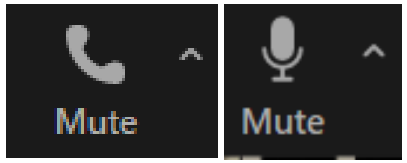
Columbia Basin Collaborative Habitat Work Group

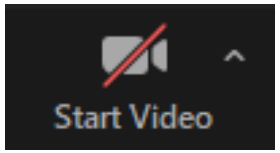
November 9th, 2022

Zoom Features

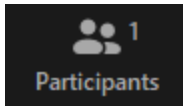
Keep yourself on mute when not speaking.

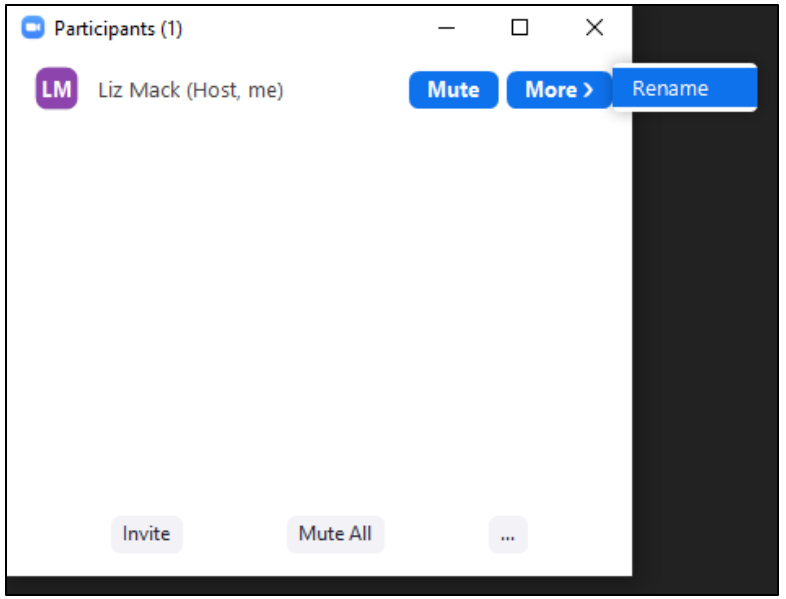


Use video, if possible, to promote face to face communication.



If needed **rename yourself** in the participant panel.





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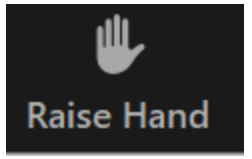

Zoom Features

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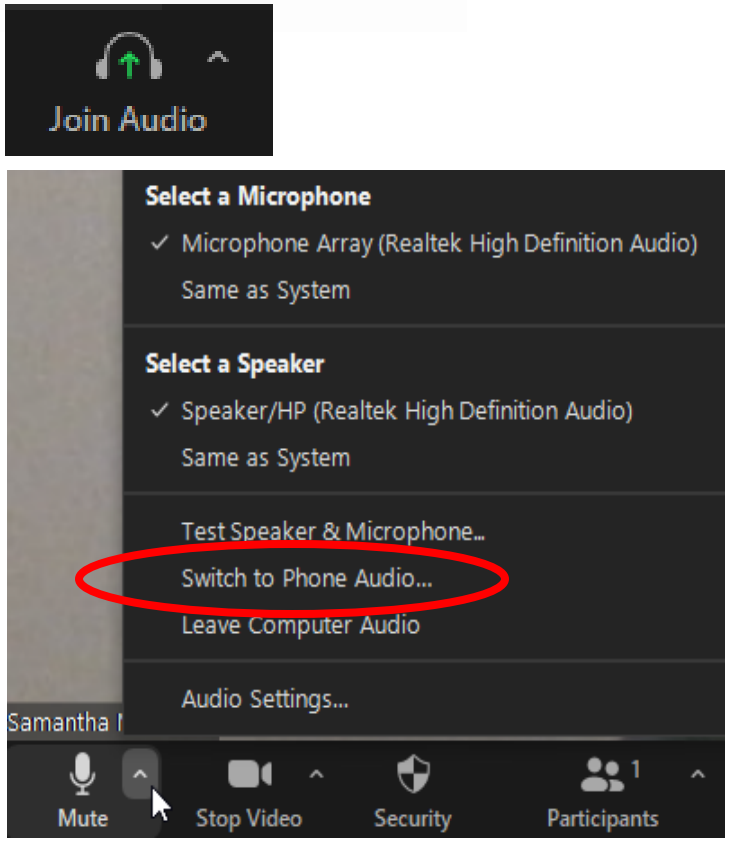
- To **switch to phone**, click the arrow next to the microphone icon and select “Switch to Phone Audio”.
- If you have joined by browser, please click “Audio Settings”



For technical support, please contact Colin Johnson

Zoom Features

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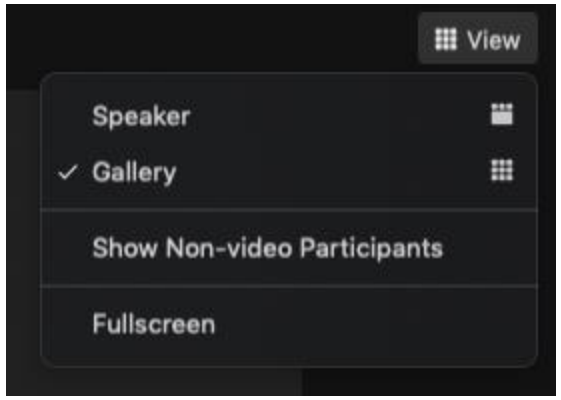

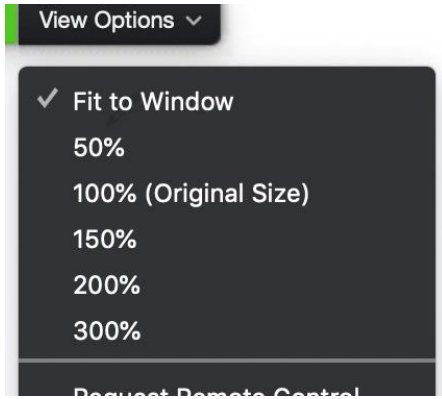

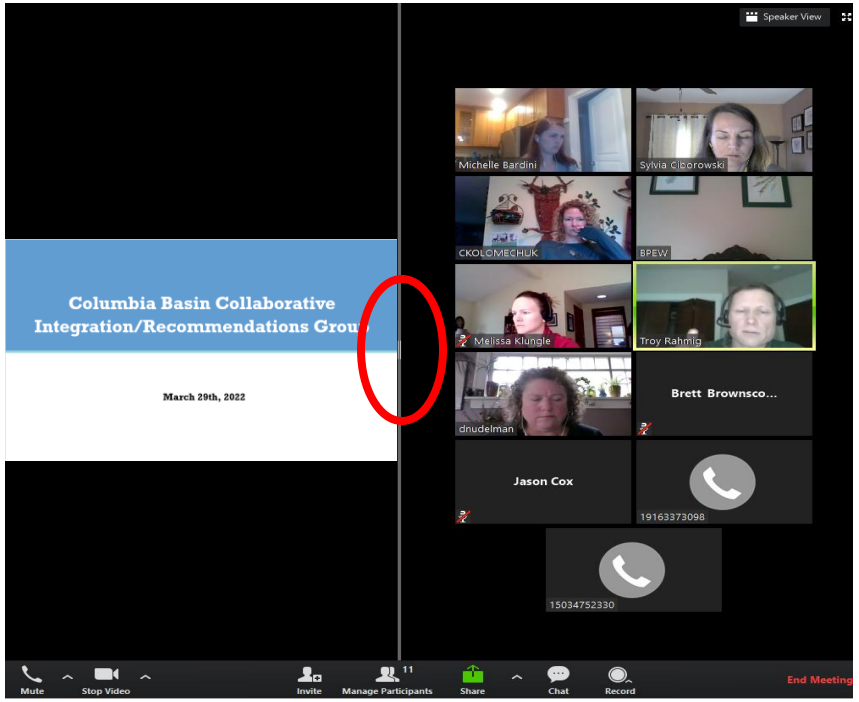

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Welcome, Agenda Review, and Updates

Meeting Guidelines

- Honor the agenda
- Listen to understand and ask questions to clarify
- Balance speaking time
- Don’t pile on
- Be present

Agenda Review

Time (PT)	Topic
10:00 – 10:15 am	Welcome, Agenda Review, and Updates
10:15 – 10:30 am	Work Plan Review
10:30 – 10:50 am	Estuary Habitat Discussion Resources and Gaps
10:50 – 11:10 am	Tributary Habitat Discussion Resources and Gaps
11:10 – 11:20 am	Break
11:20 – 11:55 am	Presentation: Selection of Restoration Projects
11:55 – 12:50 pm	Develop Short Term Recommendations
12:50 pm – 1:00 pm	Confirm Next Steps, Upcoming Meeting Topics, and Summary

Introductions

- Name
- Affiliation and expertise
- Hope to accomplish or bring into the discussion

Work Plan Review

Recommended Action Form

1. Work Group developing the action:
2. Summary of action:
    a. Is this part of an existing program or new program?
3. Benefit: (link to matrices)
    a. What benefit will the action provide?
    b. What data support this?
4. Entities that would implement that action:
5. Timing:
    a. How long will it take to implement that action?
    b. How long until fish populations benefit from action?
6. Stock(s) benefited by the action and magnitude of benefit for each stock(s)
7. Estimated cost:
8. Uncertainties related to the action:
9. Regulatory processes or policies associated with the action:
10. Potential challenges:
11. Adaptive management (describe how this will be incorporated into to action):

Habitat Work Plan

Meeting	Goals
Kick off	Introduction to CBC Estuary and Tributary Habitat Work Group • Come to shared understanding of the assignment from the I/RG and information available from the CBPTF • Identify existing forums, gaps, and funding needs and sources • Start developing work plan Assess gaps in existing forums, science, and funding
Meeting 2:	Finalize work plan • Clarify request from the I/RG • Further identify priority habitat programs, locations, responsible entities and limiting factors • Further understand challenges and opportunities to habitat restoration efforts
Meeting 3:	Develop short term recommendations • Identifying priority areas for restoration and protection related actions • Identify implementers, partners, and collaborators in the work • Identify challenges and potential solutions
Meeting 4:	Develop long term recommendations • Finalize short term recommendations to go the Science Integration Work Group and the I/RG • Overview of successful long-standing programs

Estuary Habitat Discussion
Recap of Resources and Gaps

Estuary Habitat Table Biological Criteria for Priority Actions

Stock Status \ Impact Level	Low	Medium	High	Very High
Low	LC SpCH LC Coho MC Sock UC SpCH UC Sock SN SpCH SN Sock	LC Tule FCH LC WSthd Will SpCH Will WSthd UC Sum CH	UC Sum Sthd	
Medium	MC SpCH	LC Sum Sthd MC Sum Sthd SN Sum Sthd	LC Chum	
High	MC Coho	SWW WSthd		
Very High		LC Bright FCH MC FCH UC FCH SN FCH		

Impact Level
Low: less than 20%
Medium: 20-30%
High: 31-50%
Very High: Greater than 50%

Stock Status (based on CBP medium goal)
Low: less than 25%
Medium: 25-50%
High: 51-75%
Very High: greater than 75%

Prioritization Status
Red: Priority 1
Orange: Priority 2
Yellow: Priority 3
Blue: Priority 4
Green: Priority 5

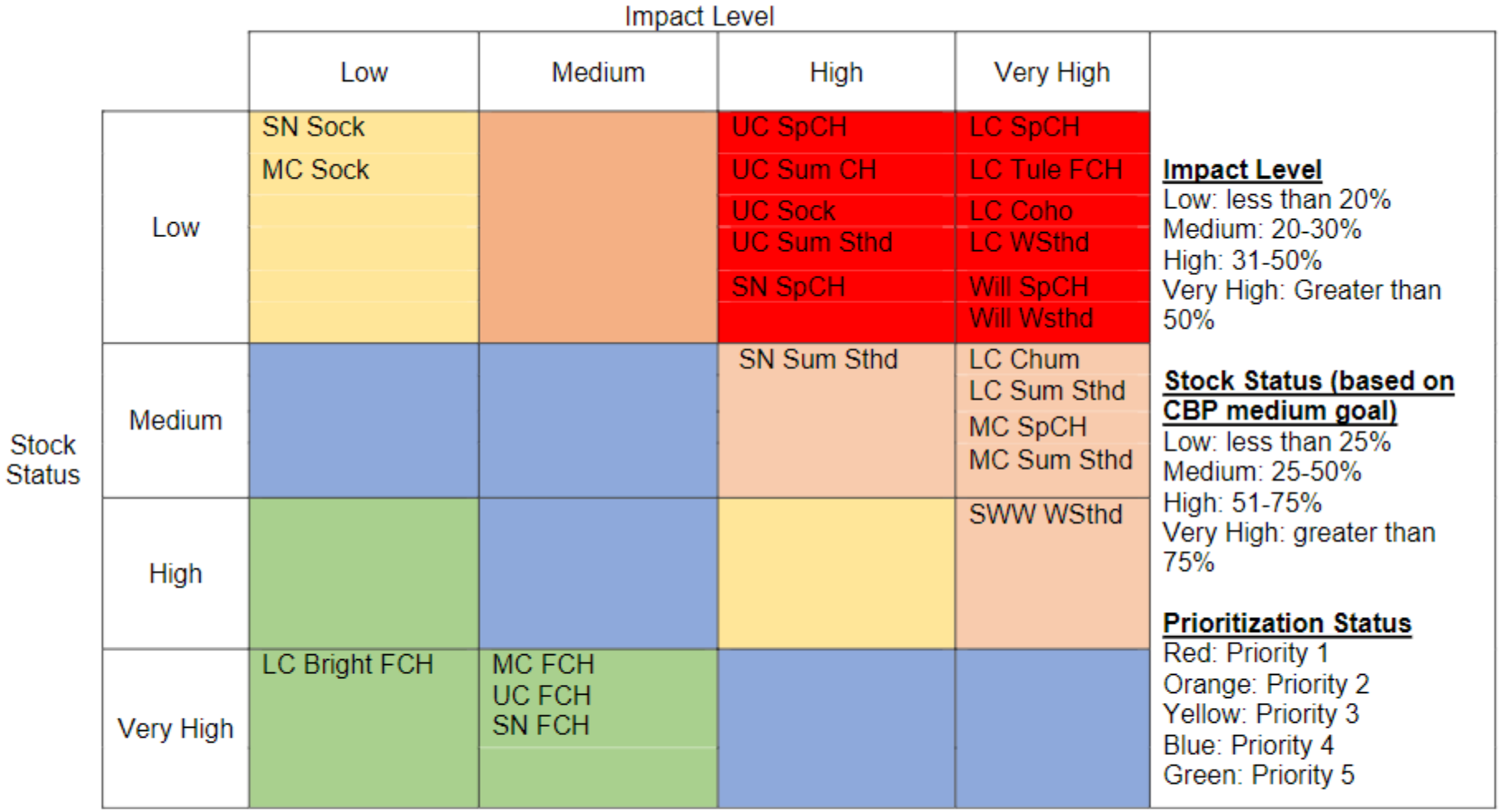
NA: SN Coho, UC Coho, LC Late BFCH

Existing Estuary Habitat Programs

- Columbia Estuary Ecosystem Restoration Program (CEERP)
- United States Army Corps of Engineers – Anadromous Fish Evaluation Program
- United States Army Corps of Engineers – Studies Review Work Group - Expert Regional Technical Group (ERTG)
- Federal land use and regulatory programs
- Fish Barrier Removal Board – Washington
- State and local land use regulatory programs
- Washington Governors Salmon Recovery Office
- Return of the Redds - Oregon
- North Coast Watershed Association - Oregon
- The Lead Entity Programs managed by the four Salmon Recovery Regions - Washington
- Mitigation banks
- Lower Columbia Estuary Partnership Science Work Group

Tributary Habitat Discussion
Recap of Resources and Gaps

Tributary Habitat Table Biological Criteria for Priority Actions



NA: LC Late BFCH, MC Coho, SN Coho, UC Coho

Existing Tributary Habitat Programs

- Columbia River System Biological Opinion Tributary Habitat Program (including Tributary Habitat Steering Committee and Tributary Technical Team)
- NOAA Pacific Coast Salmon Recovery Fund
- Bonneville Power Administration Fish and Wildlife Program and funding
- Habitat Conservation Plans associated with Federal Energy Regulatory Commission (FERC) licensed dams
- Washington State Forest Practices Board – Timber, Fish and Wildlife Program
- Washington Governor's Salmon Recovery Office
- Fish Barrier Removal Board (WDFW)
- Washington Salmon Recovery Funding Board (SRFB)
- Idaho Regional Planning and Implementation Efforts
- Clear Water Focus - Idaho
- Upper Salmon Basin Watershed Program and Tech Team - Idaho
- Upper Snake River Working Group - Idaho
- Washington Regional Planning and Implementation Efforts
- Washington Salmon Coalition
- Upper Columbia Salmon Recovery Board and Regional Technical Team
- Washington Snake River Salmon Recovery Board
- Lower Columbia Recovery Board
- Yakima Basin Integrated Plan
- Washington State Public Utility Districts - Tributary Committees as part of Habitat Conservation Plans
- Western Rivers Conservancy
- Soil and Water Conservation Districts
- Land trusts (e.g., Deschutes)
- Local non-profits

Break

10 minutes

Presentation: Selection of Restoration Projects

Today's Panel of Presenters:

- Mike Edmondson – Idaho
- Jason Karnezis – BPA
- Jim Brick – Oregon
- Brandon Rogers - Yakama Nation Fisheries
- Steve Manlow – Lower Columbia Fish Recovery Board


Kandoll Farm – Columbia Land Trust

CEERP Priority Projects for fy23

Wolf Bay

Breach a remnant railroad in 2 locations, installing two free-span bridges, allowing full hydrologic connection and fish passage to approximately 44 acres of estuarine wetland habitat directly off the mainstem of the Columbia River.

Carr Slough

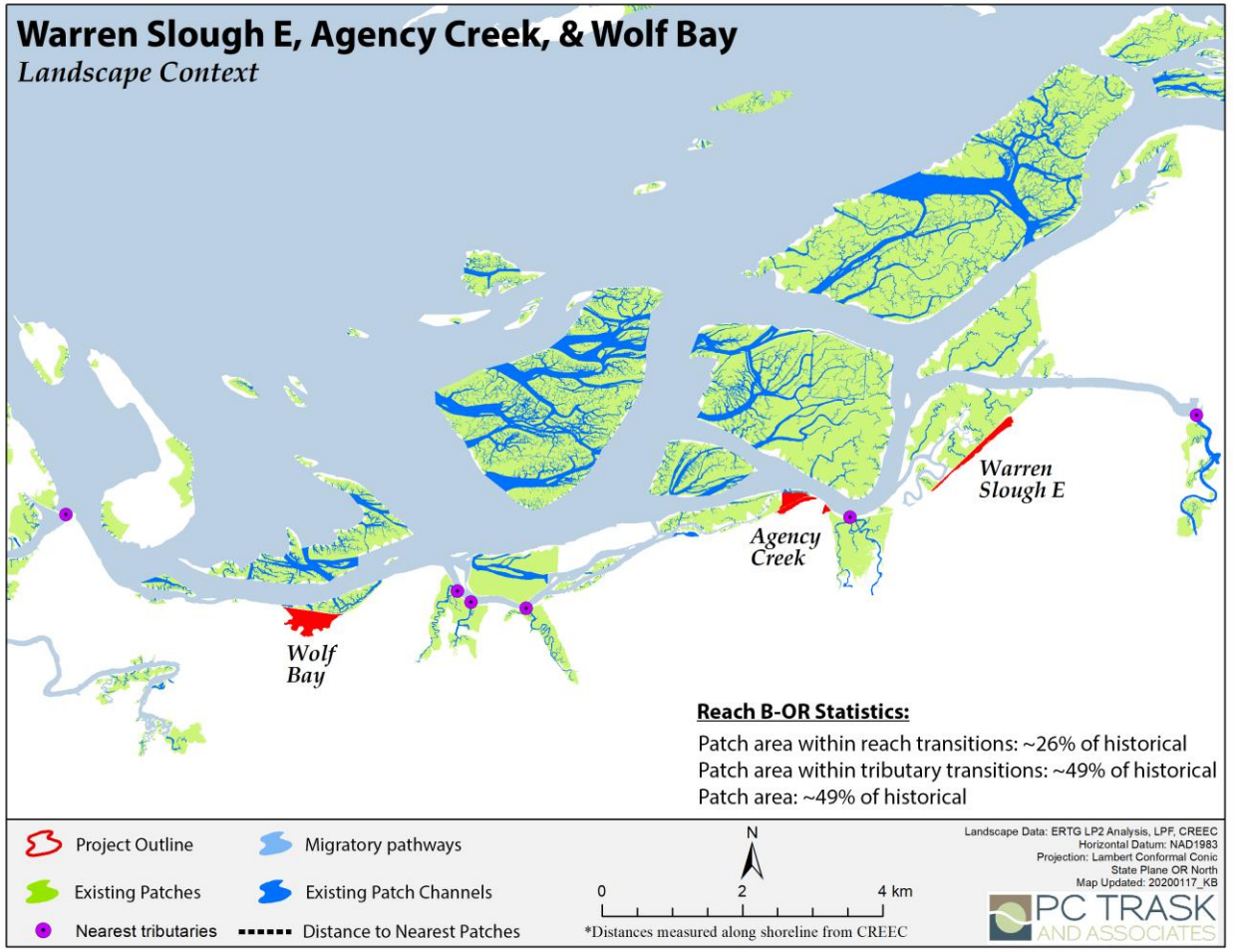
Breach an existing railroad berm and replace with either a large size culvert or bridge to create full fish access and hydrologic connectivity to 140 acres of floodplain wetland habitat.

Svensen Island

Removal of existing dike and tide-gate structures to re-establish tidal hydrology on 320 acre site. Channel enhancements will also be included to emulate natural tidal slough channel structure. Removal of exotic pasture grasses will allow natural colonization of estuarine plant communities from adjacent seed banks. Remnant dredge materials will also be removed on properties north end to reference estuarine plant colonization elevations.

Wolf Bay Restoration

1. Two new railroad breaches, placing a set of side-by-side 30’ bridges (60’ cumulative opening) on the west end of the site, and placing an additional 40’ bridge on the east end of the project area re-connecting to historic channel network
2. New connections reduce the velocity at the existing trestle bridge below the bi-directional fish passage threshold, removing a known velocity barrier and improving passage, providing three total openings to the site.
3. Restore natural tidal signatures by removing existing hydraulic constrictions.
4. Increase tidal exchange to improve ecosystem functions within the project's tidal wetlands.
5. Greater tidal exchange will reduce sedimentation and simplification of the site, contributing to improved edge complexity and opportunities for plant overhang, improving foraging opportunities.
6. Increase microdetritus and prey resources to the estuary.
7. Increase opportunities for estuary feeding and residency to improve growth and survival at ocean entry by improving the connection to 43 acres of intertidal and floodplain habitat.



Landscape context

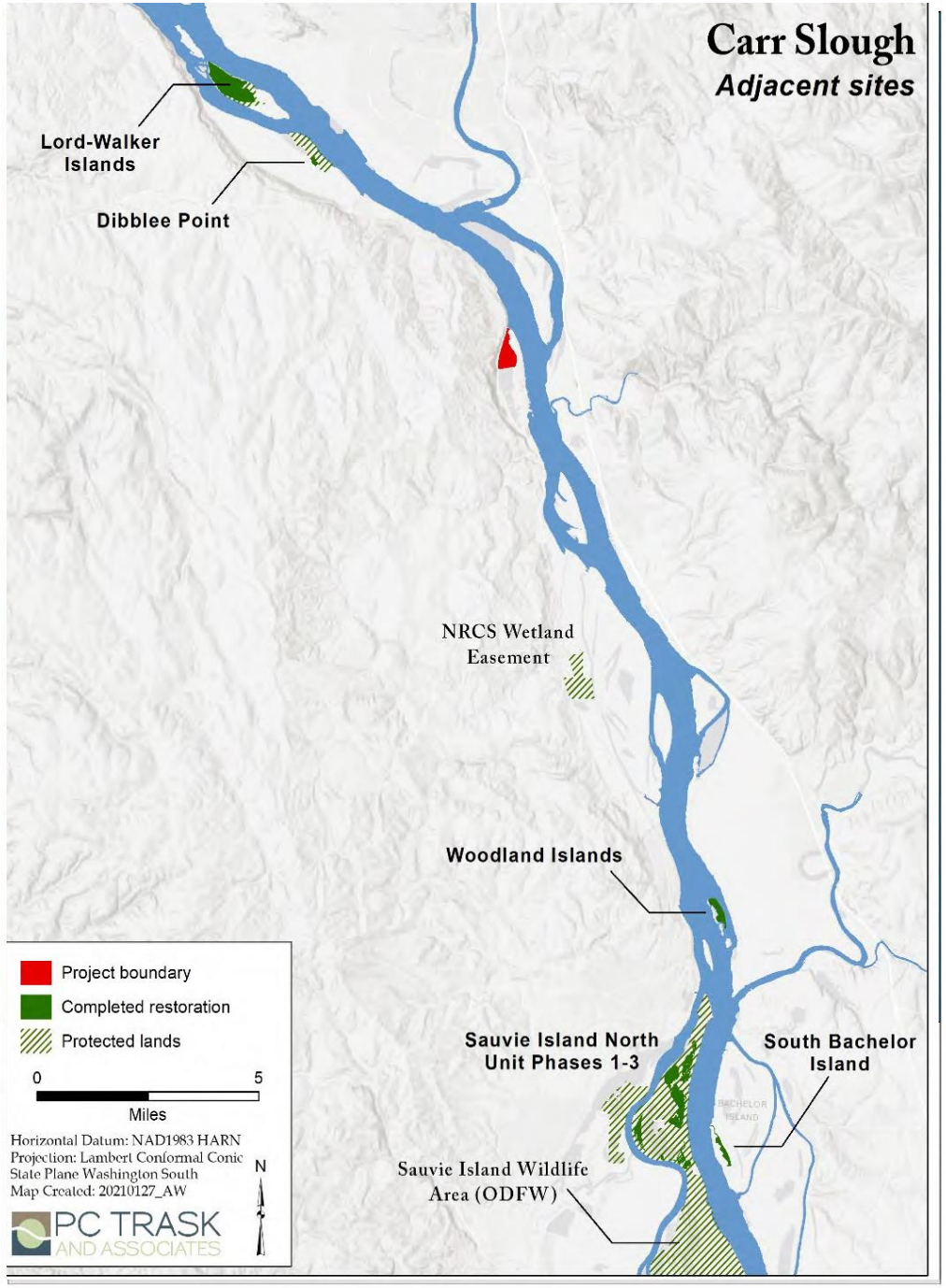
1. Fill a shoreline gap
2. High Quality Matrix along perimeter of project areas and improved edge complexity

Carr Slough Restoration

1. Create second opening into the site
2. Create multiple flow paths at the confluence
3. Replace ditches/berm with a sinuous channel
4. Remove abandoned culvert
5. Lower marsh plain for diversified vegetation
6. Emergent and riparian re-plantings

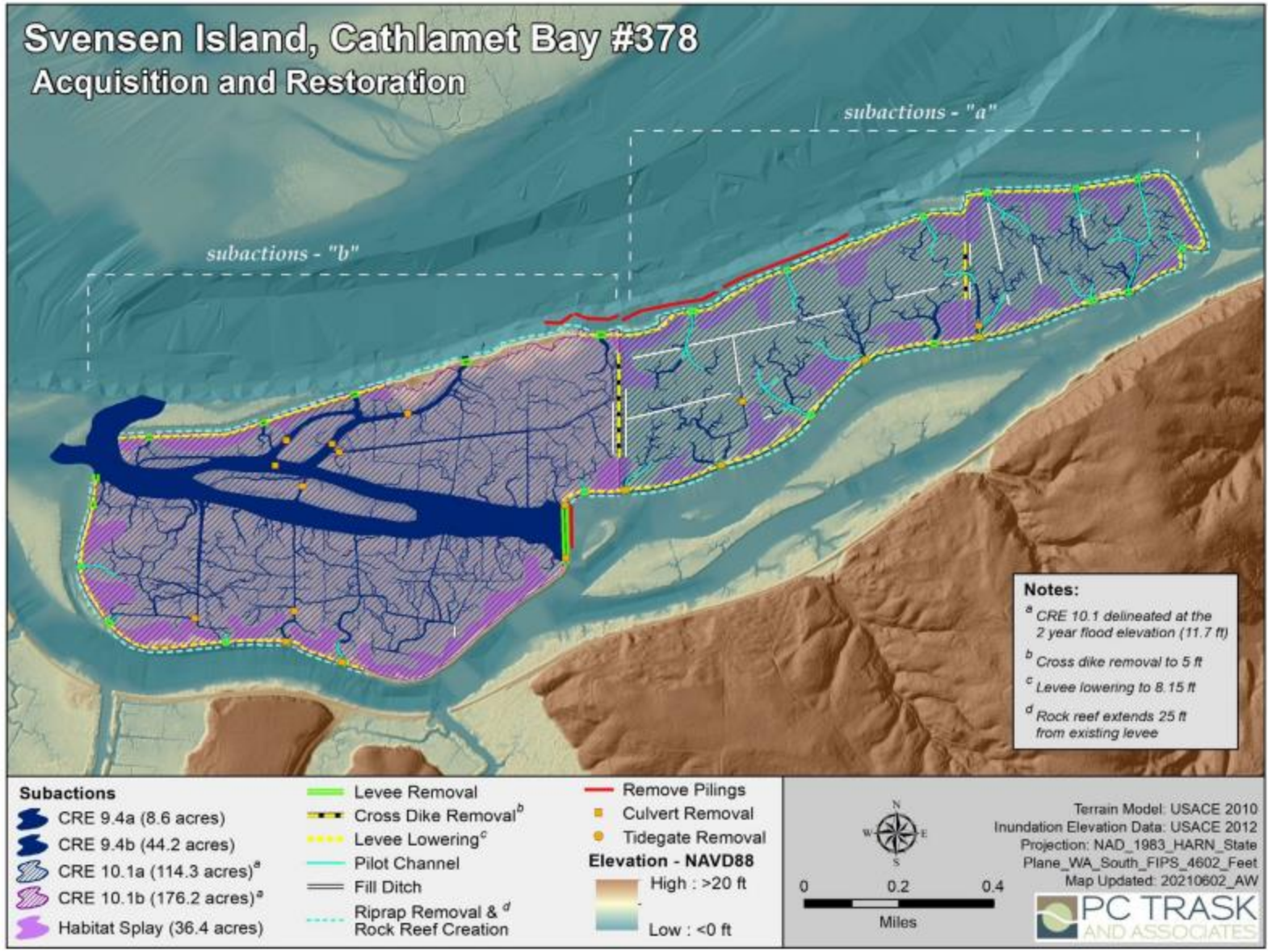
Project Benefits

1. Good stepping-stone patch in a stretch of river that has never had a large-scale floodplain reconnection project
2. Adds a second opening through railroad levee to vastly improve fish passage into main site
3. Multiple new flow paths into embayment as well as interior wetlands
4. Greatly increased channel sinuosity and channel edge density
5. Removal of defunct culvert/tide gate and artificial berms
6. Enhanced food web connectivity and water quality
7. Improved wetland habitat capacity through marsh plain lowering and re-planting effort
8. Potential to expand the project through Graham Road in future years to another 100+ acres of additional habitat



Svensen Island Restoration

1. Removal and lowering of existing exterior dike.
2. Remove cross-dike structure
3. Remove several tide gate structures
4. Remove multiple culverts
5. Excavate multiple pilot channels to emulate natural tidal slough channel structure.
6. Fill agricultural ditches
7. Removal of exotic pasture grasses will allow natural colonization of estuarine plant communities from adjacent seed banks.



Mike Edmondson - Administrator, Idaho Governor's Office of Species Conservation, State of Idaho

Priority Projects: *Oregon Dept. Of Fish and Wildlife*

-- Conservation and Recovery Plans

 # Sps, viability, gap, LF, HIP, Climate, Connect

Atlas, Netmap…

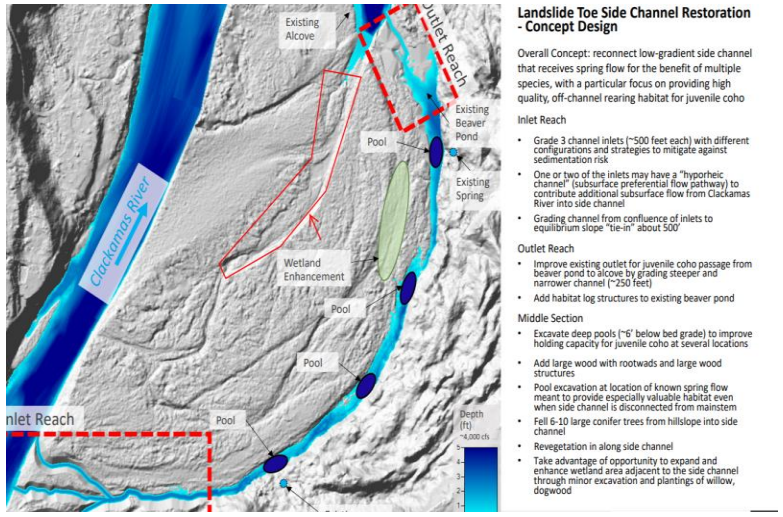
-- Federal Infrastructure Funds

Statewide priorities, goal posts

-- Other projects used to inform rest. priorities

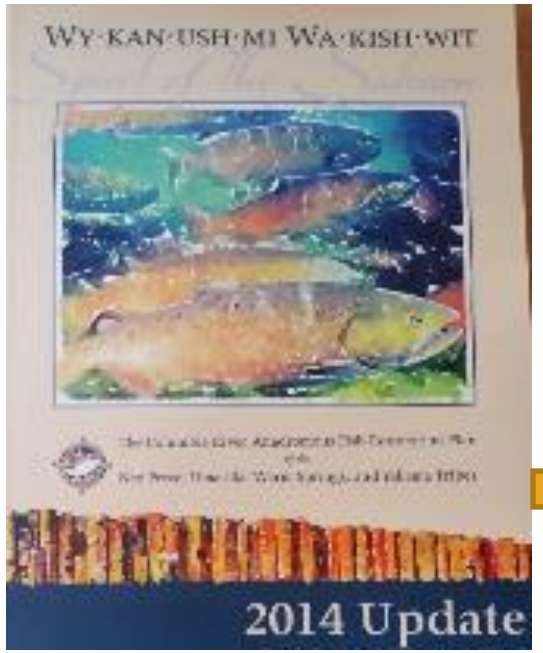
SAP, research, RME

1. Landslide Toe, Clackamas River mainstem
2. Wallowa Fish Passage and Flow
3. Columbia River Steelhead Overshoot

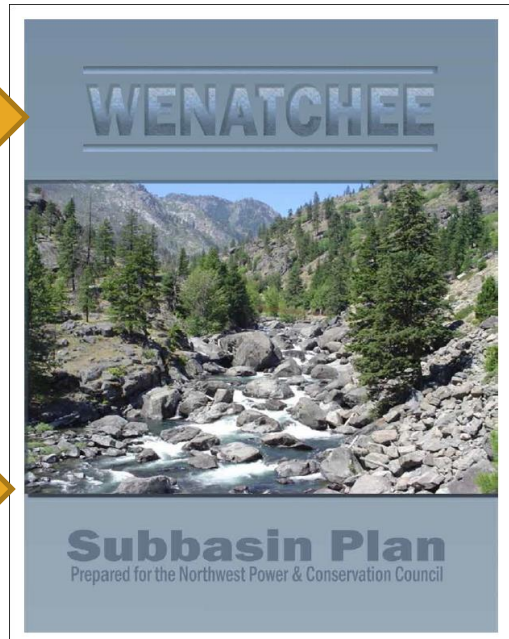


Project Selection/Prioritization Process

Wy Kan Ush Mi Wa Kish Wit (Spirit of the Salmon)



Subbasin Plans



Recovery Plan

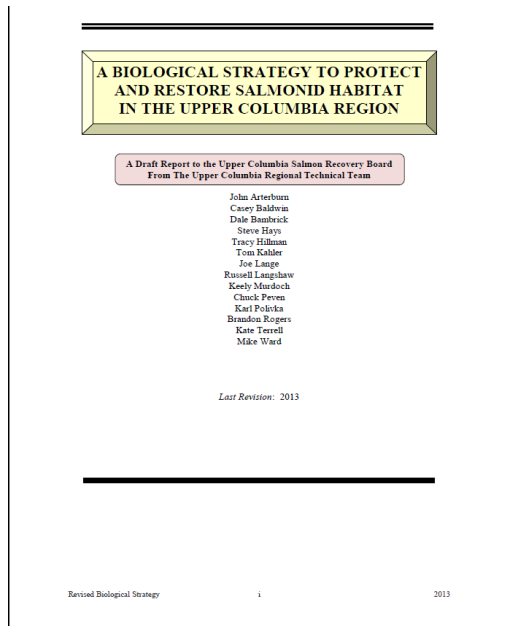
Upper Columbia Spring Chinook Salmon and Steelhead Recovery Plan*

August 2007

Upper Columbia Salmon Recovery Board

*This Plan also covers bull trout, which are under the jurisdiction of the U.S. Fish and Wildlife Service. The strategies and actions in this proposed plan are intended as additional recommendations for the draft bull trout recovery plan that was published by the U.S. Fish and Wildlife Service in April 2002.

UCRTT Biological Strategy



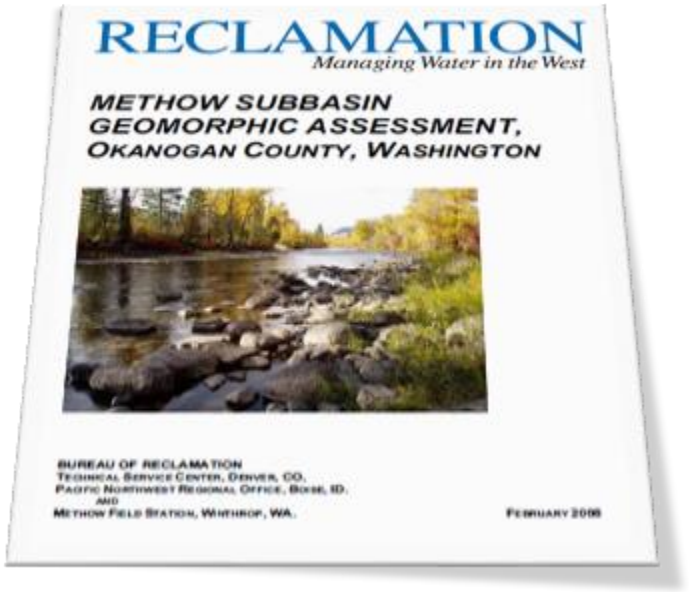
These plans were compiled by representatives from Yakama, federal, state and local agencies including NOAA, USFS, USFWS, YN and WDFW.

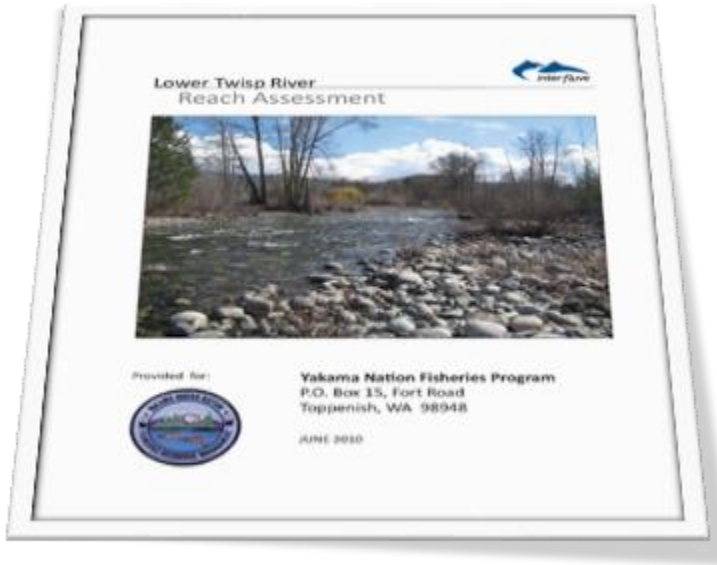
Project Selection/Prioritization Process

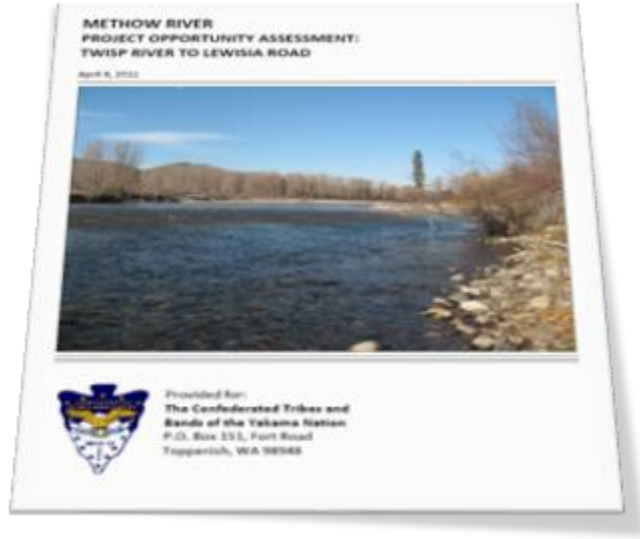
Subbasin Tributary Assessment

Specific River Reach Assessment

Project Level Concept Development

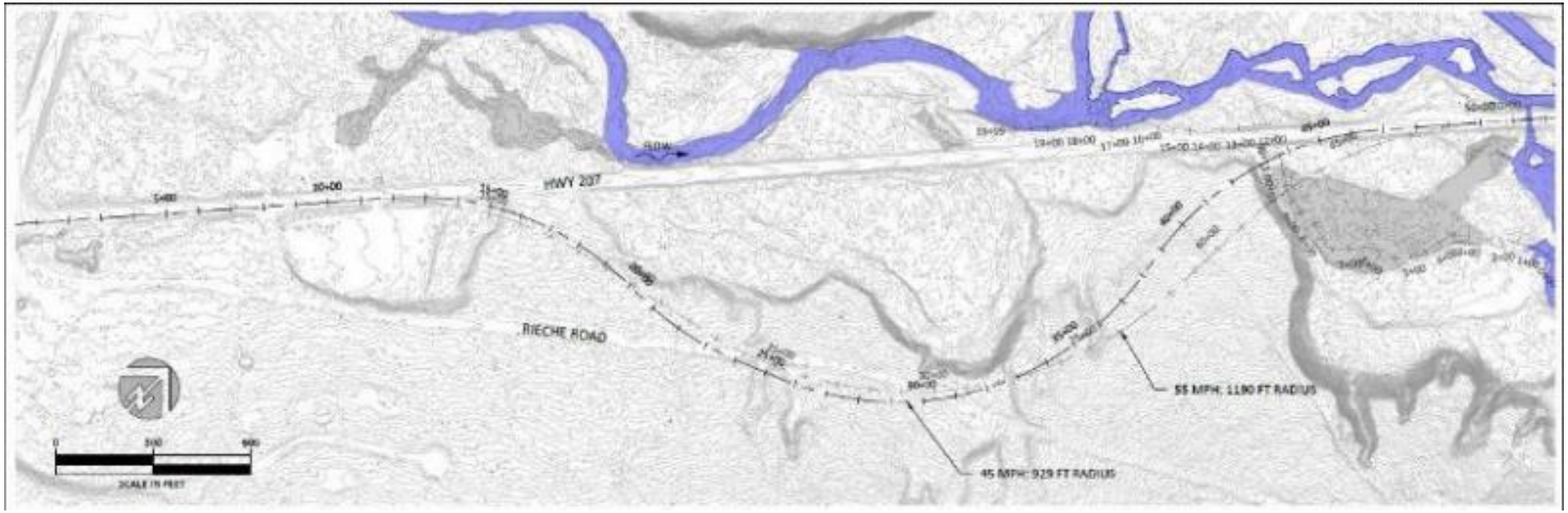


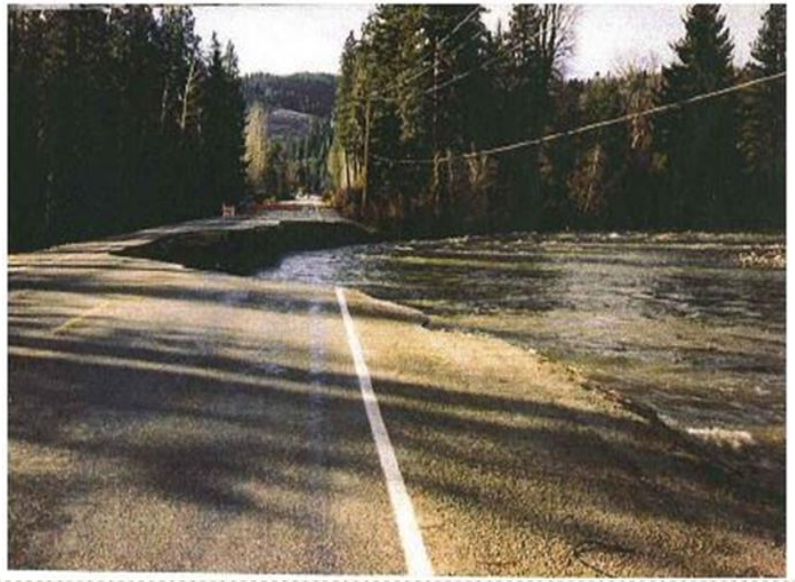




All of these stages are completed by certified professionals (licensed geologists, hydrologists, fluvial geomorphologists, fish biologists, etc…) and incorporate comments and suggestions made by peers and members involved in the Subbasin Watershed Action Teams

Nason Creek SR 207 Realignment





10 Year Restoration Plan

We have 10-year restoration plans for most watersheds in the Columbia River Basin based on addressing specific limiting factors by species and life stage

Examples:

- 15 actions in the Entiat River - $5,050,000
- 72 actions in the Methow River - $41,520,000
- 44 actions in the Wenatchee River - $50,300,000
- Plan is coordinated with strategic restoration partners, most notably the US Forest Service

Habitat Restoration Funding Sources

- BPA Columbia River Fish and Wildlife Program
- NOAA Pacific Coast Salmon Recovery Fund administered through states and tribes
- USFWS Fish and Aquatic Resource Conservation
- BOR Columbia/Snake River Salmon Recovery Program
- NRCS programs for riparian conservation
- USFS Landscape Restoration Programs
- State programs (DOE, DNR, RCO.)
- Public Utility District mitigation funding
- EPA Columbia River toxics initiative
- USACOE Columbia River Fish Mitigation, Aquatic Ecosystem Restoration, Environmental Stewardship and individual projects

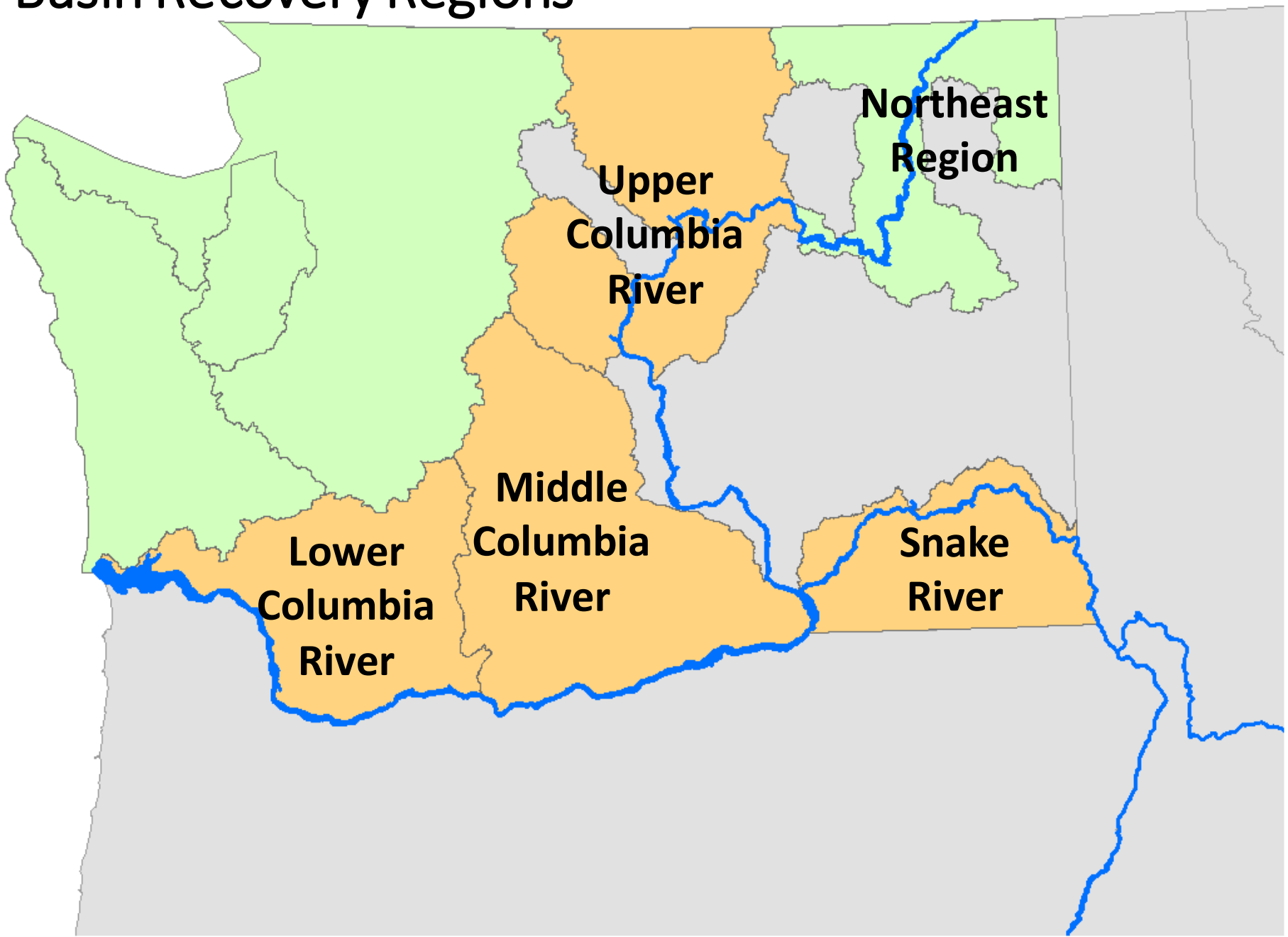
Lower Columbia Fish Recovery Board Regional Habitat Program Overview

Steve Manlow, Executive Director

Columbia Basin Collaborative

November 9, 2022

Columbia Basin Recovery Regions



Columbia Basin Lead Entities

Salmon Recovery Funding Board (SRFB) Project- Review Process

Habitat strategy based on recovery plan and watershed priorities

Project development and design

Planned Project Forecast Lists

Annual Solicitation

Lead Entity Technical Committee review

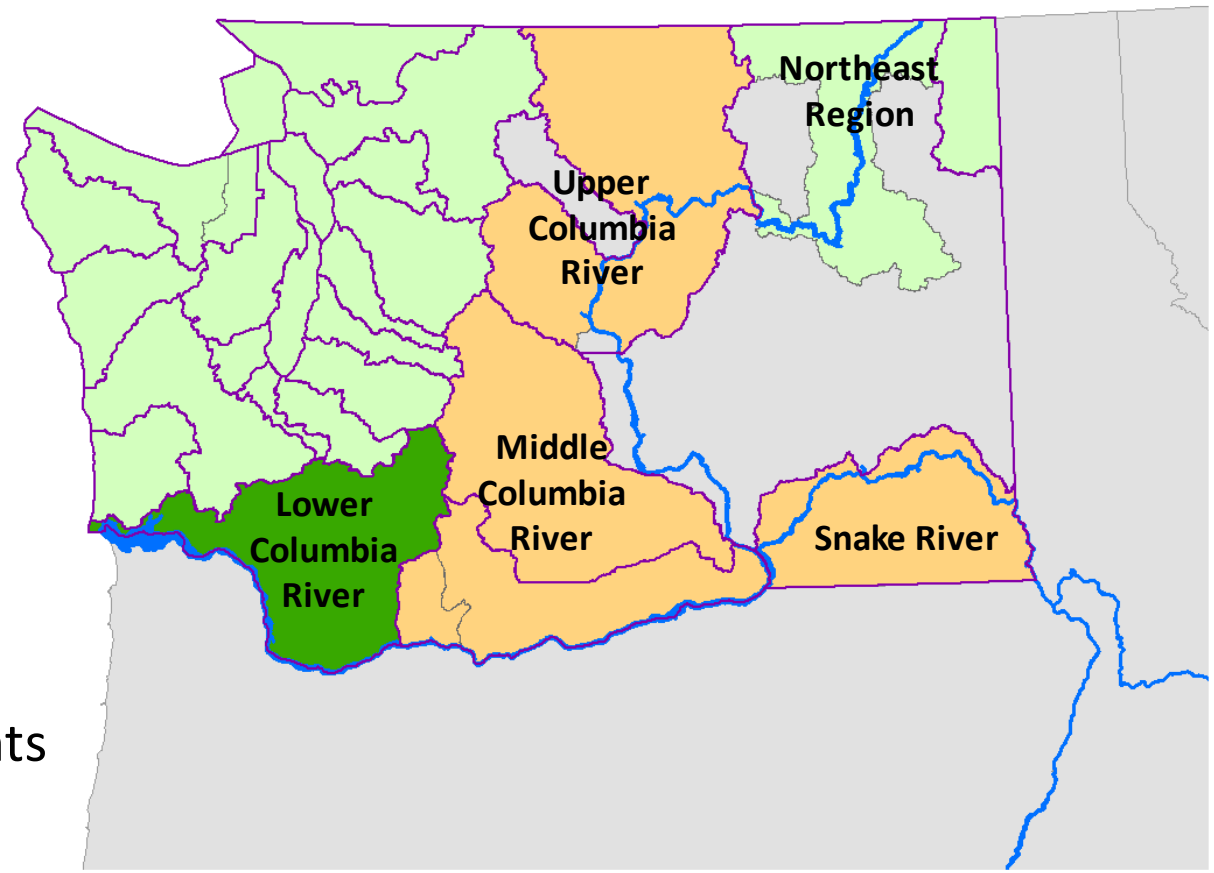
State Review Panel review

Citizens Committee review

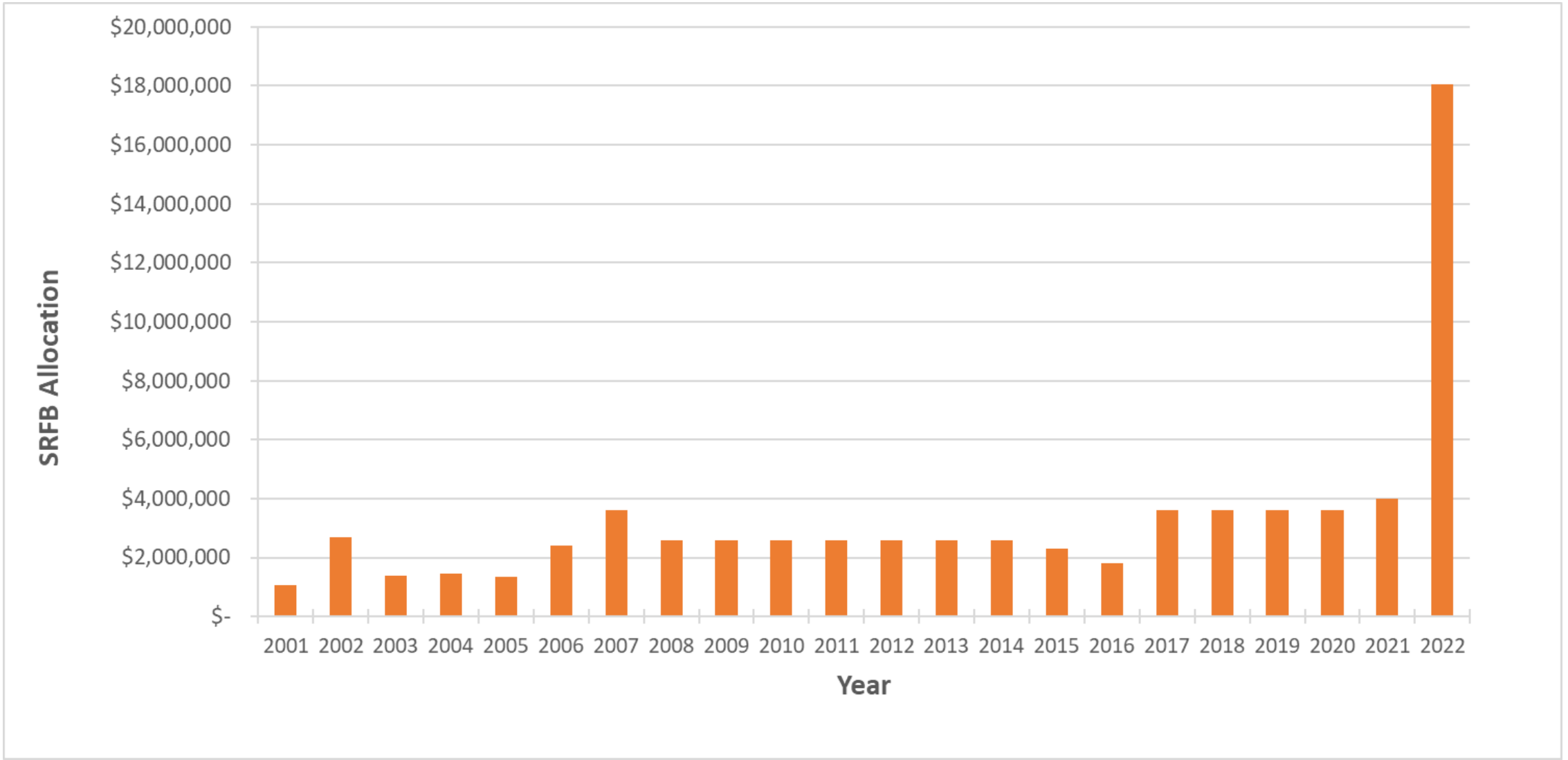
Salmon Recovery Funding Board awards grants

Contracting

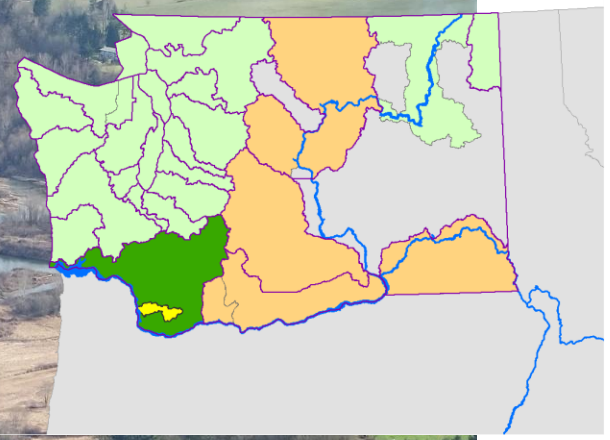
Permitting and Construction



Salmon Recovery Funding Board (SRFB) Funding in the Lower Columbia Region

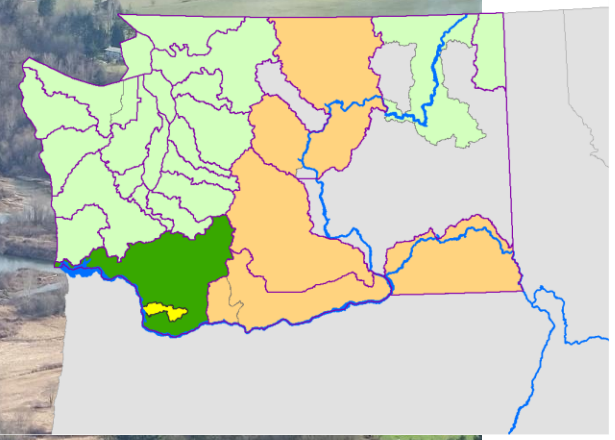


Ridgefield Pits Floodplain Restoration



Lower Columbia Estuary Partnership

Ridgefield Pits Floodplain Restoration



Fish

ESA-listed chum, fall Chinook, coho and winter and summer steelhead

Lamprey and cutthroat trout

Proposed Restoration

300 acres of floodplain habitat

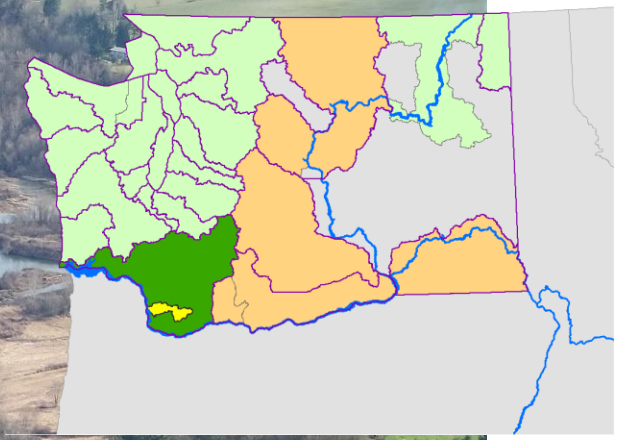
2 miles of stream habitat

1,700 pieces of large woody debris

Improve 5 miles of downstream river habitat

Lower Columbia Estuary Partnership

Ridgefield Pits Floodplain Restoration



Community Engagement and Time Frame

1996 – river avulsed into gravel mining pits

2009 - identified in watershed strategy

2017 - 2021 – stakeholder supported design developed

2021 – proposed restoration phase of project

2023 – construction start goal

Land ownership: mix of state, county, conservation, and private lands

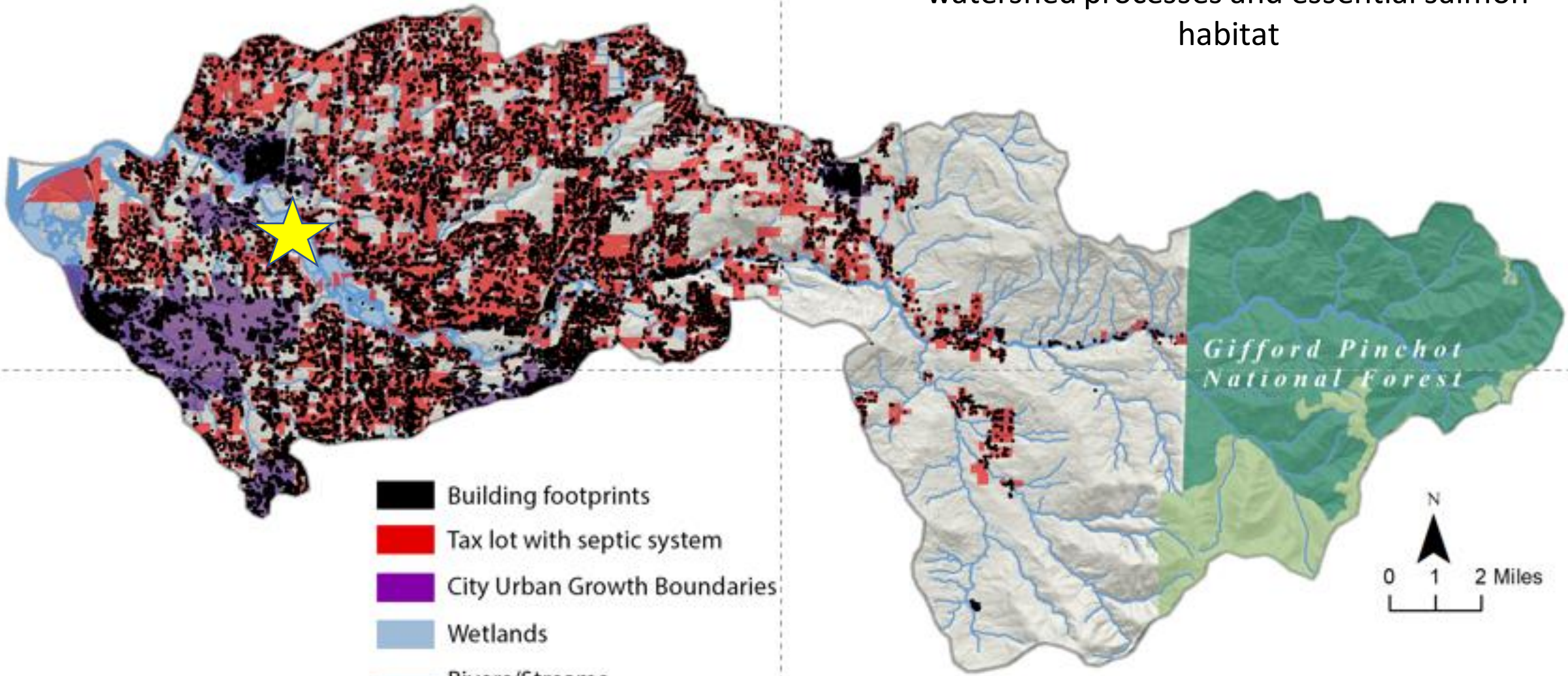
Funding Sources

EPA, SRFB, Ecology, WA DNR

Lower Columbia Estuary Partnership

Highest Priority Recovery Gap - Protecting the Habitat Baseline

Working with land managers to protect watershed processes and essential salmon habitat




2021 Annual Report
Lower Columbia Fish Recovery Board
Thank you!
Message From the Director
About Us
Hydropower
Freshwater Habitat
Hatcheries and Harvest
Predation
Estuarine and Ocean Habitats
Community Engagement
Looking Forward

Develop Short Term Recommendations

- Are there any actions taken right now to help restore habitat for high-impacted stocks?

- Are those actions (programs and projects) in place and successful? What changes are needed to improve chance of success and diminish challenges?

- Are there any projects that are “shovel-ready”? Which projects are going to be highly beneficial?

Next Steps, Upcoming Meeting Topics, and Summary

Next Steps

Upcoming Meeting Topics

- Salmon recovery metrics and mapping tools
- Understanding CEERP
- Landowner incentives (ex: Washington Salmon Coalition)

Thank you ~

Photo credit: Roger Tabor