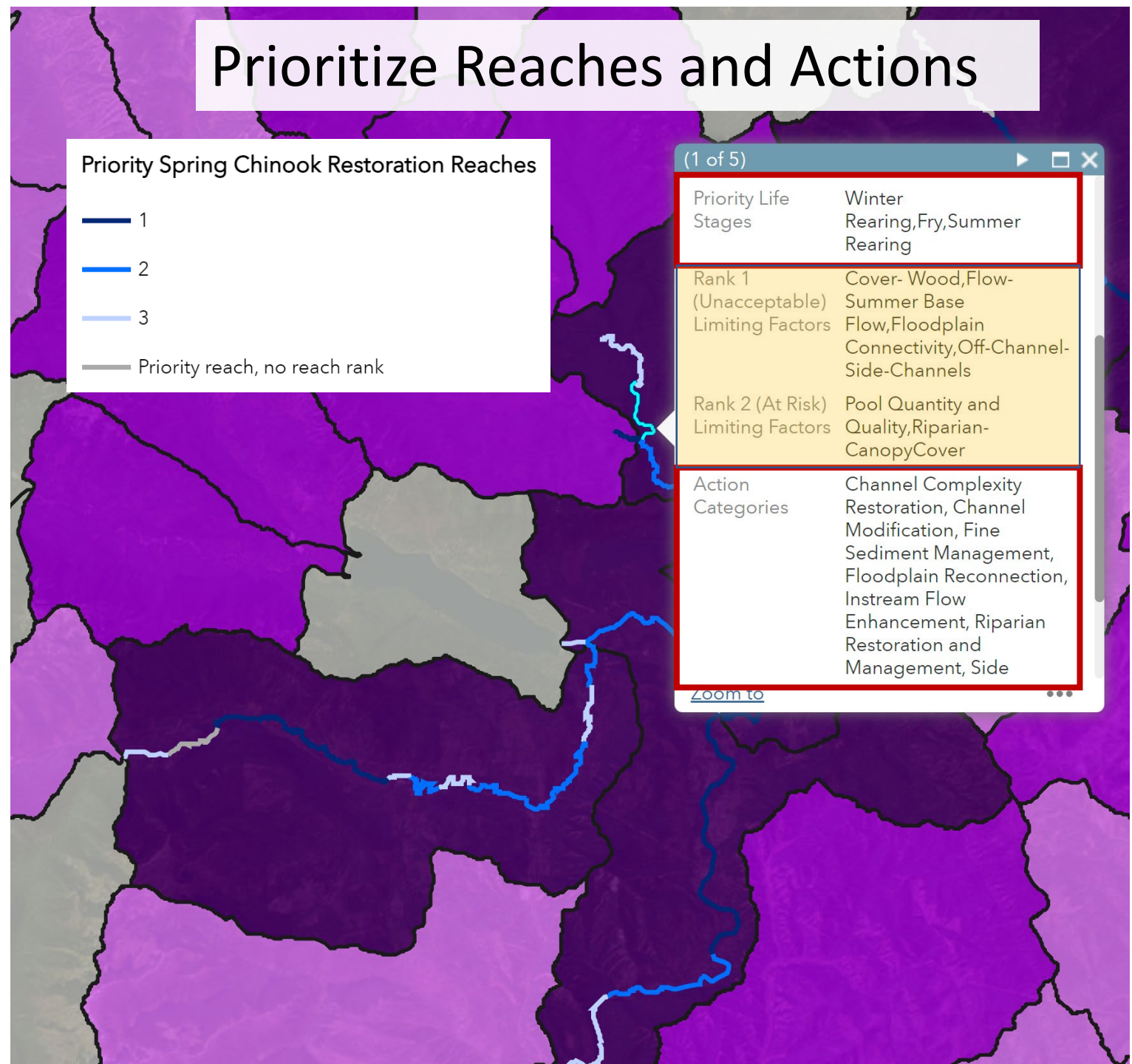
Priority Spring Chinook Restoration Reaches

- 1
- 2
- 3
- Priority reach, no reach rank

(1 of 5)

Priority Life Stages	Winter Rearing, Fry, Summer Rearing
Rank 1 (Unacceptable) Limiting Factors	Cover- Wood, Flow- Summer Base Flow, Floodplain Connectivity, Off-Channel- Side-Channels
Rank 2 (At Risk) Limiting Factors	Pool Quantity and Quality, Riparian- Canopy Cover
Action Categories	Channel Complexity Restoration, Channel Modification, Fine Sediment Management, Floodplain Reconnection, Instream Flow Enhancement, Riparian Restoration and Management, Side

Zoom to



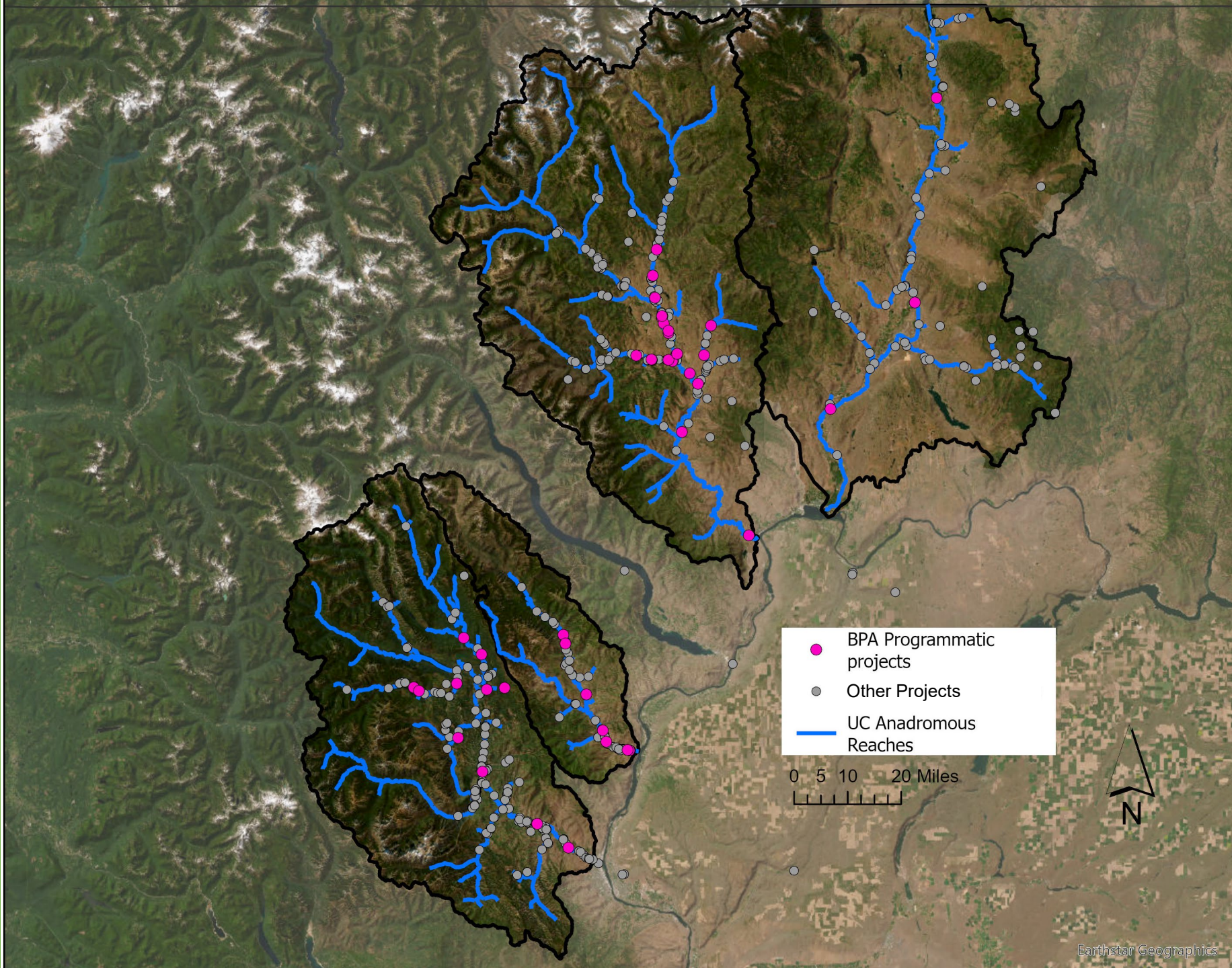
Prioritization Used to Evaluate:

- **Where** projects will have the greatest impacts on populations
- **What** types of restoration actions will have the greatest biological benefit



PROGRAMMATIC
PROJECTS
2010-2022

Wenatchee,
Entiat,
Methow,
Okanogan
subbasins



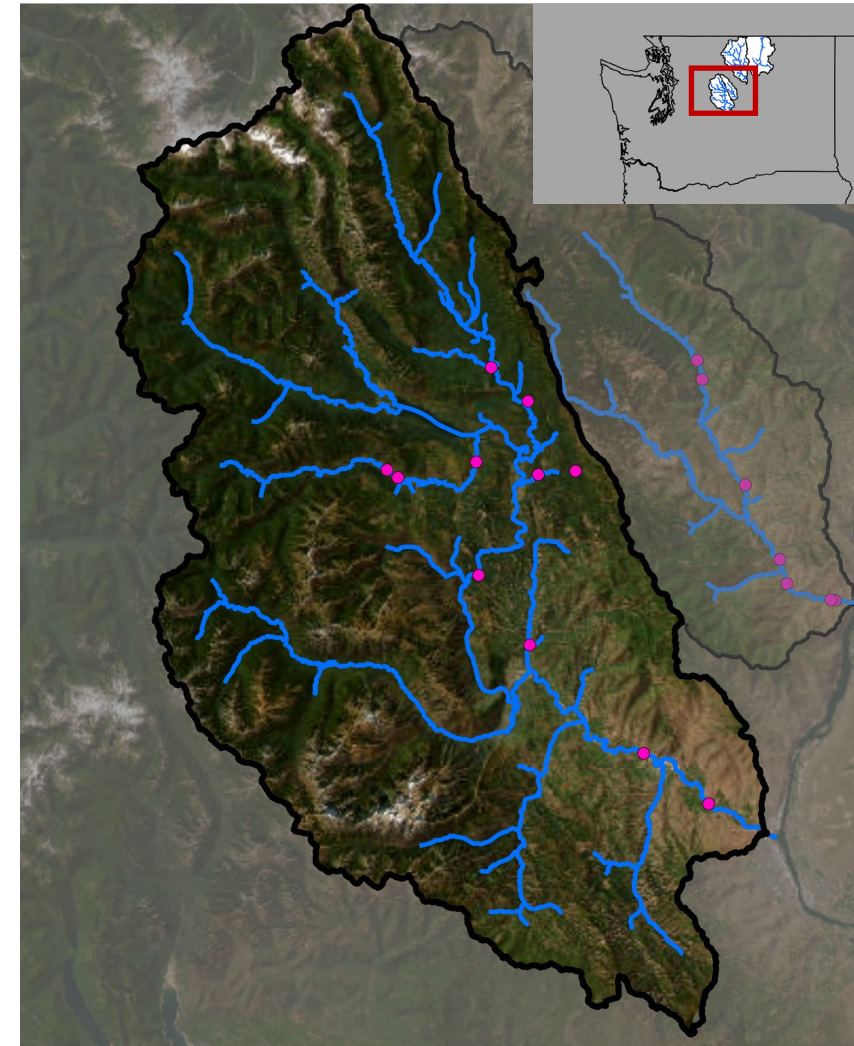
Regional Accomplishments (2002-2022): Programmatic and Other Partner Projects

Project metric	Amount
Barriers/blockages removed	187
Length of stream made accessible	190 miles
Riparian treated	405 acres
Floodplain restored/enhanced	410 acres
Water conserved	133 cfs
Number of fish screens installed	120

Wenatchee Subbasin

Efforts focused on:

- Heavily altered spawning/rearing reaches
- Two major subpopulations
- Increasing rearing habitat in lower Wenatchee



Project Highlight: Merritt Oxbow (Cascade Fisheries)

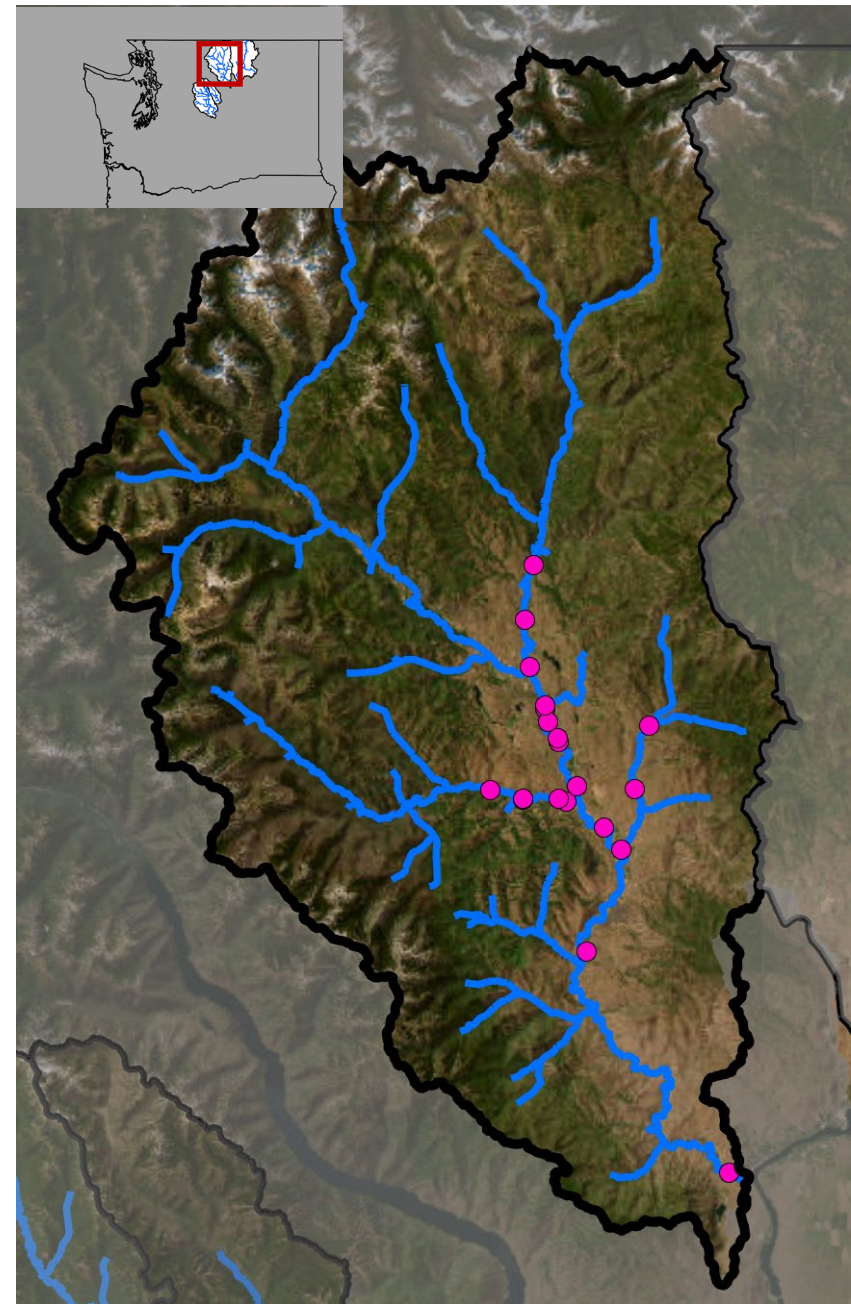
- Created 670' of perennial side channel
- Connected relict oxbows
- Provided 0.43 acres off channel habitat at low flow
- Planted 1.1 acres riparian habitat



Methow Subbasin

Efforts focused on:

- In-stream water conservation
- Screening diversions
- Restoring rearing habitat in mainstem



Project Highlight: Barkley Bear

(Methow Salmon Recovery Foundation,
Trout Unlimited)

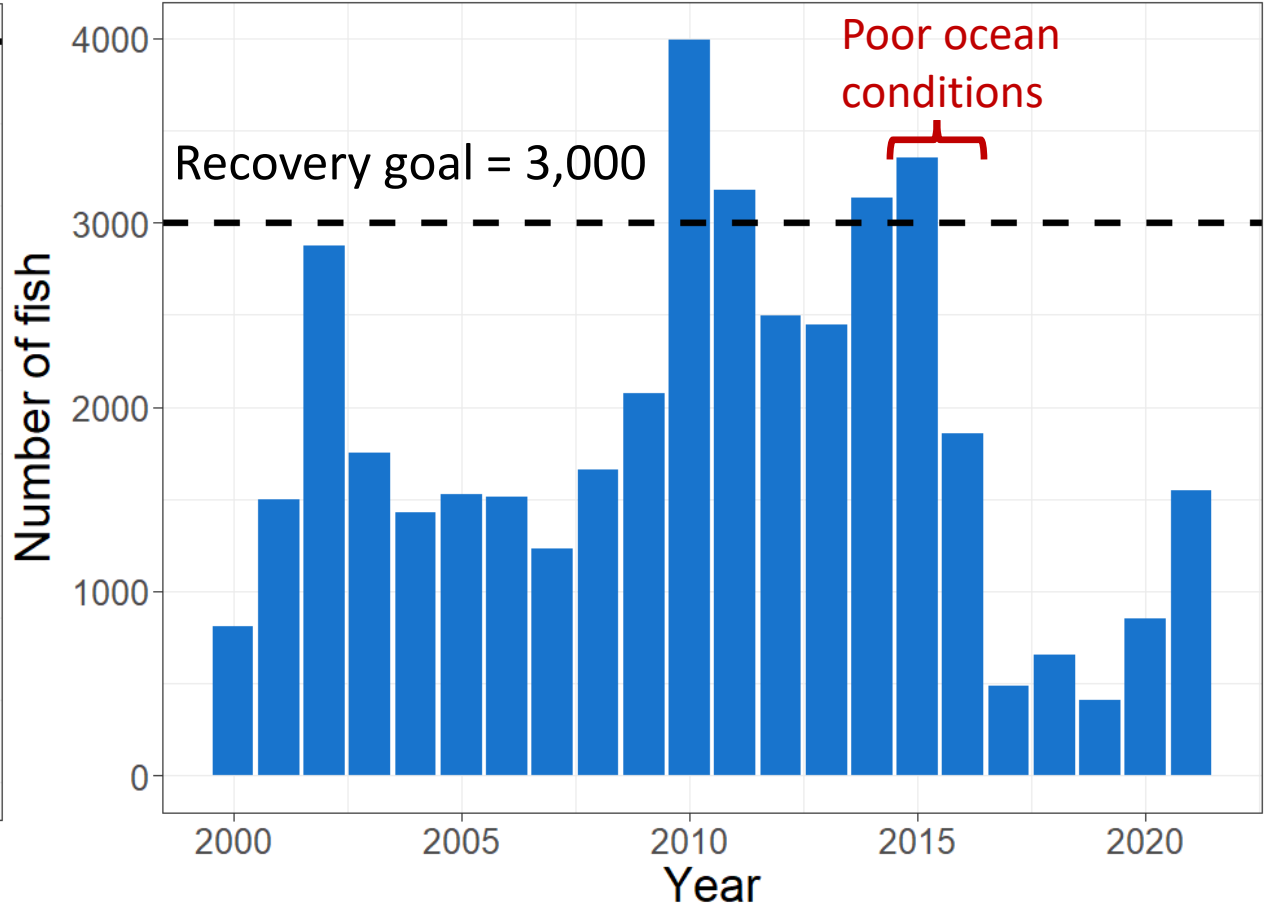
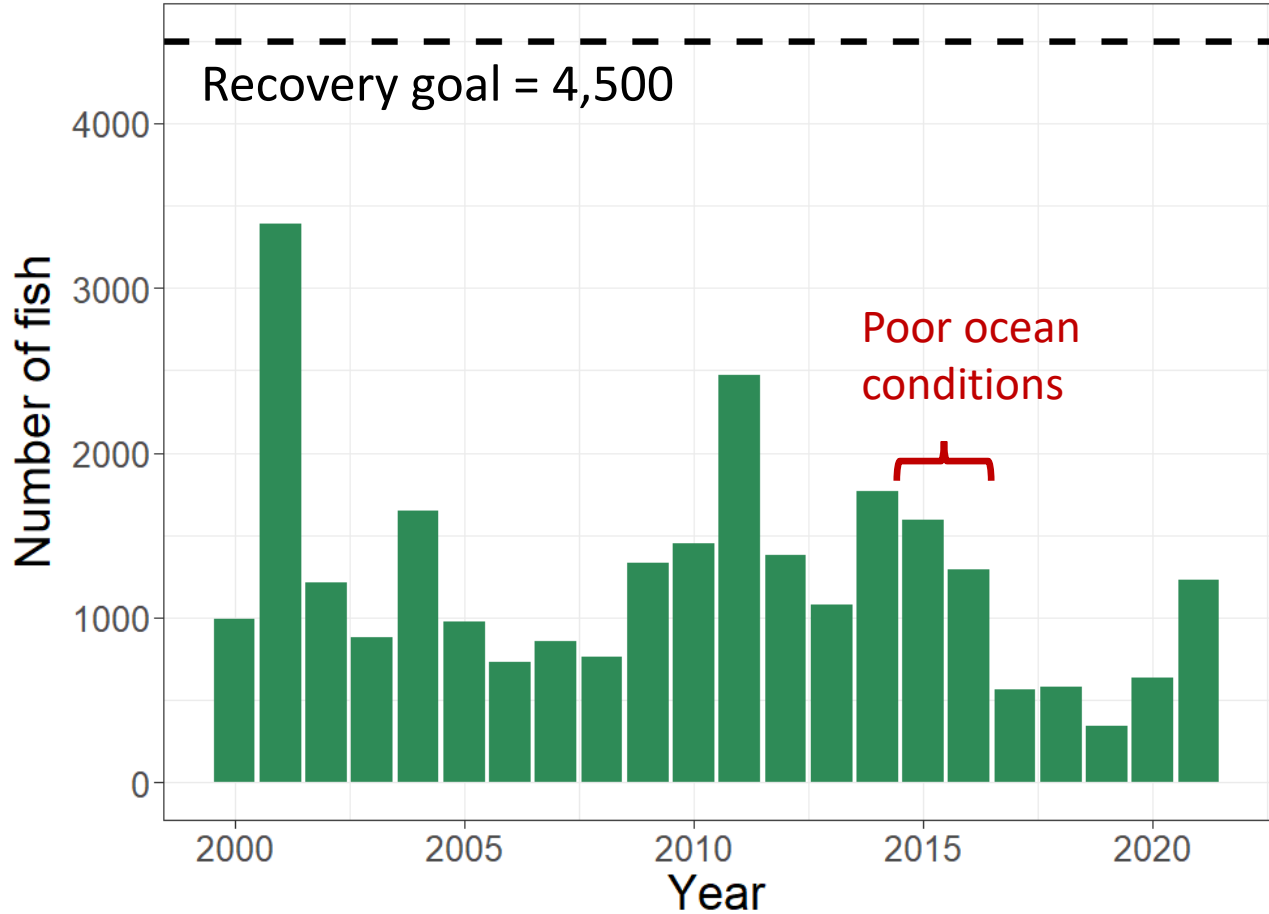
- Converted irrigation ditch to pump
- Removed major irrigation diversion
- Acquired 3 cfs of water
- Additional flow for 4 miles of stream
- Restored 1.7 acres floodplain/riparian
- Added side channel complexity



Natural origin spring Chinook escapement

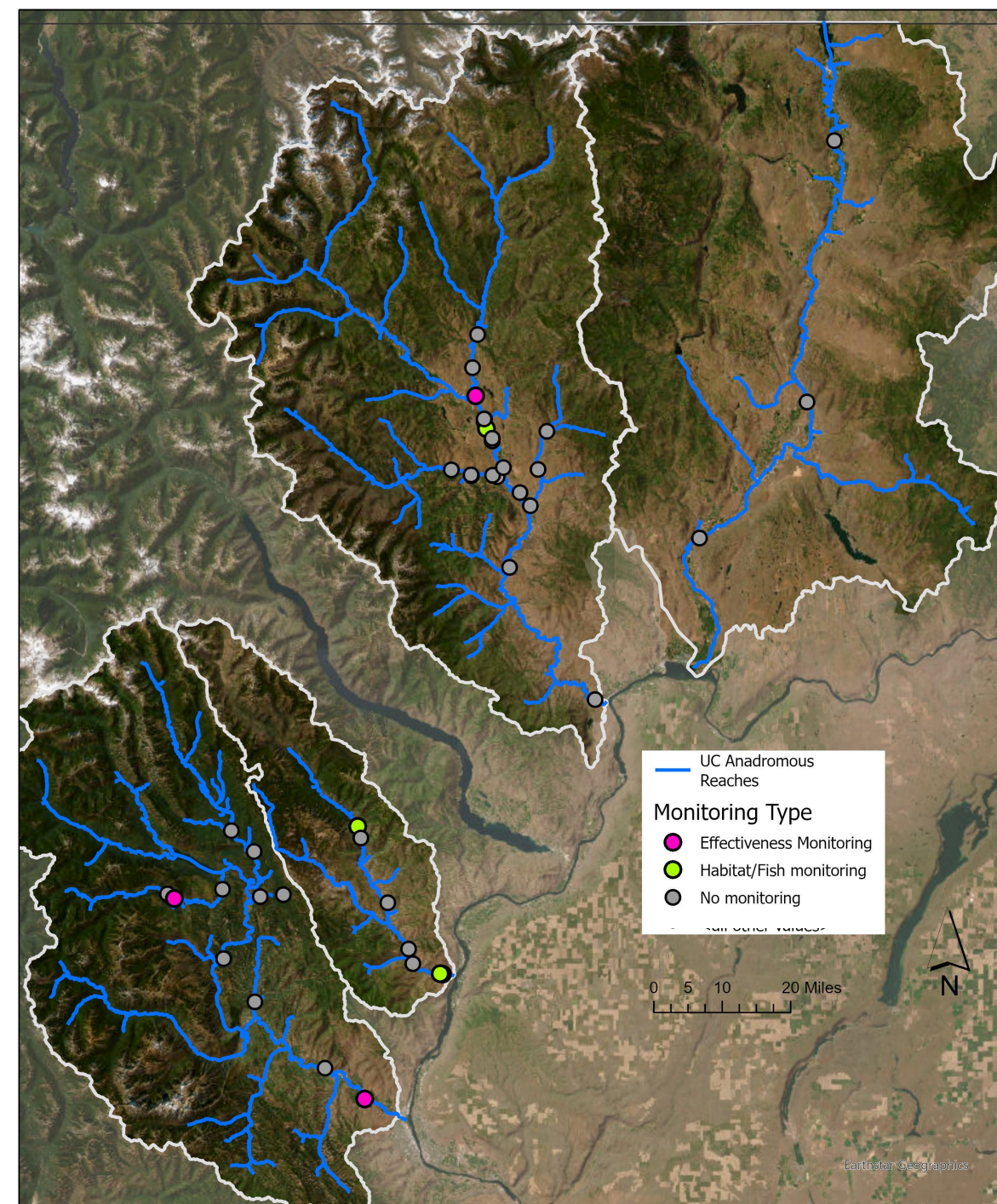


Natural origin steelhead escapement



Monitoring and Evaluation

- Programmatic does not fund M&E or coordination
- The UCSRB-BPA collaborated on a summary Matrix of F&W Program M&E investments for BPA-funded projects
- The Upper Columbia currently lacks a subregion-specific M&E framework
- Opportunity to develop a program aligned with guidance in Columbia Basin Tributary Habitat RM&E Strategy (October 31, 2022)



CHALLENGES

Land Ownership
& Administration

Infrastructure

Risk-Liability

Funder Needs

Policy-Regulatory

Shifting Costs &
Timelines

Natural Events
(wildfire, flood)

Social



SUCCESSSES

- Implementation of complex, large-scale, high priority projects
- Prioritization drives process & project development
- Rolling process provides added flexibility
- Ongoing “Umbrella” and project-level adaptive management by FFY
- Programmatic remains a critical part of Upper Columbia habitat restoration and recovery efforts

ONGOING LEARNING

- Portfolio management to support shifting implementation timelines among projects and needs takes true co-sponsorship
- How to fill adaptive management needs related to monitoring and evaluation



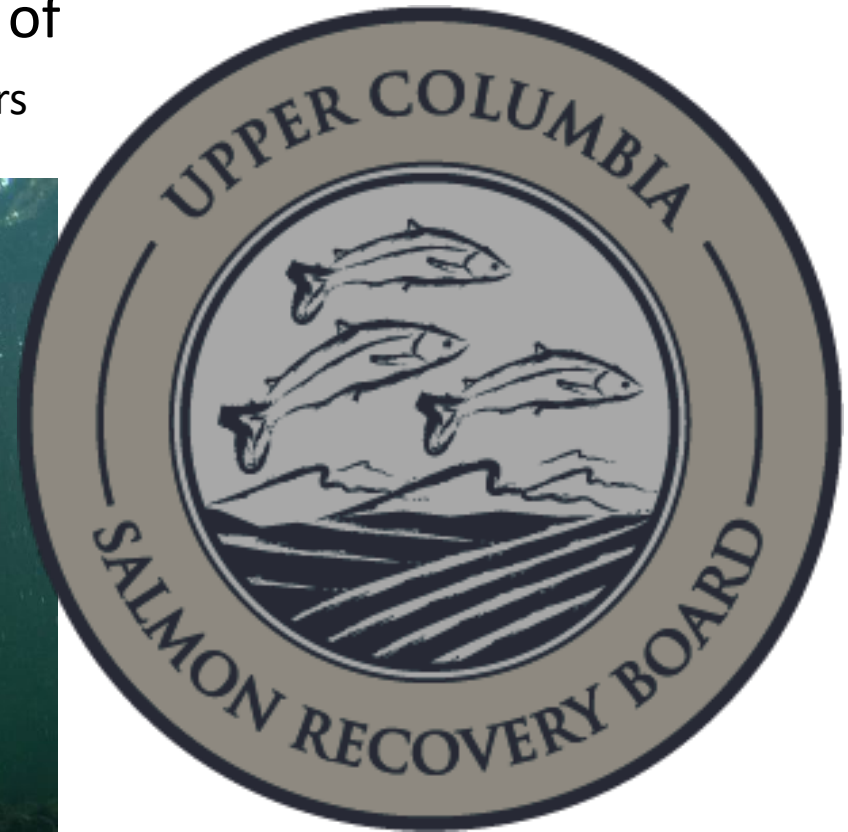
FUTURE WORK

Implementation (Projected / Potential: 2023-2027)

YEAR	SPECIES		PROJECT NAME	PRIMARY OBJECTIVE
2023	SpCH	SH	Big Meadow Creek Fish Passage Restoration	Restore Fish Passage
2023		SH	Goose Creek Watershed Restoration	Restore Fish Passage; Riparian habitat
2023	SpCH	SH	M2 Sugar Levee Reach Implementation	Floodplain Reconnection
2024	SpCH	SH	Upper Wenatchee Floodplain Reconnection	Floodplain Reconnection
2024		SH	Restore Peshastin Confluence	Floodplain Reconnection; Riparian Habitat
2024	SpCH	SH	Goodwin Side Channel	Floodplain Reconnection; Riparian Habitat
2024	SpCH	SH	Lower Methow--Miller Hole	Floodplain Reconnection; Riparian Habitat
2024	SpCH		Fish Screen Programmatic MVID E	Fish Screening
2024	SpCH	SH	Fish Screen Programmatic Twisp Power	Fish Screening
2024		SH	Fish Screen Programmatic Buttermilk	Fish Screening
2024		SH	Fish Screen Programmatic Maltais	Fish Screening
2025		SH	Lower Clear Creek Restoration	Instream complexity; Riparian habitat
2025		SH	Chiwawa 13 Culverts--Brush and Pole Creeks	Restore Fish Passage
2025	SpCH	SH	Stonewater Ranch Flow Improvement Project	Restore Fish Passage
2025	SpCH		Fish Screen Programmatic-Skyline	Fish Screening
2025		SH	Fish Screen Programmatic Tandy	Fish Screening
2026		SH	Chiwawa 13 Culverts--Gate and Grouse Creeks	Restore Fish Passage
2027		SH	Chiwawa 13 Culverts--Deep and Twin	Restore Fish Passage



“Salmon are like silver threads woven deep into the fabric of the Northwest ecosystem.” - Jim Lichatowich, Salmon Without Rivers



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