WASHINGTON STATE
RECREATION AND CONSERVATION OFFICE
Salmon Recovery
Funding Board

Salmon Recovery Funding Board Meeting Agenda

December 7, 2022
Hybrid

Location In-Person: Room 172, First Floor, Natural Resources Building, 1111 Washington Street, SE, Olympia, WA. This public meeting location will allow for the public to provide comment and listen to the meeting as required by the Open Public Meeting Act. This requirement can be waived via HB 1329 if there is declaration of emergency or if an agency determines that a public meeting cannot safely be held. If an emergency occurs, remote technology will be used instead.

Location Virtually: https://us06web.zoom.us/webinar/register/WN_E_IiWnZ4S4edi4UMnBAReA

Phone Option: (669)900-6833 – **Webinar ID:** 853 3036 6524

**Additionally, RCO will record this meeting and would be happy to assist you after the meeting to gain access to the information.*

Order of Presentation: In general, each agenda item will include a short staff presentation and followed by board discussion. The board only makes decisions following the public comment portion of the agenda decision item.

Public Comment: General public comment is encouraged to be submitted in advance to the meeting in written form. Public comment on agenda items is also permitted. If you wish to comment, you may e-mail your request or written comments to Julia.McNamara@rco.wa.gov . Comment for these items will be limited to 3 minutes per person.

COVID Precautions: Masking is not required at this meeting. However, masks and hand sanitizer will be made available. The meetings rooms will be set to allow for as much social distancing as possible and air purifiers will be placed throughout.

Special Accommodations: People with disabilities needing an accommodation to participate in RCO public meetings are invited to contact Leslie Frank by phone (360) 902-0220 or e-mail Leslie.Frank@rco.wa.gov.

Wednesday, December 7, 2022

OPENING AND MANAGEMENT REPORTS

9:00 a.m.	**Call to Order** • Roll Call and Determination of Quorum • Review and Approval of Agenda ***(Decision)*** • Approval of September Meeting Minutes ***(Decision)*** • Approval of August Meeting Minutes ***(Decision)*** • Remarks by the Chair • Introduce New Members Joe Maroney and Chris Pettit	*Chair Breckel*
9:15 a.m.	**1. Director's Report** A. Director's Report B. Legislative and Policy Update C. Fiscal Update (written only) D. Performance Report (written only)	*Megan Duffy* *Brock Milliern* *Mark Jarasitis* *Brent Hedden*
9:30 a.m.	**2. Salmon Recovery Management Report** A. Governor's Salmon Recovery Office Report B. Salmon Section Report	*Erik Neatherlin* *Jeannie Abbott* *Tara Galuska* *Marc Duboiski*
10:00 a.m.	**General Public Comment for items not on the agenda:** *Please limit comments to 3 minutes.*	
10:15 a.m.	**3. Partner Reports** • Council of Regions • WA Salmon Coalition • Regional Fisheries Enhancement Groups	*Alex Conley* *Mike Lithgow* *Lance Winecka*
10:45 a.m.	**BREAK**	

BOARD BUSINESS: DECISION

11:00 a.m.	**4. $50 Million Supplemental Project Presentation** A. Overview B. Regions • Upper Columbia • Snake River • Washington Coast	*Kat Moore* *Regions*

	• Yakima Basin **C.** Board Discussion * **Public comment** will occur prior to adopting the motions. Please limit comments to three minutes.	*Board*
12:30 p.m.	**LUNCH**	
BOARD BUSINESS: DECISIONS		
1:30 p.m.	**5. Future Funding Pathways – 2023 and 2024** • 2023 Pacific Coastal Salmon Recovery Act Funding and Infrastructure Investment and Jobs Act • Targeted Investment Criteria Edits * **Public comment** will occur prior to adopting the motions. Please limit comments to three minutes.	*Nick Norton* *Jeannie Abbott* *Marc Duboiski*
2:15 p.m.	**BREAK**	
2:30 p.m.	**6. Manual 18: 2023 Updates** * **Public comment** will occur prior to adopting the motions. Please limit comments to three minutes.	*Nick Norton*
3:00 p.m.	**7. Upland Acquisitions Policy Options** * **Public comment** will occur prior to adopting the motions. Please limit comments to three minutes.	*Leah Dobey*
BOARD BUSINESS: BRIEFING		
3:30 p.m.	**8. Statewide Salmon Strategy Workplan Update**	*Katie Pruit*
BOARD BUSINESS: DECISION		
3:45 p.m.	**9. Monitoring Update**	*Keith Dublanica & Erik Neatherlin*
BOARD BUSINESS: BRIEFING		
4:10 p.m.	**10. Partner Reports** • Conservation Commission • Department of Ecology • Department of Natural Resources • Department of Fish and Wildlife • Department of Transportation	 *Chris Pettit* *Annette Hoffmann* *Tom Gorman* *Jeremy Cram* *Susan Kanzler*

4:40 p.m.	**ADJOURN**

Next meeting: March 8-9, 2023 – Natural Resources Building, Room 172, Olympia, WA, 98501 – Online via Zoom

SALMON RECOVERY FUNDING BOARD SUMMARY MINUTES

Date: August 3, 2022

Place: Hybrid - Room 172, Natural Resources Building, 1111 Washington Street, SE, Olympia, WA

Salmon Recovery Funding Board Members:

Jeff Breckel, Chair	Stevenson	**Annette Hoffman**	Designee, Washington Department of Ecology
Jeromy Sullivan	Kingston	**Tom Gorman**	Designee, Department of Natural Resources
Kaleen Cottingham	Olympia	**Brian Cochrane**	Designee, Washington State Conservation Commission
Chris Endresen-Scott	Conconully	**Jeremy Cram**	Designee, Department of Fish and Wildlife
VACANT	VACANT	**Susan Kanzler**	Designee, Washington Department of Transportation

This summary is to be used with the materials provided in advance of the meeting. The Recreation and Conservation Office (RCO) retains a recording as the formal record of the meeting.

Call to Order:

Chair Breckel called the Salmon Recovery Funding Board (board) meeting to order at 1 PM. He requested roll call, determining quorum.

Member Kanzler was absent during the meeting.

Chair Breckel spoke about the importance of considering the special circumstances surrounding cost increases and using these budget requests as an opportunity to make long-term impacts to the state.

Decision

Motion:	Move to Approve the August 3, 2022, Agenda
Moved By:	Member Cottingham
Seconded by:	Member Endresen-Scott
Decision:	Approved

Item 1: City of Bellingham Cost Increase for Middle Fork Nooksack Diversion Dam Removal 18-1534

Member Cottingham recused herself from this item.

Marc Duboiski, Recreation and Conservation office (RCO) Salmon Recovery Grants Section Manager, and **Alissa Ferrell**, RCO Salmon Grants Manager, provided and overview regarding the proposed cost increase from the City of Bellingham for $1,537,580.

The city proposed a modified request for $1.5 million in March 2022 and Director Duffy was briefed in May. In July, the board subcommittee, comprised of Members Endresen-Scott and Hoffman, was briefed; members asked clarifying questions to better understand the project and the issues leading to the project cost increase. The project base is in a high-risk location due to soil composition and led to unanticipated costs and construction bids that exceeded the original estimate by over $2 million.

Member Endresen-Scott shared her support for the cost increase because of the project quality. She explained the time-consuming process of completing projects of this scale and that unprecedented cost increases have stalled completion. She questioned how project sponsors intend to determine soil type for future projects, which severely impacts final costs. This support was also voiced by **Member Hoffman**, who discussed the unknowable factors involved with a project and stated that some costs cannot be anticipated.

The board members discussed the cost increases associated with the denser soil composites. **Member Cochrane** suggested using Geo Tech to sample soil to prevent these challenges on future projects. Mr. Duboiski shared that Geo Tech work is required in pre-design and ongoing work but said that this data often only provides a small sample. Mr. Duboiski said he would reach out to Bellingham's engineer for further context on this matter.

Chair Breckel discussed the persistence of the city in completing this project and the potential benefits it offers for fish and the community. Chair Breckel and **Member Cram** shared their support.

Public Comment:

None.

Motion: Move to Approve the City of Bellingham's Middle Fork Nooksack Diversion Dam project cost increase request in the amount of

$1,537,580. The total amount is made up of returned 2017-2019 Puget Sound Acquisition and Restoration Large Capital funds from Puget Sound Partnership. The cost increase amendment includes an increase in match by $3,285,773, bringing the City's share up to 35 percent of total project costs.

Moved By: Member Endresen-Scott
Seconded by: Member Sullivan
Decision: Approved

BREAK: 2:25 PM

Item 2: Operating and Capital Budget Requests for 2023-2025

Brock Milliern, RCO Legislative and Policy Director, stated that the agency will submit its 2023-25 biennial budget request to the Office of Financial Management in September 2022, which includes the board's funding request.

Mr. Milliern presented recommended funding levels for the Puget Sound Acquisition and Restoration grant program based on discussions with the Puget Sound Partnership, at a total of $65 – 70 million.

The state operating budget projection included an increase of $600 million from 2023 - 2025 and an increase in the capital budget of about $147.3 million, totaling $4.112 billion in expected bond capacity.

Jeannie Abbott, Governor's Salmon Recover Office (GSRO) discussed the lead entity (LE) and recovery region capacity increase request. The lead entities currently receive $3.374 million in state funding. Seven funding options were presented, which included calculations to: hire one full-time employee (FTE), match state employee cost of living adjustment (COLA), match inflation rates (four options ranging from 25 - 72 percent rates), or an additional increase for Columbia basin lead entities. Ms. Abbott shared that the inflation rate options considered several key years in the LE's and RCO's background.

A summary table was presented that shared the various options and the total cost of the funding increase. **Member Endresen-Scott** asked if the lead entities received any cost increases during the years of the proposed options. Ms. Abbott responded that in 2014 the SRFB raised the base to $60,000 for 12 of the 25 lead entities.

RCO Director Duffy shared that requests have been received from LEs to assist with complex projects, sponsors, staff turnover, and matching funds. LEs are concern with

staff turnover resulting from inflation and increased cost of living. Any board requests will be presented to the Office of Financial Management (OFM).

Chair Breckel discussed the selective funding increases that have occurred over time, although there has not been a general cost increase for all lead entities. **Member Cottingham** shared her initial support for the COLA proposal, stating that the LEs have experienced many areas of increased workload and new programs, without cost of living increases despite all this work.

The board members asked for the LE perspective. Ms. Abbott responded that they fully support receiving funding for one FTE. They would also like to open the conversation with OFM and the Governor's Office to discuss the changes with the original expectations versus the level of workload presented today (amplified by the increased level of cost of living and operations).

Member Cottingham questioned if it was possible to develop a formula to better understand how much funding each LE should receive. Chair Breckel supported this idea and said that the original allocation logic has been lost. **Director Duffy** shared that support from the board would help defend any budgetary requests to the Legislature.

Chair Breckel asked how allocation would be determined. Director Duffy responded that this request would ensure an increase for the lead entities to aid in capacity. Looking at the next biennium, the agency would assess ways to allocate any additional funding more proportionately.

Chair Breckel and the members voiced their support for the COLA option. Member Endresen-Scott and **Member Hoffman** shared their interest in learning how this funding will be used as it would not be disbursed equitably.

Member Cochrane stated the need to support and trust the lead entities. In his experience, it is difficult to retain staff without being classified as FTEs and having the dependable funding associated.

Erik Neatherlin, GSRO director outlined that GSRO has been working with the salmon recovery regions to develop their proposal request for increased capacity funding. There are more details in the materials that the regions have compiled but in general there are three main reasons for the requested increase. There is a need to update regional recovery plans and implement key regional initiatives. There are new requirements for regional engagement in the implementation of the Governor's salmon strategy update. And the regions have an important role in helping secure the new federal infrastructure funding that will be available over the next 5 years. There is at least 5 years of federal

funding coming down the pike, but the work associated with those funds will extend out over the next decade. So, for these three reasons, Erik Neatherlin explained, are why the regions have been working on their request to increase their capacity funding.

The members ultimately expressed support for giving Director Duffy the authority to determine needs while working with the regions and lead entities. The COLA option was still supported but not settled on.

Public Comment:

Lance Winecka, Executive Director of the South Puget Sound Salmon Enhancement group, commented on the issues surrounding capacity. He stated that the lead entities support the option to fund one FTE. He shared that the grants process is a difficult, year-round process that requires additional assistance.

Alex Conley, Executive Director for the Yakima Basin Fish Recovery Board, stated that the region is not fully staffed to complete the excessive amount of work allocated to them. He shared his support in developing a new allocation formula for additional funding towards LEs. Mr. Conley suggested coming up with three tier system with flat funding rates that consider population and workload. He also suggested building in the LE expectations with the Legislature to address any future proposed changes.

Mr. Milliern presented the additional salmon recovery requests for the 2023 - 2025 biennial budget. He shared the previous budget funding amounts and estimated requests for the new budget. He does not have solid numbers for all programs, as several entities are still going through their budgetary process. Mr. Milliern proposed offering an update at the September meeting with the finalized amounts.

Mr. Milliern presented the historical requests and allocation totals. He highlighted the Planned Project Forecast list, which offered a total of $453.4 million to fund board projects.

Public Comment:

Lance Winecka shared the importance of investing early in the grants process. He stated that many project sponsors would not move forward if they did not receive funding as they do not have the money to fund their organizations and projects independently.

Member Cottingham suggested being aggressive with the funding requests due to the uncertainty with the economy; she stated the agency should be prepared in September for $75 million worth of projects. Member Cottingham suggested $80 million, which would amount to about $17 – 18 million allocated for each grant round. This funding

amount was supported by the other members. Member Cram furthered that the board should look to maintain an increased level of funding to keep larger scale projects continuing. Chair Breckel suggested increasing the funding to $82 million to ensure $75 million for projects.

Motion: Move to approve a bond fund amount of $82 million for Salmon Recovery Funding Board funded projects, including funding for RCO administration, Lead Entity capacity, RFEG project planning costs, and request authority to spend up to $75 million in PCSRF funds.
Moved By: Member Cottingham
Seconded by: Member Endresen-Scott
Decision: Approved

Motion: Move to request additional operating funds for Lead Entity capacity
Moved By: Member Endresen Scott
Seconded by: Member Cottingham
Decision: Approved

The board emphasized that when funds are requested from the Legislature, there should be verbalized expectations that there will be ongoing increases for lead entities to keep up with the workload.

Motion: Move to request operating funds to provide additional support for the following regional recovery organizations: Coast, Lower Columbia, Yakima, Upper Columbia, and Snake.
Moved By: Member Cottingham
Seconded by: Member Endresen-Scott
Decision: Approved

Motion: Move to support the funding requests of our partners: $65-70 million in the Puget Sound Acquisition and Recovery program; the Brian Abbott Fish Barrier Removal Board program, funding to be determined; $20 million in the Estuary and Salmon Restoration program; the WA Coast Restoration and Resiliency Initiative, funding to be determined ($12-15 million); and the Family Forest Fish Passage program, funding to be determined ($10 million).
Moved By: Member Endresen-Scott
Seconded by: Member Cottingham
Decision: Approved

Motion: Move to Adjourn
Moved By: Member Cottingham
Seconded by: Member Sullivan
Decision: Approved

ADJOURN 3:05 PM

Next meeting: September 21 – 22, 2022. Natural Resources Building, Room 172, Olympia, WA 98501.

Subject to change considering COVID restrictions.

Approved by:

Chair Breckel

SALMON RECOVERY FUNDING BOARD SUMMARY MINUTES

Date: September 21, 2022

Place: Hybrid - Room 172, Natural Resources Building, 1111 Washington Street, SE, Olympia, WA

Salmon Recovery Funding Board Members:

Jeff Breckel, Chair	Stevenson	**Annette Hoffman**	Designee, Washington Department of Ecology
Jeromy Sullivan (absent)	Kingston	**Tom Gorman**	Designee, Department of Natural Resources
Kaleen Cottingham	Olympia	**Brian Cochrane**	Designee, Washington State Conservation Commission
Chris Endresen-Scott	Conconully	**Jeremy Cram**	Designee, Department of Fish and Wildlife
VACANT	VACANT	**Susan Kanzler**	Designee, Washington Department of Transportation

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Call to Order:

Chair Breckel called the Salmon Recovery Funding Board (board) meeting to order at 9 AM. He requested roll call, determining quorum. **Member Hoffman** joined at 9:05 AM.

Motion: Move to Approve the September 21, 2022, Agenda
Moved By: Member Cottingham
Seconded by: Member Endresen-Scott
Decision: Approved

Motion: Move to Approve the 2023 Meeting Dates
Moved by: Member Cottingham
Seconded by: Member Endresen-Scott
Approved: Approved

Motion: Move to Approve the March 2022 Meeting Minutes
Moved by: Member Endresen-Scott
Seconded by: Member Cottingham
Approved: Approved

Motion: Move to Approve the June 2022 Meeting Minutes
Moved by: Member Endresen-Scott
Seconded by: Member Cottingham
Approved: Approved

Chair Breckel addressed the dedication of the Recreation and Conservation Office (RCO) staff, project sponsors and partners to complete these grant rounds despite challenges presented by limited capacity and the pandemic. He recognized the accomplishments of Terry Williams, Tulalip Tribal member, and champion of climate issues, who passed away recently.

Item 1: Director's Report

RCO Director Megan Duffy described agency activities and staff changes that have taken place since the June board meeting including: the continuation of the Recreation Grants Equity Review, Spokane site visit, and new hires and internal staffing transitions. Director Duffy shared that she and **Erik Neatherlin**, Governor's Salmon Recovery Office (GSRO) Director, will travel to Washington D.C. for Pacific Coastal Salmon Recovery Fund (PCSRF) salmon days to meet with Federal agency representatives and Washington State Congressional members.

Brock Milliern, RCO Policy and Legislative Director, stated that five decision packages have been submitted to the Office of Financial Management for consideration in the Governor's budget. The largest request is capacity funding dedicated to the lead entities (LEs) and salmon regions. Other decision packages included funding requests for a Diversity, Equity, and Inclusion (DEI) Coordinator and a Tribal Liaison. Mr. Milliern stated that the agency has also requested funding to update the comprehensive mapping data, which will be available to the public. The final request asked for continual funding to aid with Flowering Rush, an invasive species that the Washington Invasive Species Council is assisting with.

Member Cottingham asked about the recent funding forecast prediction. Mr. Milliern responded that funding looked likely to increase slightly but there is caution largely due to inflation and concerns of recession.

Item 2: Salmon Recovery Management Report

Governor's Salmon Recovery Office Report

Erik Neatherlin, summarized the recent work completed by the GSRO and the RCO Salmon Recovery Section, including work with regional salmon recovery boards, planning for the Salmon Recovery Conference and an update on salmon grant programs.

Mr. Neatherlin shared that Puget Sound Day will occur on October 4, 2022.

Lastly, the Salmon Strategy update is being led by **Katie Knight Pruit**, GSRO Salmon Recovery Coordinator, and will be delivered in October to the Governor's Office

Jeannie Abbott stated that the Salmon Recovery Conference is scheduled for April 18-19, 2023, in Vancouver, WA. Registration will open in January 2023.

Tara Galuska, Orca Recovery Coordinator, provided an update regarding the State Environmental Policy Act checklist guidance and stated that there is a Washington Department of Fish and Wildlife (WDFW) survey open to the public regarding boating rules; it will be included in an adaptive management report to the Legislature. Lastly, Ms. Galuska stated that Orca Recovery Day is on October 15, 2022.

Ms. Galuska suggested the website Be Whale Wise as a resource to learn more about good practice rules surrounding vessel usage.

Salmon Section Report

Marc Duboiski, Salmon Section Manager, provided updates on the previous round of funded projects and proposed projects for the 2022 grant round. Mr. Duboiski stated that the Watershed Plan review is ongoing; and several individuals have been contracted to assist in this work. He stated that the current panel will be expanded to ten participants, and a Request for Qualifications and Quotations (RFQQ) is open. The partner program requests have been submitted for the 2022 grant round. 2021 projects are still ongoing as grants continue to be administered, and over 45 of these projects have been closed since the July board meeting. Mr. Duboiski stated that $266,000 in cost increases have been disbursed of the approved $1 million.

General Public Comment

None.

BREAK: 10:10 – 10:25 AM

Item 3: Partner Report

Council of Regions

Alex Conley, Chair of the Council of Regions (COR), provided an update regarding increased staff capacity and highlighted the COR's support update for resources to the Salmon Recovery Strategy. Mr. Conley noted that RCO's requested regional operating funding increase will assist the regions and voiced the COR's support for the proposed RCO's Manual 18 reform. He requested the board consider discussing the short and long-term goals of the regional monitoring program at the board's December 2022 meeting. Lastly, Mr. Conley spoke of the bottlenecks presented to sponsors largely due to the extensive application process and permitting. He asked the board to consider how to make the process more efficient.

Member Hoffmann asked for additional details on what Mr. Conley would like discussed about the regional monitoring program. He wants to discuss program funding as it relates to the quantity of project submission from regions. **Member Cottingham** discussed the difficulties with funding allocations and funding dates due to as some money results from residual funding from other programs. **Director Duffy** suggested holding the conversation after the IMW synthesis information comes in. To provide a comparison, **Lance Winecka**, Executive Director of the South Puget Sound Salmon Enhancement Group (SPSSEG), shared that sponsor submissions for the NOAA grant took about 60-80 hours to complete the application process.

WA Salmon Coalition

Aundrea McBride, Washington Salmon Coalition (WSC) Vice Chair, discussed the importance of having flexibility in the grants process. She also thanked the board and RCO for seeking an increase in capacity for lead entities. In October, WSC will meet to discuss their nexus with the Salmon Recovery Network to assist with the 2023 WSC Action Plan. Member Cottingham asked about the coalition's participation in the capacity funding discussion. Ms. McBride said that the regions had been in discussion with RCO on their legislative request that concern the regions. Member Cram asked for additional details on the design-build projects that the regions had been having difficulty with, alluding that they must be larger projects. Ms. McBride relayed that

design-build projects, even the smaller projects, are facing increased cost due to inflation.

Regional Fisheries Enhancement Groups

Lance Winecka, Executive Director of SPSSEG, shared the groups' interest in several ongoing programs and initiatives, including streamlining project permits in partnership with WDFW. The group will be attending a sponsor training session. Mr. Winecka also shared the groups' interest in implementing match reform.

Item 4: Manual 18 Changes

Nick Norton and **Leah Dobey**, RCO Policy Specialists, summarized proposed administrative revisions and policy proposals for the Salmon Recovery Grants Manual 18. The board was briefed with changes as part of preparations for the 2023 board grant round.

The proposed revisions include:

- a new appendix on match requirements for acquisitions with upland acreage;
- increasing match-waiver caps for certain project types;
- changing the definition of large restoration projects;
- clarifying eligibility and requirements for "design-build" projects;
- streamlining and adding detail to Appendix D.

Based on the results of stakeholder input and feedback, policies for decision will be presented at board's December 7 meeting.

The agency intends to collaborate with the regions in October before presenting the finalized options to the board in December. Ms. Dobey presented on one set of proposed changes that focuses on upland acquisitions, the associated match required, and establishing flexibility within the proposed policy.

Member Cottingham mentioned potential challenges with quantifying uplands due to boundary line adjustments and permit zoning issues; she suggested they might need to be viewed as exceptions where it would take too much time to receive proper permitting or where splitting off the riparian zone would not be allowed. She also suggested looking at one of the Chelan Douglas Land Trust as an example, as the property was purchased then the upland section sold off through a voluntary conversion. **Member Cochrane** questioned if the policy could be expanded to include flood plains where farmland is being acquired to secure future salmon restoration.

Member Endresen-Scott stated the need for clarifying when or if sponsors are required to bring additional match and how uplands are defined, but noted the importance of uplands and a desire not complicate the process for sponsors. This was supported by **Chair Breckel** as these uplands are crucial in maintaining instream conditions.

Public Comment:

Aundrea McBride, Skagit Watershed Council, shared that the proposed policy changes are supported by the lead entities.

Mickey Fleming, Chelan Douglas Land Trust Lands Program Manager, shared preliminary concerns regarding sales of parcels as landowners want to sell entire property pieces and not just along the water boarder.

Dan Roix, Columbia Land Trust Conservation Director, opposed the proposed change as drafted, noting that the rules as written devalue the importance of watershed health, upland impacts on stream health and salmon recovery efforts. He stated that uplands greatly impact stream health, and the complexity of this issue needs to be further discussed. Mr. Roix also said that match reform will help more projects be funded.

Chair Breckel highlighted the desire from partners to have further insights into defining terms and seeing further discussion regarding match.

Mr. Norton continued to present the additional policies, issues and proposed changes focused on a design-only match waiver, large restoration projects, design-build projects and Appendix D. Member Hoffman questioned the risks surrounding the large restoration project reform. Mr. Duboiski elaborated that there are a multitude of layers large projects go through before completion: conceptual, preliminary design, final design, and bidding. Large projects need a permit ready for design to be considered suitable for presentation to the board. If there is less design information, there is process risk for increased costs during the later stages.

Chair Breckel suggested the board consider the design process. He questioned what the board can do to reassess the design questions and ensure they are making the best decision.

Additional Public Comment:

Alex Conley, Yakima Basin Fish and Wildlife Recovery Board (YBFWRB) Executive Director, spoke of the value in the proposed updates to the design-build project pathway as there are many project types that do not need higher levels of information.

He said that for smaller projects that do not want to outsource the workload, changes could help ensure they would not need an additional threshold, like engineers, to complete the project.

Regarding design-build projects (to be renamed to field-fit), Member Hoffman asked for further insights. Mr. Norton emphasized that sponsors and the review panel are looking for clarification of which project types this policy applies to and would both benefit from clearer criteria about which phase the projects need to be in to be eligible for funding.

Member Sullivan shared his support for these proposals, especially the field-fit, to ensure that projects can be more streamlined as he feels setting a timeline is arbitrary.

Mr. Norton stated that there are a few smaller administrative updates/policy clarifications that will also be included in the Manual 18 updates for the 2023 grant round timeline, such as clarifications on the cost increase procedure and aligning language given updates to permitting processes.

LUNCH: 12:08 – 1:10 PM

Item 5: US Army Corp of Engineers Permit Streamlining

Steve Manlow, Lower Columbia Fish Recovery Board Executive Director, shared the feedback received from the disbursed permitting questionnaire. The feedback highlighted that there are many delays that occur during the permitting process. Most respondents shared that the major delays are relating to aquatic habitat functions and conversion of wetlands or streams.

An ad hoc workgroup was formed in 2020 to address potential solutions — five high and eight medium priority actions were developed to address these permitting problems. Nine of these actions were identified as priority and will be implemented, including, establishing subject matter experts, and offering internal and external applicant training.

Jess Jordan, U.S. Army Corp of Engineers (USACE) Biologist, discussed the necessity for the workshops due to concerns of habitat decline, including significant wetland loss. Robust internal and external training will work to better educate participants on issues including watershed-based restoration.

Mr. Jordan emphasized the opportunity for having an open-ended conversation and keeping the lines of communication open.

On behalf of the Department of Ecology (DOE), **Member Hoffman** said that she has discussed the nationwide policy changes the USACE has made, and it will create more work for DOE's permitting department. She suggested involving DOE early to avoid delays.

Public Comment

None.

BREAK: 2:05 – 2:20 PM

Item 6: Targeted Investments Funding Decision

Marc Duboiski identified the projects for funding consideration using 2022 Targeted Investment funding after the board selected orca recovery as the priority. He also presented on the criteria needed to be eligible for funding. Four regions each submitted one project: Lower Columbia, Mid-Columbia, Puget Sound, and Snake.

Amee Bahr, RCO Outdoor Grants Manager, presented on the zis a ba II project within the Puget Sound region and on the Ridgefield Pits Floodplain Restoration project within the lower Columbia. **Kay Caromile**, RCO Outdoor Grants Manager, presented on the Gap to Gap Ecosystem Restoration Construction project within the Yakima basin. **Alice Rubin**, RCO Senior Outdoor Grants Manager, presented on the Tucannon PA 26 Phase III-IV Restoration project within the Columbia region.

Regarding the Gap to Gap project, **Member Kanzler** asked if the bridge on highway 24 could sustain a levee breach. Ms. Caromile responded that all city developments that have occurred (since 2004) have been in preparation for this project and designed to withstand any additions.

Member Hoffman asked if the Tucannon project is scalable. Ms. Rubin responded that it is and that the Bonneville Power Administration will help fund whatever is not received from targeted investments through the lead entity list.

Steve Toth, Advisory Committee Interim Chair, shared the process involved with ranking the targeted investment proposals, including the 60-point evaluation criteria. The zis a ba II and Gap to Gap projects ranked the highest for the targeted investment criteria largely due to their benefits for wildlife and the environment.

The board voiced concerns over match and discussed the need to assess the scoring criteria. Mr. Toth shared that the working group could have used further clarification from the board of their intention with these investments.

Motion: Move to approve the Targeted Investments ranked list shown in Table 1. The top project, zis a ba II final design and construction, sponsored by the Stillaguamish Tribe of Indians, receives full funding in the amount of $4,977,891. The second ranked project, Gap to Gap Ecosystem Restoration Construction, sponsored by Yakima County received partial funding in the amount of $3,612,109.

Moved by: Member Cottingham

Seconded by: Member Endresen Scott

Approved: Approved

The board supported the zis a ba and gap to gap projects. Member Cottingham highlighted that projects that did not receive Estuary and Salmon Restoration Program (ESRP). However, funding can be proposed in 2023.

Item 7: Partner Reports

Note: This item was moved after item 5, at 1:50 PM

Conservation Commission

Member Cochrane, Conservation Commission Habitat and Monitoring Coordinator, shared that 16 decision packages were submitted to the Office of Financial Management (OFM) and there is a continuation of funds received from the supplemental budget. Member Cochrane said this will be his last meeting and he will be replaced by the Commission's Executive Director Chris Pettit.

Department of Ecology

Member Hoffman, DOE Assessment Program Manager, highlighted that the agency is updating their guidance document for the site potential tree height and will be addressing riparian areas as part of the Clean Water Act Nine Point plan. Member Hoffman also shared that the Environmental Trust program is looking to prioritize areas. A report will be delivered to the Legislature by the end of the year.

Department of Natural Resources

Member Gorman, Washington State Department of Natural Resources Aquatic Resources Division Manager, stated that several funding packages are on the way to OFM, involving stewardship, large vessel removal, tire piles in the Puget Sound, climate resilient communities, deforestation, and mapping. The agency submitted funding requests for environmental justice and economic development.

Department of Fish and Wildlife

Member Cram, WDFW Salmon Recovery Policy Lead, shared that the agency has submitted about 15 packages that relate to salmon recovery. The packages also focus on restoring Washington's biodiversity, climate resiliency, expanding agency capacity to engage in habitat protections and restoration.

Department of Transportation

Member Kanzler, Washington State Department of Transportation Fish Passage Coordinator, highlighted the Clean Water Act, which seeks to ensure water quality standards. The agency is continuing work to protect the integrity of surface waters in the state, working to ensure that water acreage is replaced, recognizing the connection to storm water drainage, and eliminating plastics from waterways.

RECESS: 3:52 PM

SALMON RECOVERY FUNDING BOARD SUMMARY MINUTES

Date: September 22, 2022

Place: Hybrid - Room 172, Natural Resources Building, 1111 Washington Street, SE, Olympia, WA

Salmon Recovery Funding Board Members:

Jeff Breckel, Chair	Stevenson	**Annette Hoffman**	Designee, Washington Department of Ecology
Jeromy Sullivan (absent)	Kingston	**Katerina Lassiter**	Designee, Department of Natural Resources
Kaleen Cottingham	Olympia	**Brian Cochrane**	Designee, Washington State Conservation Commission
Chris Endresen-Scott	Conconully	**Jeff Davis**	Designee, Department of Fish and Wildlife
VACANT	VACANT	**Susan Kanzler**	Designee, Washington Department of Transportation

This summary is to be used with the materials provided in advance of the meeting. The Recreation and Conservation Office (RCO) retains a recording as the formal record of the meeting.

Call to Order

Chair Breckel called the Salmon Recovery Funding Board (board) meeting to order at 1 PM. He requested roll call, determining quorum.

Item 8: 2022 Grant Round

Marc Duboiski, RCO Salmon Section Manager, presented the 2022 funding report, the modified grant timeline, a summary of the regions, the featured projects and review panel comments.

Mr. Duboiski shared that for the 2022 grant round there is more than $20 million from the regular budget and more than $75 million from the supplemental budget. There will also be additional funding from the Puget Sound Acquisition and Restoration (PSAR) fund totaling $63 million ($30 million regular and $33 million large capital). From the 290 submitted projects, about 185 are proposed for funding.

Several projects were highlighted by RCO Outdoor Grants Managers. **Amee Bahr** presented on the Entiat Tributary Baseflow and Habitat Restoration project (22-1512),

Josh Lambert presented on the Tahuya Mainstem RM 3.5 Protection project (22-1097), and **Kendall Barrameda**, presented on the Camp Cr at Schafer Boom Rd Fish Barrier Correction project (22-1040).

Steve Toth and **Marnie Tyler** shared their project observations as part of the technical review panel. Mr. Toth provided an overview of the 2022 grant round. The panel offered conditioned project review recommendations (sponsors want more time and a more formal process), highlighted national flood insurance program regulatory issues (sponsors want communication with the Federal Emergency Management Agency (FEMA)), suggested stream assessments that support recovery plan updates (suggested stage zero restoration, headwater alluvial water storage), and suggested new stream restoration approaches. The panel members then provided several noteworthy projects as examples, such as the Nooksack Integrated Floodplain Acquisition (22-1356).

The board focused on the recommendations surrounding channel disturbance for the proposed stream assessments. Ms. Tyler emphasized that this technique is not appropriate in every setting. Mr. Toth said that they have seen similar techniques used and the sponsors are seeing an increase in proposals to fill channels. He said they want to educate the board on new techniques. **Member Cottingham** said she wanted to know how protection agencies view these projects and what the ramifications could be, to which Ms. Tyler and Mr. Toth explained that the process is too new to know exactly.

Brice Crayne, Lower Columbia Fish Enhancement Group and responded that they will be reviewing stage zero projects from the last five to ten years to measure their effectiveness. **Member Cram** shared his desire to see more of this work as most traditional projects require a lot of heavy equipment, and these techniques could expedite completion.

Several challenges have arisen regarding the stage zero and water storage projects due to concerns surrounding the amounts of intervention needed to see benefits. **Chair Breckel** said these options should be considered as climate resilience initiatives.

BREAK: 10:33 – 10:50 AM

Item 9: 2022 Grant Round Overview by Regions

Washington Coast Sustainable Salmon Partnership

Mara Zimmerman, Washington Coast Sustainable Salmon Partnership (WCSSP) Executive Director, spoke of the efforts and goals of the regions, which are focused on

sustainable mitigation rather than recovery as highlighted in the Washington Coast Sustainable Salmon Plan.

The WCSSP's habitat strategies influence the annually proposed projects from the four lead entities. Ms. Zimmerman highlighted the lead entities and the 2022 proposed projects from the North Pacific Coast, the Quinault Indian Nation, the Chehalis Basin, and Willapa Bay.

Chair Breckel ask about lead entity capacity and Ms. Zimmerman replied that the entities want to pursue as many funding opportunities as possible, but capacity is limited. She shared that letters of support enable them to get additional funding but increased capacity would allow them to do their work better.

Puget Sound Partnership

Amber Moore, Puget Sound Partnership (PSP) Salmon Recovery Manager, stated that the Puget Sound Salmon Recovery plan (PSSRP) will be updated next year and intends to create a sustainable strategy for maintaining salmon and fish populations. The partnership submitted ten proposals; the zis a ba was approved as a targeted investment project. New funding from the Legislature will help update local watershed chapters.

Member Cottingham asked for confirmation of the funding request totals. These were later presented during item 11.

Hood Canal Coordinating Council

Alicia Olivas, Hood Canal Coordinating Council (HCCC) Lead Entity Coordinator, shared that the council submitted 13 projects. The HCCC is requesting a total of about $37 million from the board and another request will be made to the Legislature for the remaining funding needed to complete the projects.

Lower Columbia Fish Recovery Board

Steve Manlow, Lower Columbia Fish Recovery Board (LCFRB) Executive Director, stated that the LCFRB submitted two proposals for targeted investments amounting to $17.4 million. Within the Salmon Recovery Funding Board's grant round, 19 proposals were submitted totaling $25 million. Mr. Manlow shared that a viability assessment is underway and will influence the upcoming requests; the board will also be focusing on climate change and staff capacity.

Yakima Basin Fish and Wildlife Recovery Board

Michael Horner, YBFWRB Lead Entity Program Coordinator, shared that the Salmon Recovery Funding Board approved for funding for the top projects. Thirteen submitted projects; ten of which were fully funded and two were partially funded.

Snake River Salmon Recovery Board

John Foltz and **Ali Fitzgerald**, Snake River Salmon Recovery Board (SRSRB) Director and Project Coordinator, presented the SRSRB grant round highlights. Over 24 projects were submitted and 18 received funding. Supplemental funding was received for one project totaling about $5 million. They also shared that the SRSRB is working to implement National Oceanic and Atmospheric Administration Infrastructure and Investment Jobs Act development and has several ongoing monitoring efforts.

Upper Columbia Salmon Recovery Board

Dave Hecker, Upper Columbia Salmon Recovery Board (UCSRB) Lead Entity Coordinator, presented on the four subbasins the board handles. The UCSRB submitted twelve projects totaling $2.9 million. The highest ranked projects were the allocation projects. Mr. Hecker spoke on the UCSRB's focus on barrier removal, addressing the barriers previously removed and plans to remove more.

Northeast Washington Salmon Recovery Region

Joe Maroney, Kalispel Tribe Fishery and Water Resource Director, shared that two projects were submitted, requesting $232,000 for Skookum Creek and $179,974 for phase two of the Mill Creek project.

Recognition Resolution of Member Brian Cochrane

Chair Breckel announced a resolution to recognize the work of Member Brian Cochrane.

Motion: Move to Approve the Resolution of Recognition for Brian Cochrane (See full language in the attached resolution)
Moved by: Member Cottingham
Seconded by: Member Endresen Scott
Approved: Approved

Member Cochrane thanked the board and spoke to his appreciation of all the work that will continue to protect salmon populations.

LUNCH: 12:02 – 1:00 PM

Item 10: 2022 Grant Round Board Funding Decisions

Yakima Basin Fish and Wildlife Recovery Board

Motion: Move to approve $3,592,555 for the Middle Columbia Salmon Recovery Board Regions show in Attachment 9 (pages 59-61) of the 2022 Funding Report, dated September 2022. This amount includes $1,224,550 of funding for projects in the Klickitat County Lead Entity
Moved by: Member Endresen-Scott
Seconded by: Member Cottingham
Approved: Approved

Washington Coast Sustainable Salmon Partnership

Motion: Move to approve $3,378,520 for projects and project alternates on the Coastal Region ranked lists, as shown in Attachment 9 (pages 88-92) of the 2022 Salmon Recovery Grant Funding Report, dated September 2022
Moved by: Member Cottingham
Seconded by: Member Endresen-Scott
Approved: Approved

Upper Columbia Salmon Recovery Board

Motion: Move to approve $2,942,241 for projects and project alternates on the Upper Columbia Region ranked list, as show in Attachment 9 (pages 86-87) of the 2022 Salmon Recovery Grant Funding Report, dated September 2022
Moved by: Member Endresen-Scott
Seconded by: Member Cottingham
Approved: Approved

Snake River Salmon Recovery Board

Motion: Move to approve $2,869,778 for projects and project alternates on the Snake River Region ranked list, as shown in Attachment 9 (pages 84-85) of the 2022 Salmon Recovery Grant Funding Report, dated September 2022
Moved by: Member Cottingham
Seconded by: Member Endresen-Scott
Approved: Approved

Puget Sound Salmon Recovery Region – SRFB Funds

Motion: Move to approve $13,134,787 for projects and project alternatives on the Puget Sound Region ranked list, as shown in Attachment 9 (pages 63-83) of the 2022 Salmon Recovery Grant Funding Report, dated September 2022
Moved by: Member Endresen-Scott
Seconded by: Member Cottingham
Approved: Approved

Puget Sound Salmon Recovery Region – PSAR Funds

Motion: Move to approve the 2023-2025 list of PSAR projects, totaling $22,477,599 in the Puget Sound and Hood Canal Regions, as listed in Attachment D (pages 63-83) of the 2022 Salmon Recovery Grant Funding Report, dated September 2022 and authorize the RCO Director to enter project agreements once funding is approved by the Legislature
Moved by: Member Cottingham
Seconded by: Member Endresen-Scott
Approved: Approved as amended negating Attachment D and replacing it with Attachment 9

Puget Sound Salmon Recovery Region – PSAR Large Capital Funds

Motion: Move to approve the 2023-2025 list, totaling $33,441,650 for PSAR large capital projects on the Puget Sound Region ranked list, as shown in Attachment 6 (pages 44-45) of the 2022 Salmon Recovery Grant Funding Report, dated September 2022, and authorize the RCO Director to enter into project agreements once funding is approved by the Legislature
Moved by: Member Endresen-Scott
Seconded by: Member Cottingham
Approved: Approved

Northeast Washington Salmon Recovery Region

Motion: Move to approve $354,000 for projects on the Northeast Region ranked list, as shown in Attachment 9 (page 62) of the 2022 Salmon Recovery Grant Funding Report, dated September 2022
Moved by: Member Cottingham

Seconded by: Member Endresen-Scott
Approved: Approved

Lower Columbia River Salmon Recovery Region

Motion: Move to approve $8,702,914 for projects and project alternates on the Lower Columbia Region ranked list, as shown in Attachment 9 (pages 55-58) of the 2022 Salmon Recovery Grant Funding Report, dated September 2022. This amount includes $234,979 of funding for projects in the Klickitat County Lead Entity
Moved by: Member Endresen-Scott
Seconded by: Member Cottingham
Approved: Approved

Hood Canal Salmon Recovery Region

Motion: Move to approve $2,487,775 in SRFB funds for projects and project alternates on the Hood Canal Region ranked list, as shown in Attachment 9 (pages 52-54) of the 2022 Salmon Recovery Grant Funding Report, dated September 2022
Moved by: Member Cottingham
Seconded by: Member Endresen-Scott
Approved: Approved

Statewide

Motion: Move to approve the carryforward of any unobligated $25 million SRFB supplemental funds pending reappropriation, on the 2022 lead entity ranked lists as shown in Attachment 9 of the 2022 Salmon Recovery Grant Funding Report, dated September 2022, to the 2023 grant cycle
Moved by: Member Endresen-Scott
Seconded by: Member Cottingham
Approved: Approved as amended, negating Attachment A and replacing it with Attachment 9

Item 11: Supplemental Funding Project

Marc Duboiski, RCO Salmon Grants Section Manager, provided an overview of the supplemental funding decisions for the allocated $50 million for projects requesting more than $5 million. He shared the background of the requests and the necessary

requirements in Manual 18 that the projects must abide by. The Puget Sound, Lower Columbia, Yakima, and Hood Canal regions have each submitted projects for funding.

Lower Columbia Fish Recovery Board

Steve Manlow, Lower Columbia Fish Recovery Board Executive Director, and Brice Crane shared detailed information regarding LCFRB's three eligible large capital projects: W. Fork Washougal Conservation, Ridgefield Pits Floodplain Restoration and STHD 1. He highlighted the complexity of STHD 1 which led to an increase of costs. The project total is$5 million.

Mr. Manlow spoke to the importance of staff capacity for these projects, stating that this work was only possible due to increased dollars.

Member Cram questioned where the project work would begin and Mr. Manlow replied that initial efforts will focus on the main stem. He also highlighted the scalability of this project, which allowed sponsors to work on both targeted investment projects.

Hood Canal Coordinating Council & Puget Sound Partnership

Alicia Olivas, HCCC Lead Entity Coordinator, **Theresa Mitchell**, WDFW Project Manager, **Mendy Harlow**, HCSEG Executive Director, and **Amber Moore**, PSP Salmon Recovery Manager, discussed the progress on the Duckabush Estuary Restoration project and completion plans.

The project is currently seeking $115 million from a multitude of sources and includes the new inflation calculations. The unmet need is $37 million.

Member Cottingham questioned the sponsors confidence in receiving "to be decided" funding for $41 million. The board discussed concerns surrounding the council securing funding for this plan, as they are seeking funding from multiple sources. **Chair Breckel** discussed the uncertainty to get to construction, as they could potentially lose credibility with other funders. **Member Endresen-Scott** questioned if there are other potential funding opportunities due to the highway being near sea level. The board suggested that there might be infrastructure opportunities working with WSDOT.

Yakima Basin Fish and Wildlife Recovery Board

Alex Conley, YBFWRB Executive Director, discussed the ongoing large-scale projects in the region, like Gap to Gap, and highlighted the predation issues within the Yakima region. Mr. Conley stated that avian predation is being addressed by the Army Corps of Engineers, but that predation by non-native fish on juvenile salmon is still a concern. He

also spoke about the condensed grant round and resulting two projects that are currently being reviewed by the technical panel.

Member Hoffman asked about the elimination of match and for further elaboration on whether the region is seeking elimination of match and/or leverage generally. Mr. Conley asked the board to consider having a conversation about match as many sponsors find difficulty in determining what qualifies as match and when it is necessary.

Member Cottingham questioned if the $5.1 million was a biproduct of PRISM and Mr. Duboiski replied that it was a result of how the agency reports to the Legislature.

Member Cottingham then asked if Mr. Conley is advocating for a statewide grant process. Mr. Conley responded that the board has a really good process, but there is room to increase funding to the board. He added that there could be a way to reallocate based on the size of proposals (large and small) and examine the complexity of phases based on size. There needs to be an understanding of how to carry out large projects, which are often done in phases.

Chair Breckel said that match reform is an ongoing conversation and questioned if match adds value. He spoke of the desire to see sponsors demonstrate "skin in the game," but there could be an opportunity to have elevated funding without large funding criteria. Member Cottingham said that smaller projects and sponsors are running out of funding, so the remaining projects tend to be more complex and expensive.

Motion: Move to Approve the Large supplemental projects ranked list from the Puget Sound, Lower Columbia, Mid-Columbia, and Hood Canal regions as shown in Attachment 9
Moved by: Member Cottingham
Seconded by: Member Endresen-Scott
Approved: Approved

Chair Breckel emphasized the importance of the Duckabush project and his desire to learn more about the progress.

BREAK: 2:37 PM – 2:57 PM

Marc Duboiski announced that there had been an alteration from a previous motion for the Middle Columbia due to the carry forward funding.

Motion: Move to supersede the earlier motion for the Mid-Columbia and replace it with this motion: move to approve $3,592,555 for the Middle Columbia Salmon Regions shown in Attachment 9 (pages 59-61) of the Funding Report, dated September 2022. This amount includes $735,388 of funding for projects in the Klickitat County Lead Entity

Moved by: Member Cottingham

Seconded by: Member Endresen-Scott

Approved: Approved

Item 12: Monitoring Update

Erik Neatherlin, GSRO Executive Director, and **Keith Dublanica**, GSRO Science Coordinator, provided an update summarizing the June 2022 board meeting presentation and subsequent directions, regarding monitoring funding and the implementation of an Intensively Monitored Watershed (IMW) synthesis.

Mr. Neatherlin shared that an adaptive management strategy is in progress; the synthesis will be drafted in late 2022; and the final report will be drafted in 2023. The adaptive management strategy will be an opportunity to take the results from the IMWs and use the information to inform future funding decisions and identify processes for broad application. Mr. Neatherlin stated that the monitoring panel is looking to increase collaboration and would like to provide an additional update at the December meeting.

Mr. Dublanica shared an overview of the panel participants and highlighted some of the projects under review, including the County-Line (White River) Floodplain project. He stated that five of the projects were given regional certification. Mr. Dublanica said this monitoring could provide resources for future grant rounds or opportunities to invest in monitoring. He stated that there are several Lead Entities interested in the methodology and possible application in their areas.

Member Hoffman asked if the regional monitoring projects measure the effectiveness of the board funded projects. Mr. Dublanica said they are focused on localized effectiveness in the regions of the projects.

Pete Bison, Monitoring Panel Co-Chair, said the information from the regional monitoring projects will be used in the background for the synthesis. When presenting the findings, Member Hoffman suggested finding examples of how these projects can translate to other applications.

Chair Breckel asked how the board can better coordinate the two sources of funding. Mr. Neatherlin replied that there is often coordination, they consider which areas are higher priorities in the state rather than being spread evenly across the regions. He shared that there can be concentrations in specific regions depending on the year. Mr. Neatherlin continued that it will be helpful to know the board priorities and the monitoring can inform the work of the board as to how best invest funding. On the regional side, monitoring is used to fill gaps and address regional concerns.

Motion: Move to Adjourn
Moved by: Member Cottingham
Seconded by: Member Endresen Scott
Approved: Approved

ADJOURN: 3:33 PM

Next meeting: December 7-8, 2022. Location Olympia WA.

Subject to change considering COVID restriction

Approved by:

Chair Breckel

WASHINGTON STATE RECREATION AND CONSERVATION OFFICE
Salmon Recovery Funding Board

Salmon Recovery Funding Board Briefing Memo

Item 1

APPROVED BY RCO DIRECTOR MEGAN DUFFY

Meeting Date: December 7, 2022

Title: Director's Report

Prepared By: Megan Duffy, RCO Director; Susan Zemek, Communications Manager; Brock Milliern, Policy Director; Mark Jarasitis, Fiscal Manager; and Bart Lynch, PRISM Support Specialist

Summary
This briefing memo describes staff and Director's activities and key agency updates including: a legislative update, new staff profiles, news from other Recreation and Conservation Office boards, and a fiscal and performance update.

Board Action Requested

This item will be a:
- ☐ Request for Decision
- ☐ Request for Direction
- ☒ Briefing

Agency Update

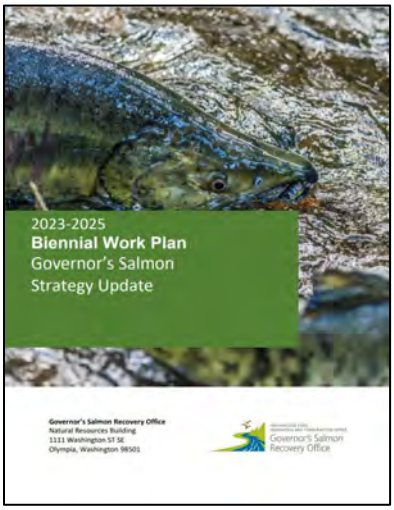
Orca Recovery Day Celebrated

This year's Orca Recovery Day was celebrated October 15 with about 40 events throughout the state. Tara Galuska, the orca recovery coordinator, participated in two podcasts in advance of the day, one with the Puget Sound Conservation Districts and one with the Whale Museum. She also gave a welcome at the Squaxin Park weeding event in Olympia. About 75 people volunteered on a cold Saturday to pull ivy from hillsides in this Puget Sound park.

Orcas Included in Environmental Checklist

Tara Galuska, the state's orca recovery coordinator, is working with the Puget Sound Partnership and Department of Ecology to create a checklist to be used when projects include vessels that might impact orcas. The new checklist and guidance are available for projects under the State Environmental Policy Act. Next, a series of public meetings will be held to identify mitigation options for vessel-related impacts to Southern Resident orcas.

Salmon Budget Summary Report Submitted



RCO submitted a legislative report to implement the 2021 *Governor's Salmon Strategy Update*. The *2023-2025 Biennial Work Plan* includes state agency work priorities with a recommended budget for salmon recovery that aligns with tribal priorities and regional salmon recovery plans.

Employee News

Hayley Edmonston joined the Recreation and Conservation Office (RCO) in October as an outdoor grants manager for the Recreation and Conservation Grants Section. Hayley has worked in the parks and conservation field for 9 years with a focus on climate change. She started her career as a park ranger at Mount Rainier and Glacier National Parks and since has worked as a management analyst at Midpeninsula Regional Open Space District in California, a senior project manager at Forterra, and most recently as an environmental planner with the Washington Department of Fish and Wildlife.

Andrea Hood joined the Recreation and Conservation Grants Team in September as an outdoor grants manager. Her entire career has been in natural resources. She was the Northwest Straits program coordinator for the Department of Ecology; an 8-year environmental planner for the Department of Health, where

she coordinated multi-agency water quality improvement work to support shellfish recovery in Puget Sound; an environmental planner with the Department of Fish and Wildlife, where she managed contracts for the Habitat Strategic Initiative Lead team; a conservation district employee, where she secured federal, state, and private grants for natural resource protection projects; and a landscape architect, where she developed plans and construction documents for outdoor spaces.

Jessica La Belle joined RCO in October as a program specialist working for the Washington Invasive Species Council. She comes to RCO from the Washington Department of Agriculture's Pest Program, where she worked on several invasive species projects from apple maggot to vineyard snail. She was the primary public point of contact during "murder hornet madness," when the discovery of northern giant hornet in Washington became national news and a viral Internet sensation. She assisted in the dissection of the first northern giant hornet nest found in the nation, and as a result was featured on the Discovery Channel, RFD-TV, and the Pest Program's YouTube videos. Jessica also has worked for other state agencies as a social worker and in various administrative roles, and in the private sector in more varied positions, such as a professional camel wrangler and ranch hand on a musk ox farm.

Maria Marlin joined RCO on November 16 as a community outreach and environmental education specialist working for the Washington Invasive Species Council. Maria comes to RCO from Oregon State University, where she served as a research and extension agent at a satellite station in Aurora. She was part of the nursery plant pathology program, where she organized trainings, developed informative educational material, conducted outreach to underserved audiences, and performed research funded by grants she wrote. Before that, she was at the University of Idaho completing her master's degree in natural resources.

News from the Boards

The **Habitat and Recreation Lands Coordinating Group** met on November 30. Meeting topics will include legislative updates, an overview of the Washington Recreation and Conservation Plan (SCORP), and a discussion on the impacts on cultural resources as it related to outdoor recreation.

Invasive Species Council: The council held its first travel meeting since 2019 in Airway Heights in late September. The council toured the Liberty Lake Watercraft Inspection Station, which included a mussel-sniffing canine demonstration and decontamination demonstration featuring a $300,000 wash unit funded by RCO's Boating Facilities Program. The following day, the council held a hybrid meeting to discuss topics such as European green crab, northern pike response readiness, and use of the incident command system to respond to invasive species. The council will meet next in Olympia on December 13. At this meeting, the council says farewell to chair Joe Maroney as he transitions to a member of the Salmon Recovery Funding Board. Meeting topics include council leadership selection, council bylaws, summary of the 2021-2022 biennial report, introduction of new staff, and updates on projects such as the spotted lanternfly action plan and state European green crab emergency response.

The **Recreation and Conservation Funding Board** met October 25-26 and approved ranked lists of projects from the Community Forest Program, Land and Water Conservation Fund, Washington Wildlife and Recreation Program, and Youth Athletic Facilities program. The board will meet next on January 24-25, 2023.

Legislative and Budget Update

RCO submitted to the Office of Financial Management the capital and operating budget requests for the 2023-2025 biennium. Utilizing agency budget requests, the governor's budget is scheduled to be released in mid-December and will be based on state revenue forecasts that should be updated on November 18.

Fiscal Report

The fiscal report reflects Salmon Recovery Funding Board activities as of October 17, 2022.

Salmon Recovery Funding Board

For July 1, 2021-June 30, 2023, actuals through October 17, 2022 (FM 15). 62.5 percent of biennium reported.

PROGRAMS	BUDGET	COMMITTED		TO BE COMMITTED		EXPENDITURES	
	New and Re-appropriation 2021-2023	Dollars	% of Budget	Dollars	% of Budget	Dollars	% of Committed
State Funded							
2015-17	$1,746,440	$1,570,028	90%	$176,412	10%	$505,718	32%
2017-19	$6,230,576	$5,710,421	92%	$520,155	8%	$3,467,112	61%
2019-21	$14,669,777	$14,035,162	96%	$634,615	4%	$7,122,797	51%
2021-23	$26,682,800	$26,344,995	99%	$337,805	1%	$4,125,910	16%
2021-23 Supplemental	$95,880,000	$48,473,846	51%	$47,406,154	49%	$0	0%
Total	**$145,209,593**	**$96,134,452**	**66%**	**$49,075,141**	**34%**	**$15,221,537**	**16%**
Federal Funded							
2016	$389,018	$389,018	100%	$0	0%	$389,018	100%
2017	$4,159,679	$3,972,590	96%	$187,089	4%	$2,114,753	53%
2018	$7,627,453	$6,176,506	81%	$1,450,946	19%	$2,842,812	46%
2019	$10,867,937	$10,663,947	98%	$203,991	2%	$4,615,864	43%
2020	$16,530,979	$15,565,061	94%	$965,918	6%	$7,669,469	49%
2021	$17,848,000	$17,356,455	97%	$491,545	3%	$2,950,709	17%
2022	$23,280,000	$17,965,640	77%	$5,314,360	23%	$83,661	.5%
Total	**$80,703,066**	**$72,089,217**	**89%**	**$8,613,849**	**11%**	**$20,666,286**	**29%**
Grant Programs							
Lead Entities	$6,926,575	$6,884,454	99%	$42,121	1%	$1,989,434	29%
PSAR	$107,036,152	$104,763,887	98%	$2,272,265	2%	$20,576,016	20%
Subtotal	**$113,962,727**	**$111,648,341**	**98%**	**$2,314,386**	**2%**	**$22,565,450**	**20%**
Administration							
Admin/ Staff	$8,117,810	$8,117,810	100%	$0	0%	$4,678,238	58%
Subtotal	**$8,117,810**	**$8,117,810**	**100%**	**$0**	**0%**	**$4,678,238**	**58%**
GRAND TOTAL	**$347,993,196**	**$287,989,820**	**83%**	**$60,003,376**	**17%**	**$63,131,511**	**22%**

Note: Activities such as smolt monitoring, effectiveness monitoring, and regional funding are combined with projects in the state and federal funding lines above.

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Performance Update

The following data displays grant management and project impact performance measures for fiscal year 2023. Data included are specific to projects funded by the board and current as of October 28, 2022.

Project Impact Performance Measures

The following tables provide an overview of the fish passage accomplishments funded by the board in fiscal year 2023. Grant sponsors submit these performance measure data for blockages removed, fish passages installed, and stream miles made accessible when a project is completed and in the process of closing. The Forest Family Fish Passage Program, Coastal Restoration Initiative Program, Chehalis Basin Strategy, Brian Abbott Fish Barrier Removal Board, and the Estuary and Salmon Restoration Program are not included in these totals.

Measure	FY 2023 Performance
Blockages Removed	5
Bridges Installed	1
Culverts Installed	0
Fish Ladders Installed	1
Fishway Chutes Installed	0

So far, five salmon blockages were removed this fiscal year (July 1, 2022, to October 28, 2022), and two passageways installed (Table 1). These projects have cumulatively opened 45.64 miles of stream (Table 2).

Project Number	Project Name	Primary Sponsor	Funding Program	Stream Miles
18-1671	Pilchuck Dam Removal Restoration Project	Tulalip Tribes	SRFB/PSAR	37.00
18-1648	Cooke Creek Screening & Passage	Kittitas Co Conservation Dist	SRFB/PSAR	1.35
19-1104	Wildcat Road Fish Barrier Correction	Chehalis Basin FTF	SRFB/PSAR	7.29
		Total Miles		**45.64**

Grant Management Performance Measures

Table 3 summarizes fiscal year 2023 operational performance measures as of October 28, 2022.

Measure	FY Target	FY 2023 Performance	Indicator	Notes
Percent of Salmon Projects Issued Agreement within 120 Days of Board Funding	90%	**N/A**	●	No agreements for SRFB-funded projects were due to be mailed this fiscal year to date.
Percent of Salmon Progress Reports Responded to On Time (15 days or less)	90%	**85%**	●	211 progress reports were due this fiscal year to date for SRFB-funded projects. Staff responded to 178 in 15 days or less. On average, staff responded within 9 days.
Percent of Salmon Bills Paid within 30 days	100%	**100%**	●	During this fiscal year to date, 524 bills were due for SRFB-funded projects. All were paid on time.
Percent of Projects Closed on Time	85%	**78%**	●	32 SRFB-funded projects were scheduled to close. So far this fiscal year, 25 of them closed on time.
Number of Projects in Project Backlog	5	**11**	●	Eleven SRFB-funded projects are in the backlog and need to be closed out.
Number of Compliance Inspections Completed	125	**12**	●	Staff inspected 12 worksites this fiscal year to date. They have until June 30, 2023, to reach the target.

WASHINGTON STATE RECREATION AND CONSERVATION OFFICE
Salmon Recovery Funding Board

Salmon Recovery Funding Board Briefing Memo

Item 2

APPROVED BY RCO DIRECTOR MEGAN DUFFY

Meeting Date: December 7, 2022

Title: Salmon Recovery Management Report

Prepared By: Erik Neatherlin, GSRO Director
Jeannie Abbott, GSRO Program Coordinator
Tara Galuska, GSRO Orca Recovery Coordinator
Marc Duboiski, RCO Salmon Recovery Section Manager

Summary
This memo summarizes the recent work completed by the Governor's Salmon Recovery Office and the Recreation and Conservation Office's Salmon Recovery Grants Section, including work with regional salmon recovery boards, planning for the Salmon Recovery Conference, and an update on salmon grant programs.

Board Action Requested

This item will be a:
- ☐ Request for Decision
- ☐ Request for Direction
- ☒ Briefing

Governor's Salmon Recovery Office (GSRO)

Legislative and Partner Activities

Governor's Salmon Recovery Office (GSRO) and Recreation and Conservation Office (RCO) staff traveled to Walla Walla for the Brian Abbott Fish Barrier Removal Board (FBRB) meeting in September. This was the first in-person FBRB meeting in 2 years. The Snake River Salmon Recovery Board hosted the meeting and led the tour of Mill Creek, beginning in the upper Walla Walla basin, extending to the Bennington diversion dam, and ending at the Mill Creek concrete flume and weir fish passage work in downtown Walla Walla.

With Governor Inslee's DC office staff, GSRO and RCO staff convened in Washington DC in October as part of the five-state Pacific Coastal Salmon Recovery Fund (PCSRF) delegation. Washington State coordinated and led the delegation meetings. The delegation met with federal agency partners and each state met with their own Congressional delegation. This was the first in-person visit in 2 years.

GSRO staff convened the Natural Resources Subcabinet with the Governor's Office to discuss 2023-25 agency salmon recovery priorities. This includes the riparian work led by the Governor's Office and the state agency biennial work plan of legislative and budget requests to implement the statewide strategy (Item 8). The Subcabinet includes the directors of state natural resource agencies.

GSRO and RCO Director attended the Governor's Centennial Accord meeting with Tribes on October 24 and 25 in Tulalip. GSRO was one of the state leads and presented during the natural resources work sessions.

GSRO staff continued to participate in the Net Ecological Gain and Riparian discussions and workshops as part of separate legislative provisos on each topic.

GSRO staff presented jointly with Nisqually Indian Tribe virtually at the Board of Directors meeting for Pacific Salmon Foundation based in Canada. This was a continuation of the Salmon Action Dialogue Series discussion associated with collaborative models and salmon recovery in Washington State.

GSRO staff continued with its quarterly meetings with Upper Columbia United Tribes, Columbia River Intertribal Fish Commission, and Northwest Indian Fisheries Commission (NWIFC). The purpose of these meetings is to ensure communication and collaboration on federal and state affairs, and key policy and budget issues.

GSRO and RCO staff continued to meet with the Regional Salmon Recovery Directors and their boards on a regular basis.

GSRO staff attended the Washington Salmon Coalition annual retreat and provided several presentations on the various issues and work products underway.

Governor's Salmon Strategy Update – 2023-25 Biennial Work Plan

GSRO successfully completed a legislatively required 2023-25 Biennial work plan and provided it to the Governor's Office and Office of Financial Management. Katie Knight Pruit, GSRO Salmon Recovery Coordinator, will provide the board with a full briefing during the December meeting.

State of Salmon Report

The coordination and development of the 2022 State of Salmon Report is underway with state agencies, tribal partners, and regional recovery regions. The report captures the status and trends of salmon, their habitat, the needs and gaps, and progress of statewide salmon recovery efforts. GSRO is updating statewide indicators for abundance, harvest, ocean conditions, water flow and temperature, and updating

habitat focus metrics on each recovery region. The report is due to the legislature in December 2022. Eli Asher, GSRO Policy Specialist, was hired to lead this effort.

Salmon Recovery Network

The Salmon Recovery Network (SRNet) continues to meet virtually. Recent discussions concern how to best gather information about federal funding opportunities. SRNet is creating a method to collect information about federal funding programs, total costs, project descriptions, and applicants to share with SRNet members and other interested parties.

Salmon Recovery Conference

The salmon recovery conference will be April 18-19, 2023, in Vancouver, WA. The theme is "A Shared Future." A call for abstracts was sent out mid-August and then extended to the end of October. Abstracts are being reviewed until December 12, 2022. The Steering Committee is working on confirming keynote speakers, contacting sponsors, and selecting presenters for the sessions. Registration will open January 4, 2023.

Southern Resident Orca Recovery

The Department of Ecology is working with GSRO and Puget Sound Partnership (PSP) on finalizing a checklist and guidance to support the Orca Recovery Task Force's recommendation 27, "Determine how permit applications in Washington State could be required to explicitly address potential impacts to orcas." A series of public meetings are complete, and guidance is being developed for the questions that were developed for the checklist. Next, mitigations options will be discussed in a set of subsequent of public meetings starting in November.

Orca Recovery Day was October 15, and 40 events were held across the state for public participation. Many of the events included restoration activities at salmon restoration projects funded by the board. At the local Thurston County event, over 70 people volunteered to restore areas of Squaxin Park, and Tara Galuska, GSRO Orca Recovery Coordinator, spoke about the connections between salmon and orca recovery and the two board funded projects completed at the park. Ms. Galuska also participated in two podcasts and a transboundary panel on orca recovery organized by the Salish Sea Institute and attended by 450 people.

The population of the Southern Resident Killer Whale (SRKW) is 73 individuals, down one individual since the previous board meeting. The primary threats are contaminants, vessels, and prey availability. In November 2022, the Washington Department of Fish and Wildlife will provide an adaptive management report to the Legislature on the 2019

regulations on distance, speed and the commercial whale watching rules, and recommendations moving forward. . State agency budget requests to accomplish the recommendations by the Governor's Southern Resident Orca Task Force by state agencies have been summarized to the Office of Financial Management and partners for the 2023-25 session.

Salmon Recovery Section Report

2022 Grant Round

The board funded 128 projects at the September meeting. Ten agreements are active and many more are in the draft development stage.

Eight large supplemental projects are ready for funding consideration at the December meeting, which follows Track 2 of the $50 million funds (projects greater than $5 million). The Upper Columbia, Snake, Washington Coast and the Yakima Basin regions will be presenting.

Riparian Restoration Projects Under New Guidelines

At the December meeting, information on the number of projects and their locations will be presented.

Watershed Plan Review

The board has hired a new review panel comprised of six members. The new watershed plan review panel will conduct technical review of five watershed restoration and enhancement plans in the Puget Sound – Watershed Resource Inventory Areas (WRIA) 7 (Snohomish), WRIA 8 (Cedar-Sammamish), WRIA 13 (Deschutes), WRIA 14 (Kennedy-Goldsborough), and WRIA 15 (Kitsap).

Under RCW 90.94, watershed plans that are not approved by WRIA watershed planning committees are to be forwarded to the board for technical review.

The new watershed plan Review Panel, on the board's behalf, will complete the statutorily mandated watershed plan review and report to the board. If there are any recommendations resulting from the review, those recommendations will be provided to the Director of Ecology. The Director may choose to accept and amend the plans based upon recommendations, without committee approval prior to adoption. The kickoff meeting with the six panel members will take place in December and draft recommendations will be presented to the board in late 2023.

The six watershed plan review members are:

- Anchor QEA – Bob Montgomery and Adam Hill
- Cramer Fish Sciences – Hans Berge and Phil Roni
- Fain Environmental – Annika Fain
- PARR Excellence – Bill Norris

SRFB Standing Technical Review Panel (2023-2025)

The current eight-member review panel has been in place since January 2018. A new panel member recruitment was opened on August 1. As of the deadline of October 7, we received 20 proposals, which included engineers, biologists, ecologists, and geomorphologists.

Of those 20 proposals, RCO has decided to recruit 10 review panel members. Increasing the number of members will accommodate scheduling of application site visits, reduce the number of lead entity areas to review for each panel member, and add engineering expertise. Staff will report out at the December board meeting who will be serving on the review panel.

Salmon Recovery Funding Board Grant Administration

The following table shows projects funded by the board and administered by staff since 1999. The information is current as of November 1, 2022. This table does not include projects funded through the FBRB, Family Forest Fish Passage Program, the Washington Coast Restoration and Resiliency Initiative, or Estuary and Salmon Restoration Program. Although RCO staff support these programs through grant and contract administration, the board does not review or approve projects under these programs.

Table 1. Board-Funded Projects

	Pending Projects	Active Projects	Completed Projects	Total Funded Projects
Salmon Projects to Date	130	424	2,909	3,463
Percentage of Total	3.8%	12.2%	84%	

Strategic Plan Connection

The Salmon Recovery Management Report supports *Goal 2* of the board's strategic plan, which focuses on the board's accountability for investments. By sharing information on staff activities and the grant round processes, the board can ensure accountability for the efficient use of resources.

Attachments

Closed Projects

Attachment A: Closed Projects lists projects that closed between August 3, 2022, and November 1, 2022. Each project number includes a link to information about the project (e.g., designs, photos, maps, reports, etc.). Staff closed out 35 projects or contracts during this time.

Approved Amendments

Attachment B shows the major amendments approved between August 3, 2022, and November 1, 2022. Staff processed 19 cost change amendments during this period.

Salmon Projects Completed and Closed from August 3, 2022-November 1, 2022

Project Number	Sponsor	Project Name	Primary Program	Closed Completed Date
16-1367	Jamestown S'Klallam Tribe	Dungeness Floodplain Restoration- Kinkade Phase	Puget Sound Acq. & Restoration	10/14/2022
16-1408	South Puget Sound SEG	Spurgeon Creek Remeander	Puget Sound Acq. & Restoration	8/31/2022
16-1449	South Puget Sound SEG	Nisqually River Tributaries Habitat Assessment	Salmon State Projects	10/18/2022
16-1487	Mason Conservation Dist	Skokomish Valley Road Relocation Final Design	Puget Sound Acq. & Restoration	9/21/2022
16-1489	Mason Conservation Dist	Southern Hood Canal Riparian Enhancement Phase 3	Puget Sound Acq. & Restoration	8/8/2022
17-1143	Friends of the San Juans	Mud Bay Salt Marsh Restoration Sucia Island	Salmon State Projects	10/5/2022
18-1285	Lewis Conservation District	Chehalis Basin Fish Screening - Phase 2	Salmon Federal Projects	10/5/2022
18-1293	North Olympic Land Trust	Clallam Bay Acquisition	Puget Sound Acq. & Restoration	8/24/2022

Project Number	Sponsor	Project Name	Primary Program	Closed Completed Date
18-1299	North Olympic Land Trust	Lower Elwha River Protection Priority #4	Puget Sound Acq. & Restoration	8/29/2022
18-1313	Coastal Watershed Institute	Elwha Estuary Levee Assessment	Puget Sound Acq. & Restoration	8/26/2022
18-1397	Cowlitz Indian Tribe	Abernathy Creek Mainline Restoration IMW	Salmon Federal Projects	10/10/2022
18-1617	Snohomish County Public Works	Thomas' Eddy Hydraulic Reconnection Prelim-Design	Salmon State Projects	10/13/2022
18-1648	Kittitas Co Conservation Dist	Cooke Creek Screening & Passage	Salmon Federal Projects	9/20/2022
18-1710	Yakama Nation	Taneum Fish Passage at RM 1.8	Salmon Federal Projects	8/3/2022
18-1746	Friends of the San Juans	Sand Lance Spawning Habitat Protection	Puget Sound Acq. & Restoration	10/5/2022
18-2090	Tri-State Steelheaders Inc	Mill Creek Passage Design-6th Ave Extension	Salmon Federal Projects	9/29/2022
18-2091	Columbia Conservation Dist	Tucannon River Habitat Restoration, PA-32	Salmon State Projects	8/12/2022

Project Number	Sponsor	Project Name	Primary Program	Closed Completed Date
18-2228	Hood Canal SEG	Lower Big Beef Creek Acquisitions	Salmon State Projects	10/17/2022
18-2613	NW Indian Fisheries Comm	NWIFC Hatchery Reform 2018 Genetics	Salmon Federal Activities	9/15/2022
19-1104	Chehalis Basin FTF	Wildcat Road Fish Barrier Correction	Salmon State Projects	9/23/2022
19-1253	Lower Columbia Estuary Partner	East Fork Thermal Assessment	Salmon State Projects	10/25/2022
19-1420	Skagit Fish Enhancement Group	Skagit Forks/Britt Slough Wetlands Reconnection	Salmon State Projects	10/7/2022
19-1447	Yakama Nation	Tieton River Restoration Design Site #4	Salmon Federal Projects	10/24/2022
19-1466	Chelan-Douglas Land Trust	Nason & Kahler Creeks Confluence Acquisition	Salmon Federal Projects	8/3/2022
19-1502	Kittitas Conservation Trust	Hanson Ponds Assessment & Design	Salmon State Projects	8/25/2022
19-1521	Trout Unlimited - WA Coast	Wisen Creek & Tributary Stream Crossing Designs x3	Salmon State Projects	8/12/2022

Project Number	Sponsor	Project Name	Primary Program	Closed Completed Date
19-1551	Yakama Nation	Fish Passage and Habitat Design on Spring Creek	Salmon Federal Projects	8/10/2022
20-1035	Walla Walla Co Cons Dist	Touchet River Mile 42 Design	Salmon Federal Projects	8/9/2022
20-1065	Lower Columbia Estuary Partner	East Fork Lewis River Habitat Improvements	Salmon Federal Projects	10/10/2022
20-1068	Pacific Coast Salmon Coalition	Morganroth Springs Fish Passage Final Design	Salmon Federal Projects	9/2/2022
20-1103	Lewis County Public Works	Berwick Creek at Labree Fish Passage Design	Salmon Federal Projects	10/17/2022
20-1192	Wild Fish Conservancy	Deschutes Tributary Restoration Planning	Salmon Federal Projects	9/6/2022
20-1515	Sunnyside Division Bd of Crtl	Sunnyside Dam Smolt Passage Improvement Project	Salmon State Projects	8/15/2022
21-1196	Yakama Nation	Taneum Creek Rag-Heart Habitat Enhancement	Salmon State Projects	8/15/2022
21-1277	US Geological Survey	PNAMP IMW support	Salmon Federal Activities	10/23/2022

Project Amendments Approved by the RCO Director

Project Number	Project Name	Sponsor	Program	Type	Date	Amendment Descriptions
16-1372	Lower Dungeness Floodplain Restoration	Clallam Co Community Dev	PSAR Large Capital Projects	Cost Change	10/24/2022	Adding $2,800,000 in PSAR funds Adding $2,700,000 million in PSAR large capital funding, 13-15 - $30,495 and 17-19 - $2,669,505. Adding $100,000 in PSAR projects (15-17 PSAR - NOPLE). Approved by the SRFB at the March 2022 board meeting.
18-1228	Dosewallips R Powerlines Acquisition and Design	Jefferson County Public Health	Puget Sound Acq. & Restoration	Cost Change	8/30/2022	Add $99,955 PSAR 17-19 return funds, approved by PSP, to agreement. New project total is $371,174. Cost increase resulted from inadequate budgeting of preliminary design costs and an increase in the project complexity resulting in higher cost.

Project Number	Project Name	Sponsor	Program	Type	Date	Amendment Descriptions
18-1382	Camano CC Tidegate Feasibility & Prelim Design	Snohomish Conservation Dist	Puget Sound Acq. & Restoration	Cost Change	10/3/2022	The cost increase is $20,150 from the $75 million supplemental funding, $25 Million: Option 2, Modified Regional Allocation. The increase is due to engineering costs charged by consultants (original estimated was based on in-house engineering but District staffing was insufficient for the work). The match share is increased to maintain the 15% requirement.
18-1490	Cedar Grove Fish Passage Improvement	Skagit County Public Works	Puget Sound Acq. & Restoration	Cost Change	8/30/2022	The total cost increase is $197,000. $100,000 from 17-19 PSAR. $97,000 from the $75 million supplemental funding, $25 Million: Option 2, Modified Regional Allocation included in the SRFB 2022 grant round. The increase is due to low engineer's estimate, high consultant costs and work not included in original bid. The matching share is increased by $270,154 which exceeds the 15% requirement.

Project Number	Project Name	Sponsor	Program	Type	Date	Amendment Descriptions
18-1534	Middle Fork Nooksack Diversion Dam Removal	Bellingham City of	PSAR Large Capital Projects	Cost Change	10/5/2022	Increase budget by $1,537,580 in 2017-2019 returned PSAR Large Capital funds and match by $3,285,773 due to cost overruns in construction and required change order.
19-1398	Lower Eld Nearshore Habitat Complex Acquisition	Capitol Land Trust	Salmon State Projects	Cost Change	9/6/2022	Reduce sponsor match 1% from $265,500 to $250,353. New project total is $325,350.
20-1040	Jackson Beach Restoration Design	San Juan County Public Works	Salmon Federal Projects	Cost Change	9/26/2022	Adding match to allow for a time extension.
20-1061	E Side Wayne Sammamish-Waynita Restoration Design	Bothell City of	Puget Sound Acq. & Restoration	Cost Change	10/27/2022	The project sponsor, in coordination with the WRIA 8 Lead Entity, requested a cost increase in the 2022 grant round. The increase as follows was approved by the SRFB on September 22, 2022. $160,373 in SRFB funding plus $27,882 in sponsor match.

Project Number	Project Name	Sponsor	Program	Type	Date	Amendment Descriptions
20-1068	Morganroth Springs Fish Passage Final Design	Pacific Coast Salmon Coalition	Salmon Federal Projects	Cost Change	9/2/2022	To remove state funds used for advances
20-1128	Upper Cowan Ranch LWD Design	North Olympic Salmon Coalition	Puget Sound Acq. & Restoration	Cost Change	9/6/2022	Adding match to a design-only project to allow for a time extension.
20-1150	South Fork Upper and Lower Fobes Ph 2 Restoration	Lummi Nation	Salmon State Projects	Cost Change	8/30/2022	Increase budget by $323,760 in 2022 Supplemental WRIA 1 Lead Entity Allocation and add $57,134 in match.
20-1188	Talbot Dam Removal Design	Fish & Wildlife Dept of	Salmon State Projects	Cost Change	9/20/2022	Increase budget by $15,590 in 2022 SRFB funds due to cost overruns for stakeholder coordination and expanded cultural resource survey work.

Project Number	Project Name	Sponsor	Program	Type	Date	Amendment Descriptions
20-1284	Middle Pilchuck Habitat Restoration at Russell Rd	Snohomish County Public Works	Puget Sound Acq. & Restoration	Cost Change	9/22/2022	Snohomish County has requested a cost and scope change for this project. The $160,584 cost increase includes $6,544 in 2021-23 PSAR and $101,845 in 2019-2021 PSAR funds from Snohomish Lead Entity return funds, and $52,195 in new match. The cost change is necessary to fund increases in the cost of wood placement and project administration. The scope change includes increasing the miles of stream treated/off channel habitat created from 0.27 miles to 0.44, increasing the number of pools created/structures placed from 36 to 54, and increasing the acres of riparian planted from 1.2 to 4.26. The Snohomish LE, Puget Sound Partnership, and RCO Director Duffy have approved the amendment. See amendment request information in attachments for details.
20-1468	Nason Kahler Instream Complexity Restoration	Chelan Co Natural Resource	Salmon Federal Projects	Cost Change	8/30/2022	Add $55,342 in Salmon PCSRF funds to comply with BPA requirements and to complete the riparian planting.

Project Number	Project Name	Sponsor	Program	Type	Date	Amendment Descriptions
21-1101	Dungeness Riparian Recovery Phase III	North Olympic Salmon Coalition	Salmon Federal Projects	Cost Change	9/6/2022	Adding $108,515 in SRFB funding from Skagit LE. Skagit LE had a project which received alternate funding, so provided this funding to NOPLE's partially funded project.
21-1180	Nason Kahler Instream Complexity Restoration Ph 2	Chelan Co Natural Resource	Salmon State Projects	Cost Change	8/30/2022	Add $55,342 in Salmon PCSRF funds to comply with BPA Safety requirements and to complete the riparian planting.

Project Number	Project Name	Sponsor	Program	Type	Date	Amendment Descriptions
21-1202	Lower Snyder Creek Restoration Design	Mid-Columbia RFEG	Salmon Federal Projects	Cost Change	10/19/2022	The project sponsor has requested a cost increase of $106,499 to cover unforeseen changes to their project prior to implementation. This design project requires hydraulic and subsurface flow information to help inform the design for the anticipated restoration on Lower Snyder Creek. Hydraulic information was to be provided by the 11 now decommissioned wells at the project site and is now unavailable for this design. The need to drill three new wells to acquire information on subsurface flows was not anticipated but is now necessary. This additional funding will pay for the drilling of three new wells to acquire the necessary data to do the hydraulic analysis on subsurface flows and subsurface water levels.

Project Number	Project Name	Sponsor	Program	Type	Date	Amendment Descriptions
21-1208	Lower Issaquah Creek Stream & Habitat Enh	Issaquah City of	Salmon Federal Projects	Cost Change	9/22/2022	The amendment will use $8,819.13 in 13-15 PSAR return funds and $91,180.87 in 15-17 PSAR return funds for a total cost increase of $100,000. The sponsor is contributing an additional $20,000 in match for this project. The sponsor requests this cost increase due to bids coming in higher than the engineer's cost estimate. The WRIA 8 Lead Entity and Puget Sound Partnership approved the use of 2017-19 PSAR return funds for this cost increase on April 22, 2022 (see attached letter). This request is consistent with return funds policy described in Manual 18. RCO Director Duffy approved the cost increase on May 5, 2022.

Project Number	Project Name	Sponsor	Program	Type	Date	Amendment Descriptions
21-1241	Upper Rattlesnake Creek Conservation	Columbia Land Trust	Salmon State Projects	Cost Change	10/17/2022	The project sponsor has come back during the 2022 grant round to to fully fund the original 2021 request and obtain a cost increase for their acquisition project. This amendment adds $725,367 of SRFB funds and provides an additional $335,505 in match, which is commensurate with the upland acreage area.

WASHINGTON STATE RECREATION AND CONSERVATION OFFICE
Salmon Recovery Funding Board

Salmon Recovery Funding Board Decision Memo

Item 4

APPROVED BY RCO DIRECTOR MEGAN DUFFY

Meeting Date: December 7, 2022

Title: Supplemental Funding Decisions

Prepared By: Kat Moore, Senior Outdoor Grants Manager

Marc Duboiski, Salmon Recovery Grants Section Manager

Summary

This memo identifies larger scale projects for grant funding in the Upper Columbia, Snake River, Washington Coast, and Yakima Basin regions using money received in the 2022 supplemental budget.

Board Action Requested

This item will be a:

- ☒ Request for Decision
- ☐ Request for Direction
- ☐ Briefing

Introduction/Background

In the 2022 supplemental session, the legislature appropriated $75 million for salmon recovery to the Salmon Recovery Funding Board (board). The proviso requires that $50 million of the funding be used for larger projects valued at greater than $5 million. In June, the board decided to provide each region except the Northeast Region (NE) a percentage of the $50 million in 10 percent increments, shown in Table A. Each region is required to develop priority lists through their own process and present projects to the board for funding at either the September 2022 or December 2022 board meeting. The board also approved the following criteria for these projects:

- Total project cost must be $5 million or greater. The board funding amount may be less than $5 million.
- Manual 18 requirements apply unless specific exceptions are made by the board.
- Funds may not be used for cost increases, assessment, monitoring, or capacity.
- Match requirements are waived for these projects.

- Preliminary design is required for restoration projects

Each region solicited projects for the large supplemental funding, the projects were reviewed by the review panel, and were reviewed and ranked by regional processes.

Table A. Large Project Supplemental Funding Investments.

Region	Funding Amount
Washington Coast Sustainable Salmon Partnership	$4,794,000
Hood Canal Coordinating Council	$4,794,000
Lower Columbia Fish Recovery Board	$9,588,000
Northeast Washington	$0
Puget Sound Partnership	$14,382,000
Snake River Salmon Recovery Board	$4,794,000
Upper Columbia Salmon Recovery Board	$4,794,000
Yakima Fish and Wildlife Recovery Board	$4,794,000
RCO Admin	$2,060,000
TOTAL	**$50,000,000**

The board approved projects in four regions (Puget Sound, Lower Columbia, Yakima, and Hood Canal) from the supplemental budget at the September 2022 board meeting.

The regions with funding remaining (Upper Columbia, Snake River, Washington Coast, and Yakima) are proposing projects for funding at the December 2022 meeting. As of November 1st, the last full review panel meeting, all projects have been reviewed by the board Review Panel and are either cleared or conditioned for funding. Conditioned projects have been designated as such until preliminary designs are submitted and reviewed by the technical panel. The deadline for final project applications, including preliminary design, is December 1st. Another full review panel meeting is scheduled for December 6th, to evaluate the preliminary design documents submitted for project eligibility.

Process and Funding Request

Yakima

At the September 2022 meeting, the board approved providing additional funding to the Gap to Gap Ecosystem Restoration, Construction Implementation project (22-1579) This project was reviewed and ranked as the region's Targeted Investment (TI) project but only expects partial funding by the TI program. The Yakima region provided $1,184,865 of their $4,794,000 large project supplemental funds to the Gap to Gap project to fully fund the request.

The Yakima region has $3,609,135 remaining in their large project supplemental funding. The region held a supplemental grant round to identify projects for the remaining funding. The region received two proposals: Toppenish Creek at Pom Pom Road Floodplain Reconnection (22-1967) and Yakima River Corridor Plan Implementation Phase II (22-1961). The projects were reviewed by their Local Review Committee composed of members from their Technical Advisory group and Citizen Committee. The region ranked the Yakima River Corridor Plan Implementation as their top priority. The Toppenish Creek at Pom Pom Road project is an alternate.

Snake River

The Snake River Salmon Recovery Board received two letters of intent in response to their request for proposals for large supplemental funding. One project on the lower Touchet River was withdrawn early in the process and has since received funding through the Department of Ecology. Tri-State Steelheaders submitted a Mill Creek Passage - Large Capital Project (22-1802) proposal that contains multiple sections of work within Mill Creek. The project was reviewed by the Regional Technical Team and the Lead Entity Committee to ensure it met biological and technical requirements. The Local Review Committee evaluated the project based on its benefit to salmon, certainty for success, and community support. The Snake River Recovery Board approved the project and recommends it for funding by the board.

Upper Columbia

The Upper Columbia Salmon Recovery Board received four applications in response to their request for projects for large supplemental funding. One project was withdrawn from consideration. The region held virtual site tours and presentations that were attended by members of the Regional Technical Team (RTT), Tributary Committee (TRIB), and Citizen Advisory Committees (CACs). The RTT reviewed and scored the projects and provided their technical scores to the CACs. Upper Columbia has two Citizen Advisory Committees, one representing Chelan County and the other Okanogan County. The two CACs independently developed a ranked list, each using the same review criteria. Both committees convened a joint meeting to develop a single regional ranked list for

funding consideration. Upper Columbia is recommending the Sugar Reach Channel Reconnections Implementation (22-1806) and two additional projects as alternates – Nason Creek and State 207 – Phase 1 (22-1807); and, Icicle and Peshastin ID Instream Flow Project (22-1815).

Washington Coast

The Coast Salmon Partnership received two projects in response to their request for proposals, the Willapa Coastal Forest – Phase 1 (22-1803) and the Quillayute River Historic Oxbow Implementation (22-1807). Neither of the proposed projects had been previously reviewed by the Lead Entities or the board's Review Panel. Further, the Coast Salmon Partnership had not previously scored and ranked projects across Lead Entities. As a result, the projects went through three levels of review – Lead Entity, Coast Salmon Partnership Implementation Committee, and State Review Panel – before the final project list was submitted to the Coast Salmon Partnership board for approval. The regional ranked project list combined projects from both lead entities and citizen input on the regional project list occurred through the Coast Salmon Partnership board of directors. Each of the four coastal Lead Entities has one vote on the Coast Salmon Partnership board of directors. The board of directors voted to support the final project list recommending the Willapa Coastal Forest – Phase 1 project (22-1803) for funding and the Quillayute River Historic Oxbow Implementation project (22-1807) as an alternate.

Motion

Move to approve the Large Supplemental Projects ranked lists from the Upper Columbia, Snake River, Washington Coast and Yakima Basin regions as shown in Attachment A.

Strategic Plan Connection

The board allocated the large supplemental funding to each region to implement regional priorities in alignment with Goal #1 of the strategic plan, which states that the board funds the best possible salmon recovery activities and projects through a fair process that considers science, community values and priorities, and coordination efforts.

Attachment A

Attachment A: Large Supplemental Projects

Large Supplemental Projects

Yakima Region				Remaining Allocation: $3,609,135	
Project number	Project Sponsor, Project Name	Grant Request	Sponsor Share	Proposed Supplemental Funding	Total Project Cost
22-1961	Kittitas County Public Works, Yakima River Corridor Plan Implementation Phase II	$3,609,135	$1,390,866	$3,609,135	$5,000,001
22-1967	Yakama Nation, Toppenish Creek at Pom Pom Road Floodplain Reconnection	$3,609,135	$1,390,866	$0 Alternate	$5,000,001
			Total	$3,609,135	

Snake River Region				Allocation: $4,794,000	
Project number	Project Sponsor, Project Name	Grant Request	Sponsor Share	Proposed Supplemental Funding	Total Project Cost
22-1802	Tri-State Steelheaders, Mill Creek Passage – Large Capital Project	$16,487,334	$206,001	$4,794,000	$16,693,335
			Total	$4,794,000	
The scope of work for this project will be scaled to available funding.					

Upper Columbia				**Allocation: $4,794,000**	
Project number	Project Sponsor, Project Name	Grant Request	Sponsor Share	Proposed Supplemental Funding	Total Project Cost
22-1806	Methow Salmon Recovery Foundation, Sugar Reach Channel Reconnections Implementation	$4,974,000	$206,001	$4,794,000	$5,000,001
22-1807	Yakama Nation, Nason Creek and State Route 207 – Phase 1	$4,794,000	$3,822,780	$0 Alternate	$8,616,780
22-1815	Chelan County Natural Resources, Icicle and Peshastin ID Instream Flow Project	$4,794,000	$321,787	$0 Alternate	$5,115,787
			Total	$4,794,000	

Washington Coast				**Allocation: $4,794,000**	
Project number	Project Sponsor, Project Name	Grant Request	Sponsor Share	Proposed Supplemental Funding	Total Project Cost
22-1803	Western Rivers Conservancy, Willapa Coastal Forest – Phase 1	$4,974,000	$206,001	$4,794,000	$5,000,001
22-1807	Quileute Tribe, Quillayute River Historic Oxbow Implementation	$4,794,000	$206,001	$0 Alternate	$5,000,001
			Total	$4,794,000	

Upper Columbia Region

Large Supplemental Funding 2022

Dave Hecker (UCSRB)

Sugar Reach Channel Reconnections Implementation

Methow Salmon Recovery Foundation (MSRF)

Tara Gregg (Project Manager)
Chris Johnson (MSRF President)

Regional Process

- Timeline and Regional Deadlines
- Presentations
- Regional Technical Team Scoring
- Citizen Advisory Committee Ranking

Technical Scoring and Citizen Ranking Outcomes

RTT Scoring

Project	Score
Nason Creek and State Route 207 – (Phase 1)	73
Wenatchee-Chiwawa Irrigation District Instream Flow Improvement	72
Sugar Reach Channel Reconnections Implementation	71
Icicle and Peshastin Irrigation Districts Instream Flow Improvement	68

CAC Ranking

Project	Rank
Sugar Reach Channel Reconnections Implementation	1
Nason Creek and State Route 207 – (Phase 1)	2
Wenatchee-Chiwawa Irrigation District Instream Flow Improvement	3
Icicle and Peshastin Irrigation Districts Instream Flow Improvement	4

1st Alternate:
Nason Creek and State route 207 – (phase 1)

- **Sponsor**: Yakama Nation Fisheries

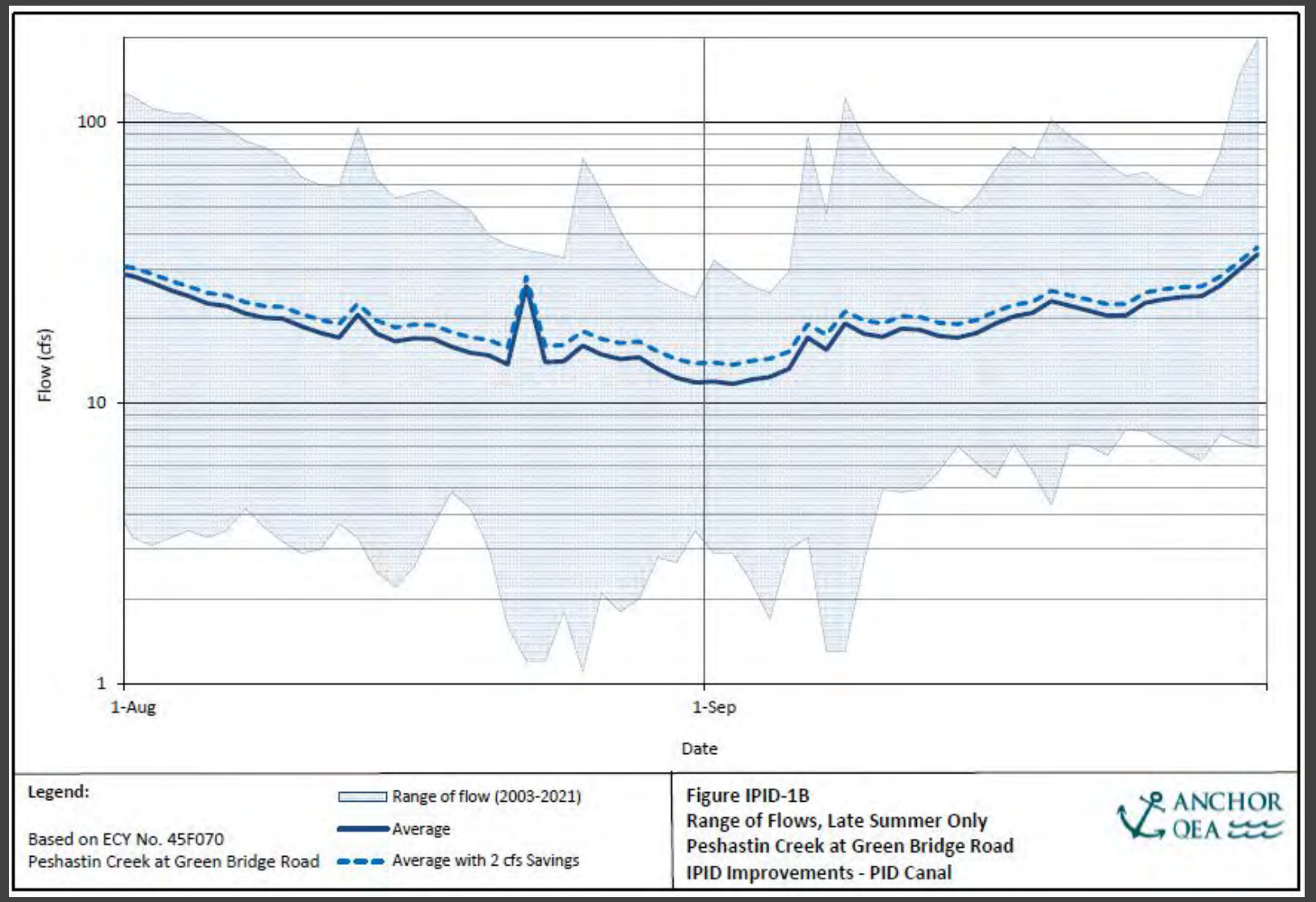
- **Project Goals:**
  - Relocate 0.65-mile segment of HW 207 out of floodplain

- **Estimated Project Cost:**
  - $8,616,780

2nd Alternate:

Icicle Peshastin Irrigation District Instream Flow Project

- **Sponsor**: CCNRD
- **Project Goals**:
  - Divert 2 CFS to Peshastin Creek & 3 CFS to Icicle Creek
- **Estimated Project Cost:**
  - $5,115,787



METHOW SALMON
RECOVERY FOUNDATION

Sugar Channels Reconnections

Supporting Salmon, Supporting Community

Floodplains by Design
· REDUCING RISK, RESTORING RIVERS ·

Bonneville
POWER ADMINISTRATION

HCP Tributary Committees

METHOW SALMON
RECOVERY FOUNDATION

BUREAU OF RECLAMATION

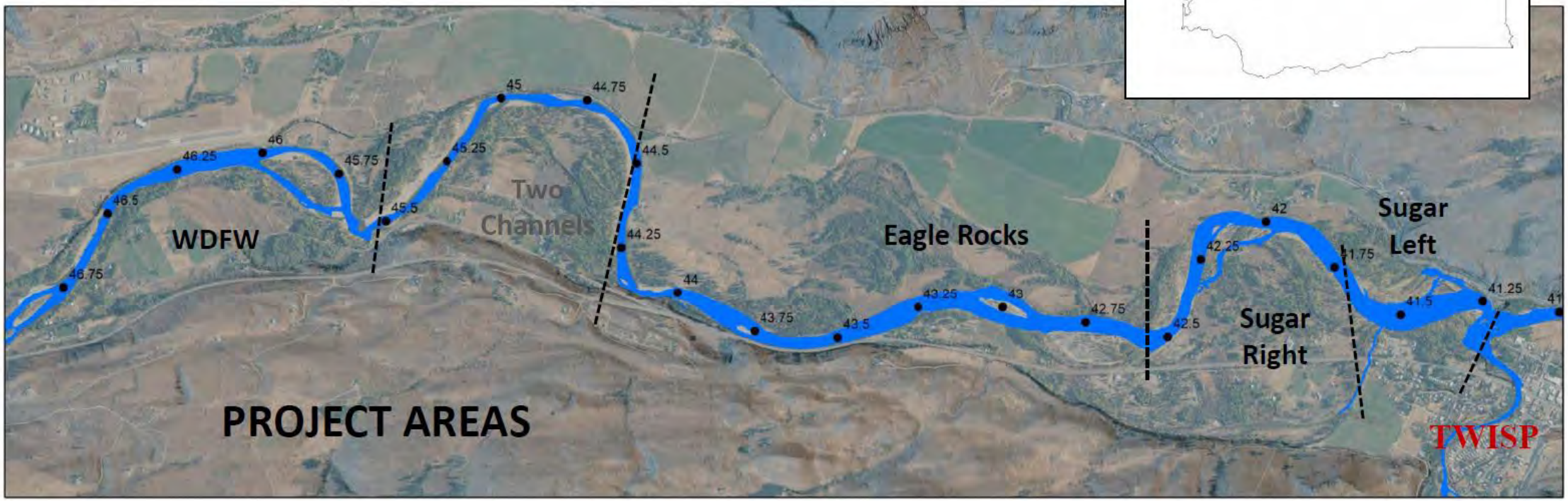
WASHINGTON STATE
RECREATION AND CONSERVATION OFFICE
Salmon Recovery Funding Board

Washington Department of FISH and WILDLIFE

US Army Corps of Engineers

WASHINGTON STATE DEPT OF
NATURAL RESOURCES

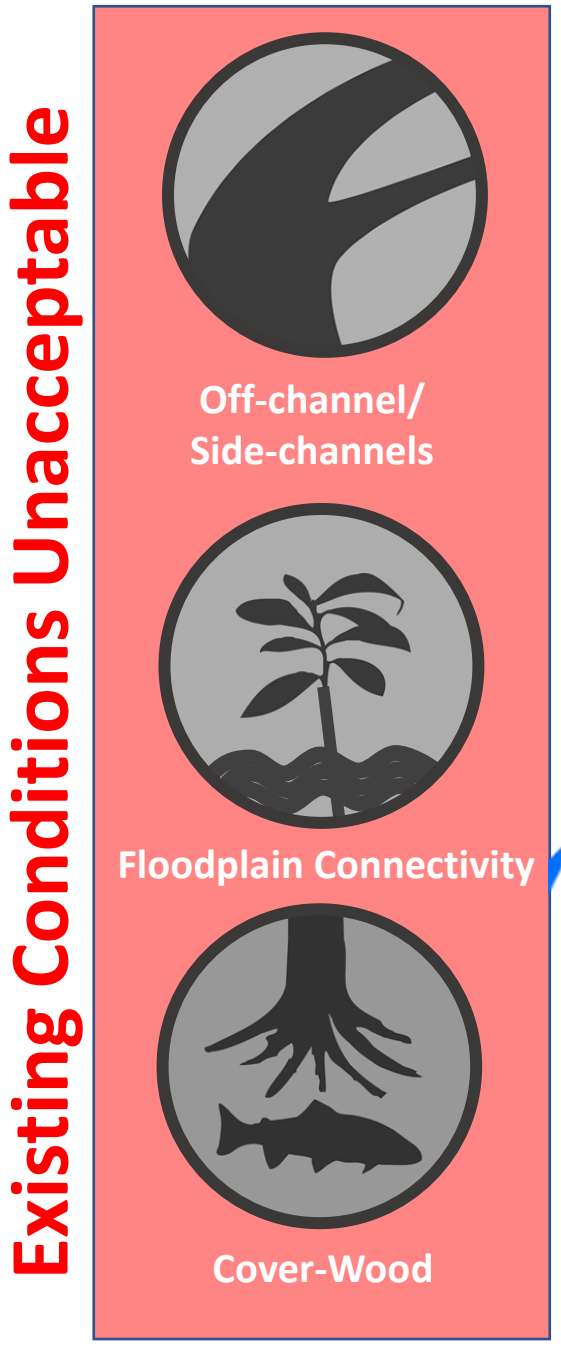
Sugar Reach Channel Reconnections Vicinity Map



Subbasin: Methow

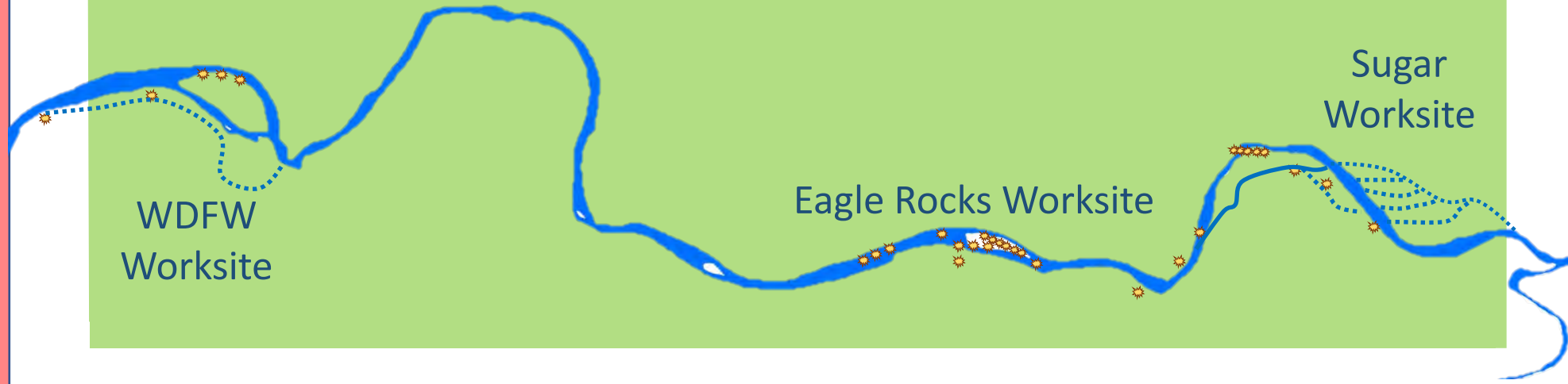
Assessment Unit: Methow River Thompson

Reaches: Methow River Thompson 01, 02, 03, & 04

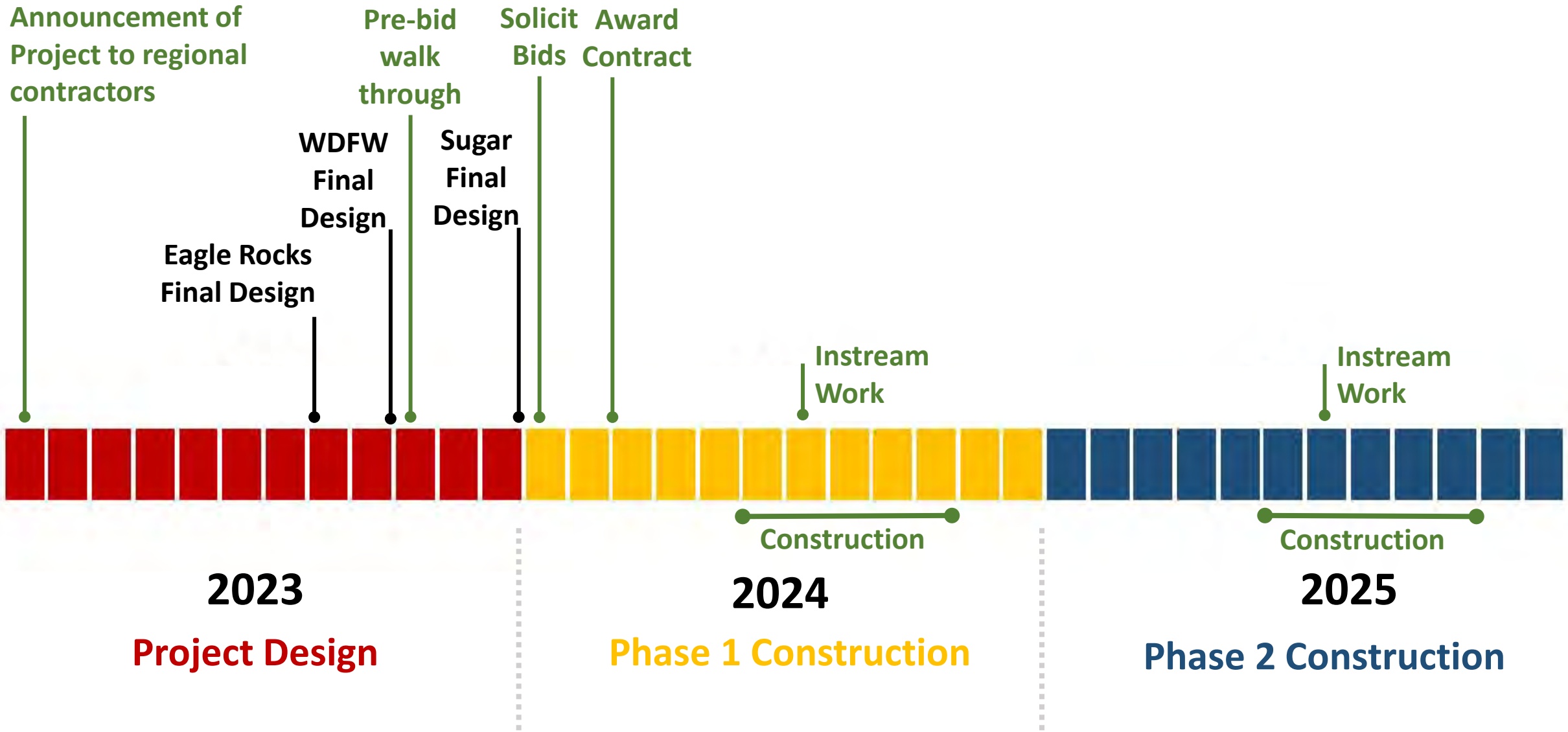


Restoration Target

44	2.9	9.0	11.6	2.6
Wood Structures	Miles of Floodplain Channels	Acres of Riparian Planted	Acres of Floodplain	Miles of Side-channel



Reach Scale Benefits 4.1 Total Miles of Stream



Project Implementation

Economics of the Sugar Reach

$7,386,511 =

* Includes 30% contingency in alignment with preliminary design cost estimate standards

Cover-Wood
44 Structures
Riparian Plantings
9 Acres

+

Off-channel/
Side-channels
5.5 Miles

+

Floodplain
Connectivity
11.9 Acres

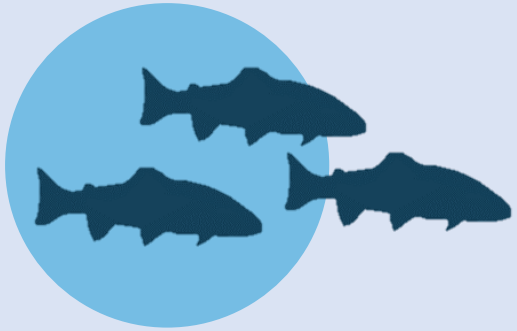
+

51 Jobs

+

Local Economy Support

+



More Fish

Anticipated Construction Funding Match:

Floodplains by Design
· REDUCING RISK, RESTORING RIVERS ·

Bonneville
POWER ADMINISTRATION

Questions and Discussion

Community

Cover-Wood

Off-channel/
Side-channels

Floodplain
Connectivity

Mill Creek: *a unique seven-mile-long fish passage barrier*

Snake River Salmon Recovery Region
$50 Million Supplemental Project Presentation

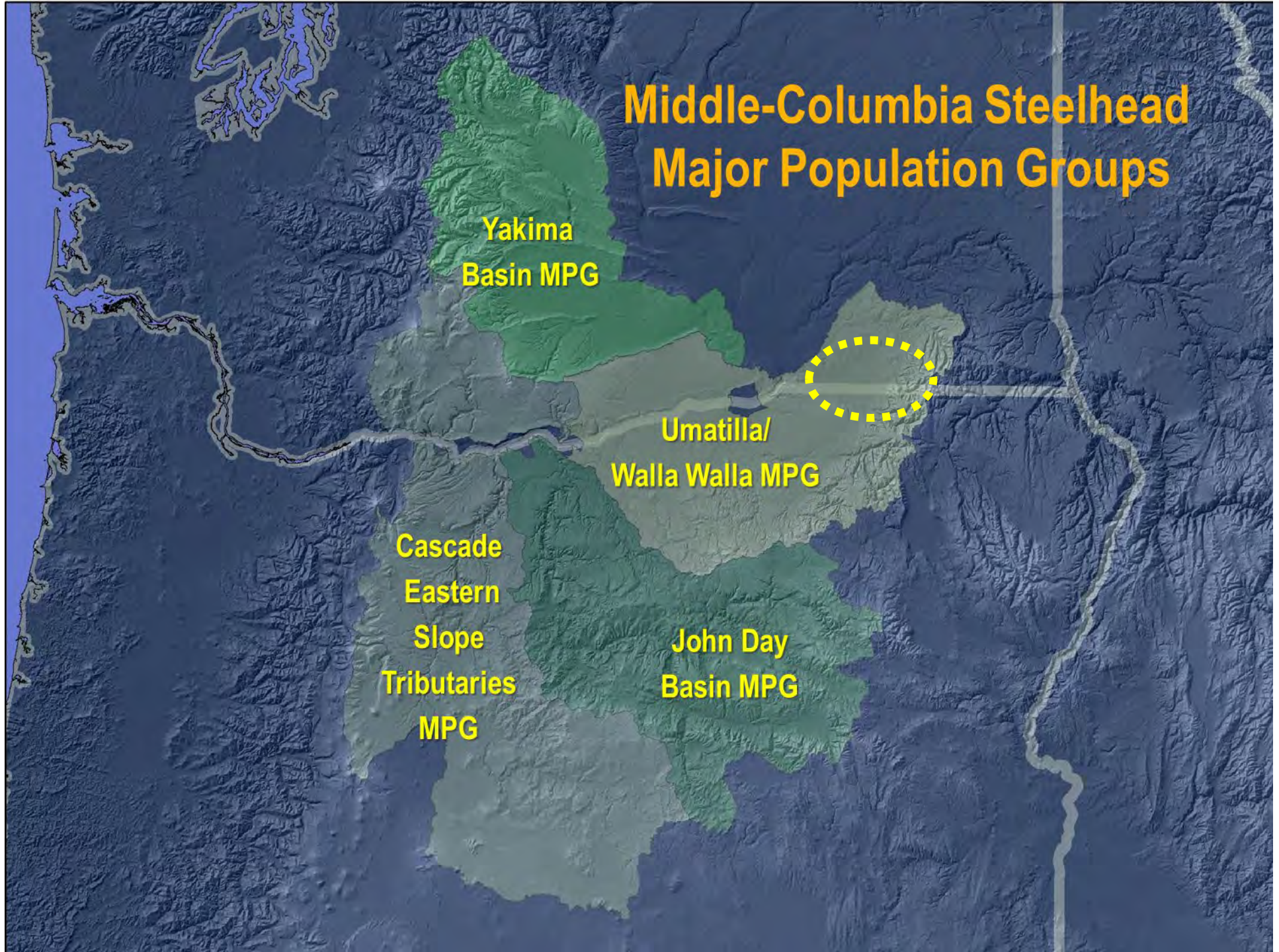
December 7, 2022

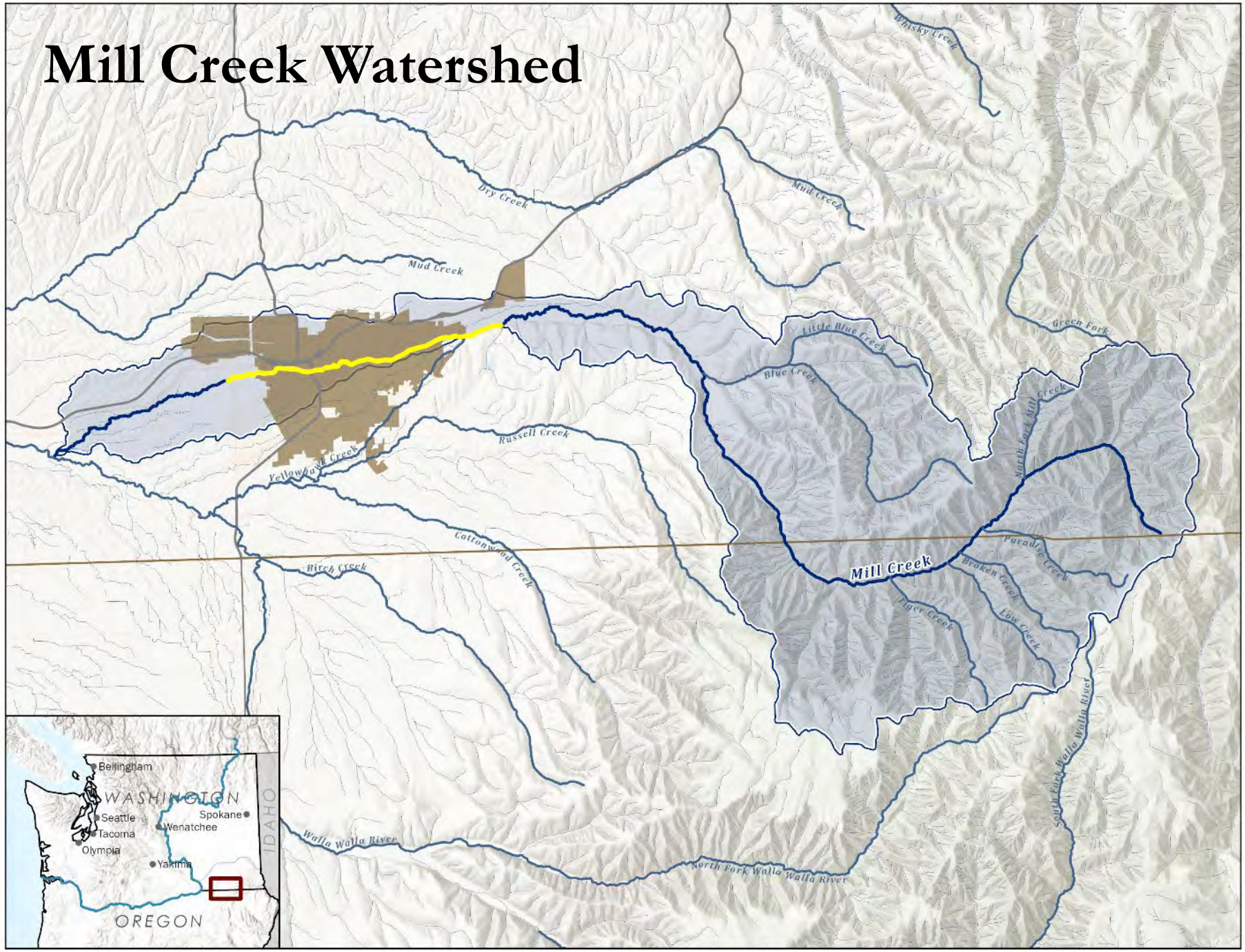
Brian Burns & Morgan Morris, Tri-State Steelheaders Regional Fisheries Enhancement Group
Mike Lambert, Confederated Tribes of the Umatilla Indian Reservation
Monte Puymon, City of Walla Walla
Mark Wachtel & Steve Martin, Washington Department of Fish and Wildlife
Ali Fitzgerald & John Foltz, Snake River Salmon Recovery Board

Presentation Outline

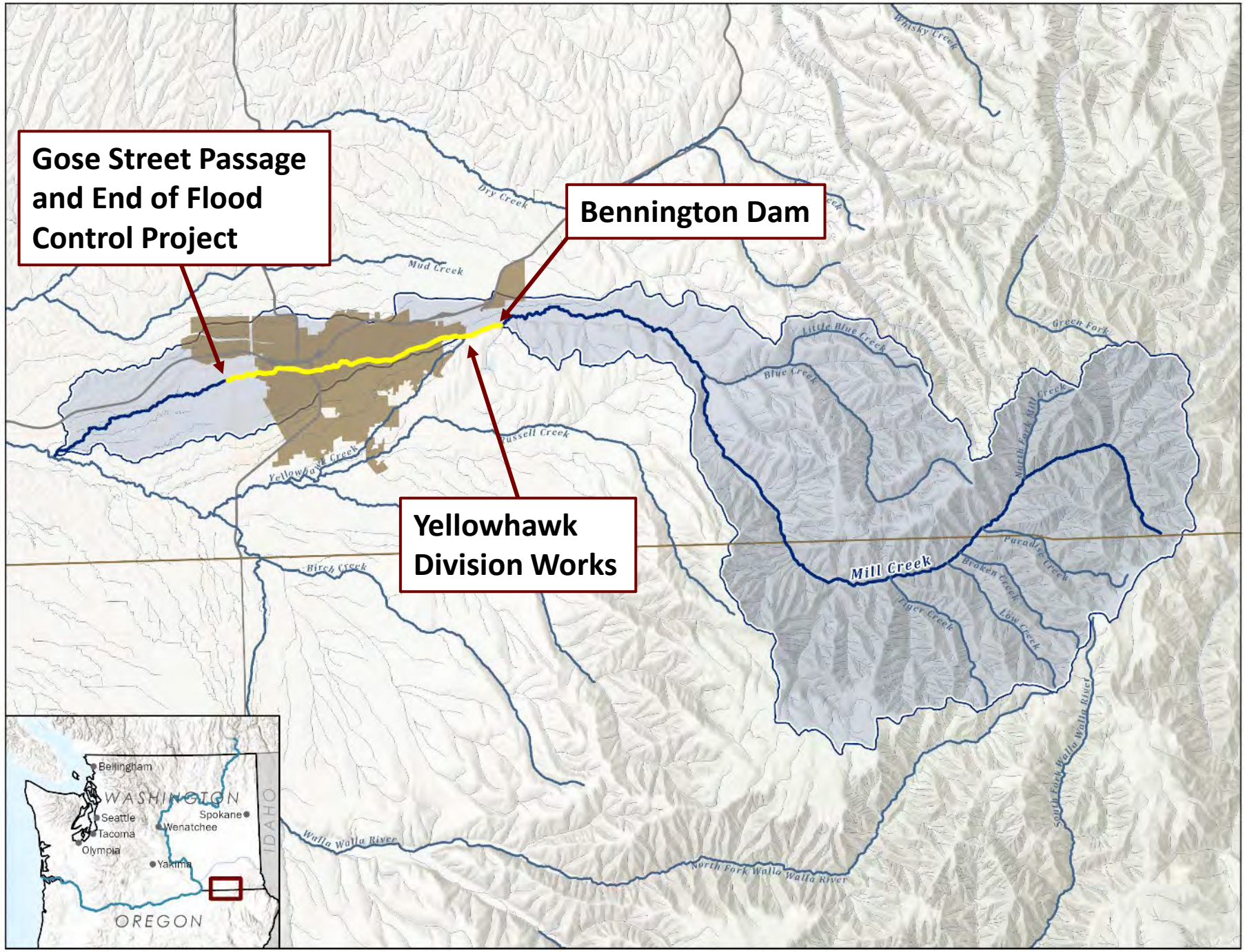
- Snake Regional Process for Large Supplemental Projects
- Context for Mill Creek Fish Passage
- Identify what is being proposed for $4.79M
- What is left to do?

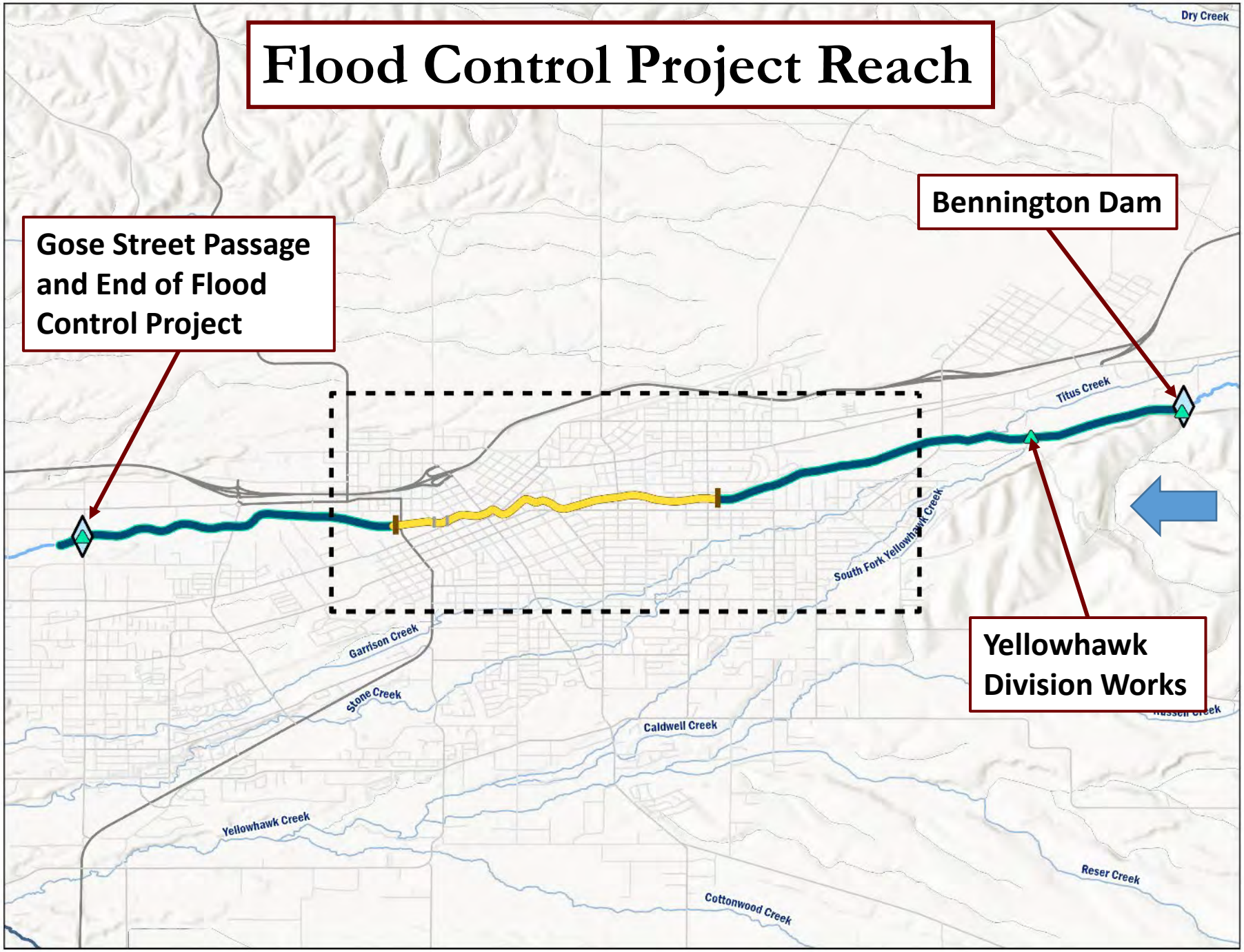
Regional Process


Middle-Columbia Steelhead
Major Population Groups
Yakima
Basin MPG
Umatilla/
Walla Walla MPG
Cascade
Eastern
Slope
Tributaries
MPG
John Day
Basin MPG

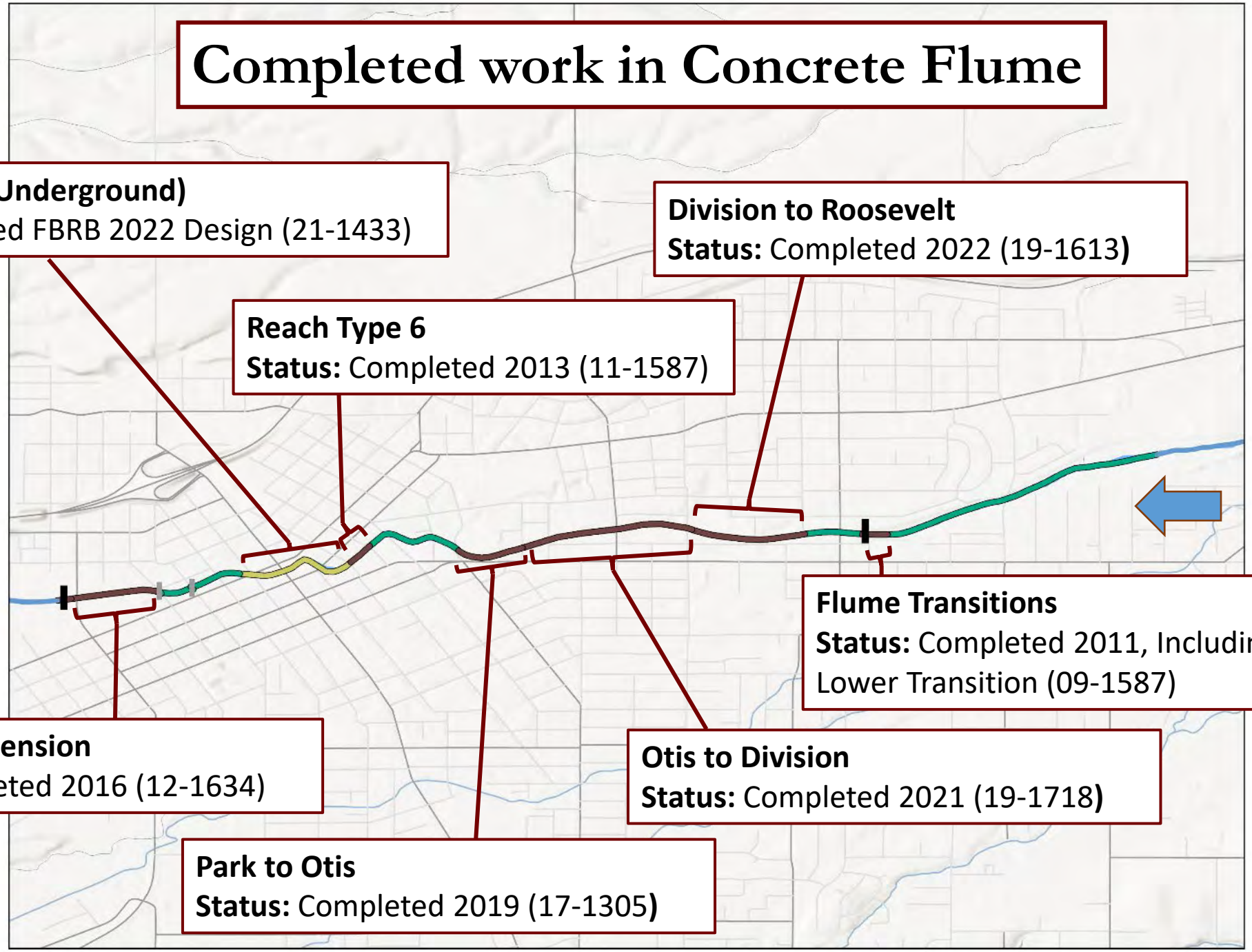

Mill Creek Watershed
Whisky Creek
Dry Creek
Mud Creek
Mud Creek
Little Blue Creek
Green Fork
Blue Creek
North Fork Mill Creek
Russell Creek
Yellowhawk Creek
Cottonwood Creek
Birch Creek
Mill Creek
Paradise Creek
Broken Creek
Tiger Creek
Low Creek
South Fork Walla Walla River
Walla Walla River
North Fork Walla Walla River
Bellingham
WASHINGTON
Seattle
Spokane
Wenatchee
Tacoma
Olympia
Yakima
IDAHO
OREGON

Link to Google Earth Flight


Gose Street Passage and End of Flood Control Project
Bennington Dam
Yellowhawk Division Works
Dry Creek
Mud Creek
Russell Creek
Yellowhawk Creek
Birch Creek
Whisky Creek
Little Blue Creek
Blue Creek
Green Fork
North Fork Mill Creek
Mill Creek
Paradise Creek
Broken Creek
Tiger Creek
Low Creek
South Fork Walla Walla River
Walla Walla River
North Fork Walla Walla River
Bellingham
WASHINGTON
Seattle
Spokane
Wenatchee
Tacoma
Olympia
Yakima
IDAHO
OREGON


Flood Control Project Reach
Gose Street Passage and End of Flood Control Project
Bennington Dam
Yellowhawk Division Works
Dry Creek
Titus Creek
South Fork Yellowhawk Creek
Garrison Creek
Stone Creek
Caldwell Creek
Yellowhawk Creek
Reser Creek
Cottonwood Creek

Completed work in Concrete Flume



Colville to 3rd (Underground)
Status: Proposed FBRB 2022 Design (21-1433)

Reach Type 6
Status: Completed 2013 (11-1587)

Division to Roosevelt
Status: Completed 2022 (19-1613)

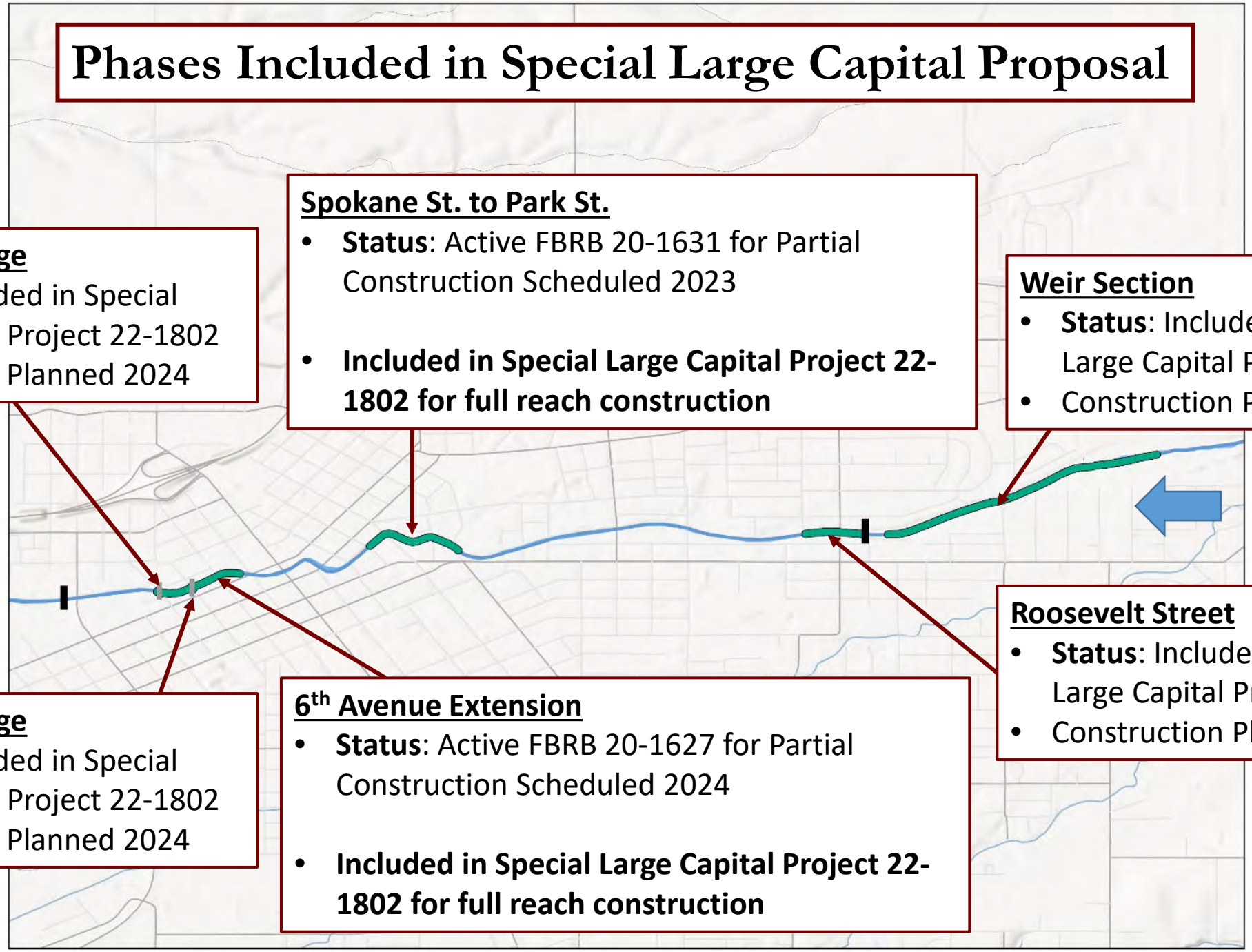
Flume Transitions
Status: Completed 2011, Including Lower Transition (09-1587)

9th Avenue Extension
Status: Completed 2016 (12-1634)

Otis to Division
Status: Completed 2021 (19-1718)

Park to Otis
Status: Completed 2019 (17-1305)

Phases Included in Special Large Capital Proposal



5th Avenue Bridge
- **Status**: Included in Special Large Capital Project 22-1802
- Construction Planned 2024

Spokane St. to Park St.
- **Status**: Active FBRB 20-1631 for Partial Construction Scheduled 2023
- **Included in Special Large Capital Project 22-1802 for full reach construction**

Weir Section
- **Status**: Included in Special Large Capital Project 22-1802
- Construction Planned 2025

Roosevelt Street
- **Status**: Included in Special Large Capital Project 22-1802
- Construction Planned 2023

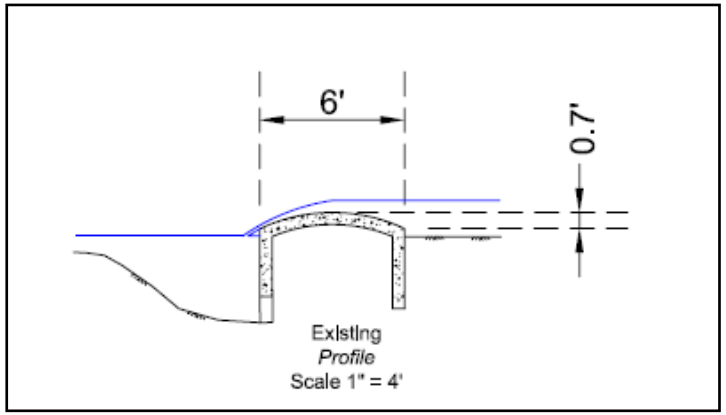
6th Avenue Bridge
- **Status**: Included in Special Large Capital Project 22-1802
- Construction Planned 2024

6th Avenue Extension
- **Status**: Active FBRB 20-1627 for Partial Construction Scheduled 2024
- **Included in Special Large Capital Project 22-1802 for full reach construction**

Two Channel Types in this Project

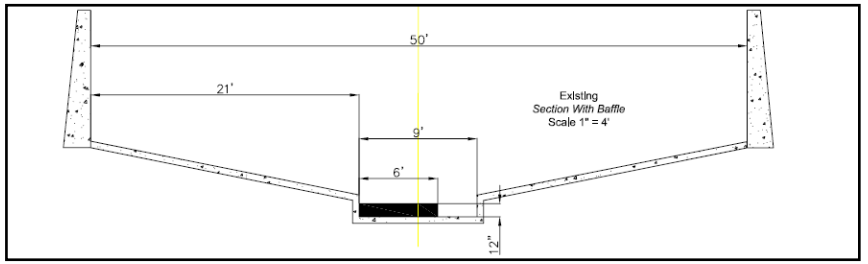
Channel-spanning Stabilizers (Sills or Weirs)

263 total



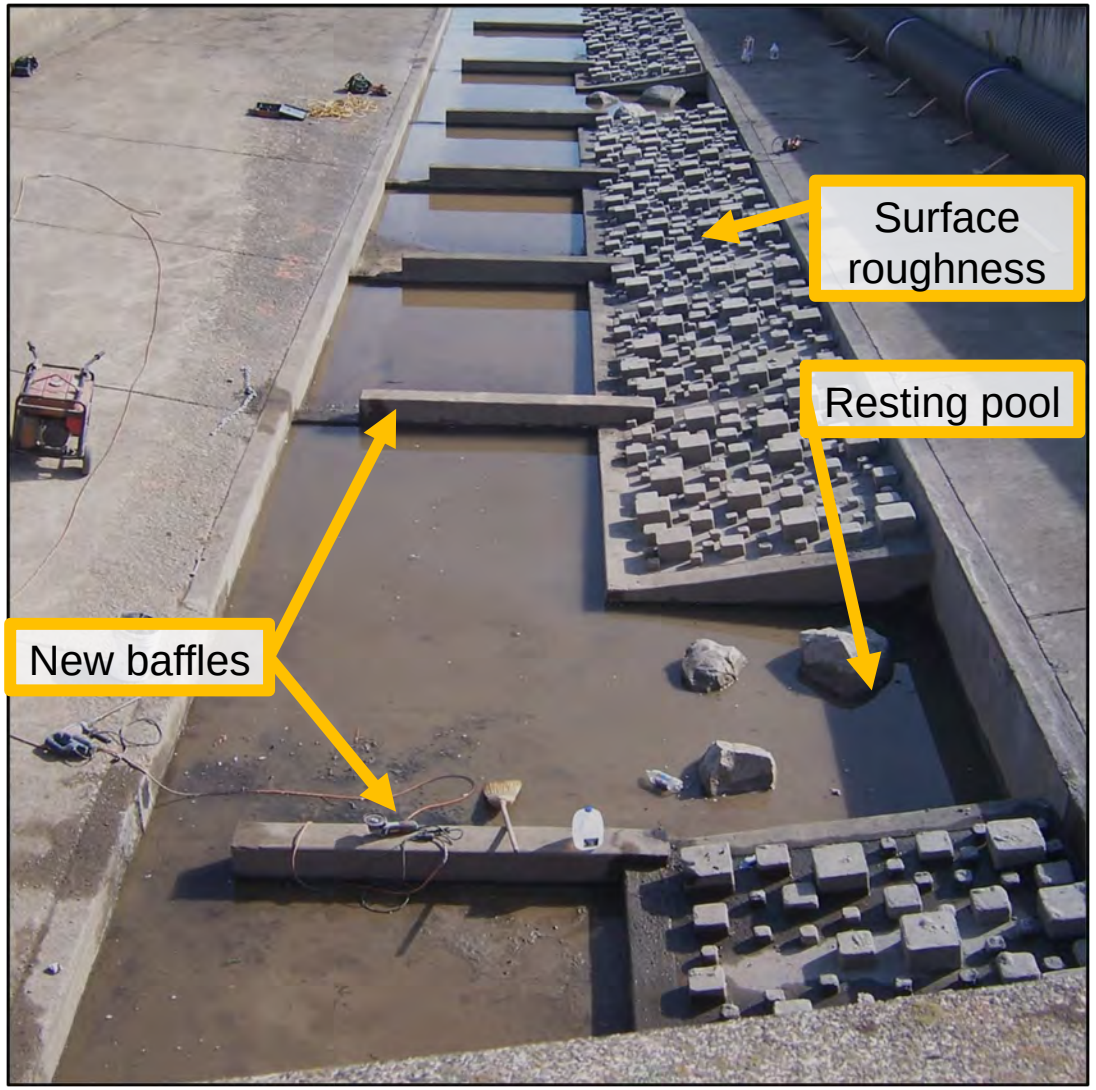
Concrete Flume

2.2 miles



Concrete Flume

Pre-Project



Post-Project Treatment

Fish Passage Zone

Channel-spanning Stabilizers (Sills or Weirs)

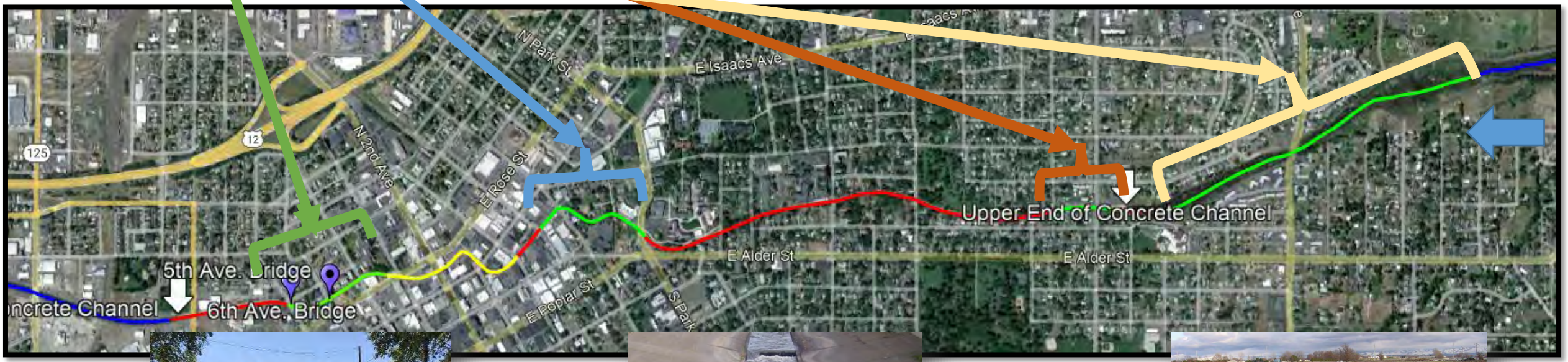
Existing Condition

Weir Notch During Construction

5th and 6th Avenue Bridges

Project Cost Totals

Phase	Sequence	Grant Request Primary	Grant Request Secondary	Prism Match	Other Project Funding	Overall Project Cost
Spokane to Park	1	$ 619,854		$ 206,000	$ 1,469,063	$ 2,294,917
Roosevelt St.	2	$ 2,100,567				$ 2,100,567
6th Ave. Ext.	3	$ 1,051,336			$ 1,116,227	$ 2,167,563
6th Ave. Bridge	3	$ 529,300				$ 529,300
5th Ave Bridge	3	$ 492,943	$ 1,948,258		$ 152,490	$ 2,593,691
Weir Section	4		$ 5,110,562			$ 5,110,562
Totals		**$ 4,794,000**	**$ 7,058,820**	**$ 206,000**	**$ 2,737,780**	**$ 14,796,600**



Mill Creek Fish Passage Phases

Location	Sequence	Implementation Timeline	Total Cost by Phase	Funding Identified For $5M Proposal	Funding Secured by Phase	Funding Applied For
Spokane St. to Park St.	1	2023	$ 2,294,917	$ 619,854	$ 1,469,063	
Roosevelt St. Extension	2	2023	$ 2,100,567	$ 2,100,567		$ 1,774,885
3rd Ave. to 6th Ave.	3	2024	$ 2,167,563	$ 1,051,336	$ 1,459,627	
5th Ave Bridge	3	2024	$ 2,593,691	$ 2,593,691	-	$ 2,186,954
6th Ave Bridge	3	2024	$ 529,300	$ 529,300	$ -	$ -
Roosevelt St. to Union St. (weir segments b,c,d; 51 weirs)	4	2025	$ 5,110,562	$ 5,110,562	$ -	$ -
Total			**$ 14,796,600**	**$ 12,005,310**	**$ 2,928,690**	**$ 3,961,839**

Total of the funding in-hand if phases move forward = ~$4.7M
Total of the potential funding (including this proposal) = ~$10.2M

Mill Creek Fish Passage Phases

Location	Implementation Timeline	Total Cost by Phase	Funding Identified For $5M Proposal	Funding Secured by Phase	Funding Applied For
Spokane St. to Park St.	2023	$ 2,294,917	$ 619,854	$ 1,469,063	
Roosevelt St. Extension	2023	$ 2,100,567	$ 2,100,567		$ 1,774,885
3rd Ave. to 6th Ave.	2024	$ 2,167,563	$ 1,051,336	$ 1,459,627	
5th Ave Bridge	2024	$ 2,593,691	$ 2,593,691	-	$ 2,186,954
6th Ave Bridge	2024	$ 529,300	$ 529,300	$ -	$ -
Roosevelt St. to Union St. (weir segments b,c,d; 51 weirs)	2025	$ 5,110,562	$ 5,110,562	$ -	$ -
Total		**$ 14,796,600**	**$ 12,005,310**	**$ 2,928,690**	**$ 3,961,839**

What's Left to Do?

Gose Street	2025-2026		$ -	$ 160,860	$ 575,000
Gose St. to 9th Ave. (Lower Weirs)			$ -	$ -	$ -
3rd St. to Colville St. (Underground Section)			$ -	$ -	$ 195,760
Union St. to Yellowhawk Diversion (weirs)			$ -	$ -	$ -
✓ Yellowhawk Diversion to Bennington Dam (weirs; federal reach)	2025		$ -	$ 6,000,000	n/a
✓Bennington Dam Fish Ladder	2024		$ -	$ 8,700,000	n/a

We are getting close!

- ✓ Fish Passage Achieved in ~85% of the Concrete Channel and at all Bridges
- ✓ Significant Work in Weir Sections Completed with Fish Passage Achieved for ~42%
- ✓ Fish Passage Achieved at Bennington Dam and Yellowhawk Diversion
- ✓ Mill Creek Base Flow Projects Underway


Photo: USACE

What is at Stake?

- 50+ miles of designated critical spawning/rearing habitat upstream
  - Summer steelhead
  - Bull trout
  - Spring Chinook

- Population Viability
- Spring Chinook Reintroduction
- Headwaters are completely closed and protected

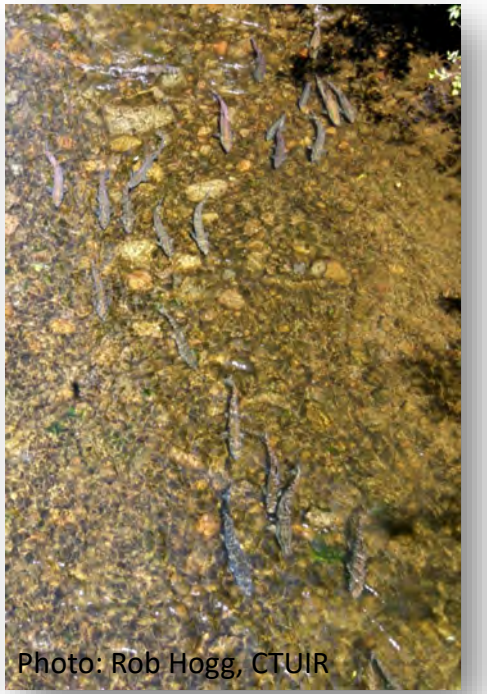


Photo: Rob Hogg, CTUIR

Thank You

CONFEDERATED TRIBES OF THE UMATILLA INDIAN RESERVATION

WASHINGTON STATE RECREATION AND CONSERVATION OFFICE
Salmon Recovery Funding Board

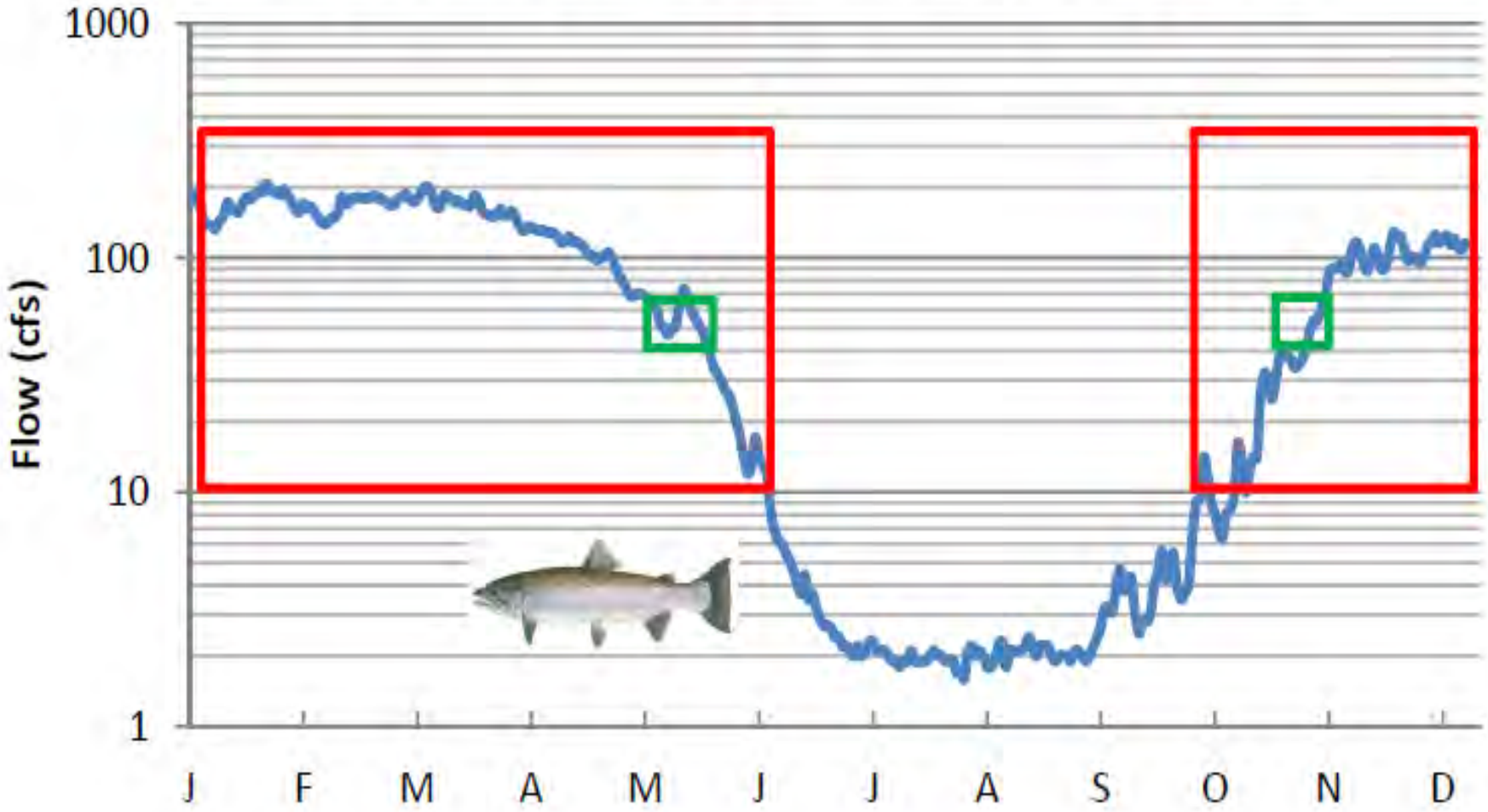
Washington Department of FISH and WILDLIFE

Brian Abbott Fish Barrier Removal Board

BONNEVILLE POWER ADMINISTRATION

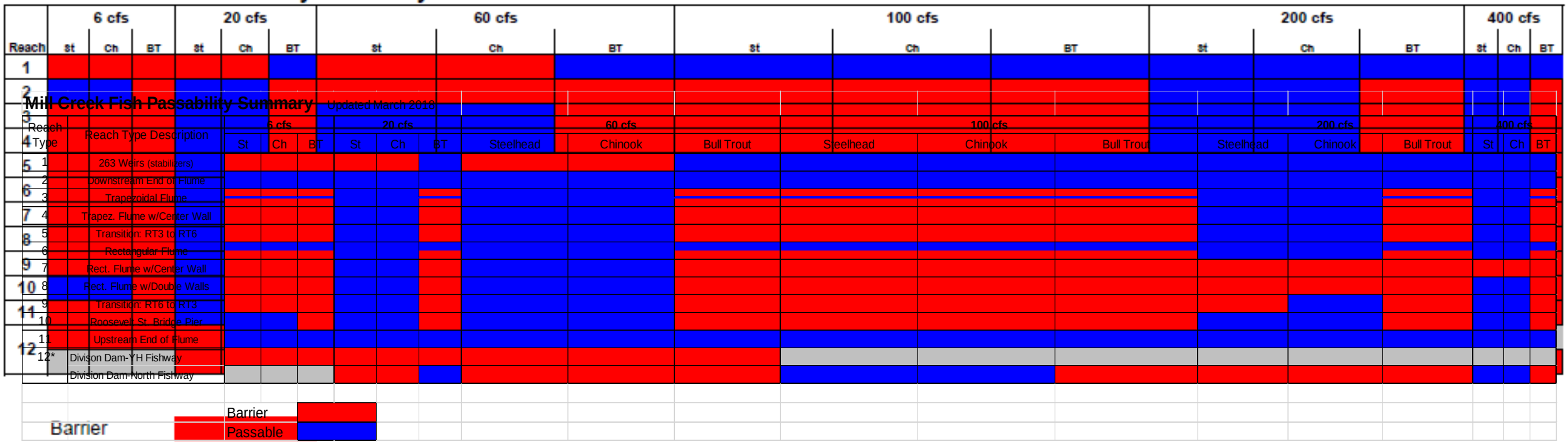
TRI-STATE STEELHEADERS Since 1965

Mill Creek STA 14015000 - Average Daily Flows



Concrete Channel Progress- Spring 2018

Mill Creek Fish Passability Summary



Mill Creek Fish Passability Summary Updated March 2018

Reach Type	Reach Type Description	6 cfs St	6 cfs Ch	6 cfs BT	20 cfs St	20 cfs Ch	20 cfs BT	60 cfs Steelhead	60 cfs Chinook	100 cfs Bull Trout	100 cfs Steelhead	100 cfs Chinook	100 cfs Bull Trout	200 cfs Steelhead	200 cfs Chinook	200 cfs Bull Trout	400 cfs St	400 cfs Ch	400 cfs BT
1	263 Weirs (stabilizers)																		
2	Downstream End of Flume																		
3	Trapezoidal Flume																		
4	Trapez. Flume w/Center Wall																		
5	Transition: RT3 to RT6																		
6	Rectangular Flume																		
7	Rect. Flume w/Center Wall																		
8	Rect. Flume w/Double Walls																		
9	Transition: RT6 to RT3																		
10	Roosevelt St. Bridge Pier																		
11	Upstream End of Flume																		
12*	Divison Dam-YH Fishway																		
	Division Dam-North Fishway																		

Barrier

Passable

Note: The larger cell sizes represent the flow frequency. For example: 100 cfs occurs 32% of the time as compared to 6 cfs which only occurs 8% of the time.

Mill Creek Fish Passability Summary At the completion of the Large Cap projects

Reach Type	Reach Type Description	6 cfs			20 cfs			60 cfs			100 cfs			200 cfs		
		St	Ch	BT	St	Ch	BT	St	Ch	BT	St	Ch	BT	St	Ch	BT
1	263 Weirs (stabilizers)															
2	Downstream End of Flume															
3	Trapezoidal Flume															
4	Trapez. Flume w/Center Wall															
5	Transition: RT3 to RT6															
6	Rectangular Flume															
7	Rect. Flume w/Center Wall															
8	Rect. Flume w/Double Walls															
9	Transition: RT6 to RT3															
10	Roosevelt St. Bridge Pier															
11	Upstream End of Flume															
12*	Divison Dam-YH Fishway															
	Division Dam-North Fishway															

Barrier

Passable

Mill Creek Fish Passability Summary At the completion of the Large Cap projects

Reach Type	Reach Type Description	6 cfs			20 cfs			60 cfs			100 cfs			200 cfs			400 cfs		
		St	Ch	BT	St	Ch	BT	Steelhead	Chinook	Bull Trout	Steelhead	Chinook	Bull Trout	Steelhead	Chinook	Bull Trout	St	Ch	BT
1	263 Weirs (stabilizers)																		
2	Downstream End of Flume																		
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7	Rect. Flume w/Center Wall																		
8	Rect. Flume w/Double Walls																		
9	Transition: RT6 to RT3																		
	Roosevelt St. Bridge Pier																		
	Upstream End of Flume																		

Barrier

Passable

Mill Creek Fish Passage Phases

Location	Sequence	Total Cost by Phase	Funding Identified For $5M Proposal	Funding Secured by Phase	Funding Applied For	Scenario 1: No Additional Funds	Scenario 2: Top Ranked FBRB Project Funded	Scenario 3: Both FBRB Projects Funded
Spokane St. to Park St.	1	$ 2,294,917	$ 619,854	$ 1,469,063		$ 619,854	$ 619,854	$ 619,854
Roosevelt St. Extension	2	$ 2,100,567	$ 2,100,567		$ 1,774,885	$ 2,100,567	$ 325,682	$ 325,682
3rd Ave. to 6th Ave.	3	$ 2,167,563	$ 1,051,336	$ 1,459,627		$ 1,051,336	$ 1,051,336	$ 1,051,336
~~**5th Ave Bridge**~~	~~3~~	~~$ 2,593,691~~	~~$ 2,593,691~~	~~-~~	~~$ 2,186,954~~	~~$ -~~	~~$ 2,593,691~~	~~$ 406,737~~
6th Ave Bridge	3	$ 529,300	$ 529,300	$ -	$ -	$ 529,300	$ 529,300	$ 529,300
~~**Roosevelt St. to Union St.**~~	~~4~~	~~$ 5,110,562~~	~~$ 5,110,562~~	~~$ -~~	~~$ -~~	~~$ 492,943~~	~~$ -~~	~~$ 1,861,091~~
Total		**$ 14,796,600**	**$ 12,005,310**	**$ 2,928,690**	**$ 3,961,839**	**$ 4,794,000**	**$ 5,119,863**	**$ 4,794,000**

Funding In-Hand or Secured

$	2,928,690	FBRB Proposals (21-23)
$	1,400,000	CTUIR-BPA Contributions
$	385,933	City of Walla Walla 5th Ave. Bridge

Potential Funding

$	3,961,839	FBRB Proposals (23-35)
$	875,000	WDFW-BPA Funds
$	4,790,000	Anticipated SRFB $50M funds
$	612,000	Walla Walla Water 2050
	TBD	2023-25 SRFB

Willapa Coastal Forest – Phase I

Salmon Recovery Funding Board 2022 Supplemental Grant

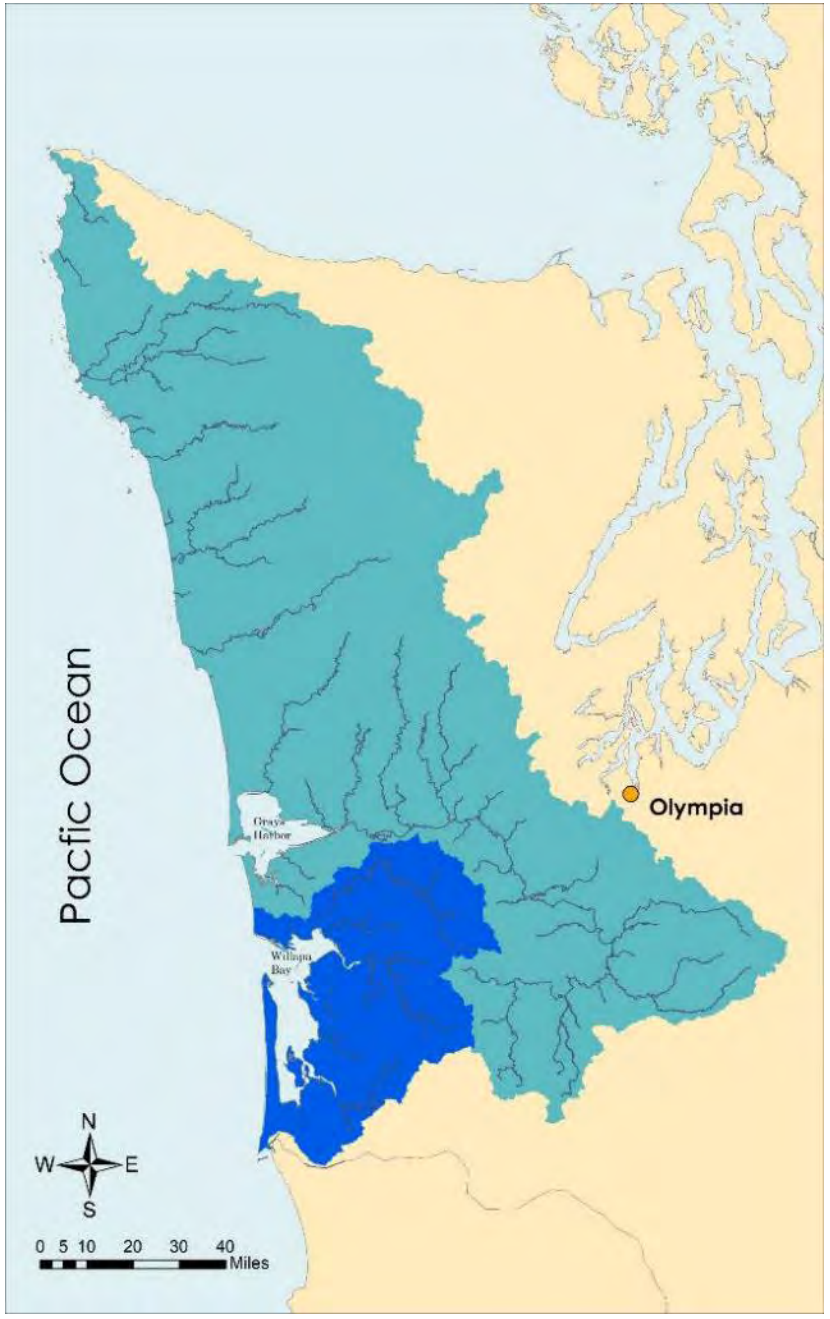
December 7, 2022

Today's Presentation

Tom Kollasch, Willapa Bay Lead Entity Coordinator

Jackie Ferrier, Willapa National Wildlife Refuge

Alex Barton, Western Rivers Conservancy



WRIA 24 (Willapa Bay)

Species

Chum, coho, and Chinook salmon, steelhead, coastal cutthroat

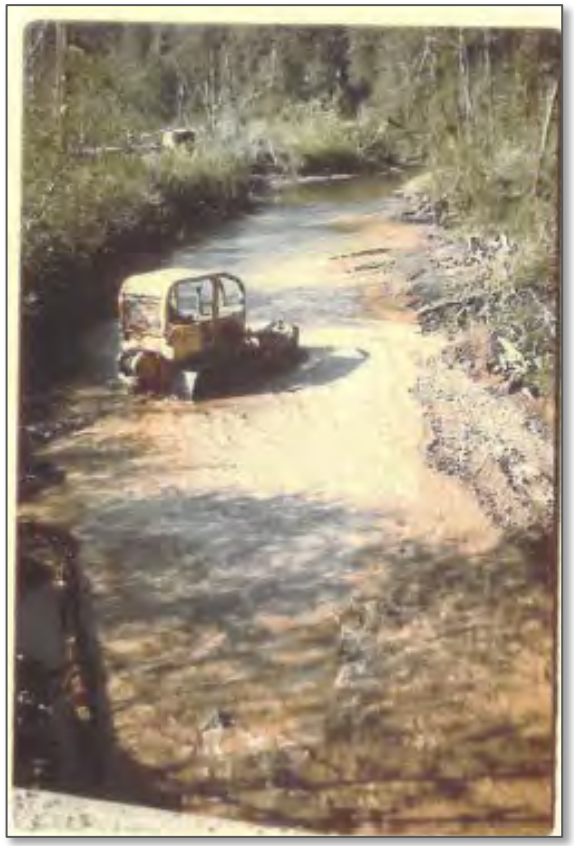
Major rivers

North, Willapa, Palix, Nemah, Naselle, Bear

Land Use Legacy

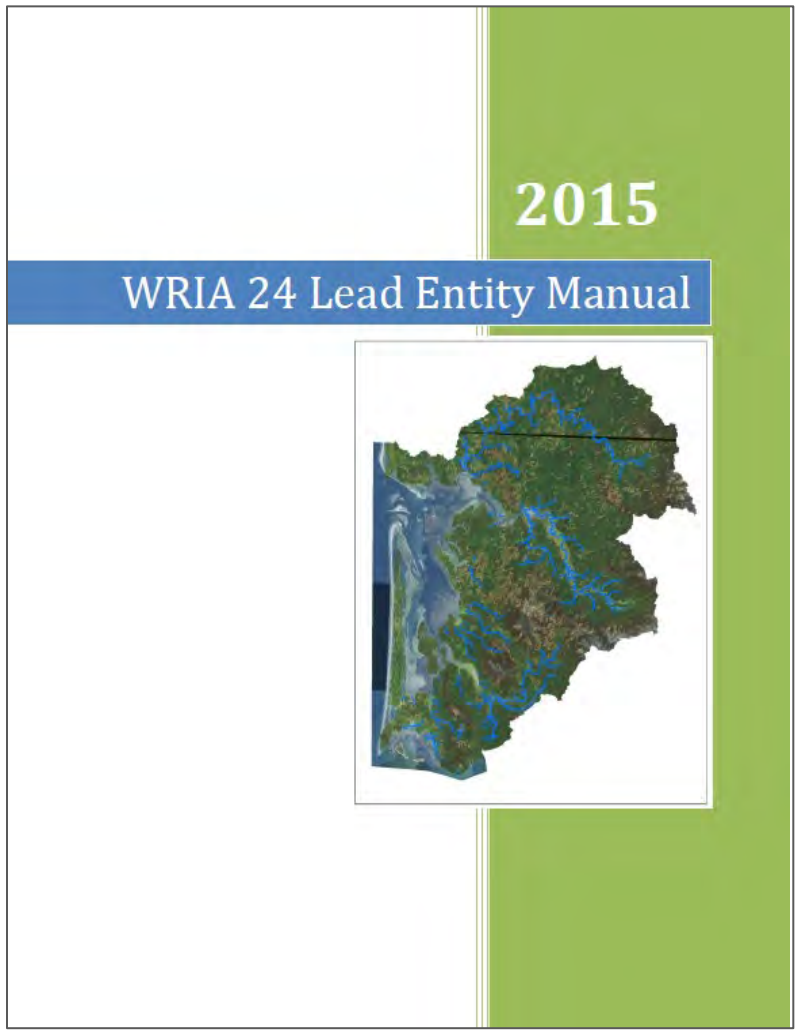
Log pond formed by barrier dam
(Source: Chehalis Historical Museum)

Splash dam near South Bend
(Source: Chehalis Historical Museum)



Bear River Stream ‘Cleaning’
(Source: Heiser 1971)

Willapa Bay LE Salmon Recovery Strategy

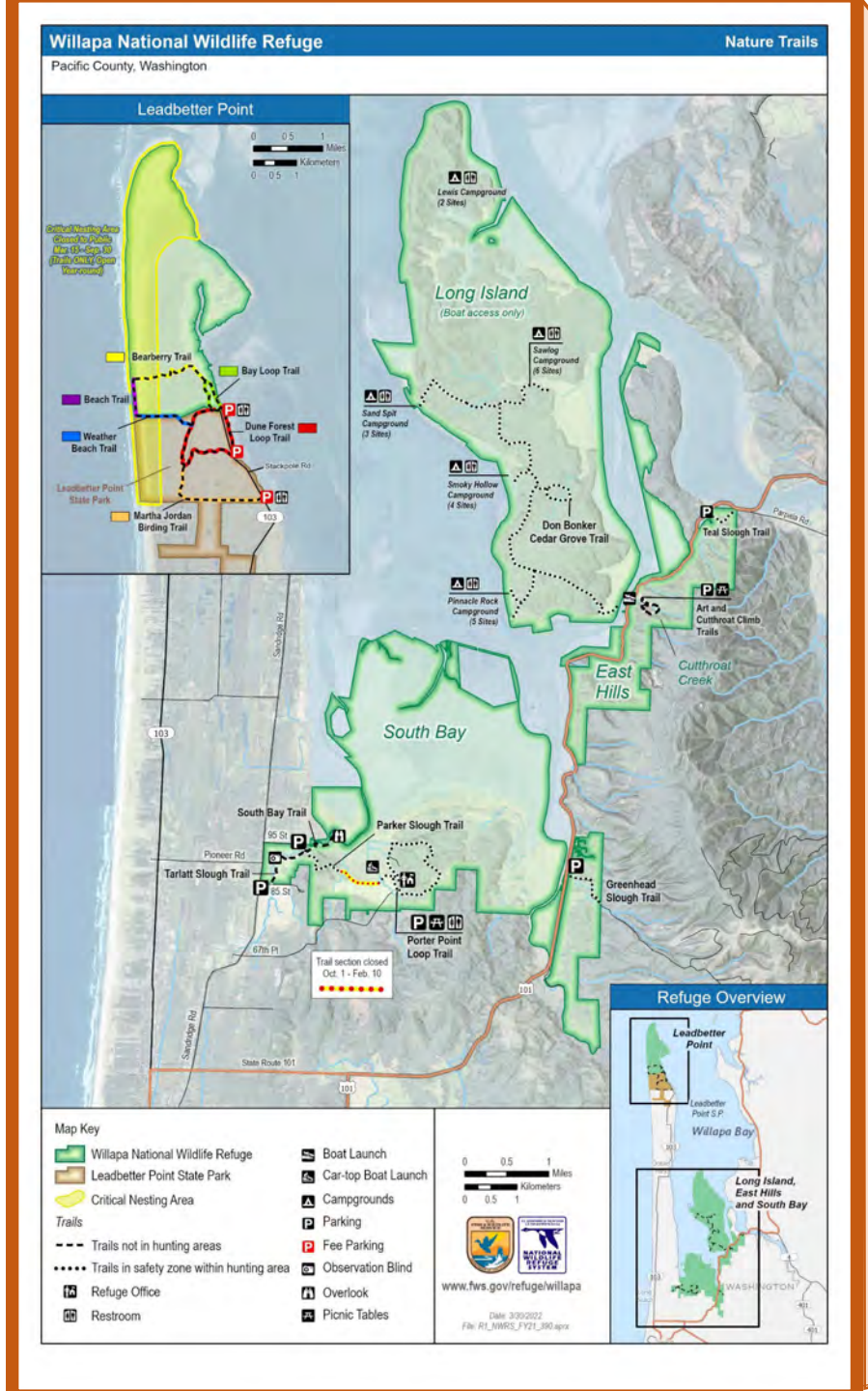


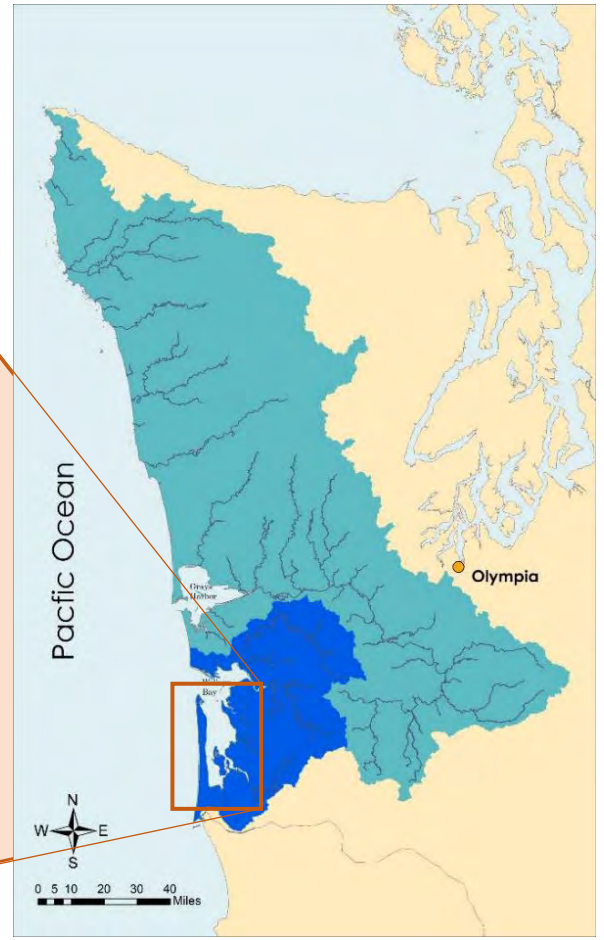
Limiting factors for salmon habitat:

- fine sediment – decom. forest roads
- lack of wood – LWD inputs
- lack of gravel – LWD, gravel supplement
- high water temperature – riparian shade
- fragmented habitat – acquisition of key habitats

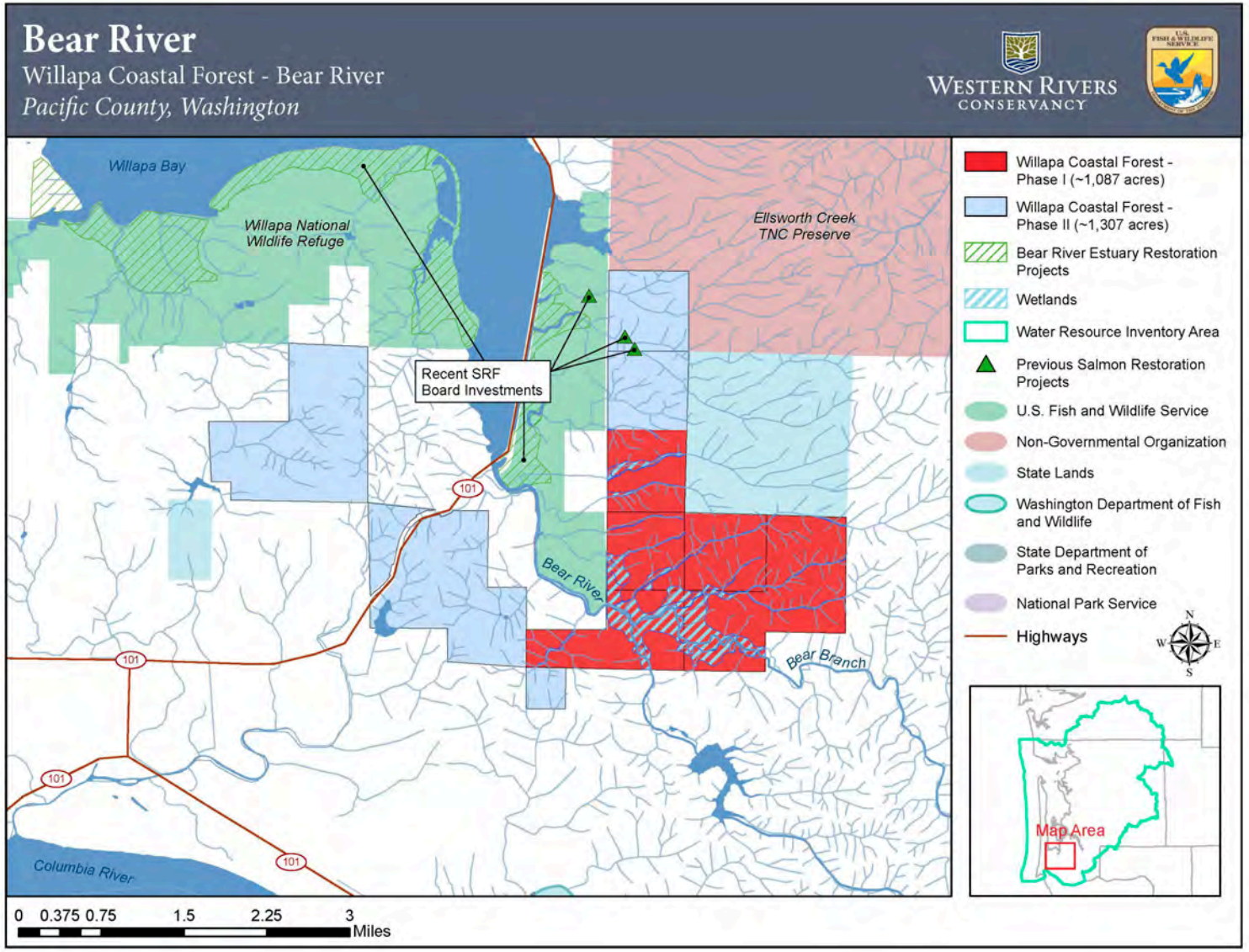
"various appropriate acquisition and or acquisition/restoration projects may often be the only and best way to restore land throughout the watershed" (2007: pg. 101).

Willapa National Wildlife Refuge





Building on Decades of Investment



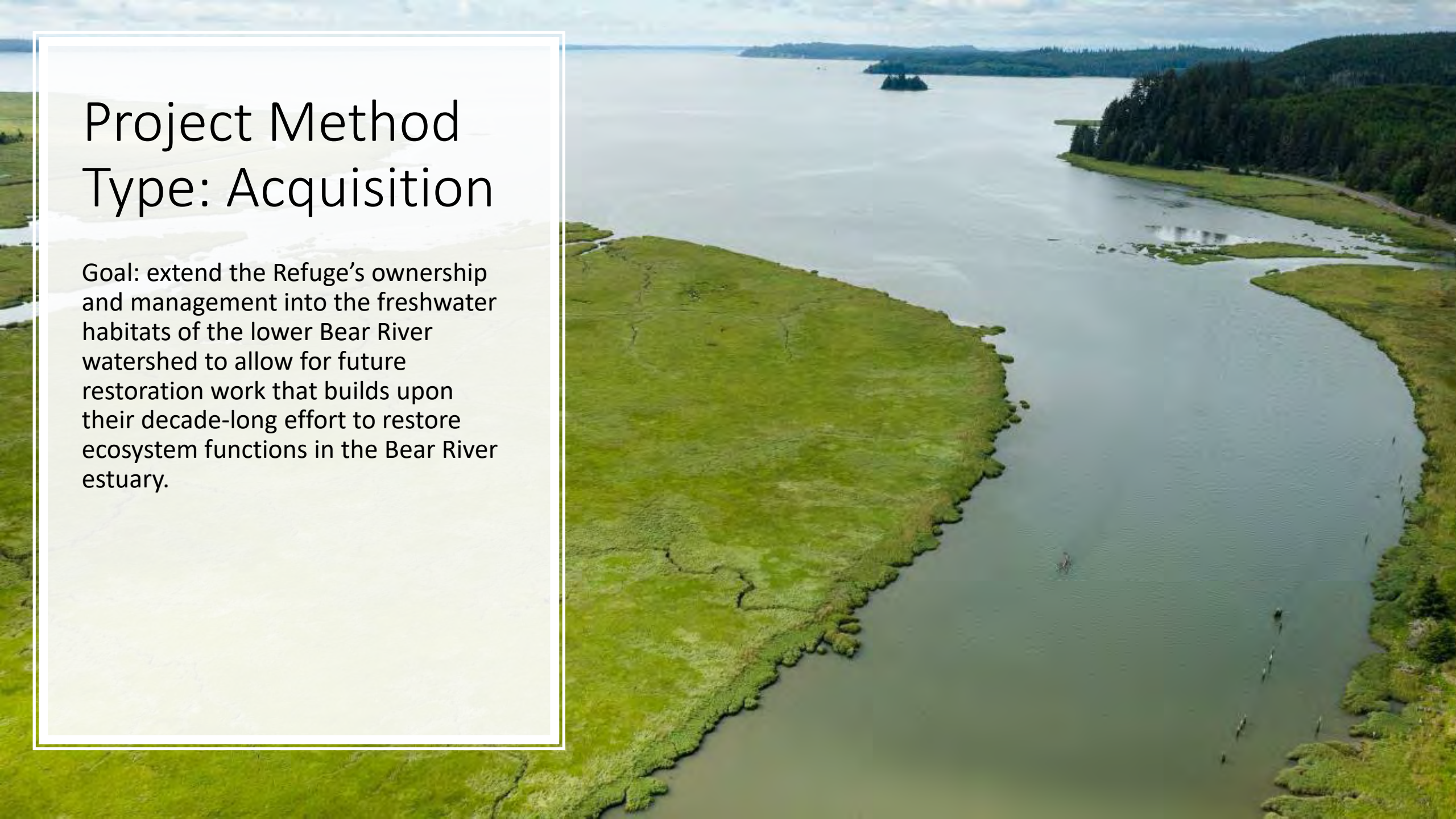
Project Strategy

"…various appropriate acquisition and or acquisition/restoration projects may often be the only and best way to restore land throughout the [Bear River] watershed."

- Pacific County Strategic Plan for Salmon Recovery (2007 update)

Project Method Type: Acquisition

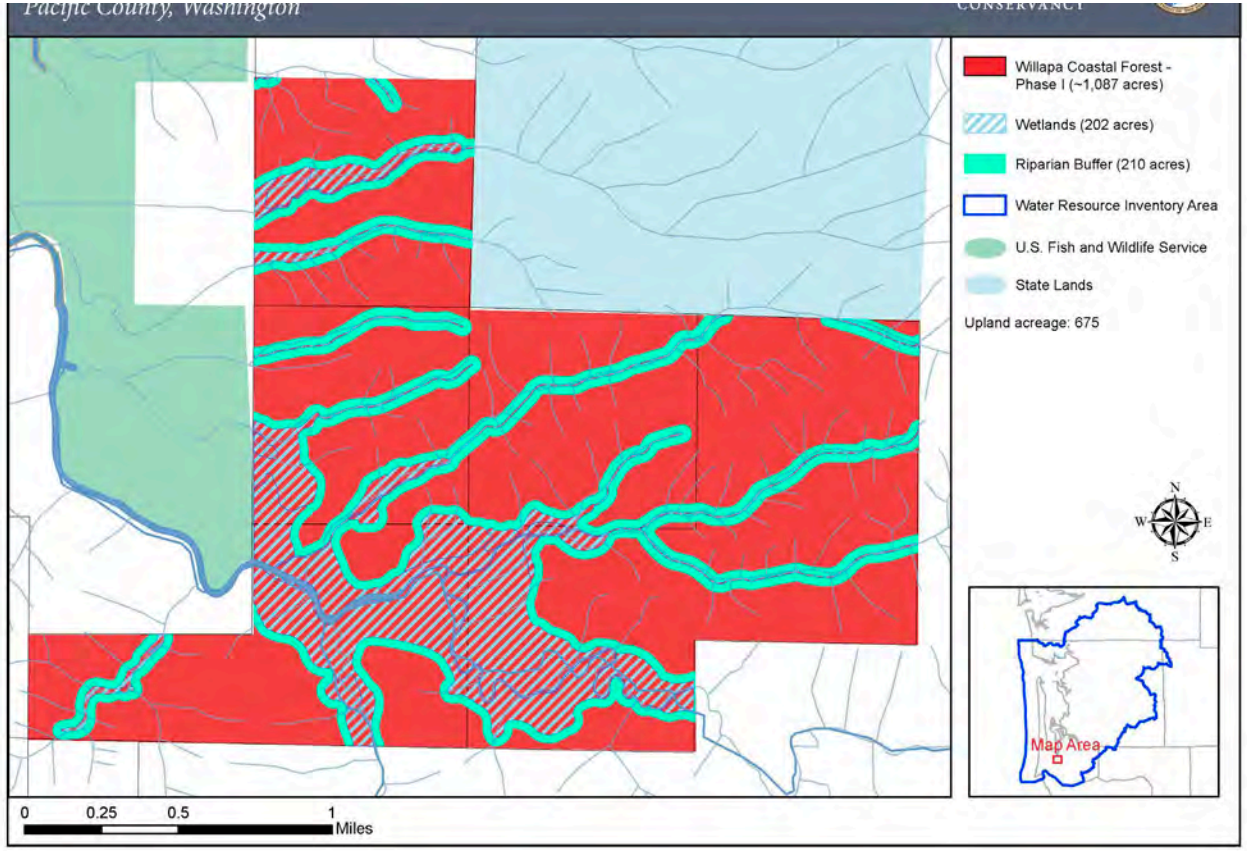
Goal: extend the Refuge's ownership and management into the freshwater habitats of the lower Bear River watershed to allow for future restoration work that builds upon their decade-long effort to restore ecosystem functions in the Bear River estuary.



Life Histories and Species Diversity

Salmonid Habitat Quantity and Quality

- 19 miles of stream (total 38)
- 3 miles of Bear River and Bear Branch
- 210 acres of riparian areas
- 202 acres of wetlands (incl. 3 ac tidal)
- 675 acres of uplands



Riparian Forest and Native Vegetation

Sediment Control

Public Benefits

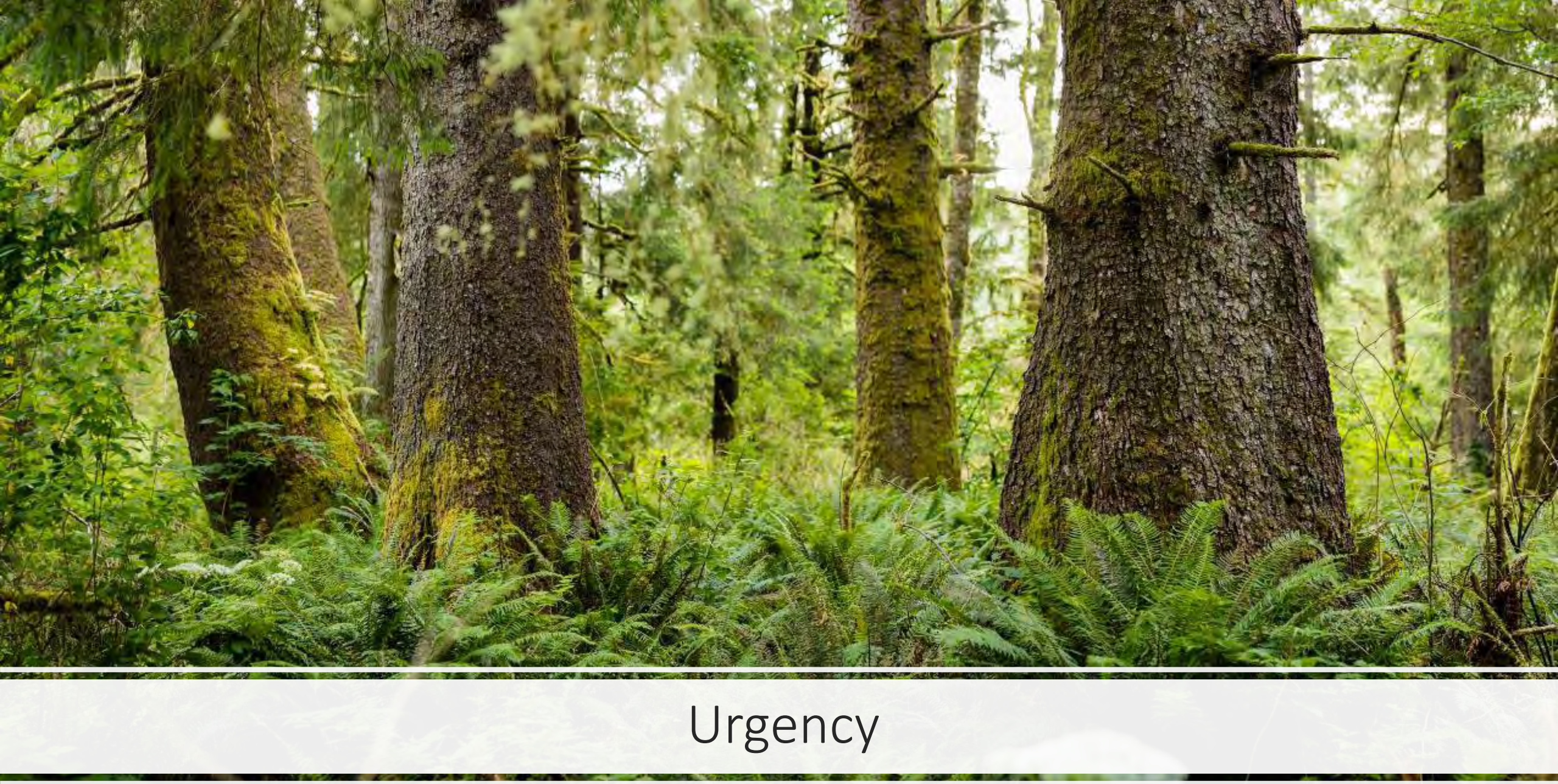
Likelihood of Success: Project Status

- WRC has a 33-year track record conserving rivers around the West
- Project team:
  - Nelson Mathews, Vice President, WRC
  - Alex Barton, Project Manager, WRC
  - Jackie Ferrier, Project Leader, USFWS
  - Consultants
- Project Milestones

Budget

SRFB Funds	Cost
Land	$4,794,000

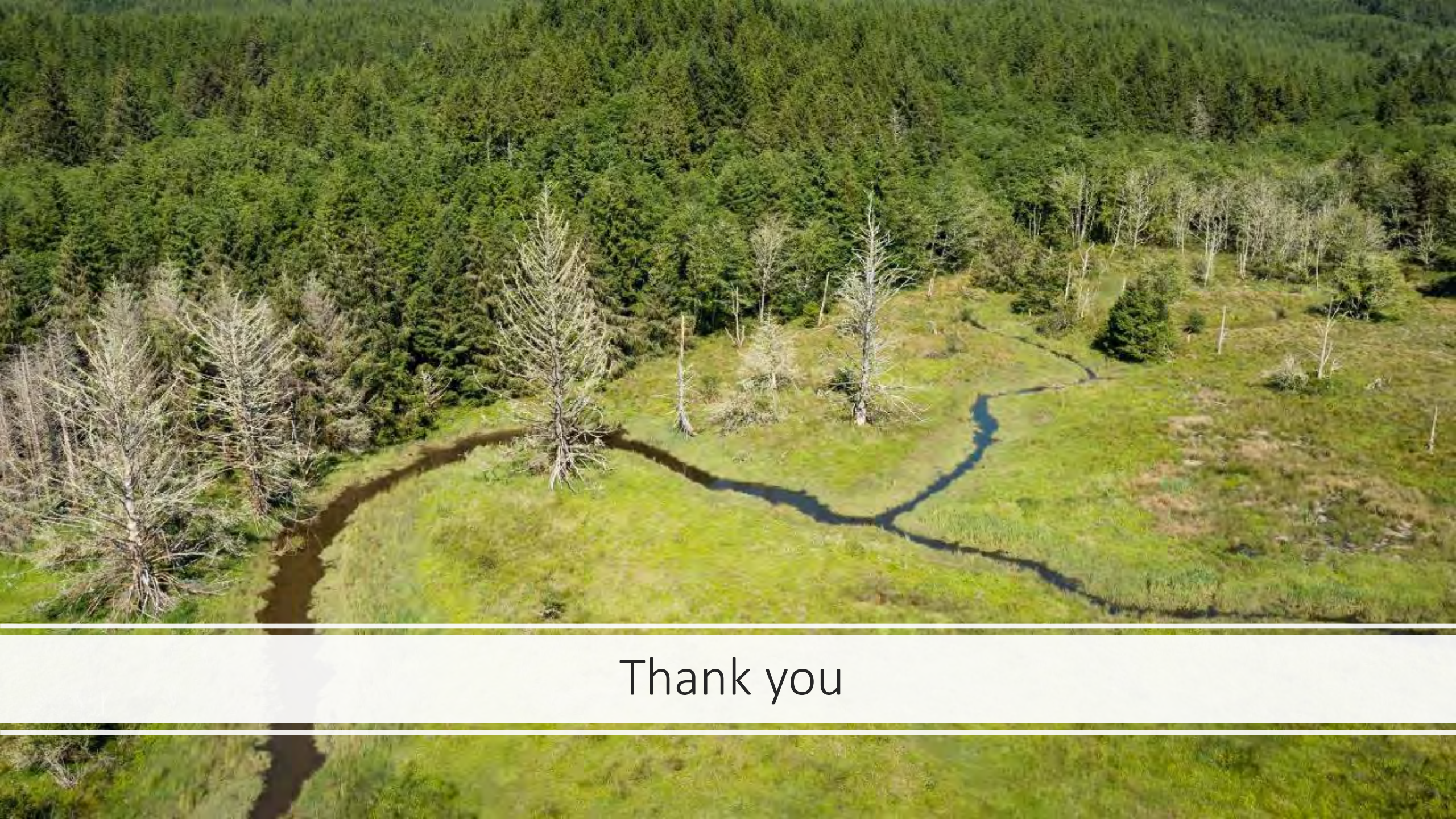
Match Source	Amount
Land and Water Conservation Fund (WRC is seeking funding)	$206,001
Total	**$5,000,001**



Urgency

Local Community Support

- Letters of support:
  - Willapa National Wildlife Refuge
  - Friends of Willapa National Wildlife Refuge
  - The Nature Conservancy
  - Audubon Washington
  - Columbia River Estuary Study Taskforce
  - Ducks Unlimited
  - Pacific County Board of Commissioners
  - Pacific County Visitors Bureau



Thank you

Upper Columbia Region

Large Supplemental Funding 2022

Dave Hecker (UCSRB)

Sugar Reach Channel Reconnections Implementation

Methow Salmon Recovery Foundation (MSRF)

Tara Gregg (Project Manager)
Chris Johnson (MSRF President)

Regional Process

- Timeline and Regional Deadlines
- Presentations
- Regional Technical Team Scoring
- Citizen Advisory Committee Ranking

Technical Scoring and Citizen Ranking Outcomes

RTT Scoring

Project	Score
Nason Creek and State Route 207 – (Phase 1)	73
Wenatchee-Chiwawa Irrigation District Instream Flow Improvement	72
Sugar Reach Channel Reconnections Implementation	71
Icicle and Peshastin Irrigation Districts Instream Flow Improvement	68

CAC Ranking

Project	Rank
Sugar Reach Channel Reconnections Implementation	1
Nason Creek and State Route 207 – (Phase 1)	2
Wenatchee-Chiwawa Irrigation District Instream Flow Improvement	3
Icicle and Peshastin Irrigation Districts Instream Flow Improvement	4

1st Alternate:
Nason Creek and State route 207 – (phase 1)

- **Sponsor**: Yakama Nation Fisheries

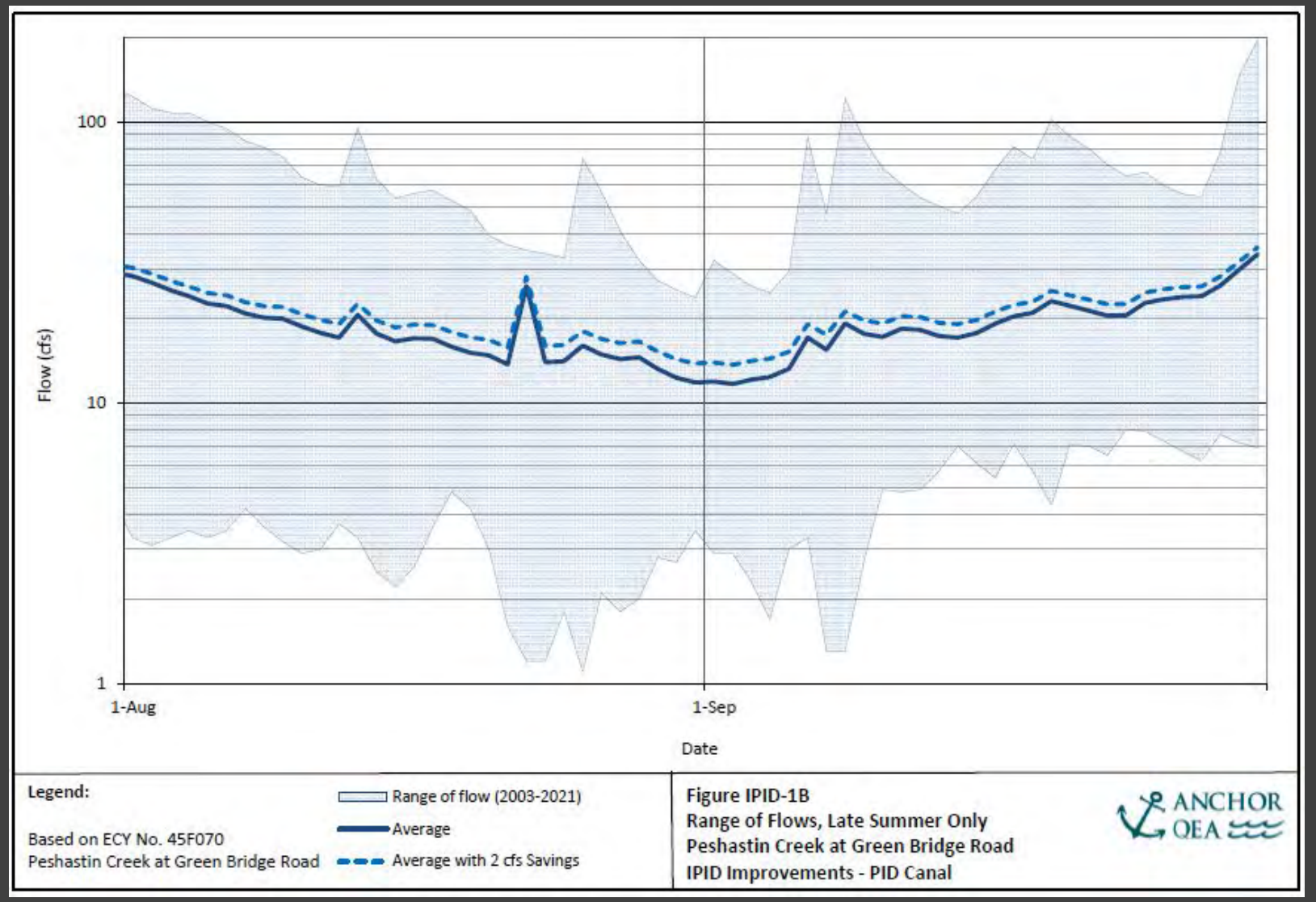
- **Project Goals:**
  - Relocate 0.65-mile segment of HW 207 out of floodplain

- **Estimated Project Cost:**
  - $8,616,780

2nd Alternate:

Icicle Peshastin Irrigation District Instream Flow Project

- **Sponsor**: CCNRD
- **Project Goals**:
  - Divert 2 CFS to Peshastin Creek & 3 CFS to Icicle Creek
- **Estimated Project Cost:**
  - $5,115,787



METHOW SALMON
RECOVERY FOUNDATION

Sugar Channels Reconnections

Supporting Salmon, Supporting Community

Floodplains by Design
· REDUCING RISK, RESTORING RIVERS ·

Bonneville
POWER ADMINISTRATION

HCP Tributary Committees

METHOW SALMON
RECOVERY FOUNDATION

BUREAU OF RECLAMATION

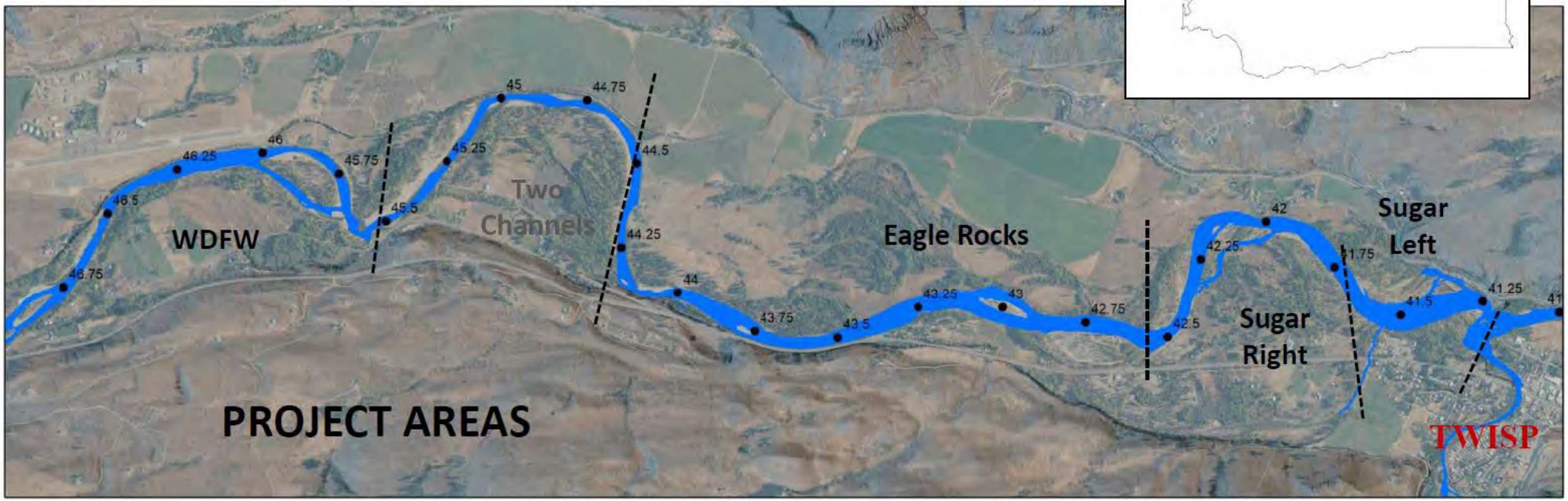
WASHINGTON STATE
RECREATION AND CONSERVATION OFFICE
Salmon Recovery Funding Board

Washington Department of FISH and WILDLIFE

US Army Corps of Engineers

WASHINGTON STATE DEPT OF
NATURAL RESOURCES

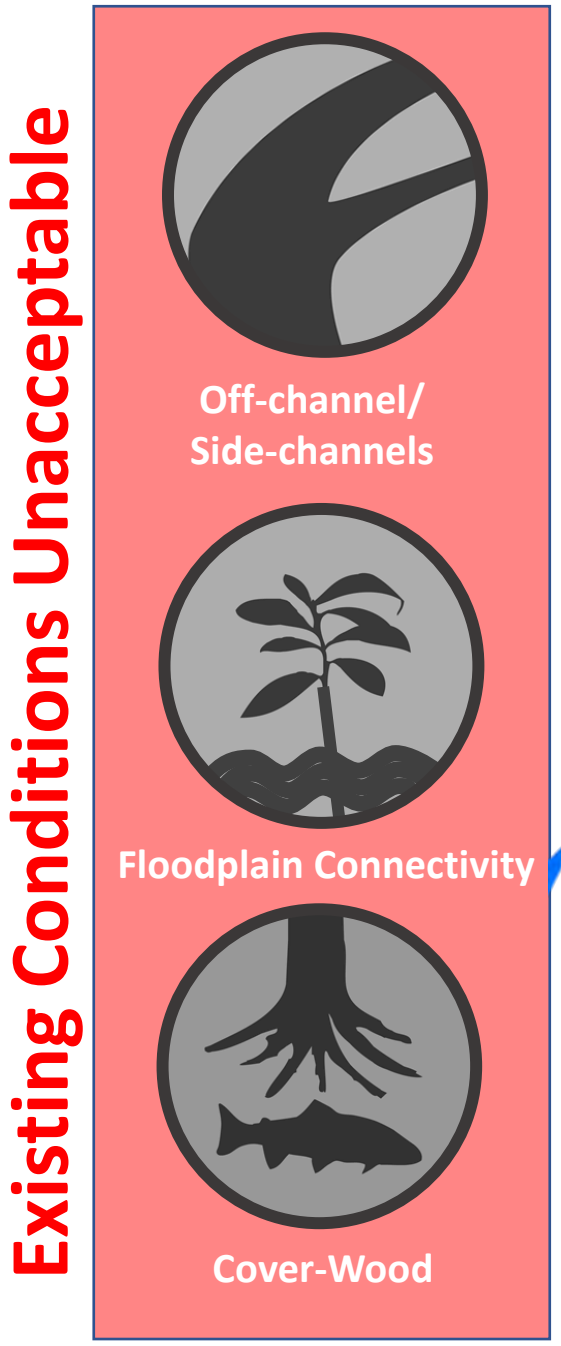
Sugar Reach Channel Reconnections Vicinity Map



Subbasin: Methow

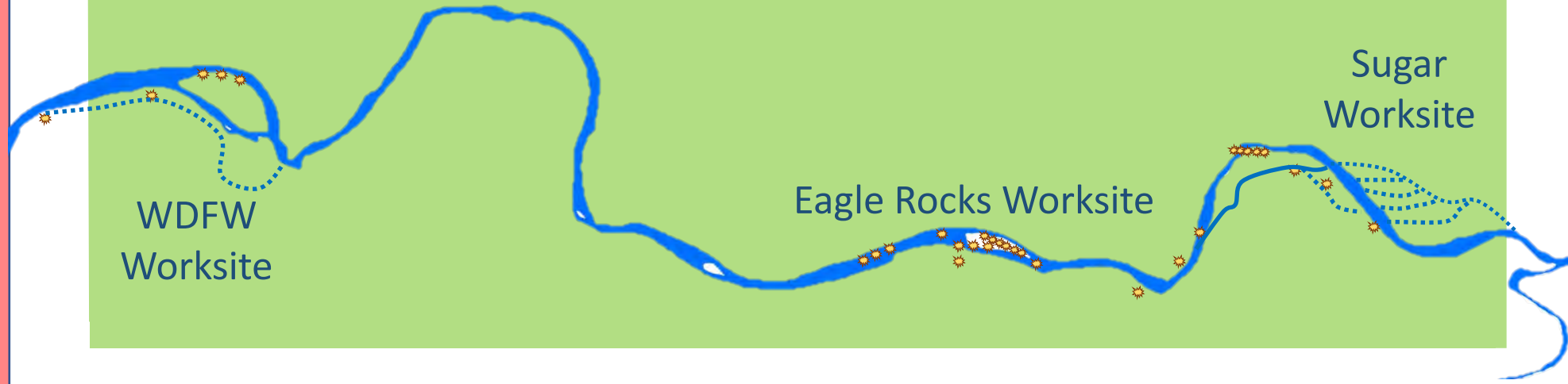
Assessment Unit: Methow River Thompson

Reaches: Methow River Thompson 01, 02, 03, & 04

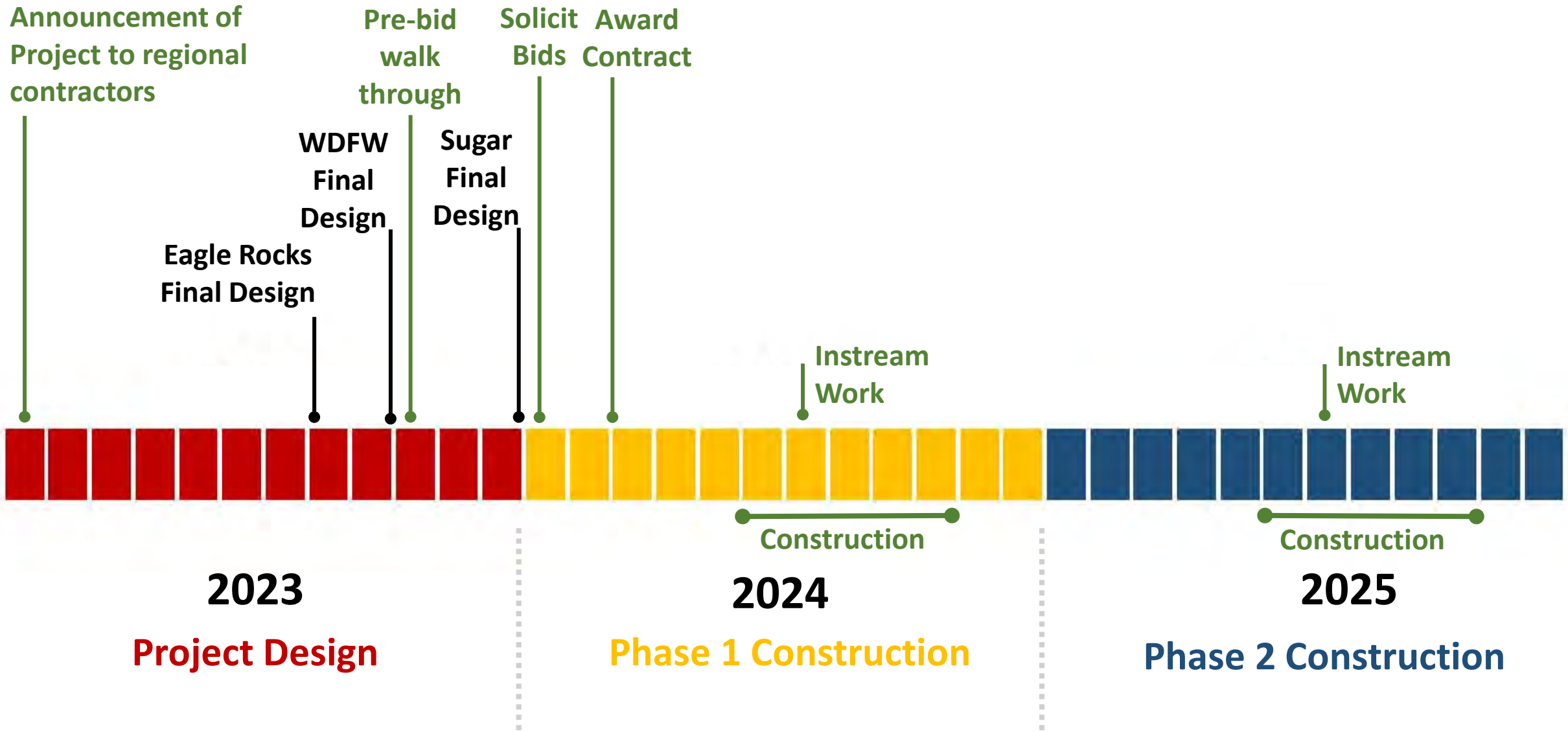


Restoration Target

44	2.9	9.0	11.6	2.6
Wood Structures	Miles of Floodplain Channels	Acres of Riparian Planted	Acres of Floodplain	Miles of Side-channel



Reach Scale Benefits 4.1 Total Miles of Stream



Project Implementation

Economics of the Sugar Reach

$7,386,511 =

* Includes 30% contingency in alignment with preliminary design cost estimate standards

Cover-Wood
44 Structures
Riparian Plantings
9 Acres

+

Off-channel/
Side-channels
5.5 Miles

+

Floodplain
Connectivity
11.9 Acres

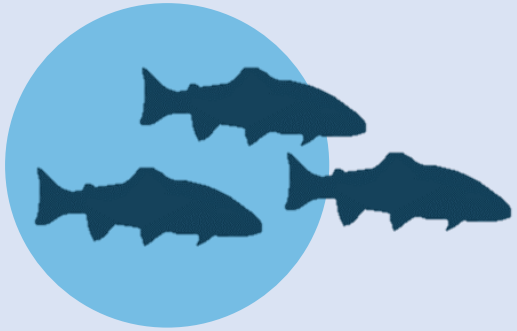
+

51 Jobs

+

Local Economy Support

+



More Fish

Anticipated Construction Funding Match:

Floodplains by Design
· REDUCING RISK, RESTORING RIVERS ·

Bonneville
POWER ADMINISTRATION

Questions and Discussion

Community

Cover-Wood

Off-channel/
Side-channels

Floodplain
Connectivity

WASHINGTON STATE RECREATION AND CONSERVATION OFFICE
Salmon Recovery Funding Board

Salmon Recovery Funding Board Decision Memo

Item 5

APPROVED BY RCO DIRECTOR MEGAN DUFFY

Meeting Date: December 7, 2022

Title: Future Funding Pathways – 2023 and 2024

Prepared By: Jeannie Abbott, GSRO Program Coordinator
Nick Norton, RCO Policy and Planning Specialist

Summary
This memo discusses options should increased funding become available in 2023 via NOAA and the Pacific Coast Salmon Recovery Fund (PCSRF) given the passing of the Infrastructure Investment and Jobs Act (IIJA). This memo also summarizes a path forward for a 2024 Targeted Investment Grant Round should funding be available. There are two different requests of the Salmon Recovery Funding Board (board) as part of this agenda item:

1) A decision regarding how to allocate any funding received via PCSRF in 2023 that results in a grant resources above the status quo grant round of $18 M

2) A decision regarding updating Targeted Investment (TI) objectives and criteria in preparation of the 2024 Targeted Investment Grant Round

Board Action Requested

This item will be a:
- ☒ Request for Decision
- ☒ Request for Direction
- ☐ Briefing

PCSRF 2023

As part of the passage of the Infrastructure Investment and Jobs Act (IIJA), NOAA received additional funding for Pacific Coast Salmon Recovery Fund (PCSRF) for five fiscal years (2022-2026). In fiscal year 2022, NOAA received PCSRF applications as normal and then determined how much funding applicants would receive from either IIJA or regular PCSRF funds. RCO received $24 million total, $6 million in PCSRF IIJA and $18 million in regular PCSRF. RCO distributed these funds to projects that were reviewed

and ranked during the lead entity grant round and targeted investment grant round and approved at the September Salmon Recovery Funding Board (board) meeting. Based upon the 2022 grant, RCO anticipates the maximum grant request in 2023 to be $25 million in PCSRF and PCSRF IIJA combined. When completing the application, RCO needs to be aware of the amount of regular PCSRF funds needed for RCO programs and activities. If the 2023 federal award provides funding above the annual statewide status quo funding of $18 million, RCO staff requests a decision from the board about how to distribute those dollars.

Staff developed possibilities to address this issue.

Option 1: Regional allocation
Any additional PCSRF funds would be distributed via the regional allocation formula.

Option 2: Regional allocation plus

Any additional PCSRF funds would be distributed via the regional allocation formula. Each region would be required to include on their project list at least one project that meets the IIJA objectives as identified in NOAA's Notice of Funding Opportunity. They include:

- Projects that result in an increase in miles accessible and acres restored that are most impactful, large in scale, regionally significant habitat restoration projects that will provide measurable and lasting benefits to the climate resilience of salmon populations and their habitat.

- Making efforts to engage with underserved communities as defined in Executive Order 13985

Regions should focus on their highest priority projects that are challenging to fund within the regular grant round allocation. Regions may combine base allocation funds with any additional IIJA funds to undertake a project/projects that meet the IIJA focus identified above. Criteria and ranking for these projects would need to be determined by staff, regions, and review panel members.

Projects would follow the normal grant round calendar – applications due in June, reviewed and scored by review panel, and approved at the September board meeting.

Option 3: Region large project list

Utilize unfunded or partially funded projects from the 2022 grant round. This could include projects that were reviewed and ranked from 2022 Targeted Investment and/or

large supplemental projects. Criteria and ranking for these projects would need to be determined by staff, regions, and review panel members, however projects should meet the IIJA objectives identified above in Option 2.

Projects would follow the normal grant round calendar – applications due in June, reviewed and scored by review panel, and approved at the September board meeting.

Grant Round Scenarios

	2023 Grant Round	**2024 Grant Round** **For the 2024 grant round, the board may select to combine all funds (TI & IIJA) greater than the $18M grant round for one Targeted Investment project selection process*
Option 1 **Regional Allocation**	• Regular grant round • Regional allocation for PCSRF IIJA	• Regular grant round • Regional allocation for PCSRF IIJA • TI grant round for 23-25 TI funding
Option 2 **Regional Allocation Plus**	• Regular grant round • Regional allocation for PCSRF IIJA o Project list must contain a project of regional significance, meeting IIJA objectives	• Regular grant round • Regional allocation plus for PCSRF IIJA • TI grant round for 23-25 TI funding
Option 3 **Large Project List**	• Regular grant round • Region large project list for PCSRF IIJA (NOAA objectives)	• Regular grant round • TI grant round for 23-25 • Region large project list for PCSRF IIJA

Targeted Investment 2024 - Objectives and Criteria Development

In September 2020, the board approved the Targeted Investment policy. The policy had five Targeted Investment priorities: approaching recovery, orca recovery, populations at risk, future threat abatement, and emergency response priority.

In June 2021, the board approved the evaluation process and scoring criteria for Targeted Investments. Each priority has its own criteria. The board chose orca recovery as the Targeted Investment priority for the '21-'23 biennium. Concerns were raised at the board meeting about the criteria. Between the June and September meetings, staff worked with regions and lead entities to clarify the orca recovery criteria.

In September 2021, the board adopted the Manual 18, Appendix J Targeted Investment Program. This portion of the manual describes the process and evaluation criteria specific to orca recovery. If and when the board chooses a different targeted investment priority, Manual 18 will be updated with the criteria for that specific Targeted Investment priority and the previous priority criteria will be removed.

The board will be setting the 2023 and 2024 grant round amounts in June 2023 based on the 2023-2025 state capital budget. The Targeted Investment policy states that the board will adopt one or more Targeted Investment priorities each biennium. The targeted investment grant round for state capital funding is set to occur in 2024.

Staff would like to review the targeted investment criteria with the regions, lead entities, and review panel members to address concerns. Staff will bring proposed criteria changes to the board for decision at the June 2023 meeting, prior to the board selecting the 2024 Targeted Investment priority. Establishing the criteria now for all the targeted investment priorities allows the board to have multiple options when choosing a targeted investment priority in future biennia.

Strategic Plan Connection

Goal 1: Fund the best possible salmon recovery activities and projects through a fair process that considers science, community values and priorities and coordination of efforts.

Motions

2023 PCSRF IIJA Project Selection Motion Options:

Move to use the regional allocation formula to select projects for funds over the $18 million statewide status quo grant round allocation.

OR

Move to use the regional allocation formula to select projects for funds over the $18 million statewide status quo grant round allocation. Each region must include on their project list at least one regionally significant habitat project, consistent with NOAA IIJA objectives.

OR

Move to use regional large list to select projects for funds over the $18 million statewide status quo grant round allocation. Criteria and ranking for these projects would need to be determined by staff, regions, and review panel members by the June board meeting.

Target Investment Motion

Move to recommend that staff review the criteria for the Targeted Investment program. Staff will provide updates to the SRFB at the March meeting.

WASHINGTON STATE RECREATION AND CONSERVATION OFFICE
Salmon Recovery Funding Board

Salmon Recovery Funding Board Decision Memo

Item 6

APPROVED BY RCO DIRECTOR MEGAN DUFFY

Meeting Date: December 7, 2022

Title: Manual 18 2023 Updates

Prepared By: Nicholas Norton, Policy and Planning Specialist
Kathryn Moore, Senior Outdoor Grants Manager

Summary
This memo summarizes the proposed policy changes and administrative revisions to *Manual 18: Salmon Recovery Grants* for the 2023 grant round. These revisions incorporate changes resulting from suggestions from the Technical Review Panel and Recreation and Conservation Office staff, and feedback and edits from regions, lead entities, and project sponsors.

Board Action Requested

This item will be a:
- ☒ Request for Decision
- ☐ Request for Direction
- ☐ Briefing

Introduction/Background

Salmon Recovery Grants Manual 18 contains the instructions and policies needed for completing a grant application for submission to the Salmon Recovery Funding Board (board) and managing a funded project. The board approves large policy proposals contained in Manual 18; the Recreation and Conservation Office (RCO) director has authority to approve administrative changes and minor policy clarifications.

The proposed policy revisions to Manual 18 for 2023 include changes to Appendix D, prohibited and allowed uses, design-only match waivers, and large project definitions, among others. Complete descriptions of these changes are included below. Proposed policy changes regarding the acquisition of upland habitat are also being presented as an option for inclusion in Manual 18 for the 2023 grant round but will be presented separately in Item 7.

RCO staff is presenting final changes to Manual 18 for approval by the board so that the manual can be finalized for the start of the 2023 grant round. If the policy changes are approved, RCO will update the manual to include both board-approved and director-approved administrative changes or minor policy changes.

Manual 18 Changes Proposed for 2023 Grant Cycle

Policy Changes

The following policy changes are being presented for approval by the board in preparation for the 2023 board grant round:

- **Design-Only Match Waiver.**
    - Increase the eligibility cap for design-only match waivers from $200,000 to $350,000.
    - Increase the required timeline for completion of design-only projects without match from 18 months to 2 years.

- **Large Restoration Projects (*see additional analysis below*).**
    - Increase threshold where preliminary design deliverables are required prior to application for construction funding from $250,000 to $350,000.

- **Prohibited and Allowed Uses.**
    - Clarify that use of SRFB-funded properties is limited to salmon recovery purposes. Inconsistent uses are prohibited unless specifically provided for in the manual or allowed as part of a grant agreement or RCO review.
    - Specify low-impact and cultural use as the type of public use appropriate for board-funded acquisitions.
    - Add a list of allowable public use infrastructure (parking areas and associated roads, trail infrastructure, fencing and gates, signage and kiosks, recreational amenities like benches and tables) along with design considerations to limit impact.
    - Limit allowable public use infrastructure eligible for SRFB reimbursement to eligible costs described in RCO Manual 3 or Manual 5.

- Add a list of allowable maintenance infrastructure (storage and maintenance sheds, fencing).
- Limit allowable maintenance infrastructure eligible for SRFB reimbursement to eligible costs described in RCO Manual 3 or Manual 5.

- **Cost Increase Procedure.**
  - Describe the current process for requesting a cost increase using available funds on hand at RCO or going through the grant round.
  - Set the board application deadline as the required date to request RCO approval of a cost increase amendment as part of a lead entity grant round.

- **Appendix D: Design and Restoration Project Deliverables.**
  - Create a new "Technical Expectations" section to provide more detail on best practices required for all site-specific restoration projects.
  - Expand the deliverables table and give additional information on when these deliverables are required as part of a specific design stage (at application, at agreement, prior to closing, etc.).
  - Collapse the sub-appendices D-1 to D-4 and provide more detailed definitions of each deliverable in the table in a single section.

- **Design-Build Projects (in Appendix D).**
  - Change the name to "field-fit" to better describe this project pathway.
  - Provide more clarity and specificity on the criteria needed to be eligible (experienced applicant, less complicated project type, low liability, straightforward design).
  - Set conceptual design deliverables as a minimum requirement prior to application for "field-fit" projects requesting less than $350K from the board.
  - Set preliminary design deliverables as a minimum requirement prior to application for "field-fit" projects requesting more than $350K from the board.

- **Appendix K: Targeted Investments.**
    - Include option of using Targeted Investment to leverage additional new, non-state funding opportunities (e.g., Infrastructure Investment and Jobs Act).
    - Generalize policy language so it can accommodate shifts in priorities and annual timelines across years.

Administrative Updates and/or Policy Clarifications

RCO staff have made the following administrative changes and policy clarifications to Manual 18 and the PRISM application:

- **General.** Included a new 2023 grant round timeline, updated contact information, new links, and resources, etc.
- **Permitting.** Updated language to align with new streamlined permitting processes at the state level.
- **Appendix B: Puget Sound Acquisition and Restoration (PSAR) Fund.** Clarify cost increase hierarchy in Puget Sound; updates in the Puget Sound Acquisition and Restoration process by Puget Sound Partnership and the Puget Sound Salmon Recovery Council.
- **Appendix J: Targeted Investments.** Edited to reduce redundancies.
- **Appendix K: Riparian Planting Projects.** Edited to reduce redundancies and increase clarity.
- **Acquisition Stewardship Plan.** Updated outline template to request more information about public access and infrastructure.

Large Restoration Projects: Background & Analysis

Manual 18 currently defines *large restoration projects* as those "where the applicant is requesting more than $250,000 in funding from the board for restoration and design." If a project is defined as large, it is prevented from applying for funding that includes construction costs until preliminary design deliverables are submitted with the final PRISM application.

This policy was approved and implemented as part of the 2013 grant round. The intent of the policy was to improve project success and completion by ensuring that large, more complex projects can be appropriately vetted by technical experts before obligating greater sums of money from a limited pool to a single sponsor. As projects advance through the preliminary design phase, more detailed and reliable analyses and construction cost estimates are developed.

This large project threshold and its associated design requirements have not been changed since 2013. Increasingly, there have been larger, more complex projects that are requesting less than $250,000 from the board, but with a substantial proportion of outside match or leveraged funding that make up the total project costs. In response to these trends and based on analysis of previously funded project data and practitioner feedback and experience, staff is recommending increasing this number to $350,000 to 1) keep pace with the increasing costs and complexity of projects, and 2) help speed up implementation for larger-scale restoration projects.

However, significantly increasing the preliminary design threshold also comes with potential concerns and risks. These include:

1) lower project certainty and success as larger, more complex projects requesting from $250,000 to $350,000 will no longer be required to go through rigorous technical vetting as part of a grant application at later stages of design.

2) increases in the amount of project conditioning, whereby the technical review panel feels the complexity of a project would necessitate a technical review at the preliminary design stage even though it is no longer required in policy. This creates an additional capacity burden on review panel and staff members to track and manage conditions outside of the normal application process.

3) more cost increases, by increasing the threshold s this increases the chances that final design and construction costs will change from what was predicted at the initial stages of project development. This places an additional capacity burden on staff members to manage cost increase requests.

Given these potential risks, staff would like to track new restoration projects requesting between $250,000 and $350,000 from the board that include construction for the 2023 and 2024 grant rounds, to examine the impact of this change on project completion and success, as well as internal staff workload, project conditioning, and cost increase requests. This information could be used to inform further policy changes related to the threshold for preliminary design requirements at application for construction funding.

Stakeholder Feedback

RCO staff, the Technical Review Panel, sponsors, lead entities, and regions provided feedback throughout the year, which RCO then used to propose policy and administrative changes. Specifically, many of these proposed policy changes for the 2023 grant round were initiated by a combination of staff and Technical Review Panel as a result of the 2022 internal review process.

Once initial policy proposals were developed, staff briefed the board and received feedback on substantive potential changes during the September 2022 meeting. In addition, staff conducted initial briefings and listening sessions with the Washington Association of Land Trusts, the Washington Salmon Coalition, and the Council of Regions to further scope updates to Manual 18. In preparation for the December board meeting, full drafts of these proposed policies were sent to the regions, lead entities, and key project sponsors. These partners were given two weeks to provide edits and comments, all of which have been reviewed and incorporated into this final draft as appropriate.

Next Steps

After the board meeting, staff will add any approved policy changes into the manual, along with identified administrative updates and policy clarifications. Staff will circulate an updated draft of the manual to the lead entities and regions for their review before publishing. Staff expects to release the updated manual in mid-December 2022.

Strategic Plan Connection

Developing Manual 18 policy updates for board consideration supports **Goal 1:** *Fund the best possible salmon recovery activities and projects through a fair process that considers science, community values and priorities, and coordination of efforts*.

By sharing information about Manual 18, the board and partners are aware of how projects proceed through the grant round process for funding.

Actions requested

Motion: Move to accept policy changes to the following Manual 18 sections as further presented by staff:

- Design-only Match Waivers
- Prohibited and Allowed Uses
- Cost Increase Procedures
- Appendix D Deliverables
- Design-Build Projects

- Appendix K

WASHINGTON STATE RECREATION AND CONSERVATION OFFICE
Salmon Recovery Funding Board

Salmon Recovery Funding Board Decision Memo

Item 7

PROVED BY RCO DIRECTOR MEGAN DUFFY

Meeting Date: December 7, 2022

Title: Upland Acquisitions Policy Options

Prepared By: Leah Dobey, Policy Specialist
Nicholas Norton, Policy and Planning Specialist

Summary
This memo summarizes options for the Salmon Recovery Funding Board (board) to proceed on a potential policy relating to the funding and match requirements of board acquisition projects that include, to varying degrees, upland acreage. The options presented include:

- Approve a policy for 2023 grant round that defines upland acres and sets standards for increased match based on the percentage of upland acres in a proposed acquisition; or
- Develop acquisition-specific criteria in Manual 18, Appendix F to support sponsor project development and technical review of acquisition projects with upland components; or
- Take no action currently.

Board Action Requested
This item will be a:
☒ Request for Decision
☐ Request for Direction
☐ Briefing

Introduction/Background

The acquisition of interests in land through fee-simple or conservation easement acquisition is an eligible project type in Manual 18 and is core to the salmon recovery strategy of many regions that apply for Salmon Recovery Funding Board (board) funding. It is not uncommon for sponsors to apply for board funding for acquisition projects that include "upland" habitat with varying degrees of direct benefit to salmon recovery objectives. If a project on a lead entity ranked list has significant upland acres

that do not have a clear and direct nexus with the salmon recovery objectives of the acquisition, it raises the question of whether, and to what extent, board funding should be used as part of the overall purchase.

There is minimal policy direction for how the board Technical Review Panel should proceed with these types of projects. There is no board-approved policy regarding fundable habitat types or acquisition-specific criteria beyond general cost-benefit considerations that guides decisions regarding if, and under what specific conditions, these types of acquisitions should or should not be labeled a *Project of Concern*.

Increased Match

In the absence of clear policy, an informal practice has developed internally with the primary goal of ensuring the most beneficial use of limited board funds. If an acquisition project has significant "upland" areas outside the floodplain, channel migration zone, steep slopes, and associated buffers, sponsors are typically asked as early as possible in the review process whether they can provide additional match beyond the required 15 percent that is roughly equivalent to the percent of upland acres.

Anecdotal evidence suggest that entities have been quite successful in leveraging additional match when requested; the nature of acquisition costs relative to the amount of board money available locally means that entities are often already leveraging additional outside funds well beyond the baseline 15 percent match requirements to complete an acquisition project. However, this informal practice leads to negotiations that do not have a firm basis in policy, resulting in disparate outcomes and unpredictability for staff, Review Panel members, and sponsors.

As part of the policy development process, staff reviewed data from 228 board-funded fee-title acquisition projects greater than 10 acres with available non-zero match and upland metrics from 1999-2021 (see Figure 1). Analysis of this data revealed that:

- There is significant variation in the amount of match that has been reported based on the percentage of uplands within the acquisition area; and
- Of those projects where more than half of the acreage was uplands, nearly three-fourths of them (72 percent) reported greater than the minimum required match.

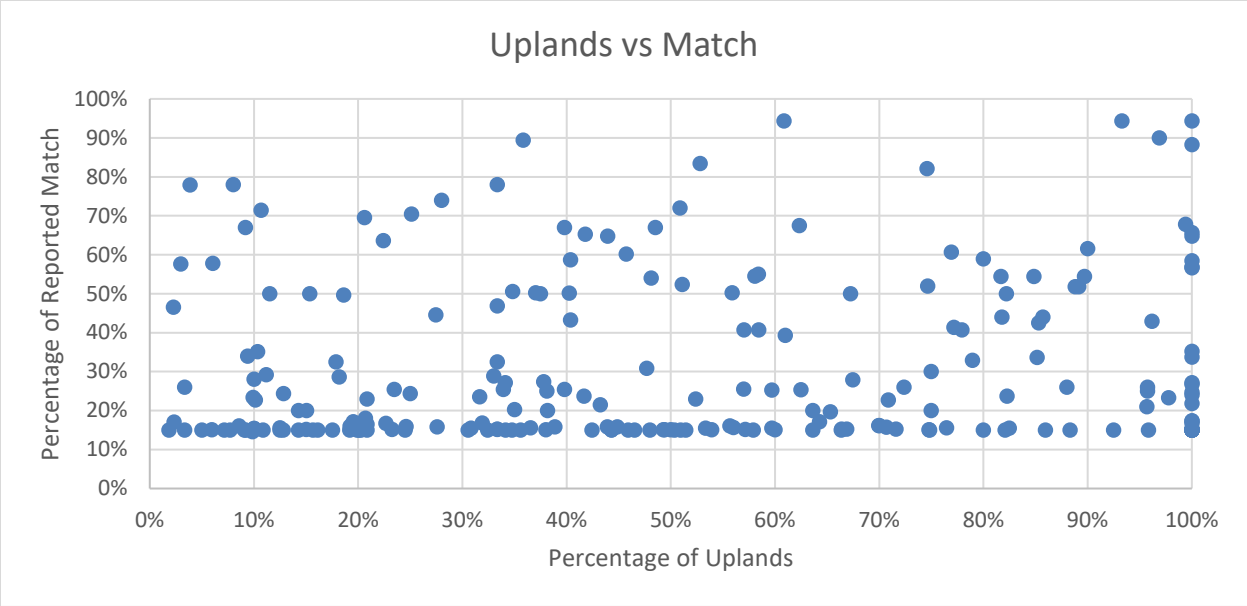


Figure 1. *Uplands percentage versus reported match percentage for fee-title acquisitions greater than 10 acres self-reporting uplands acreage since the establishment of the program.*

As a result, staff have developed policy options that would:

1) Ensure that board funds are used to fund acquisition projects with the highest impact to salmon and high benefits relative to costs.
2) Increase certainty for sponsors so they know well in advance how much additional funds would be necessary to complete an acquisition with uplands components.
3) Reduce disparate outcomes based on different interpretations and values among staff, Review Panel members, and sponsors.

Option 1: Tiered Match Approach

In the tiered match approach, the board could approve the policy as drafted in Attachment A to be included in Manual 18 for the 2023 grant round. As written, the policy has three major pieces:

- Establishes a clear method for identifying "upland" habitat based on buffers around existing riparian, wetland, and marine features on the proposed project area.
- Requires additional matching funds beyond 15 percent for projects with greater than 50 percent upland acres.

- Allows for flexibility and additional review in cases where the Review Panel determines that the cost-benefit of the upland acres is sufficient.

The initial draft of this policy was developed by Recreation and Conservation Office (RCO) staff in collaboration with members of the Review Panel during the spring and summer of 2022, largely to codify the existing informal practice and create consistency across acquisition projects. The board was briefed on the issue, the general proposed approach, and provided comments at the September 21, 2022, board meeting. The initial draft of the policy was shared with the Washington Association of Land Trusts (WALT), the Washington Salmon Coalition (WSC), and the Council of Regions (CORs) for written comments. These entities were also given the opportunity to provide verbal feedback as part of multiple listening sessions over the month of September.

Given the nature of the feedback in response to this initial draft policy (comment summary provided below), staff have chosen to present a revised version and two additional options to the board for how to move forward in this policy area. Below is a summary of the general comments received and staff recommendation relative to the initial draft of Option 1.

Stakeholder Comment Summary

- Opposed to the core intent of the policy; the local ranking is where decisions about the value of acquisitions should be made.

  Staff Response: *While local project rankings are important, the board also has an interest in ensuring sufficient cost-benefit of funded projects. This allows each lead entity's funding allocation to be dedicated toward more projects if project costs outweigh the associated benefits.*

- The match requirements are excessively punitive and would be difficult to meet.

  Staff Recommendation: *Rather than requiring commensurate match when uplands are over 15 percent of the project area (the original draft), this version would only require additional match when at least 50 percent of the property is uplands. In addition, the maximum amount of match has been capped at 35 percent, which would be required for projects with more than 75 percent uplands.*

- The policy does not recognize the contributions of upland areas on riverine health and salmon recovery.

  Staff Recommendation: *Increased the threshold for when additional match would be required from 15 percent upland acres to 50 percent.*

- Sometimes, it is not possible to acquire less than the full parcel (i.e., the landowner needs to sell as one, local zoning does not allow a boundary line adjustment, needed for viable access, etc.) or the upland acreage may be far less expensive to purchase on a per acre basis than the riparian area.

  Staff Recommendation: *Increased the threshold for when additional match would be required from 15 percent upland acres to 50 percent. Additionally, the policy allows opportunity for exceptions like these to be considered by the Review Panel.*

If the board chooses Option 1, these changes will be incorporated into Manual 18 in preparation for the 2023 grant round.

Option 2: Development of Acquisition-Specific Criteria

In this approach, staff would work with stakeholders to develop acquisition-specific criteria to be incorporated into *Appendix F: SRFB Evaluation Criteria*. This would provide guidance for review of acquisition projects with upland components.

Appendix F lists criteria that the Review Panel uses to determine whether a particular project application is cleared, conditioned, needs more information, or should be considered a *Project of Concern*. The Review Panel does not otherwise rate, score, or rank projects as part of the lead entity grant round. If a project is labeled as a *Project of Concern* based on the criteria in Appendix F, it can have large potential implications for the project's likelihood of being funded if the problems are not addressed prior to the final application deadline.

Currently, the Review Panel uses Criteria #4 to assess the cost-benefit for all project types: planning/design, monitoring, restoration, and acquisition proposals. This criterion reads:

> *The project has a high-cost relative to the anticipated benefits and the project sponsor failed to justify the costs to the satisfaction of the SRFB Review Panel.*

Instead of relying on Criteria #4, the board may choose to adopt a policy approach that lays out a series of clear criteria that relate to the acquisition of upland acreage. This may not fully address disparate outcomes but would provide sponsors a clearer basis on which to make decisions about when and how to apply for acquisitions funding and improve the consistency of the technical review process as it relates to acquisitions with upland acreage. Manual 18 includes criteria that are specific to planning, monitoring, and riparian restoration projects, changes discussed here would be the first acquisition-specific criteria. These could be related to issues with a landowner who is unwilling to

split parcels; challenges with boundary line adjustments; the need for legal and/or viable access; situations where an appraisal shows uplands are far less costly; etc.

If the board chooses Option 2, staff will work with key stakeholders and the Review Panel to present proposed language to the board in time for potential inclusion in the 2024 grant round.

Option 3: No Action at This Time

The board may choose to take no action regarding the acquisition of upland acres and associated match or match exceptions. This would allow time for further conversations about the role of match for board funded projects as a whole.

On June 1, 2022, match was a significant area of discussion as part of the annual board retreat. Staff are currently scoping and preparing for an additional, in-depth discussion with the board beginning with the March 2023 board meeting. As part of this conversation, staff plans to address multiple areas of interest expressed by the board at the retreat, including the notion of variable match in connection with certain project types, project locations, or entities.

Match requirements relative to acquisitions with "upland" components falls within the purview of this discussion and could be deliberately examined as a potential area for the application of variable match based on the interests of the board.

Motion Options

Move to approve Option 1: Tiered Match Approach as presented by staff.

OR

Move to approve Option 2: Development of Acquisition Specific Criteria as presented by staff

OR

Move to approve Option 3: No Action at This Time as presented by staff

Strategic Plan Connection

Options 1 and 2 of this policy support **Goal 2** of the board's strategic plan: Be accountable for board investments by promoting public oversight, effective projects, and actions that result in the economical and efficient use of resources.

Attachment A

Attachment A. Proposed language changes and new Appendix X for Option 1.

Proposed Section 2: Eligible Applicants and Projects

Acquisition Projects (pg. 13)

Acquisition includes the purchase of land, access, or other property rights in fee title or less-than-fee, such as conservation easements. Grant applicants interested in acquiring conservation easements must be eligible to hold conservation easements under Revised Code of Washington 64.04.130. Project sponsors must complete all SRFB-funded **acquisition projects within 3 years** of funding approval unless additional time is necessary, can be justified, and is approved by RCO.

The SRFB has very specific due diligence, appraisal, reporting, and timeline requirements for acquisition projects so refer to the requirements and checklists in *Manual 3: Acquisition Projects*.

Note that any land costs incurred before the board funding date are ineligible for reimbursement or to be used as match unless the grant applicant receives a Waiver of Retroactivity before acquiring the property. To receive payment for land costs expended before a grant award, or to use the costs as match, the applicant must submit a written letter, with supporting documentation requesting a Waiver of Retroactivity **before** purchasing the property. Such a waiver allows the acquisition costs to be eligible through the next two consecutive SRFB grant cycles. Information on waivers is found in RCO's *Manual 3: Acquisition Projects*.

Applicants with acquisition projects must identify specific parcels. However, an applicant may propose purchasing multiple properties within stream reaches, estuaries, or nearshore areas if purchasing any parcel within the specified area will achieve the project's objectives. In that case, identify a geographic envelope, including all the possible parcels that will provide similar benefits to fish and certainty of success, in the salmon proposal. These parcels should be contiguous or nearly contiguous and include similar conservation values to make them effectively interchangeable when being evaluated for funding. Clearly describe how parcels will be prioritized and pursued for acquisition. Landowner Acknowledgement Forms are required with application. For multi-site acquisition projects, enter the top priority parcels with Landowner Acknowledgment Forms into PRISM.

Acquisition projects with greater than 50 percent of the total acreage quantified as uplands must provide more than the standard 15 percent match, as described under the Matching Shares section. For this purpose, uplands are those areas that fall outside of other specified habitat types and their buffers. See Appendix X.

The SRFB does not fund property acquired through condemnation, only property acquired from willing sellers.

All acquisitions are perpetual, including water right acquisitions.

It is important to remember that some activities are never allowed on SRFB-funded properties. Refer to the section on ineligible uses in this manual.

All property acquired in fee title with RCO grants must be available for public use. Public use means that the general public has regular access and use of the property acquired with RCO grants. For more information on access, see *Manual 3: Acquisition Projects*.

Matching Share (pg. 27)

Applicants must provide a minimum of 15 percent of the project value, known as match, from non-SRFB funds. The SRFB believes that a match demonstrates local commitment and support of the project. Exceptions to this requirement include the following:

- SRFB waives match requirements for certain design-only projects that meet the specific criteria listed earlier in this section under "Eligible Projects" and "Design-Only Projects with No Required Match".
- For projects with the primary purpose of riparian planting, projects that meet minimum riparian buffer widths may qualify for zero match. See Appendix K for details.
- For acquisition projects, those with an upland portion greater than 50 percent of the total acreage are required to provide a matching share as described below:

Percent Upland Acres	Percent Required Match
Up to 50%	15%
Greater than 50% and up to 75%	25%
Greater than 75%	35%

- For this purpose, uplands are those areas that fall outside of other specified habitat types and their buffers. See Appendix X.

Exceeding the 15 percent minimum match requirement does not necessarily improve the likelihood of funding. The SRFB will not provide special consideration or preference in its evaluation process for projects with match greater than 15 percent, although lead entities may do so in their evaluation processes. The scoring criteria for the Targeted Investment program does include a "cost" criterion that gives additional points to projects that leverage greater matching funds. For more information, see Appendix J.

Match may include cash, bond funds, grants (unless prohibited by the funding entity), labor, equipment and equipment use (see RCO Manual 8 for restrictions), materials, staff time, and donations. All match must be an integral and necessary part of the approved project, must be eligible SRFB elements for the project, and must be committed to the project. Match expenses are reviewed for eligibility and with the same criteria that reimbursement requests are reviewed.

No funds administered by the SRFB, including the PSAR fund, may act as match for a SRFB grant. Funds from the Family Forest Fish Passage Program fund may not act as match.

Other funds administered by RCO may be used as match; consult with the RCO grants managers to determine whether a specific grant may be used as match for the SRFB project.

The SRFB encourages organizations to coordinate salmon recovery efforts with other efforts and funding sources to increase benefits to salmon and to help make the state's dollars go further.

Appendix X:

Quantifying Habitat Types for Acquisition Projects

For acquisition projects, applicants must quantify the acreage of lake, riparian, tideland, upland, or wetland habitat present on the property. For this purpose, uplands are those areas that fall outside of other specified habitat types and their buffers.

Riparian acreage may include the entire channel migration zone and floodplain. For guidance determining the channel migration zone for riparian projects, applicants may refer to the Washington Department of Fish and Wildlife's 2020 *Riparian Ecosystems, Volume 2: Management Recommendations*.

For quantifying buffers around lakes, tidelands, and wetlands, sponsors may choose to apply a "standard buffer" or a "site-specific buffer". The standard buffer is a simple method for quantifying habitat types. The site-specific buffer is based on the site potential tree height at 200 years ($SPTH_{200}$).

> The **standard buffer** requires a 200-foot buffer around lakes, streams, channel migration zones, floodplains, and tidelands. Wetlands that are hydrologically connected to fish-bearing waters also have a 200-foot buffer; those that are not connected to fish-bearing waters have a 100-foot buffer.
>
> The **site-specific buffer** requires that a buffer of one $SPTH_{200}$ is used around all habitat types except wetlands. For wetlands, the site-specific buffer width should be based on the county critical area ordinance.

When using the site-specific buffer, the application should reference the site potential tree height used and the section of county code where the wetland buffer widths are listed. Applicants may utilize the Washington Department of Fish and Wildlife's $SPTH_{200}$ mapping tool to determine the appropriate site potential tree height.

Regardless of the above calculation methods used, all property areas outside of these habitat types and their buffers are considered "uplands".

Note: The "standard" and "site-specific" buffers are tools for a streamlined, consistent approach for estimating relative proportions of habitat types for the purpose of

applying for Salmon Recovery Funding Board acquisition grants. If restoration projects are subsequently pursued on the property, regulatory buffers may vary by jurisdiction.

WASHINGTON STATE RECREATION AND CONSERVATION OFFICE
Salmon Recovery Funding Board

Salmon Recovery Funding Board Briefing Memo

Item 8

APPROVED BY RCO DIRECTOR MEGAN DUFFY

Meeting Date: December 7, 2022

Title: Statewide Salmon Strategy Workplan Update

Prepared By: Katie Knight Pruit, GSRO Salmon Recovery Coordinator

Summary

This memo summarizes the biennial workplan of State budget and policy priorities to implement the Governor's 2021 updated statewide salmon strategy. The Governor updated the statewide salmon strategy to renew the State's commitment to restoring salmon populations. A budget proviso in the 2022 supplemental budget directed that state agencies develop biennial, statewide legislative and policy priorities with a recommended budget for salmon recovery that align with tribal priorities and regional salmon recovery plans. The proviso created a position in the Governor's Salmon Recovery Office (GSRO) to lead this work. Work plan highlights include significant funding for salmon recovery projects, regulatory improvements, assessments of riparian areas, reducing toxics in waterways, stormwater infrastructure, streamflow restoration, planning for climate resiliency, salmon reintroduction in the upper Columbia River, improved salmon harvest monitoring, and predation management.

Board Action Requested

This item will be a:

- ☐ Request for Decision
- ☐ Request for Direction
- ☒ Briefing

Introduction/Background

The 1998 Salmon Recovery Act[1] created a framework for recovering salmon and tasked the Governor's Salmon Recovery Office (GSRO) with coordination and maintenance of the State's strategy to recover salmon. The first statewide strategy, *Extinction is not an Option*, was adopted by Governor Gary Locke in 1999 to create a framework to recover

[1]Chapter 77.85 Revised Code of Washington

listed salmon and steelhead. Washington has 14 salmon and steelhead populations that are federally listed as threatened or endangered.

The first strategy served as the foundation of the State's recovery efforts for more than 20 years and progress has been made to reconnect and restore critical salmon habitat, improve land-use practices, reduce the impact of fisheries on at-risk salmon, improve hatchery management, and better manage hydropower facilities and other large dams.

However, the strategy and actions to restore salmon populations have not kept pace with current challenges. With no down-listings achieved and more than 70 percent of listed populations not keeping pace with recovery goals or still in crisis, salmon are clearly struggling.

In response, Governor Jay Inslee updated the statewide salmon strategy in 2021 to renew and strengthen Washington's commitment to salmon recovery. The updated strategy amends priorities to include climate resiliency, address known threats, honor commitments to tribes, and is broadly consistent with regional recovery plans.

Statewide Salmon Strategy Recommendations

The *Governor's Salmon Strategy Update* envisions healthy and resilient salmon, steelhead, and trout runs, restored to harvestable levels across the state. The updated strategy is organized around the following eight recommendations:

1. Protect and restore vital salmon habitat
2. Invest in clean water infrastructure for salmon and people
3. Correct fish passage barriers and restore salmon access to historical habitat
4. Build climate resiliency
5. Align harvest, hatcheries, and hydropower with salmon recovery
6. Address predation and food web issues for salmon
7. Enhance commitments and coordination across agencies and programs
8. Strengthen science, monitoring, and accountability

Salmon Strategy Workplan

The updated strategy establishes the development of a biennial workplan of near-term legislative, policy, and budget priorities for salmon recovery. A 2022 supplemental budget proviso[2] created a permanent position in the GSRO to lead this work.

An interagency work group of director-designees from nine natural resource agencies and the Office of the Governor provided proposals for the first biennial workplan. GSRO prioritized proposals on how well they: 1) implemented specific actions in the strategy, 2) aligned with regional recovery plans, and 3) supported a known tribal priority. The work plan is due October 31st of even numbered years.

In addition to working closely with agency senior staff and the interagency work group, GSRO convened the Natural Resources Subcabinet to discuss proposed investments and coordinate efforts across state agencies. GSRO will continue to convene the Natural Resources Subcabinet regularly to facilitate coordination across habitat, clean water, fish passage, climate resiliency, hatcheries, hydropower, harvest, predation, and strengthening science. The interagency work group will support the subcabinet and will meet regularly to track implementation of the work plan. This will strengthen Washington's commitment and accountability across agencies and commissions to effectively implement the updated strategy.

Workplan Priorities

The bulleted action areas listed below are the highest priorities for this biennium. Totaling $829.8 million ($110.1 million operating budget, $699.7 million capital budget, $20 million transportation budget), the priority investments are organized by recommendation categories in the *Governor's Salmon Strategy Update*.

Protect and restore vital salmon habitat ($417 million)

- Regulatory protection ($5.5 million)
- Riparian management ($10.1 million)
- Voluntary protection and restoration ($381.4 million)
- Restoration of habitat on working lands ($20 million)

[2]Section 305(14) Chapter 297 Laws of 2022

Invest in clean water infrastructure for salmon and people ($108 million)

- Toxics reduction ($9.7 million)
- Stormwater and wastewater infrastructure improvements ($98.3 million)

Correct fish passage barriers and restore salmon access to historical habitat ($123.2 million)

- Fish passage barrier removal ($119.2 million)
- Reintroduction ($3 million)
- Barrier information and regulation improvements ($1 million)

Build climate resiliency ($165.4 million)

- Streamflow restoration ($47 million)
- Columbia River basin water supply ($113.3 million)
- Greenhouse gas emissions reduction (fiscal impact not included)
- Technical capacity for climate resilience ($5.1 million)

Align harvest and hatcheries with salmon recovery ($13.7 million)

- Harvest management ($8.7 million)
- Hatchery investments ($5 million)

Address predation issues for salmon ($2.5 million)

- Pinniped management ($2.5 million)

Implementation

This biennial work plan is a point-in-time summary of policy and budget priorities. Implementation priorities will change with adoption of the Governor's budget, legislation, and legislative budgets.

Once the 2023-2025 budget is approved, GSRO will continue to work with state agencies, tribes, tribal consortia, and regional recovery organizations to ensure a

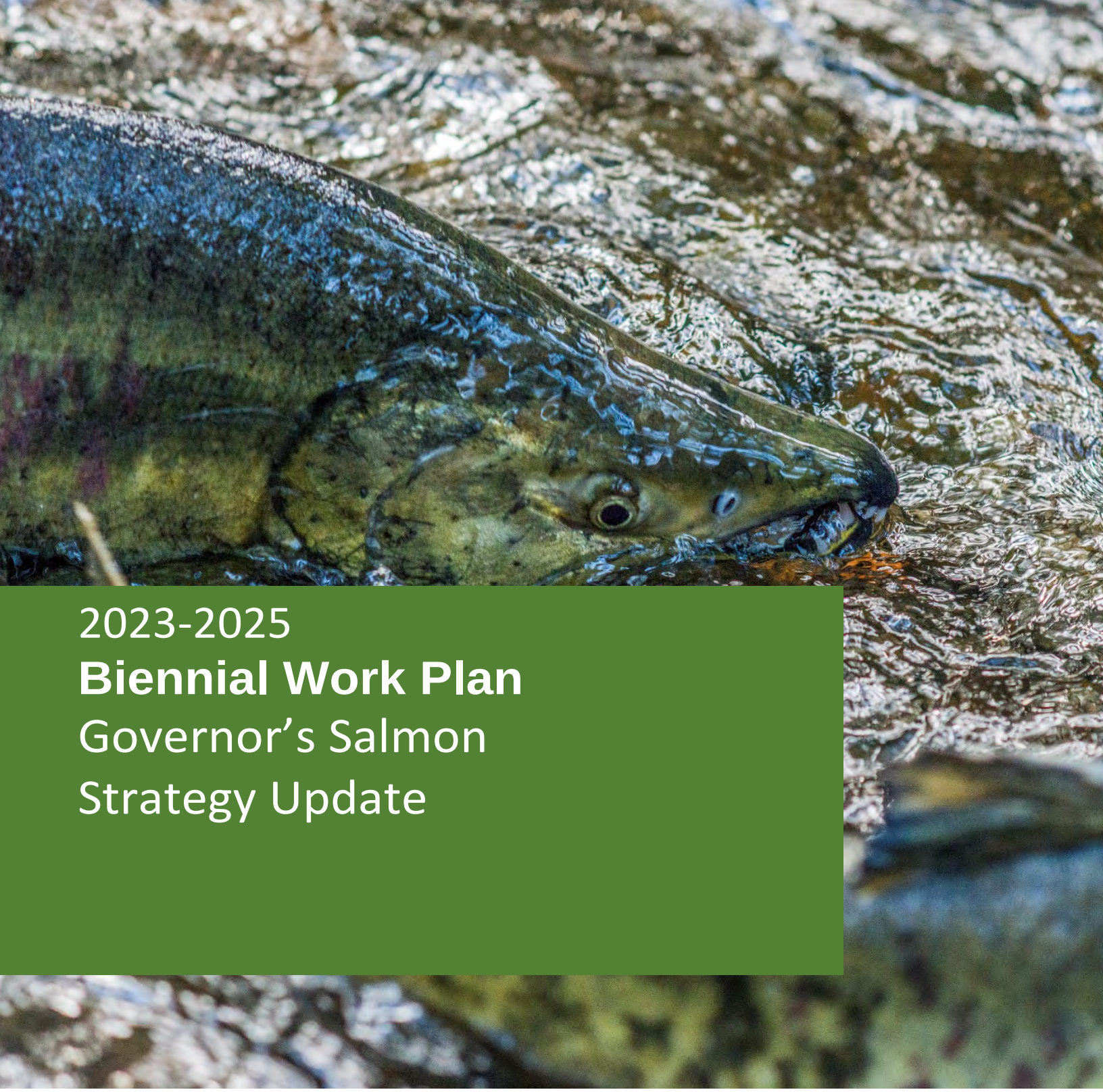
coordinated and consistent approach to implementing salmon recovery priorities in the biennium.

Strategic Plan Connection

Goal 2: Be accountable for board investments by promoting public oversight, effective projects, and actions that result in the economical and efficient use of resources.

Attachment A

Salmon Strategy 2023-2025 Work Plan: Governor's Salmon Strategy Update



2023-2025 **Biennial Work Plan** Governor's Salmon Strategy Update

Governor's Salmon Recovery Office
Natural Resources Building
1111 Washington ST SE
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WASHINGTON STATE
RECREATION AND CONSERVATION OFFICE
Governor's Salmon
Recovery Office

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October 31, 2022

Overview

Background

In 2021, Governor Jay Inslee updated the statewide salmon strategy to renew the State's commitment to restoring salmon populations. The updated strategy establishes the development of a biennial work plan and a budget proviso[1] in the 2022 supplemental budget created a position in the Governor's Salmon Recovery Office (GSRO) to lead this work. The proviso directed that state agencies develop biennial, statewide legislative and policy priorities with a recommended budget for salmon recovery that align with tribal priorities and regional salmon recovery plans.

Salmon recovery

Salmon have been present in the Pacific Northwest for more than 6 million years and a primary food source for Native Americans for more than 10,000 years. European colonization of North America changed the way land was used, and as early as 150 years ago, overfishing, dams, and habitat degradation were identified as threats to salmon abundance by the first U.S. Fisheries commissioner.

As Washington's population grew in the 1900s, many of the watersheds where salmon once thrived were impacted. Rivers were blocked, trees were removed, water was polluted, and food for salmon disappeared. These changes to the landscape and the intense harvest of salmon led to multiple populations of salmon in Washington being listed under the federal Endangered Species Act in the late 1990s.

These listings prompted state lawmakers to adopt the Salmon Recovery Act[2] in 1998. The Act created a framework for recovering salmon and tasked GSRO with coordination and maintenance of the State's strategy to recover salmon. The first statewide strategy, *Extinction is not an Option*, was adopted by Governor Gary Locke in 1999.

That first strategy served as the foundation of the state's recovery efforts for more than 20 years and much progress has been made to restore critical salmon habitat, improve land-use practices, reduce the impact of fisheries on at-risk salmon, improve hatchery management, and better manage hydropower facilities and other large dams. However, much has changed in the past two decades and the strategy and actions to save salmon

[1]Section 305(14) Chapter 297 Laws of 2022
[2]Chapter 77.85 Revised Code of Washington

have not kept pace with the challenges. With more than 70 percent of the endangered or threatened salmon and steelhead populations either not keeping pace with recovery goals or requiring immediate action, it is clear that salmon are struggling.

In response, Governor Jay Inslee updated the statewide salmon strategy in 2021 to renew and strengthen the State's commitment to salmon recovery. The updated strategy expands priorities to include climate resiliency, addresses known threats, honors commitments to tribes, and is broadly consistent with regional recovery plans.

Governor's Salmon Strategy Update

The *Governor's Salmon Strategy Update* envisions healthy and resilient salmon, steelhead, and trout runs, restored to harvestable levels across the state. The updated strategy is organized around the following eight recommendations:

1. Protect and restore vital salmon habitat
2. Invest in clean water infrastructure for salmon and people
3. Correct fish passage barriers and restore salmon access to historical habitat
4. Build climate resiliency
5. Align harvest, hatcheries, and hydropower with salmon recovery
6. Address predation and food web issues for salmon
7. Enhance commitments and coordination across agencies and programs
8. Strengthen science, monitoring, and accountability

2022 supplemental budget

The 2022 supplemental budget included more than $200 million in new investments to initiate implementation of the *Governor's Salmon Strategy Update*. A summary of these investments is in Appendix A and includes items recommended in the Governor's salmon budget proposal as well as other funding for salmon recovery. Highlights include significant funding for salmon recovery projects, assessments of riparian (streamside) areas and habitat improvements, salmon reintroduction in the upper Columbia River, improved salmon harvest monitoring, and predation management.

Development of the work plan

The legislative, policy, and budget proposals included in this work plan were provided by nine natural resource agencies through an interagency work group of director designees and the Office of the Governor. GSRO prioritized proposals based on how well each implemented specific actions in the strategy and aligned with regional recovery plans, and if they supported a known tribal priority. Appendix B provides more information on evaluation criteria.

Natural Resources Subcabinet

In addition to working closely with agency senior staff and the interagency work group, GSRO convened the Natural Resources Subcabinet to discuss proposed investments and better coordinate efforts of state agencies. GSRO will continue to convene the Natural Resources Subcabinet regularly to ensure agencies have a forum for coordinating activities across habitat, clean water, fish passage, climate resiliency, hatcheries, hydropower, harvest, predation, and science. The interagency work group will support the subcabinet and will meet regularly to track implementation of the work plan. This will strengthen the State's investment and accountability across agencies and commissions to effectively implement this statewide salmon recovery strategy.

Tribal engagement

Tribes are sovereign nations with rights inherent in the U.S. Constitution, reserved in treaties with the U.S. government, and reaffirmed through countless court cases and legal battles stretching back a century. Treaty Indian tribes have a legal authority to co-manage salmon with the State and state government relies on tribal knowledge, expertise, and experience to co-manage these iconic fish.

The Affiliated Tribes of Northwest Indians adopted a resolution in May 2022 stating that salmon "have been central to the cultures, traditions, economies, social structures, health, diet, religions, and way of life of the tribes since time immemorial, where Tribes developed an intimate understanding of the ecosystem and the water and land that support" salmon.[3]

The tribal priorities in this work plan were found in tribal documents, comments on the salmon strategy update, and meetings with tribal organizations and individual tribes. This

[3]Resolution 22-25, Affiliated Tribes of Northwest Indians

first work plan represents the beginning of a dialogue between the State and tribes; future work plans will more fully reflect the knowledge, experience, and priorities of the tribes.

GSRO met with tribal organizations including Upper Columbia United Tribes, Northwest Indian Fisheries Commission, and Columbia River Intertribal Fish Commission. Additionally, the Northwest Indian Fisheries Commission facilitated a conversation between tribal government staff and GSRO.

GSRO heard from the tribes that they are limited in their capacity to engage in multiple forums and to continue to educate the State on their priorities. GSRO looked to existing publications of salmon recovery priorities and shared what was learned with the tribal organizations.

Priority tribal themes

- Dedicate sufficient funding to implement regional salmon recovery plans
- Protect and restore habitats and ecosystems that are holistic, sustainable, and resilient
- Increase regulatory land-use protection and enforcement for salmon habitat (particularly riparian areas)
- Ensure clean water standards are based on sound science and are enforced
- Use hatcheries to support salmon conservation and harvest
- Enhance monitoring and enforcement for state commercial and recreational salmon and steelhead fisheries
- Improve predation management including seal, sea lions, and northern pike suppression and prevention
- Remedy fish passage barriers statewide
- Reintroduce salmon and steelhead to blocked habitat in the upper Columbia and Snake River basins
- Address the effects of climate change. This includes building climate resilience by restoring ecological functions and implementing strategies to prevent the energy supply system from placing undue reliance on the Columbia River ecosystem
- Recognize, honor, and incorporate tribal culture and values as part of the solution

Region priorities

Regional salmon recovery organizations lead implementation of salmon recovery plans. Federally approved recovery plans were developed in response to proposed or actual listings under the federal Endangered Species Act and provide federal assurances under the Act.[4] However, these assurances are contingent upon accomplishing local, state, and federal commitments outlined in the plans. That is why state government is committed to aligning strategy work plan priorities with implementation of regional recovery plans.

Directors of regional recovery organizations provided insight about which state agency proposals aligned with recovery plans' priorities. Located across the state, these directors oversee development and implementation of regional recovery plans on behalf of their boards, which include state, local, and tribal governments; agriculture and business interests; forestry; recreation; watershed coalitions; and other stakeholders.

The agency priorities included in this work plan are supported by one or more regions. Regional directors have requested an opportunity in future biennia to inform state agencies of their priorities before agency budget development in order to elevate and improve implementation of recovery plans.

Implementation

This biennial work plan outlines the near-term legislative, policy, and budget priorities for salmon recovery but it is not a static document. The work plan will evolve with adoption of the Governor's budget, legislation, and legislative budgets.

After adoption of the final legislative budget, GSRO will continue to work with state agencies, tribes, and regional recovery organizations to ensure a coordinated and consistent approach to implementing salmon recovery programs.

Work plan priorities

Summary of work plan priorities

Of the eight strategy recommendations, the biennial work plan focuses on specific actions related to habitat, clean water, fish passage, climate, hatcheries and harvest, and

[4]A state-approved sustainability plan was developed for the Washington coast region, with the goal of preventing future Endangered Species Act listings of salmon and steelhead.

predation. The bulleted actions areas listed below are the highest priorities to be implemented this biennium in each recommendation.

Protect and restore vital salmon habitat

- Regulatory protection
- Riparian management
- Voluntary protection and restoration
- Restoration of habitat on working lands

Invest in clean water infrastructure for salmon and people

- Toxics reduction
- Stormwater and wastewater infrastructure improvements

Correct fish passage barriers and restore salmon access to historical habitat

- Fish passage barrier removal
- Reintroduction
- Barrier information and regulation improvements

Build climate resiliency

- Streamflow restoration
- Columbia River basin water supply
- Greenhouse gas emissions reduction
- Technical capacity for climate resilience

Align harvest, hatcheries, and hydropower with salmon recovery

- Harvest management
- Hatchery investments

Address predation and food web issues for salmon

- Pinniped management

The proposals highlighted in the following section align with regional recovery plans and known tribal priorities, directly implement the strategy, and are needed urgently in the

coming biennium. The highest priority investment requests total $829.8 million ($110.1 million operating budget, $699.7 million capital budget, $20 million transportation budget).

Following each summary of the highest priority proposals is a section that outlines additional budget requests that more broadly support salmon recovery, including climate resiliency, water conservation, environmental cleanup, and biodiversity. These investments do not directly implement the strategy but provide critical agency work for maintaining and improving environmental baseline conditions for salmon. The fiscal impact for these additional budget requests is not included in this work plan.

Protect and restore vital salmon habitat

Salmon need healthy places to live. This means cool, clean water and a variety of habitats that allow them to feed, travel, rest, hide from predators, and spawn. Protecting and restoring these habitats requires a combination of voluntary programs and regulatory tools.

Regulatory protection–$5.5 million

The strategy recommends specific actions to better enforce and expand land-use regulatory protections for habitat. Regulatory protection is necessary as Washington continues to grow, develop, and use more land and water. Regulations can prevent degradation and restore unavoidable impacts of permitted development. The following regulatory protection proposals are the highest priorities this biennium:

- **Growth Management Act[5] update for salmon habitat** (Department of Commerce)–fund technical assistance and grants to local governments to integrate salmon recovery plans and watershed characterization work into planning and regulation updates. ($5.5 million operating budget)
- PLACEHOLDER **Net ecological gain** (Department of Fish and Wildlife)–fund the integration of a net ecological gain standard into state land-use, development, and environmental laws and rules. A process to develop recommendations was funded in the 2022 supplemental budget with a legislative report due December 1, 2022. The fiscal impact is not determined yet.

[5]Chapter 36.70A Revised Code of Washington

- **Additional regulatory protection proposals** that more broadly address salmon recovery are as follows:
    - **Floodplain management grants (Department of** Ecology)–fund additional grants to local governments for updating their local flood hazard management plans and preparing cost-share feasibility studies for new flood hazard and maintenance projects.
    - PLACEHOLDER **Reduce flooding in the Nooksack Basin** (Department of Ecology)–continue to fund transboundary coordination, support for local flood planning and technical assistance, and construction for flood hazard reduction projects. Funding was provided in the 2022 supplemental budget. The fiscal impact is not determined yet.
    - **Wetland mitigation bank oversight** (Department of Ecology)–fund additional staff needed to oversee these mitigation banks while in operation, which is usually at least 10 years.

Riparian management–$10.1 million

The Governor's salmon strategy emphasizes preservation and rehabilitation of riparian lands. Healthy riparian zones provide a safe environment for salmon at critical life stages and increase climate resilience by reducing summer water temperature and removing carbon dioxide from the atmosphere. The following proposals are the highest priority for riparian management this biennium:

- PLACEHOLDER **Riparian habitat improvements** (Office of the Governor)–fund riparian policy and spending recommendations to improve riparian habitat. A process to develop reports and recommendations was funded in the 2022 supplemental budget. The fiscal impact is not determined yet.
- **Riparian systems assessment** (Department of Fish and Wildlife)–fund identification of streams that if conserved or restored will provide the greatest habitat value and offer the most efficient approach to recovering salmon and other native species and will demonstrate cumulative improvements of statewide riparian conditions and extent over time. This work was funded in the 2022 supplemental budget. ($2 million operating budget)
- **River migration and stream mapping for salmon** (Department of Ecology)–fund standardized methodology, an implementation plan, and mapping channel migration zones across the state. The 2022 supplemental budget provided one-time

funding to develop a standard channel migration zone mapping methodology. ($354,000 operating budget)

- **Statewide lidar acquisition and refresh** (Department of Natural Resources)–fund collection of statewide lidar (light detection and ranging) data to provide better fundamental data to understand and protect salmon habitat and stressors. This funding is related to Puget Sound Partnership *Action Agenda* implementation and was funded in the 2022 supplemental budget. ($7.8 million operating budget)

Voluntary protection and restoration–$381.4 million

It is critically important to continue capital investments in habitat protection and restoration. These grant programs fund the highest priority projects in watersheds throughout the state–projects that have been scientifically and publicly vetted. This includes grant programs that implement the lead entity process established by the Salmon Recovery Act to ensure implementation of regional recovery plan priorities. It also includes state grant programs with a specific benefit to salmon recovery such as floodplain management, near-shore restoration, or region-specific programs for Puget Sound or the Coast. These programs also support implementation of regional recovery plans and have kept extinction at bay. Dedicating full funding for voluntary protection and restoration is critical as many watersheds narrow in on the critical pinch points to recover salmon.

The highest priority investments that will help salmon the most in the coming biennium include the following:

- **Estuary and Salmon Restoration Program** (Department of Fish and Wildlife)–fund Puget Sound near-shore recovery. ($25.5 million capital budget)
- **Floodplains by Design** (Department of Ecology)–fund the re-establishment of floodplain functions to improve salmon habitat and reduce flood risk in Washington's major river corridors. ($70.4 million capital budget)
- **Puget Sound Acquisition and Restoration Program** (Puget Sound Partnership)–fund habitat restoration and protection to restore Puget Sound's natural systems. ($65.4 million capital budget)
- **Rivers and Habitat Open Space Program** (Department of Natural Resources)–fund conservation easement purchases from willing private forest landowners to protect riparian open space, especially channel migration zones for Endangered Species Act-listed species. ($5 million capital budget)

- **Salmon Recovery Funding Board** (Recreation and Conservation Office)–fund habitat projects and other activities necessary to achieve overall salmon recovery. This program received one-time funding in the 2022 supplemental budget. ($82 million capital budget)
- **Salmon recovery region and lead entity capacity** (Recreation and Conservation Office)–fund local capacity to fully implement and integrate recovery plans with state agency programs. This proposal includes ongoing funds for the newly established Spokane Lead Entity, which was funded in the 2022 supplemental budget. ($4.5 million operating budget)
- **Washington Coast Restoration and Resiliency Initiative** (Recreation and Conservation Office)–fund grants to proactively address the region's highest priority ecological protection and restoration needs to ensure resilient coastal lands and waters. ($17.6 million capital budget)
- **Chehalis strategy implementation** (Department of Ecology)–fund the long-term flood damage reduction and aquatic species restoration plan in the Chehalis River basin. ($70 million capital budget)
- **Duckabush–Puget Sound Nearshore Ecosystem Restoration Project** (Department of Fish and Wildlife)–fund the next phase of the Duckabush estuary restoration project. This multi-phase project received one-time funding of $25 million in the 2022 supplemental budget. ($41 million capital budget)
- **Additional voluntary protection and restoration proposals** that more broadly support salmon recovery are as follows:
    - **Coastal wetlands** (Department of Ecology)–authorize a federal grant program to acquire wetlands and coastal and estuarine lands.
    - **Restoring Washington's biodiversity** (Department of Fish and Wildlife)–fund to expand agency engagement and leadership in multiple species recovery processes, habitat protection and restoration, research and monitoring, and coordination with partners and the public, which will benefit salmon recovery directly and indirectly.
    - **Wooten floodplain management at Deer Lake** (Department of Fish and Wildlife)–fund improvements to habitat for fish and other wildlife by reducing the impact of human-made lakes on the floodplain.

Restoration of habitat on working lands–$20 million

Washington State is known for farming and forestry. Several state programs are reducing impacts and improving habitat conditions on agricultural and forest lands. The following investments are the top priorities this biennium to restore habitat on working lands:

- **Conservation Reserve Enhancement Program** (Conservation Commission)–fund state match to continue the federal Conservation Reserve Enhancement Program, which works with willing farmers to plant native trees and shrubs and remove livestock and agricultural activities from riparian areas. This program received funding in the 2022 supplemental budget. ($7.7 million capital budget, $100,000 operating budget)
- **Forest Riparian Easement Program** (Department of Natural Resources)–fund reimbursement of landowners for the value of the trees they are required to leave to protect fish habitat. This program was funded in the 2022 supplemental budget. ($6.3 million capital budget)
- **Salmon Recovery Program** (Conservation Commission)–fund conservation districts to implement salmon riparian projects. This includes a request to move $10 million in the 2022 supplemental budget from operating to capital. ($3 million operating budget)
- **Watershed Resilience Action Plan for Snohomish** (Department of Natural Resources)–fund the Snohomish watershed-scale salmon recovery plan including kelp and eelgrass monitoring, large woody material installations, and fish passage barrier surveys and outreach. This program was funded in the 2022 supplemental budget. ($2.9 million operating budget)
- **Additional working lands restoration proposal** that more broadly address salmon recovery:
    - **Voluntary Stewardship Program** (Conservation Commission)–fund county monitoring requirements and agency reporting requirements to implement this program, which protects critical areas including salmon habitat through voluntary farm-friendly options.

$108 MILLION

Invest in clean water infrastructure for salmon and people

Salmon and people need clean water to survive. As cities have developed, the amount of paving and hard surfaces has increased. Today, stormwater running off those hard surfaces is a major pollution source impacting water bodies in and around Puget

Sound and other areas across the state. Emerging toxics in stormwater pose ongoing threats to water quality and salmon.

Toxics reduction–$9.7 million

The highest priority proposals this biennium will address a toxic chemical–6PPD-quinone–that is produced when vehicle tires wear on road surfaces. Scientists only recently identified this specific chemical, found in almost every automobile tire. Concentrations of the chemical often reach levels lethal to coho in urban streams.

- **Emerging toxics in Chinook salmon and Southern Resident killer whale** (Department of Fish and Wildlife)–fund work to track contaminants of emerging concern, including 6PPD-quinone, in the orca-salmon food web. ($1.8 million operating budget)
- **Tire dust in stormwater** (Department of Ecology)–fund expanded research of effective best management practices to treat 6PPD-quinone before the next updates to the stormwater manuals and permits. This work was funded in the 2022 supplemental budget. ($5.2 million operating budget)
- **Toxic tire wear chemical** (Department of Ecology)–fund work to develop alternative assessments and applied 6PPD research to reduce or mitigate coho-killing chemicals in streams. This work was funded in the 2022 supplemental budget. ($2.7 million operating budget)
- Additional proposals to reduce toxics that broadly support salmon recovery:
    - **Cleanup of toxic sites in the Puget Sound** (Department of Ecology)–fund projects that integrate shoreline habitat restoration opportunities with cleanup projects to protect public and environmental health, create jobs, and promote economic development. Related to Puget Sound *Action Agenda* implementation.
    - **Contaminated Sites Redevelopment** (Department of Ecology)–fund work to address toxics in stormwater runoff from industrial and contaminated sites, and in turn, get contaminated properties back into use sooner.
    - **Pesticide assessment in groundwater** (Department of Agriculture)–fund current programs and develop a regional assessment for pesticides in groundwater, with the primary goal of determining if legal uses of pesticides are contributing to groundwater degradation.

- **Product Replacement Program** (Department of Ecology)–fund this program, which improves collaboration with local government partners and provides financial incentives to businesses to remove or replace the worst chemicals through technology and infrastructure upgrades, best management practices, disposal programs, and use of safer chemicals.
- **Remedial Action Grant Program** (Department of Ecology)–fund cleanup at contaminated industrial sites that impact the air, land, and water resources of the state, and continued cleanup of Puget Sound.

Stormwater and wastewater infrastructure improvements–$98.3 million

Untreated stormwater can decrease the oxygen levels in the water, limit the ability of some salmon species to find food and avoid predators, and lead to large fish die-offs in urban streams. The strategy recommends stormwater retrofits and improving stormwater infrastructure to reduce negative impacts to salmon.

The strategy also recommends actions to improve wastewater infrastructure to achieve clean water for salmon and people, as well as implement nonpoint source pollution best management practices. Nonpoint source pollution occurs when rain and snowmelt pick up contaminants, such as oil, pet waste, and pesticides from yards, roads, and other areas and deposits them into water ways. That is why the highest priority stormwater and wastewater investments this biennium include the following:

- **Addressing nonpoint pollution** (Department of Ecology)–fund technical assistance to landowners, implementing best management practices and improving the timeliness of the State's water quality assessment to improve the control of nonpoint pollution–one of the leading sources of water pollution in Washington. ($2.3 million operating budget)
- **Municipal wastewater permitting** (Department of Ecology)–fund, supported by a planned fee increase, additional staff needed to address the municipal wastewater permit backlog. ($5 million operating budget)
- **Stormwater Financial Assistance Program** (Department of Ecology)–fund grants to local governments to finance stormwater retrofit projects that treat polluted stormwater in priority areas throughout the state to reduce toxics and other pollution entering waterways and to protect marine waters, estuaries, lakes, rivers, and groundwater. This proposal is a component of Ecology's water quality combined funding program and supports a Puget Sound *Action Agenda* priority to clean up toxic sites in Puget Sound. ($68 million capital budget)

- **Stormwater public-private partnerships** (Department of Ecology)–fund technical assistance and competitive grants to assist between 8 and 12 communities as they work through the assessment and stormwater project development process. This was funded in the 2022 supplemental. ($3 million capital budget)
- **Stormwater retrofits** (Department of Transportation)–fund work to apply best management practices to improve stormwater quality and reduce pollutants in stormwater entering surface waters. ($20 million transportation budget)
- **Additional water quality proposals** that more broadly support salmon recovery include actions to fund clean water infrastructure, address wastewater discharges, and reduce non-point pollution. Many of the following activities involve leveraging and authorizing significant increases in federal funding. The activities are as follows:
    - **Centennial Clean Water Program** (Department of Ecology)–fund grants to public entities to finance the construction of water pollution control facilities and to plan and implement nonpoint pollution control activities.
    - **Industrial Permitting** (Department of Ecology)–fund additional staff to process and manage sand and gravel permits, industrial general permits, and stormwater general permits, and to support statewide permitting policy development.
    - **Reducing nitrate pollution** (Department of Agriculture)–fund implementation of key recommendations made by the Lower Yakima Valley Groundwater Advisory Committee to reduce nitrate pollution sources to groundwater from irrigated agriculture.
    - **Sewer Overflow and Stormwater Reuse Program** (Department of Ecology)–fund the match for a new federal grant program through the bipartisan infrastructure law that pays for essential municipal infrastructure projects designed to address water quality and public health impacts caused by urban stormwater and combined sewer overflows.
    - **Washington State Water Pollution Control Revolving Program** (Department of Ecology)–fund the match for federal grants that provide low-interest loans to local governments, special purpose districts, and tribes for high-priority, water quality projects statewide.
    - **Water Quality Program grants and loan administration** (Department of Ecology)–fund additional capacity to manage Centennial Clean Water

Program grants and to support the additional loans offered through the Clean Water State Revolving Fund.

Correct fish passage barriers and restore salmon access to historical habitat

Improving fish passage is a long-recognized critical action of recovery and the State has been making steady progress since the first strategy was adopted. The Department of Fish and Wildlife estimates there are 18,000 to 20,000 barriers remaining[6] in Washington. These barriers either partially or fully block salmon and steelhead from reaching their spawning grounds.

Fish passage barrier removal–$119.2 million

Capital grant programs have been established to identify and remove impediments to salmon and steelhead migration. Investing in the programs below as well as reintroduction efforts are the priorities for salmon recovery this biennium.

- **Brian Abbott Fish Barrier Removal Board** (Department of Fish and Wildlife)–fund and implement the statewide barrier correction strategy. ($94.1 million capital budget)
- **Culvert injunction requirements** (Department of Transportation)–completing the requirements of the culvert injunction is a specific action in the statewide strategy. The culvert injunction requires the State to correct all state-owned fish barriers in the Puget Sound and outer Coast by 2030. A total of $3.6 billion was secured to meet the requirements of the injunction with the Move Ahead Washington package enacted in the 2002 supplemental transportation budget. Although this is a high priority, funding has been secured and therefore it is not included as a proposed new investment in the agency summary table.
- **Family Forest Fish Passage Program** (Department of Natural Resources)–fund the ongoing grant program that provides financial assistance to family forest landowners to correct fish passage barriers, directly correcting 58 culverts during the biennium. ($10.9 million capital budget)
- **Toutle River fish collection facility upgrades** (Department of Fish and Wildlife)–fund improvements to the collection and transport of Endangered Species Act-listed coho salmon and steelhead to historic spawning habitat upstream of the Toutle River sediment retention structure. ($14.2 capital budget)

[6] 2021 *Biennial Report on Fish Passage*–Department of Fish and Wildlife

Reintroduction–$3 million

A priority action in the strategy is to reintroduce salmon above dams and other human-caused barriers to meet native peoples' cultural and spiritual values, honor treaty rights, support recovery efforts, and increase cultural and economic benefits for all Washingtonians.

- **Upper Columbia River reintroduction** (agency to be determined)–fund salmon reintroduction efforts in the upper Columbia River. This proposal builds upon work funded in the 2022 supplemental budget. ($3 million operating budget)

Barrier information and regulation improvements–$1 million

In addition to correcting barriers, it is important to invest in planning and improving regulations to prevent future barriers. The following proposals are a high priority this biennium:

- **Fish passage rulemaking** (Department of Fish and Wildlife)–complete rulemaking for fishways, flow, and screening to protect fish passage when rivers and streams are modified for human uses. This work was funded one-time in the 2022 supplemental budget and additional funds are needed to complete this work. ($450,000 Operating)

- **Statewide prioritization of barriers** (Department of Fish and Wildlife)–This funding will maximize salmon recovery efforts, integrate with regional organization barrier prioritization, and coordinate with the State's schedule for culvert corrections. This work was funded one-time in the 2022 supplemental budget. ($584,000 operating budget)

$165.4 MILLION

Build climate resiliency

Climate change has warmed the air across Washington by 0.15 degree Fahrenheit every decade during the past 100 years and this trend is expected to continue. Glaciers, which store much of the freshwater in Washington, are melting, resulting in less cold water to feed streams in the summer when salmon need it the most. Precipitation patterns, such as declining snowpack, more intense winter rains, and less precipitation in the summer, are intensifying. For example, scientists estimate that the amount of water that was released from melted snow declined 21 percent in the western United States from 1955 to 2016. Summer low flows have become lower and for longer periods of time, affecting juvenile salmon at a critical stage in their lives.

In the coming biennium, there are clear priorities to prevent and reduce stresses from climate change and improve the ability of natural systems to withstand and recover from extreme events.

Streamflow restoration–$47 million

The strategy recommends actions to address changing conditions and protect and enhance stream flows for salmon at all life stages. The following investments are the highest priority this biennium:

- **Streamflow policy support** (Department of Fish and Wildlife)–fund staff to participate in the water resource management discussions occurring around the state (e.g., assessing mitigation adequacy, climate change impacts, drought response and preparedness, water banking, trust water rights, in-stream flow rulemaking, and future water right adjudications). This was funded in the 2021-23 biennium. ($1 million operating budget)

- **Streamflow Restoration Program** (Department of Ecology)–fund continued implementation of the Streamflow Restoration Program[7] by funding projects to acquire senior water rights, promote water conservation and water reuse, monitor streams and groundwater, and develop natural and constructed infrastructure to improve in-stream flows statewide. ($40 million capital budget)

- **Water Irrigation Efficiencies Program** (Conservation Commission)–fund projects to improve efficiency of how water is delivered and applied on agricultural lands. ($6 million capital budget)

Columbia River basin water supply–$113.3 million

It is important to ensure that clean, cold water remains in streams and rivers in the future with a changing climate. Water quantity and quality is a critical concern in the Columbia River basin with increased temperatures, longer periods of low flows, and disappearing glaciers that feed streams clean, cool water. The following water supply proposals are the highest priority this biennium:

- **Columbia River Water Supply Development Program** (Department of Ecology)–fund implementation of the Columbia River Basin Water Supply Development Program to deliver additional water supplies for agricultural purposes, meet the water needs for growing communities, make several existing water uses more

[7]Chapter 90.94 Revised Code of Washington

efficient, and improve streamflow conditions for fish and other wildlife. ($49 million capital budget)

- **Drought preparedness and response** (Department of Ecology)–permanently fund drought planning, preparation, and response to improve resiliency to the effects of climate change, which include recent droughts that have resulted in decreased streamflow and increased stream temperatures, killing hundreds of thousands of salmon and other aquatic species. ($11 million operating budget)

- **Upper Columbia and Nooksack adjudications** (Department of Ecology)–fund work to determine who has the legal right to use water and the volume of each right in the upper Columbia River (Water Resource Inventory Area 58) and Nooksack (Water Resource Inventory Area 1) watersheds. This was funded in the 2021-23 biennium. ($4.3 million operating budget)

- **Walla Walla 2050 water management plan** (Department of Ecology)–proposed legislation authorizes the development of projects to improve water supplies to benefit in-stream resources and out-of-stream uses. The proposal would enact a coordinated effort to implement the Walla Walla 2050 water management plan. There is no fiscal impact.

- **Yakima Basin Integrated Plan Water Supply** (Department of Ecology)–fund implementation of the Yakima River Basin Integrated Water Resources Management Plan to provide a comprehensive, long-term water resources and habitat improvement program to address the environmental and economic demands that support basin wildlife, irrigation, and municipal water supplies. ($49 million capital budget)

- **Additional Columbia region water supply proposal** that more broadly supports salmon recovery as follows:

    - **The Sunnyside Valley Irrigation District water conservation** (Department of Ecology)–fund state match to manage conservation improvements mandated by a court order.

Greenhouse gas emissions reduction

In addition to building climate resiliency in waterways, the State must meet its mandated targets for greenhouse gas emissions. Doing so includes fully implementing new policies designed to help the State achieve significant reductions in greenhouse gas emissions, each of which limit ecosystem impacts on salmon and complements the work prioritized in this plan. This section does not include a fiscal impact because these investments broadly

implement the strategy. Some examples for reducing greenhouse gas emissions include the following:

- **Clean diesel grants** (Department of Ecology)–fund a pass-through grant program for the electrification of school buses.
- **Electrification of state ferries** (Department of Transportation)–fund the construction of vessels that will use 95 percent less diesel fuel by using electricity to power the boats, and electrifying terminals.
- **Greenhouse gas inventory development** (Department of Ecology)–fund work to establish a state-specific, greenhouse gas model to forecast de-carbonization pathways and model new policy measures, develop economic sector-specific emissions expertise to provide advanced guidance for policy development, and increase public access to data.
- **Hydrofluorocarbon compliance and equity** (Department of Ecology)–fund enforcement of restrictions on the sale of products containing certain hydrofluorocarbons.
- **Climate Commitment Act[8] implementation** (Department of Ecology)–fund auction contracting costs to run the new economy-wide cap and invest program.

Technical capacity for climate resilience–$5.1 million

Building climate resilience requires moving beyond risk assessment to identify, evaluate, implement, and learn from response actions. Investments that increase technical capacity will help inform land-use planning and permitting to incorporate changing conditions and build climate resilience for salmon. The following investments are the highest priority this biennium:

- **Climate resilient Washington Department of Fish and Wildlife** (Department of Fish and Wildlife)–fund technical assistance, permitting, research, and planning that account for projected changes in climate. This request is a portion of a larger budget package. ($1.5 million operating budget)
- **Growth Management Act update for climate resiliency** (Department of Commerce)–fund technical assistance and grants to local governments to integrate climate planning into updates of their comprehensive land-use plans and development regulations. ($3.6 million operating budget)

[8]Chapter 70A.65 Revised Code of Washington

- **An additional climate resiliency proposal** that more broadly supports salmon recovery is as follows:
    - **Chronic environmental deficiencies** (Department of Transportation)–fund work to prioritize improvements at locations where maintenance crews have made repairs at a site three times in the previous 10 years and also where the maintenance negatively affects aquatic fish habitat.

Align harvest, hatcheries, and hydropower with salmon recovery

The State must maintain and support co-manager processes between the State and tribes for harvest and hatchery management to better align with salmon recovery and meet tribal treaty rights. Salmon harvest in Washington State is highly managed and relies primarily on hatchery production of salmon and steelhead. More than 80 percent of the salmon harvested in the ocean and rivers come from hatcheries.

Harvest management–$8.7 million

The following investments support strategy actions to transition the Columbia River commercial gillnet fishing industry to other types of fishing gear to reduce impacts to wild salmon and increase food for Southern Resident orcas. The strategy also recommends monitoring and enforcement of harvest rates and limits. The following harvest management proposals are the highest priority this biennium:

- **Emerging fishery implementation in the Columbia River** (Department of Fish and Wildlife)–fund implementation of a new fishery in 2023 and inform the utility and economic viability of alternative gears in the lower Columbia River commercial fishery. ($3.1 million operating budget)
- **Fisheries enforcement compliance** (Department of Fish and Wildlife)–fund additional enforcement officers to increase fishery compliance as officers are encountering more recreational harvesters than ever before and finding many taking more salmon than allowed. This was funded in the 2022 supplemental budget. ($4 million operating budget)
- **Salmon and steelhead monitoring** (Department of Fish and Wildlife)–fund work to improve Puget Sound steelhead spawning estimates and monitor salmon migration in order to inform recreational fishery management decisions. This was funded in the 2022 supplemental budget. ($1.6 million operating budget)

- **Additional harvest management proposals** that more broadly support salmon recovery are as follows:
    - **Building salmon team capacity** (Department of Fish and Wildlife)–fund work to evaluate fisheries and associated impacts to ensure they are not slowing or preventing the recovery of Endangered Species Act-listed salmon and steelhead.
    - **Columbia River Endangered Species Act Permitting** (Department of Fish and Wildlife)–fund work that includes an update of fishery management plans to develop harvest rules that could expand fishing opportunities in years of high abundance.

Hatchery investments–$5 million

The strategy calls for protecting, restoring, and enhancing salmon and steelhead productivity, production, and habitat to ensure they remain for Native Americans' food, recreation, ceremonies, and businesses. The following hatchery investment proposal is the highest priority this biennium:

- **Hatchery investment strategy** (Department of Fish and Wildlife)–address increased operational needs at facilities to support recreational, commercial, and tribal harvest; expanded production of salmon to feed endangered orcas; and conservation efforts for wild salmon. ($5 million operating budget)
- **Additional hatchery investments proposals** that more broadly support salmon recovery are as follows:
    - **Beaver Creek Hatchery renovation** (Department of Fish and Wildlife)–fund significant hatchery upgrades and improvements to maintain and increase salmon and steelhead production to provide sustainable fishing opportunities.
    - **Elochoman Hatchery abandonment** (Department of Fish and Wildlife)–fund removal of structures left in the river after the hatchery's closure in 2009 that restrict fish passage and the natural movement of sediment and wood, harming spawning and rearing habitat.

Address predation and food web issues for salmon

As people modified habitat, they upset the food webs and made it more accommodating to predators and more hostile to salmon. Managing predators is a

complicated issue, confounded by scientific uncertainty and ethical issues. Consider California sea lions, which are protected under federal law and have greatly increased their numbers in Washington. Pinnipeds (seals and sea lions) take full advantage of dams, fishways, and other habitat modifications to eat large amounts of juvenile and adult salmon.

Pinniped management–$2.5 million

The following investments implement the strategy action to reduce impacts from predators such as seals and sea lions and are the highest priority this biennium:

- **Columbia River pinniped predation** (Department of Fish and Wildlife)–fund work to reduce the high number of sea lions eating salmon in the Columbia River. This was funded in the 2021 operating budget and is the Governor's Southern Resident Killer Whale Task Force's Recommendation 13. ($1.5 million operating budget)

- **Salish Sea marine mammal surveys** (Department of Fish and Wildlife)–fund expansion of efforts to survey the diets of seals and sea lions in the Salish Sea and identify nonlethal actions to deter them from eating salmon and steelhead. This is the Governor's Southern Resident Killer Whale Task Force's Recommendation 12. ($940,000 operating budget)

Enhancing commitments and coordination across agencies and programs

There are a few proposals that broadly support the strategy recommendation to enhance commitments and coordination. Although these investments do not directly implement the strategy and their fiscal impacts are not included, they are important to the State and prioritize environmental justice, diversity, equity, and inclusion, and increase salmon recovery outreach and education. These include the following:

- **Advancement of equity and environmental justice** (Puget Sound Partnership)–fund additional staff to integrate equity and environmental justice throughout the Puget Sound recovery community.

- **Salmon in schools** (Office of Superintendent of Public Instruction)–fund at a higher level the Salmon in Schools Program, which works with educators in low-income schools to secure salmon eggs, study salmon development, and release fry into local creeks and lakes. This was first funded in the 2021-2023 operating budget.

- **Social sciences to improve recovery** (Puget Sound Partnership)–fund enhanced use of social science information and perspectives in recovery planning, communication, and implementation. Related to Puget Sound *Action Agenda* implementation.

Agency summary table

Proposal	Agency	Amount	Budget
PROTECT AND RESTORE VITAL SALMON HABITAT			
Regulatory protection			
Growth Management Act update for salmon habitat	Commerce	$5,494,000	Operating
PLACEHOLDER–Net ecological gain	Fish and Wildlife	TBD	Operating
Riparian management			
PLACEHOLDER-Riparian habitat improvements	Governor's Office	TBD	Operating
Riparian systems assessment	Fish and Wildlife	$1,994,000	Operating
River migration and stream mapping for salmon	Ecology	$354,000	Operating
Statewide lidar acquisition and refresh	Natural Resources	$7,756,000	Operating
Voluntary protection and restoration			
Estuary and Salmon Restoration Program	Recreation and Conservation Office	$25,512,000	Capital
Floodplains by Design	Ecology	$70,392,000	Capital
Puget Sound Acquisition and Restoration Program	Puget Sound Partnership	$65,400,000	Capital
Rivers and Habitat Open Space Program	Natural Resources	$4,980,350	Capital
Salmon Recovery Funding Board	Recreation and Conservation Office	$82,000,000	Capital
Salmon recovery region and lead entity capacity	Recreation and Conservation Office	$4,472,000	Operating
Washington Coast Restoration and Resiliency Initiative	Recreation and Conservation Office	$17,593,000	Capital
Chehalis strategy implementation	Ecology	$70,000,000	Capital
Duckabush-Puget Sound Nearshore Ecosystem Restoration Project	Fish and Wildlife	$41,000,000	Capital
Restoration of habitat on working lands			
Conservation Reserve Enhancement Program	Conservation Commission	$7,825,000	Capital
Forest Riparian Easement Program	Natural Resources	$6,360,000	Capital
Salmon Recovery Program	Conservation Commission	$3,000,000	Operating

Proposal	Agency	Amount	Budget
Watershed Resilience Action Plan for Snohomish	Natural Resources	$2,864,000	Operating
	Subtotal:	**$416,996,350**	
INVEST IN CLEAN WATER INFRASTRUCTURE FOR SALMON AND PEOPLE			
Toxics reduction			
Emerging toxics in Chinook salmon and Southern Resident killer whale	Fish and Wildlife	$1,770,000	Operating
Tire dust in stormwater	Ecology	$5,195,000	Operating
Toxic tire wear chemical	Ecology	$2,702,000	Operating
Stormwater and wastewater infrastructure improvements			
Addressing nonpoint pollution	Ecology	$2,256,000	Operating
Municipal wastewater permitting	Ecology	$5,002,000	Operating
Stormwater Financial Assistance Program	Ecology	$68,000,000	Capital
Stormwater public-private partnerships	Ecology	$3,000,000	Capital
Stormwater retrofits	Transportation	$20,000,000	Transportation
	Subtotal:	**$108,000,000**	
CORRECT FISH PASSAGE BARRIERS AND RESTORE SALMON ACCESS TO HISTORICAL HABITAT			
Fish passage barrier removal			
Brian Abbott Fish Barrier Removal Board	Fish and Wildlife	$94,065,000	Capital
Family Forest Fish Passage Program	Natural Resources	$10,870,000	Capital
Toutle River fish collection facility upgrades	Fish and Wildlife	$14,239,000	Capital
Reintroduction			
Upper Columbia River reintroduction	TBD	$3,000,000	Operating
Barrier information and regulation improvements			
Fish passage rulemaking	Fish and Wildlife	$450,000	Operating
Statewide barrier prioritization	Fish and Wildlife	$584,000	Operating
	Subtotal:	**$123,208,000**	
BUILD CLIMATE RESILIENCY			
Streamflow restoration			
Streamflow policy support	Fish and Wildlife	$1,038,000	Operating
Streamflow Restoration Program	Ecology	$40,000,000	Capital

Proposal	Agency	Amount	Budget
Water Irrigation Efficiencies Program	Conservation Commission	$6,000,000	Capital
Columbia River basin water supply			
Columbia River Water Supply Development Program	Ecology	$49,000,000	Capital
Drought preparedness and response	Ecology	$11,000,000	Operating
Upper Columbia and Nooksack adjudications	Ecology	$4,274,000	Operating
Walla Walla 2050 water management plan	Ecology	$0	
Yakima Basin Integrated Plan Water Supply	Ecology	$49,000,000	Capital
Technical capacity for climate resilience			
Climate resilient Washington Department of Fish and Wildlife	Fish and Wildlife	$1,500,000	Operating
Growth Management Act update for climate resiliency	Commerce	$3,638,000	Operating
	Subtotal:	**$165,450,000**	
ALIGN HARVEST, HATCHERIES, AND HYDROPOWER WITH SALMON RECOVERY			
Harvest management			
Emerging fishery implementation in the Columbia River	Fish and Wildlife	$3,133,000	Operating
Fisheries enforcement compliance	Fish and Wildlife	$4,036,000	Operating
Salmon and steelhead monitoring	Fish and Wildlife	$1,644,000	Operating
Hatchery investments			
Hatchery investment strategy	Fish and Wildlife	$4,970,000	Operating
	Subtotal:	**$13,783,000**	
ADDRESS PREDATION AND FOOD WEB ISSUES FOR SALMON			
Pinniped management			
Columbia River pinniped predation	Fish and Wildlife	$1,506,000	Operating
Salish Sea marine mammal surveys	Fish and Wildlife	$940,000	Operating
	Subtotal:	**$2,446,000**	
	Total:	**$829,808,350**	

Appendix A: Summary of 2022 supplemental budget

Proposal	Agency	Final Enacted	2023-25 Work Plan
PROTECT AND RESTORE VITAL SALMON HABITAT			
Conservation project engineering	Conservation Commission	$2,700,000	No new request
Conservation Reserve Enhancement Program	Conservation Commission	$7,000,000	New
Duckabush-Puget Sound Nearshore Ecosystem Restoration Project	Recreation and Conservation Office	$25,000,000	New
Spokane Lead Entity	Recreation and Conservation Office	$200,000	New
Forest Riparian Easement Program	Natural Resources	$5,000,000	New
Implement Governor's salmon strategy	Recreation and Conservation Office	$139,000	No new request
Kelp and eelgrass conservation	Natural Resources	$1,149,000	No new request
Net ecological gain	Fish and Wildlife	$256,000	Placeholder
Riparian habitat improvements	Governor's Office	$300,000	Placeholder
Riparian plant nursery	Conservation Commission	$1,300,000	No new request
Riparian program evaluations	Office of Financial Management	$226,000	No new request
Riparian systems assessment	Fish and Wildlife	$1,067,000	New
River migration and stream mapping for salmon	Ecology	$1,065,000	New
Salmon recovery and Growth Management Act integration	Fish and Wildlife	$1,297,000	No new request
Salmon Recovery Funding Board	Recreation and Conservation Office	$75,000,000	New
Salmon Recovery Program	Conservation Commission	$10,000,000	New
Statewide lidar acquisition and refresh	Natural Resources	$3,481,000	New
Upper Quinault River restoration project	Recreation and Conservation Office	$1,000,000	No new request

Proposal	Agency	Final Enacted	2023-25 Work Plan
Watershed Resilience Action Plan for Snohomish	Natural Resources	$225,000	New
Regional fisheries enhancement groups	Fish and Wildlife	$500,000	No new request
Salmon habitat improvements on Department of Natural Resources lands	Natural Resources	$5,000,000	No new request
Salmon recovery plan updates	Puget Sound Partnership	$2,576,000	No new request
Shoreline aerial photography	Ecology	$200,000	No new request
Shoreline management compliance assistance	Ecology	$896,000	No new request
	Subtotal:	**$145,577,000**	
INVEST IN CLEAN WATER INFRASTRUCTURE FOR SALMON AND PEOPLE			
Increase local stormwater capacity	Ecology	$4,000,000	No new request
Reduce nutrients in Puget Sound	Ecology	$989,000	No new request
Toxic tire wear chemical	Ecology	$2,704,000	New
	Subtotal:	**$7,693,000**	
CORRECT FISH PASSAGE BARRIERS AND RESTORE SALMON ACCESS TO HISTORICAL HABITAT			
Fish passage rulemaking	Fish and Wildlife	$294,000	New
Statewide prioritization of barriers	Fish and Wildlife	$360,000	New
Upper Columbia River reintroduction	Fish and Wildlife	$3,000,000	New
	Subtotal:	**$3,654,000**	
ALIGN HARVEST, HATCHERIES, AND HYDROPOWER WITH SALMON RECOVERY			
Compliance assistance participation	Ecology	$557,000	No new request
Compliance assistance participation	Fish and Wildlife	$494,000	No new request
Deschutes Watershed Center-Capital	Fish and Wildlife	2,200,000	No new request
Electronic catch record cards	Fish and Wildlife	$372,000	No new request
Enloe Dam removal study	Fish and Wildlife	$250,000	No new request

Proposal	Agency	Final Enacted	2023-25 Work Plan
Environmental prosecution	Fish and Wildlife	$852,000	No new request
Fisheries enforcement compliance	Fish and Wildlife	$1,283,000	New
Hatchery production evaluation	Fish and Wildlife	$4,283,000	No new request
License reduction and alternative gear	Fish and Wildlife	$14,400,000	No new request
Marine fisheries compliance liaison	Fish and Wildlife	$226,000	No new request
Salmon and steelhead monitoring	Fish and Wildlife	$6,912,000	New
Skagit River protection	Commerce	$4,500,000	No new request
Snake river mitigation study	Governor's Office	$375,000	No new request
Support of tribal hatcheries	Fish and Wildlife	$3,510,000	No new request
	Subtotal:	**$40,214,000**	
STRENGTHEN SCIENCE, MONITORING, AND ACCOUNTABILITY			
Fish migration monitoring	Fish and Wildlife	$2,392,000	No new request
Forage fish spawning monitoring	Fish and Wildlife	$721,000	No new request
King County Conservation District artificial lighting impacts on salmon	Conservation Commission	$125,000	No new request
	Subtotal:	**$3,238,000**	
	Total:	**$200,376,000**	

Appendix B: Work plan evaluation criteria

The following criteria were developed to prioritize state agency salmon recovery proposals. High-priority proposals are highlighted in the work plan and included in the agency summary table in Appendix A. Medium-priority proposals are mentioned in the work plan, but budget request amounts are not included. Proposals that do not directly or broadly implement a specific strategy action, but support environmental protection were given a low priority. Although these proposals may be a high priority for the State, they did not meet the evaluation criteria to implement the strategy and are not included in this work plan.

Priority	Definition
High	The proposal meets the following criteria: • Identified as a specific strategy action • Urgent in this coming biennium • Aligned with a known tribal priority • Aligned with the regional recovery plan
Medium	The proposal meets all the following criteria: • Broadly addresses a specific strategy action • Implements salmon recovery
Low	The proposal meets the following criterion: • Broadly supports environmental protection that will have benefits to salmon recovery

WASHINGTON STATE RECREATION AND CONSERVATION OFFICE
Salmon Recovery Funding Board

Salmon Recovery Funding Board Decision Memo

Item 9

Meeting Date: December 7, 2022

Title: Monitoring Update

Prepared By: Erik Neatherlin, Governor's Salmon Recovery Office (GSRO) Director
Keith Dublanica, GSRO Science Coordinator

This memo summarizes the current status of monitoring funding and provides an update for the monitoring synthesis report and adaptive management strategy. Governor's Salmon Recovery Office staff will provide an overview of the process to date, a summary of anticipated work products and deliverables, and outline the timeline for completing these tasks. In addition, given that the Washington Department of Fish and Wildlife (WDFW) has secured state operating dollars to fund the WDFW fish in/fish out gaps, there is a recommendation to set aside the $208,000 fish in/fish out funding for other regional monitoring priorities.

Board Action Requested

This item will be a:
- ☒ Request for Decision
- ☐ Request for Direction
- ☐ Briefing

Monitoring Funding Status

At the June 2, 2022, meeting, the Salmon Recovery Funding Board (board) approved $2,000,000 of the Pacific Coastal Salmon Recovery Funds (PCSRF) to support the board's monitoring programs including: Intensively Monitored Watersheds (IMW), fish in/fish out population status monitoring, monitoring synthesis report, and the monitoring panel. The board also approved up to $350,000 for regional monitoring. These figures are reflected in the table below.

The board also requested that the board monitoring subcommittee, monitoring panel regional recovery organizations, Washington Salmon Coalition, and the Governor's Salmon Recovery Office (GSRO) continue to meet regularly to guide the monitoring synthesis and adaptive management strategy efforts.

At the September 2022 board meeting, the Washington Department of Fish and Wildlife (WDFW) notified the board that the agency has identified internal operating funds to address the $208,000 fish in/fish out gaps. This permanent fund shift made the board's $208,000 fish in/fish out funding available for other monitoring programs. The monitoring subcommittee met in November 2022 and discussed several topics including the fish in/fish out funding. There was general support to make the $208,000 funding available for one year only for regional monitoring while Dr. Bilby, Dr Bisson, and the Monitoring Panel complete their work on the synthesis report and adaptive management strategy. There is motion language at the end of this memo for board consideration to set aside up to $208,000 for one year only to regional monitoring consistent with the conversation at the monitoring subcommittee meeting. This proposed change is reflected in the table below in italics.

Board Monitoring Programs	Funding Approved at June 2022 Meeting	Proposed Updated Funding Levels
Intensively Monitored Watersheds	$1,638,000	$1,638,000
Remote Sensing Pilot	$0 (previously funded)	$0
Monitoring Synthesis Report	$75,000	$75,000
Monitoring Panel	$79,000	$79,000
Fish in / Fish out	$208,000	$0 (covered by WDFW)
Proposed for Regional Monitoring	*$0*	*$208,000 (one-time fund shift)*
Total	**$2,000,000**	**$2,000,000**
Regional Monitoring via Annual Grant Round	$350,000	$350,000

Updates

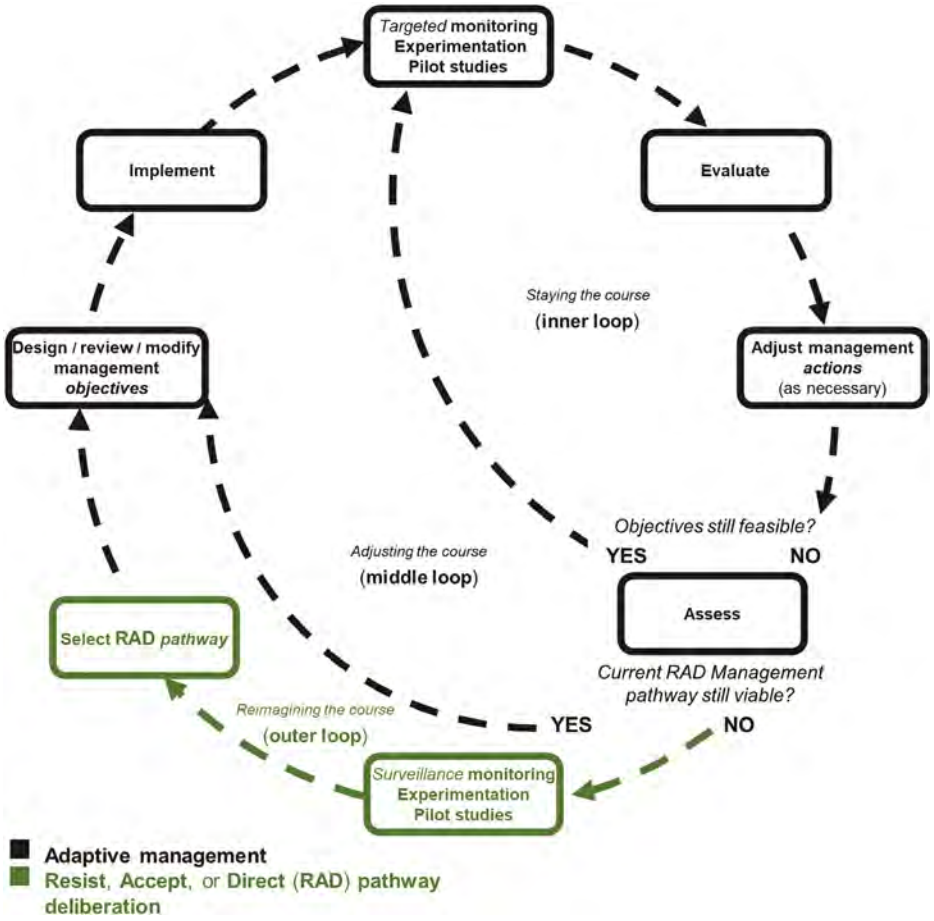
As part of the June 2022 monitoring funding decision, the board directed the GSRO to work with the monitoring panel to complete a Washington State IMW synthesis report and explore an initial adaptive management strategy to guide long term board monitoring investments and provide a framework to learn from ongoing monitoring programs.

Monitoring Synthesis Report

Work has begun on the IMW synthesis for Washington's IMWs. Monitoring panel member Dr. Bob Bilby is leading this effort and will give an update on the progress to date, the expected work products, and the timeline for completion in 2023.

Monitoring Adaptive Management Strategy

The monitoring panel, Dr. Bilby, and Dr. Pete Bisson are also developing an adaptive management framework and strategy to guide the board's monitoring program. The RAD (Resist, Accept, or Direct pathway) process, as outlined in the Lynch, et al. paper (Attachment A), is one of the processes that might be most tailored to the board's needs and processes. GSRO staff will provide an update on this process, anticipated products, and timeline for completion.



Remote Sensing "proof-of concept" Pilot

A report is expected early in 2023 and will address the success of the remote sensing methodology including sites in Western and Eastern Washington. There are ongoing discussions to continue to leverage existing data and sources of information to maximize the efficacy of the pilot.

Contracting Changes

Due to staffing changes at Washington Department of Ecology (Ecology), there will be changes to the contracting agreements and roles for Ecology, WDFW, and GSRO. Beginning in the new contract period (January 2023), Ecology will no longer be administering the IMW funding for the sub-recipients. The GSRO will assume the role of contract management for the sub-recipients, including the Lower Elwha S'Klallam Tribe, Skagit River Cooperative, and NOAA Fisheries Science Center. Ecology will continue to manage and oversee the flow gauges for the IMW studies, and WDFW will assume management of additional seasonal staffing for field work.

Weyerhaeuser Company (WeyCo) provides critical in-kind field technician support for the IMWs. They have agreed to continue their in-kind support through 2027. WeyCo does not receive any board funding but provides critical field technical and technical in-kind support for the IMW studies.

Motion

Move to approve a one-time fund shift for up to $208,000 of fish in/fish out monitoring funding to be made available for regional monitoring projects. Selection and approval of the projects will occur via the grant round process.

Strategic Plan Connection

Goal 2: Be accountable for board investments by promoting public oversight, effective projects, and actions that result in the economical and efficient use of resources.

- Monitoring Strategy: Provide accountability for board funding by ensuring the implementation of board-funded projects and assessing their effectiveness, participate with other entities in supporting and coordinating statewide monitoring efforts, and use monitoring results to adaptively manage board funding policies.

Attachment A

Scientific Paper on RAD (Resist-Accept-Direct Framework) Adaptive Management for Transforming Ecosystems

RAD Adaptive Management for Transforming Ecosystems

ABIGAIL J. LYNCH, LAURA M. THOMPSON, JOHN M. MORTON, ERIK A. BEEVER, MICHAEL CLIFFORD, DOUGLAS LIMPINSEL, ROBERT T. MAGILL, DAWN R. MAGNESS, TRACY A. MELVIN, ROBERT A. NEWMAN, MARK T. PORATH, FRANK J. RAHEL, JOEL H. REYNOLDS, GREGOR W. SCHUURMAN, SURESH A. SETHI, AND JENNIFER L. WILKENING

Intensifying global change is propelling many ecosystems toward irreversible transformations. Natural resource managers face the complex task of conserving these important resources under unprecedented conditions and expanding uncertainty. As once familiar ecological conditions disappear, traditional management approaches that assume the future will reflect the past are becoming increasingly untenable. In the present article, we place adaptive management within the resist–accept–direct (RAD) framework to assist informed risk taking for transforming ecosystems. This approach empowers managers to use familiar techniques associated with adaptive management in the unfamiliar territory of ecosystem transformation. By providing a common lexicon, it gives decision makers agency to revisit objectives, consider new system trajectories, and discuss RAD strategies in relation to current system state and direction of change. Operationalizing RAD adaptive management requires periodic review and update of management actions and objectives; monitoring, experimentation, and pilot studies; and bet hedging to better identify and tolerate associated risks.

Keywords: contemporary climate change, nonstationarity, natural resource management, climate adaptation, loop learning, loop leaps

Natural resource managers face a daunting task: maintaining dynamic and often unpredictable ecological systems within some desired range of conditions frequently defined in terms of historical observations. Adaptive management has helped guide managers in this task by employing an iterative approach to foster learning and refine objectives and potential actions for more effective decision making (Holling 1978, Walters and Hilborn 1978, Williams 2011). As a management philosophy, adaptive management generally operates under a number of elemental premises, including the ability to (1) clearly define desired management outcomes; (2) characterize structural uncertainty by a set of competing, testable models; and (3) adequately influence or control the system (controllability; Williams et al. 2007). Although variation around a stable mean (stationarity; Milly et al. 2008) is not a formally defined assumption of adaptive management, it is often implicit in either the system models or the objective-setting process (Williams and Brown 2012). Many of these considerations can hinder adaptive management from broader usage (Westgate et al. 2013).

Although climate-smart conservation has effectively drawn adaptive management into the climate change arena (Stein et al. 2014), ecosystem transformation poses some direct challenges to adaptive management's basic tenets—namely stationarity, characterizing uncertainty, and controllability (Williams and Brown 2016). A transforming ecosystem is one exhibiting shifts in multiple components that are not easily reversed through management actions (see Schuurman et al. 2021). Anthropogenic ecological trajectories and ecosystem transformations are now recognized to be occurring at rates that render the historical range of variability less and less relevant as a management target (Walters and Holling 1990, Millar et al. 2007, Wiens et al. 2012, Schuurman et al. 2021). However, a dominant assumption that the future system behavior will mimic past behavior remains in management approaches (Nichols et al. 2011, Beever et al. 2013, Schuurman et al. 2021).

To facilitate a transition to managing ecosystems in which past experiences no longer suffice, we place adaptive management within the resist–accept–direct (RAD) conceptual framework (Lynch et al. 2021, Thompson et al. 2021, Schuurman et al. 2021). The RAD framework is a simple, flexible tool to help managers make informed, purposeful choices about how to *resist, accept,* or *direct* changes in ecosystems; the tool applies both on public and private lands (Schuurman et al. 2020). We build from a strong body of adaptive-management and loop-learning literature (Flood and Romm 1996, Williams et al. 2007, Pahl-Wostl 2009, Williams and Brown 2014, 2016, 2018), but emphasize that managing transforming ecosystems requires an explicit

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Box 1. Using a compass and a gyroscope to navigate a transforming world.

The resist–accept–direct (RAD) framework (Lynch et al. 2021, Schuurman et al. 2021, Thompson et al. 2021) can help a manager navigate a transforming world like a compass helps one navigate toward a specific destination, providing guidance on when a management pathway needs redirecting because it will no longer effectively reach the desired destination. *Surveillance* monitoring, experimentation, and pilot studies are essential components of this process.

Adaptive management can help maintain a management pathway like a gyroscope is used to maintain a heading. It offers iteratively improved precision along an identified pathway that leads to a predefined desired outcome via feedback loops of technical learning, institutional learning, and changing values and beliefs over decades (and perhaps longer). *Targeted* monitoring is necessary to evaluate and adjust management actions.

Note that Lee (1994) originally proposed the compass as an analogy for adaptive management and the gyroscope as an analogy for public and stakeholder participation in democratic decision processes. Lee's intent was to focus on improving social learning. At that time, most managers viewed ecosystems as stationary, and adaptive management was often implemented with the single-loop model, focused on technical solutions (Walters 1986).

In the present article, we flip the original analogy because current system states are now acknowledged to be more complex, with multiple plausible ecological trajectories (Laycock 1991, Tausch et al. 1993) and multiple management pathways (Magness et al. 2021). In addition, adaptive management has further evolved to embrace social inputs, so multiple learning loops (Pahl-Wostl 2009, Williams and Brown 2018) are needed in the conceptual space originally occupied in Lee's compass–gyroscope analogy (figure 1).

understanding of the current functions and trajectory, a marked shift from conventional interpretations of adaptive management (box 1). We present a case study from the Mojave Desert (box 2) on how to operationalize RAD adaptive management. And, we conclude by acknowledging that although risks may be reduced, there is no one pathway to one final state amid a transforming world. RAD adaptive management is an iterative process that requires periodic review and update of management actions and objectives; monitoring, experimentation, and pilot studies; and bet hedging to support informed risk taking.

Staying the course

Adaptive management is generally defined as a six-step cycle of assessing, designing, implementing, monitoring, evaluating, and adjusting that allows managers to work iteratively toward improved understanding and improved management over time (Williams et al. 2007). Adaptive management was initially envisioned as a single loop (Walters and Hilborn 1978) that incorporates technical learning. Later, a second loop (Argyris and Schön 1978) was added to incorporate institutional learning and, together with the single loop, composes the six-step cycle that is most familiar to natural resource managers (Williams and Brown 2018). A third loop (Pahl-Wostl 2009) was later suggested to allow updates to underlying values and beliefs (see Williams and Brown 2018).

Within this adaptive-management cycle, every step is intended to refine and improve movement toward a predefined management target. If the identified objectives continue to be feasible, continued *targeted* monitoring ("designed around testable hypotheses over defined areas"; Sparrow et al. 2020, p. 1706), experimentation, and pilot studies can be used incrementally to improve management action without questioning the underlying assumptions (figure 1, inner loop). Even in this stationary situation, it is important to recognize the need to consider both near-term and temporally distant planning horizons (Walters 1986). For example, the Great Lakes lampricide program considers the immediate impacts on the treated tributaries, as well as the longer-term lake-level benefits of sea lamprey (*Petromyzon marinus*) control measures (Siefkes et al. 2014). Similarly, a US Fish and Wildlife Service management program for midcontinent mallards (*Anas platyrhynchos*) employs adaptive harvest by iteratively examining relationships between waterfowl populations, harvest, and broader societal processes to improve hunting regulations with each new increment of learning (Johnson et al. 2015). Such processes must be revisited frequently because directional change can quickly derail management pathways.

Adjusting the course

If management objectives are no longer feasible but the current RAD pathway is still considered the appropriate strategy, managers can still operate in the six-step adaptive-management cycle. This involves revisiting assumptions about cause–effect relationships and adjusting management objectives to align with feasible outcomes (figure 1, middle loop). Interventions may need to change or intensify to maintain a system state, if the system is subject to escalating directional drivers. *Targeted* monitoring, experimentation, and pilot studies can be used to test and refine potential management interventions that may later be implemented at broader scales (Nichols and Williams 2006). For example, comparing tree seedling densities after different prescribed fire treatments can guide actions for expanding the area of a functional grassland system and serve as metrics of success when directing transformation of a forest ecosystem to grassland (Davis et al. 2019). Managers may choose in this loop to be forward looking, and perhaps assess species'

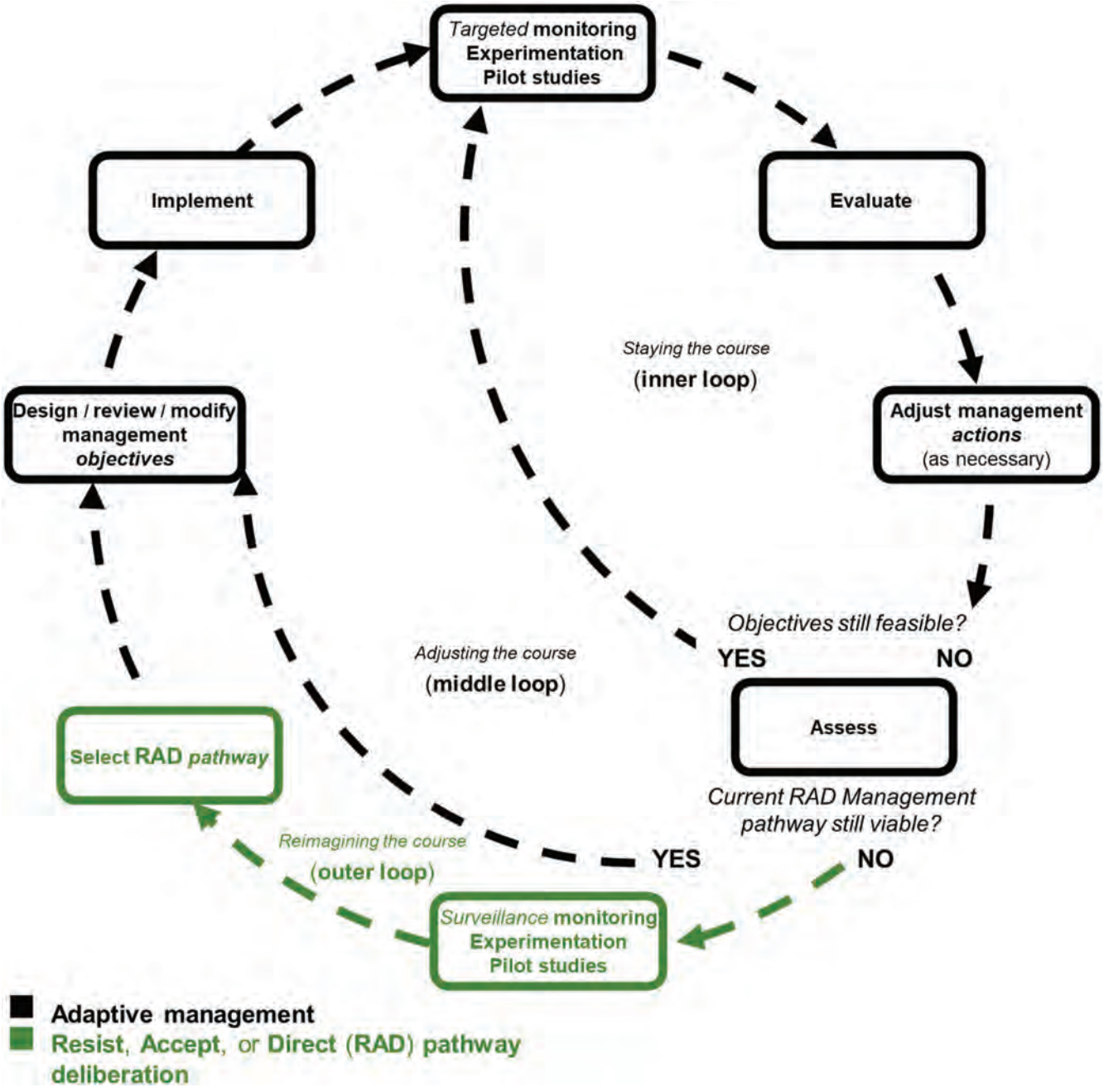

Figure 1. Adaptive management is generally defined as a six-step cycle (black). The resist–accept–direct (RAD) framework (green) can be overlaid on this process to assist informed risk taking for transforming ecosystems.

adaptive capacity (Thurman et al. 2020) or climate-change vulnerability (Foden et al. 2019) on the basis of their attributes or observed status and trends (Nicotra et al. 2015).

Reimagining the course

In the six-step adaptive-management model, the management pathway does not need to change, because fundamental drivers of ecological condition are considered stationary. However, as ecosystems become vulnerable to irreversible transformation, decision makers will need to refocus on emerging processes such as altered hydrology, loss of topsoil, or marine acidification, or on critical components such as keystone, foundation, or invasive species. More fundamentally, they will need to identify alternative acceptable (or least unacceptable) outcomes if previous management objectives become infeasible (Crausbay et al. 2021). Including stakeholders and rightsholders in RAD deliberations can help identify the existing knowledge base and community values to determine feasible and desirable system trajectories, given ecological, economic, and sociopolitical constraints (Lynch

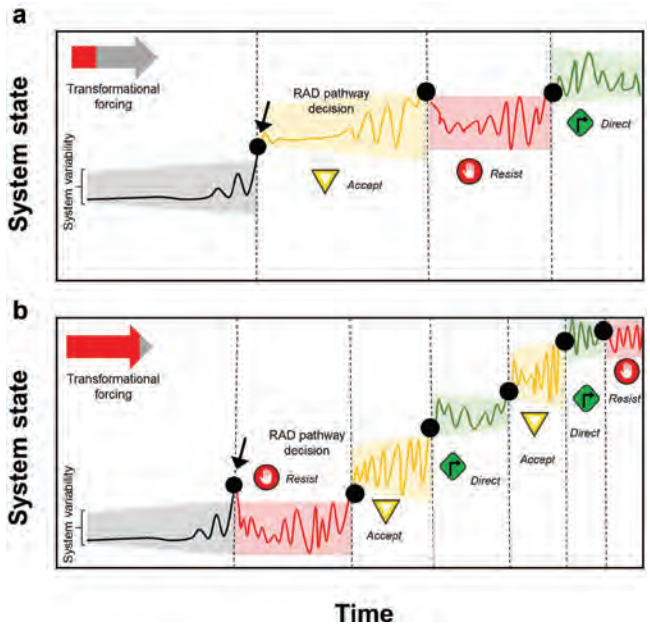

Figure 2. Heuristic decision pathways using adaptive management that begin with a current ecosystem (grey) affected by (a) moderate or (b) strong transformational forcings that drive outer-loop decisions (black dots) to* resist *(red time periods),* accept *(yellow), or* direct *(green) the trajectory of change. Under continued transformation, ecosystems depart farther in multidimensional space from starting conditions and system variability may increase in some cases. Stronger transformational forces may require revisiting the outer loop more frequently because the rate of ecosystem transformations is likely to increase.

et al. 2021). RAD deliberations can be a standalone process or integrated into other existing planning processes such as scenario planning (Peterson et al. 2003), structured decision making (Conroy and Peterson 2013), and climate-smart conservation (Stein et al. 2014). Climate-smart conservation is a particularly good complement for RAD adaptive management because it is built on a foundation of adaptive management and explicitly acknowledges the need to manage for change, not just persistence (NPS 2021).

Managers and other decision makers can collaboratively examine multiple pathways within the RAD framework to address transformations in ecosystem structure, function, and services. If a management pathway is no longer viable, assessment of alternative options can help reduce uncertainties about system trajectories, drivers, and responses to potential management interventions (figure 1, outer loop). For example, prescribed fire can be used in some locations to experimentally assess how changing wildfire regimes shape current and future ecosystems by linking fire behavior to fire effects in real time (Hiers et al. 2020). Likewise, common gardens may be used to explore which species (Berend et al. 2019) or plant genotypes (Flanagan et al. 2018) are best suited for managed relocation (Crausbay et al. 2021).

Loop leaps

Inevitably, setting goals for the distant future will require a fundamental shift in management thinking to accommodate ecosystem transformation. Openness to continued learning and changing pathways is necessary because ecological surprises are inevitable (Walker and Salt 2012). Adaptive management objectives for transforming ecosystems need to explore multiple, plausible ecological trajectories (Noy-Meir 1975, Bestelmeyer et al. 2003, Crausbay et al. 2021, Magness et al. 2021), and strategies may shift as ecological surprises manifest themselves (Williams and Jackson 2007). Management culture may need to shift to a mindset that encourages risk taking, nimble responses, and a greater commitment to learning through science-based processes; Crausbay and colleagues (2021) defined many science priorities raised by the information needs of this new management outlook.

The uncertainties associated with ecological transformation will make it increasingly difficult to identify pathways that are simultaneously ecologically viable, socially acceptable, and economically feasible (Lynch et al. 2021). Multiple decision points in RAD adaptive management provide opportunity to reassess 1) whether the objectives are still feasible and 2) whether the currently pursued RAD pathway is still viable (figure 1). Should a change in course be warranted, the management trajectory can be reset to a different course through a loop leap (figure 2).

Needing to know when to leap the nested management loops, either to revisit objectives along the same RAD strategy pathway (figure 1, middle loop) or to consider new system trajectories and RAD strategies (figure 1, outer loop), presents new challenges that may require different approaches for different systems. The knowledge necessary for loop leaps comes from establishing effective monitoring programs to refine plausible future trajectories, identifying nearby ecological tipping points (Dakos et al. 2019, Magness et al. 2021), designing experiments to examine system thresholds, or planning pilot studies to test alternative management actions (table 1).

Loop leaps may be needed more frequently where transformations are happening more rapidly because of the magnitude of climate-change exposure, frequency of extreme climate events, and other drivers of change. In extreme cases, the outer loop may need frequent visitation, shifting among RAD strategies over time (figure 2). Even within a particular management jurisdiction, transformational forces can vary. For instance, environmental conditions are likely to deteriorate more rapidly at the trailing edge of a shifting species' range than at the center (Hampe and Petit 2005). As one illustration, the endangered American burying beetle (*Nicrophorus americanus*) requires uncompacted, moist (nonsaturated) soil to bury carrion and uses different habitat types in northern and southern regions of the Great Plains in the United States, which vary in both temperature and precipitation (Leasure and Hoback 2017). As the frequency, duration, and intensity of drought conditions across

Box 2. A case study of RAD adaptive management in the Mojave Desert.

The Mojave Desert is the driest region of North America, and experiences extreme seasonal temperature variability; summer temperatures can exceed 54 degrees Celsius (129 degrees Fahrenheit) and winter temperatures can fall below freezing. The region is characterized by large topographic and elevational variability, ranging from –85 meters (m; –279 feet) to over 3500 m (over 11,000 feet). The large topographic variability and dearth of surface water account for the high numbers of endemic species, threatened and endangered species, and isolated and unique ecosystems (NatureServe 2021). Over the past three decades, the Mojave has experienced rapid anthropogenic development, which is likely to increase as cities in the region grow. Drivers of ecosystem transformation are wide ranging and include introduced species, groundwater pumping, and climate change. A decline in species richness and distributions over the last century (Iknayan and Beissinger 2018, Riddell et al. 2021) is expected to intensify as the Mojave becomes warmer and drier with increasingly frequent extreme-weather events (Seager et al. 2007, Diffenbaugh et al. 2008, Cook et al. 2015).

Water is the most limiting resource in the Mojave. Because both uncertainty (future hydrological regimes) and controllability (water is highly manipulated in managed portions of deserts) are high, adaptive management may be particularly useful when discussing water-related RAD actions in arid landscapes (Allen et al. 2011). However, the Mojave presents four major challenges that successful (RAD-based) adaptation must overcome: (1) multiple competing demands on limited resources that will likely intensify in the future; (2) multiple jurisdictions include several federal agencies, Tribal nations, states, and local municipalities; (3) changing policy directives from new political administrations that alter or shift implementation of management strategies; and (4) slow ecological processes that may require multidecadal timescales before *a priori* management triggers are met. The temporal mismatch between ecosystem processes and management actions presents a challenge for all managers; however, the RAD pathway provides a framework for before, during, and after (figure 2). In this Mojave case study, we use desert springs to illustrate two spatial scales of application for RAD adaptive management.

Ash Meadows National Wildlife Refuge (NWR) comprises numerous desert springs; it possesses unique flora and fauna and has the highest concentration of endemic species in the United States, 26 endemic species inhabit the 9700-hectare (24,000-acre) refuge, including 12 species federally listed as threatened or endangered (Sada 1990). Legislative directives (i.e., US Endangered Species Act) require managers to preserve listed species and habitats (figure 3a). Management objectives, which have been focused on increasing the population size of the endangered Devils Hole pupfish (*Cyprinodon diabolis*) that occurs in only one spring, have been pursued using various actions such as supplemental feeding and habitat manipulation (figure 1, inner loop). The population size continues to decline (Hausner et al. 2014), however, and a refugial population has been created elsewhere as a safeguard. Objectives, which currently include maintaining a viable population *in situ,* may need modification (e.g., to *ex situ*) to meet metrics of success (figure 1, middle loop). Reconsideration of the current RAD pathway (implicitly, *resist*) could be triggered by either continued declines in population size or prohibitive costs (figure 1, outer loop).

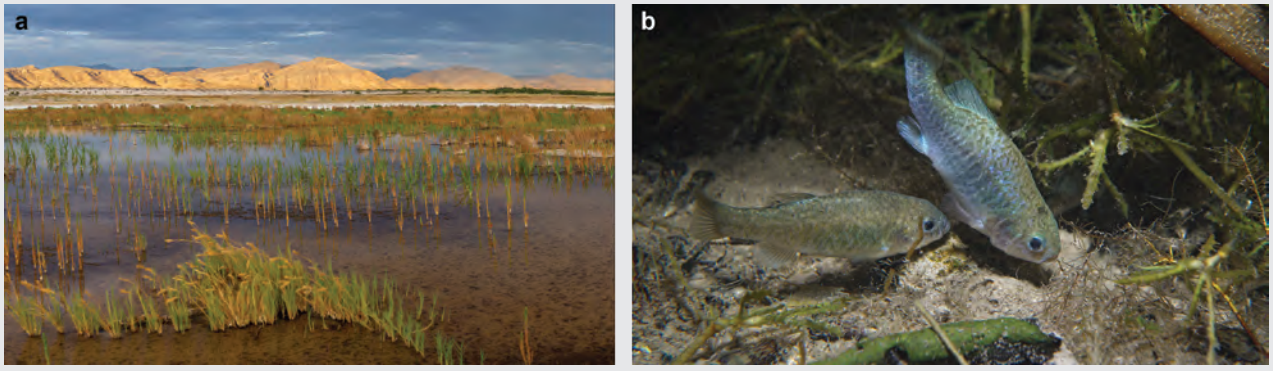

Figure 3. (a) Alkali seep at Ash Meadows National Wildlife Refuge in southern Nevada, a biodiversity hotspot and one of the largest remaining oases in the Mojave Desert. The refuge provides rare spring and wetland habitats for 26 endemic species, 12 of which are federally threatened or endangered. Photograph: Peter Pearsall/USFWS. (b) The Shoshone pupfish (Cyprinodon nevadensis shoshone) historically occurred in Shoshone Spring and throughout its outlet creek in Inyo County, southern California. Photograph: Steven David Johnson.

At broader spatial extents, desert-spring biota throughout the Mojave are threatened by numerous invasive aquatic species (Parker et al. 2021). In some springs, managers have *accepted* transformation of entire fauna into assemblages composed almost entirely of invasive species, particularly when alternative actions are hindered by recreational objectives. Warm desert springs often represent the only swimming holes in rural communities. At other springs, managers have *resisted* change by maintaining or restoring native species by various actions such as invasive species removal and water treatments (figure 1, inner loop).

Metrics of progress indicate that the response of native species to these strategies vary across the Mojave (Parker et al. 2021). Objectives may need revisions to meet the goal of a robust native spring fauna in the Mojave, a metric of success (figure 1, middle loop). For example, objectives could shift to efforts aimed at increasing native species distribution by creating new spring habitats to be stocked with natives (figure 3b). This strategy as a bet-hedging technique is already used in the Mojave, where managers have *directed* change by establishing multiple refugial populations of imperiled species in artificially constructed aquatic environments (figures 3c, 3d). *Surveillance* monitoring could be used to track the status of existing springs in the Mojave, whereas *targeted* monitoring could be used to manage artificial spring

Box 2. Continued.

habitats (Wintle et al. 2010). Reconsideration of this RAD pathway could be triggered by continued declines of native spring species or if water availability becomes reduced to a level at which human use is prioritized over allocation of water for conservation (figure 1, outer loop).

Integrating adaptive management into the RAD decision-making space presents opportunities to address considerations of environmental justice (Crausbay et al. 2021). The Mojave has racially and ethnically diverse populations, a wide rural–urban divide, and a history of inequities associated with past natural resource management decisions. Environmental justice concerns center around equitable distribution of environmental benefits and burdens, which can be incorporated into multiple decision points along the RAD pathway. Effective inclusion of these considerations into planning processes is often an agency requirement, a moral imperative, and can improve the chances for long-term success by incorporating a broader range of knowledge and perspectives into management decisions (Stirling 2008, Daley and Reames 2015, Magness et al. 2021). Specifically, consulting and engaging Tribal and other underrepresented populations in a genuine and respectful way that is meaningful to them is most effective, from clear responsibilities for the different parties at the outset on through the development and implementation of the work. In addition, explicit acknowledgement of the unequal distribution of past environmental burdens in the Mojave can act as a starting point for discussions about how to improve future decision making. For example, in Las Vegas, Nevada, affluent neighborhoods that contain more parks and landscaping are cooler and less climatically stressed than lower-income communities (*sensu* Smith et al. 2020). Managers can promote more equitable outcomes by recognizing past injustices, following environmental-justice requirements and best practices, and including multiple perspectives in decision making. For instance, in situations in which resistance may be more desirable (use of scarce water resources to maintain riparian forests), *resist* actions should be equitably allocated among communities regardless of economic status, ethnicity, or geographic location.

Figure 3. Continued. (c) Excessive water diversion for agriculture and other human use resulted in severe habitat loss, and the Shoshone pupfish was presumed extinct until a single population was rediscovered in a drainage canal in the mid-1980s. Today, Shoshone pupfish numbers have rebounded because of collaborative efforts among multiple entities (Shoshone Village, The Amargosa Conservancy, agencies, universities) to create, stock, and maintain spring-fed ponds for the species. Photograph: Susan Sorrells. (d) Similarly, maintenance of aquatic habitats created for refugial populations of the imperiled relict Leopard Frog (Lithobates onca), previously distributed throughout springs, creeks, and seeps in drainages of the lower Colorado River watershed, is necessary. Photograph: USFWS.

Although our case study depicts a (relatively) straightforward path along a theoretical model, we acknowledge that, in reality, events rarely unfold according to plan. Still, several key messages from the Mojave can be applied more broadly. First, small-scale pilot studies may be easier to initiate on private lands. For example, nonprofit organizations that act as land managers are often less constrained by federal mandates, such as the National Environmental Policy Act, and their decision-making process is typically faster. These nimble organizations have more flexibility when executing RAD options and, therefore, can be a good platform for pilot studies associated with adaptive management. Second, when working with multiple partners across a landscape, some communities may be more open to experimenting with RAD approaches. These communities can provide opportunities to test not only ecological interventions but also different engagement and communication methods for enhancing stakeholder and rightsholder relationships and collaboration. For example, some Tribal Nations in the Mojave have expressed a willingness to experiment with constructing solar energy facilities that use novel wildlife-friendly designs (DOI 2020). Third, participatory planning processes designed to serve as a compass will be most effective when drawing from a comprehensive suite of stakeholders and rightsholders (box 1). Broad participation from community members such as private landowners, conservation organizations, off-road recreationists, Tribes, and agencies was key to successful implementation of RAD actions in the Mojave, and this pattern is likely to hold for other rural communities embedded within landscapes in which adaptive management occurs. Finally, one-third of human populations live in countries characterized by water stress (Vörösmarty et al. 2010), and water scarcity is projected to increase globally because of a changing climate, population growth, and economic development (Hoekstra et al. 2012). Unconventional approaches highlighted in our case study may offer insight to natural resource managers in other arid environments.

Table 1. Loops within the resist–accept–direct (RAD) adaptive-management framework with their purpose, typical actors, iteration frequency, and potential information-gathering approaches that can be used for navigating the loops.

Loop	Purpose	Actors	Relative iteration frequency	Information gathering approaches
Outer Reimagining the course	Navigate the existing knowledge base to identify desired ecosystem futures and relevant RAD strategies given ecological, economic, and social constraints	Policy makers, stakeholders, managers		*Surveillance* monitoring to refine plausible future trajectories, experiments and pilot studies to examine potential RAD pathway changes
Middle Adjusting the course	Develop management objectives under the current RAD pathway in order to achieve desired ecosystem futures	Stakeholders, managers		*Targeted* monitoring to identify ecological tipping points, experiments to examine system thresholds
Inner Staying the course	Implement, monitor, evaluate, and adjust actions to iteratively improve management effectiveness and achieve management objectives	Managers		*Targeted* monitoring to evaluate progress toward management objectives, pilot studies and experimentation to test alternative management actions

Note: Although we depict iterations occurring at regular frequencies, the middle- and outer-loop iterations may be triggered by regular revisit schedules, detected by crossed thresholds, or linked to contingencies defined through planning processes.

the Great Plains are difficult to accurately model (Feng et al. 2017), conserving the American Burying Beetle may require more nimble and slightly different responses in different areas of its range.

Who bears the burden of implementation and opportunity costs when loop leaps occur will depend on the RAD pathway selected. For example, an *accept* objective may only result in monitoring costs for public-land managers but may involve substantial financial or social consequences for other stakeholders and rightsholders if it leads to loss or degradation of ecosystem services. Potential trigger points (Mulder et al. 1999) for loop leaps and socioeconomic and environmental-justice implications for potential pathways are considerations across any option (Magness et al. 2021). Because learning is ongoing through the process, timing of reevaluation can be refined (figure 2).

As a specific example, Devils Tower National Monument in northeast Wyoming, in the United States, is centered on a massive igneous monolith rising above the surrounding plains, which Native peoples consider sacred and have lived and held ceremonies beside for thousands of years. The whole management unit—including a complex of ponderosa pine (*Pinus ponderosa*) forest and woodland, some with a bur oak (*Quercus macrocarpa*) understory, and meadows flanking the base of the tower—is an ethnographic landscape, and modern connections between Native American culture and the tower are maintained through personal and group ceremonies and practices. Preserving ethnographic resources, including meadows used as ceremonial sites, is therefore a management priority. However, a recent climate change scenario planning process highlighted the possibility of strong future shifts in the forest–meadow ratio that might affect an important ceremonial space. In recognition of the potential need to *resist* or *direct*, rather than *accept*, managers identified ways in which their monitoring approaches could be updated specifically to be more sensitive to changes in tree recruitment that could trigger different forest management approaches (Schuurman et al. 2019).

Operationalizing RAD adaptive management

Although the need to address directional system change has long been acknowledged in adaptive management (Williams and Brown 2012), in our collective experience, resource managers either have not yet widely embraced it or are still seeking guidance and tools for managing under rapid change. Our simple RAD adaptive management approach uses the familiar to confront the unfamiliar. It combines iterative planning with stakeholders and rightsholders to choose a RAD strategy with adaptive-management practices to craft management objectives and implement actions.

At the most fundamental level, stakeholders, rightsholders, managers, and policy makers will have to decide whether to *resist, accept,* or *direct* ecosystem change, and what indicators to monitor that would alert them when a loop leap is needed (see table 1). For example, under *resist* and *direct* strategies, iterative and adaptive management approaches provide a process to improve learning by doing (Walters and Holling 1990) and satisfy management objectives (figure 1, inner loop) or shift management objectives (figure 1, middle loop). In contrast, under an *accept* strategy, management may focus instead on *surveillance* monitoring (figure 1, outer loop) that could detect system change or thresholds that show the need for a *direct* or *resist* strategy. Alternatively, management might focus on experimentation to speed learning about *direct* or *resist* strategies (figure 1, outer loop).

The choice of pathway will be influenced by an understanding of the current rates of transformation, plausible future trajectories of transformation, and realistic expectations for management action (Magness et al. 2021). The rate of transformation is context dependent but there is potential for rapid ecological transformation, even within a management timeframe (figure 2). Mass coral reef bleaching, drought-induced tree mortality, and cyanobacteria blooms in lakes are just a few examples of abrupt changes in marine, terrestrial, and aquatic ecosystems that can happen over very short timescales (Turner et al. 2020).

Time itself may dictate the feasibility of any given RAD pathway. In some cases, *resist* strategies may be the only feasible choice, given near-term decision requirements. However, substantial conservation challenges can arise from temporal mismatch in the function and scale of social and ecological systems (Young 2002, Beever et al. 2019). Sustaining interest, funding, and political will warrant understanding and communicating the implications of timescales for any RAD deliberation.

This time element for transformational adaptation (Kates et al. 2012) is driven by a wider set of institutions, stakeholders, and rightsholders than those tied directly to an individual RAD decision (Magness et al. 2021). Societal and institutional frameworks, values, rules, and knowledge in governance structures constrain the capacity for transformational choices (Wise et al. 2014, Gorddard et al. 2016). Consequently, there is a much larger societal decision-making realm that contains multi-level loops of learning that constrain RAD decisions (Clifford et al. 2021, Magness et al. 2021). Similar future-looking approaches have been effectively implemented for social and institutional dimensions (Colloff et al. 2017, van Kerkhoff et al. 2019). The generally slower rate at which social values and beliefs change may hinder adoption of *accept* or *direct* strategies (Gorddard et al. 2016, Colloff et al. 2017), but it is important to note that social change can also happen rapidly (Repetto 2006).

To help others steward transforming ecosystems, we provide the following guideposts for consideration:

Review and update management actions and objectives periodically. In the face of increasingly pervasive and frequent ecosystem transformations, managers may need to iteratively update actions and objectives to anticipate or adapt to transformation (Nichols et al. 2011, Fisichelli et al. 2016) because historical conditions no longer serve as useful precedent. Through the RAD framework, actions and objectives can be updated at multiple scales to better suit existing conditions and examine the feasibility of achieving specific desired conditions. To facilitate these course corrections, managers can schedule reassessments into their planning processes. These reassessments can be time-based, linked to a tipping point, or tied to conditions that suggest change is, ultimately, probable but with unpredictable timing.

The US State Wildlife Action Plan (SWAP) program, for example, requires each state to review and, if necessary, revise plans for conserving fish, wildlife, and habitats at least every 10 years. This provision is designed to incorporate new information and changing circumstances on a regular basis. And, the SWAP program includes inherent accountability because it is a condition for funding through the State and Tribal Wildlife Grant Program.

Monitor, experiment, and conduct pilot studies. Navigating ecosystem transformations with the RAD framework will likely require both greater humility and also increased willingness to make potentially unprecedented decisions in the face of high uncertainty associated with no-analog climates and novel communities. Managers may see future shifts in their information needs from a focus on the target resource's dynamics to include, at least, *surveillance* monitoring of ecological processes and system functioning (Wintle et al. 2010) to refine understanding of plausible future system trajectories and more frequent assessments of the adequacy of *targeted* monitoring and observation methods. Reassessment of *targeted* monitoring requires asking whether traditional tools and approaches are still tenable for providing the necessary information to achieve management objectives, or whether system observability has declined sufficiently under unfolding ecosystem transformations to warrant a change in monitoring approaches. In many situations, these information needs will require greater collaborations across agencies and with academic partners, because the manager's organization may not have the expertise or resources required to effectively monitor the most informative indicators of system change. Cross agency–academic, manager–researcher relationships are particularly valuable for investigation-based efforts that include data interpretation from monitoring, experimentation, and pilot projects.

Experimental approaches can test, confirm, and improve our understanding of the ecological outcomes of climate signals. For example, snow fences are used *in situ* to simulate warmer soil temperature effects on subarctic vegetation growth and permafrost (Johansson et al. 2013) and arctic microbial activity and nitrogen mineralization (Schimel et al. 2004). Passive heating chambers and fertilizer simulate the effects of warmer air temperatures and changing nutrient dynamics on tree seedlings planted above the treeline (Angulo et al. 2019). This kind of experimentation can provide an early warning indication of potential effects. Such a preview increases the window of opportunity for directing change. However, experiments are in no way predictive, only suggestive (Stephens et al. 2015).

Pilot studies, in contrast, can take the form of demonstration projects as proof of concept or as conventional experiments to demonstrate efficacy of a particular management action; these activities may be particularly important for gaining political and social buy-in, given that a greater diversity of values will typically be involved when revisiting middle and outer loops (Magness et al. 2021). For example, to help *resist*, rainwater catchments can recharge drying springs in southern Nevada, in the United States (box 2; Tambe et al.

2012). To help *direct*, soil inoculation with mycorrhizal fungi can improve bigleaf mahogany (*Swietenia macrophylla*) seedling response to drought stress (Rajan et al. 2020). Subsequent interactions with cyanobacteria facilitate the formation of biological soil crust in deserts, essentially accelerating ecological processes (Wang et al. 2009). In exploring another *direct* option, field transplanting to novel sites coupled with climate suitability models validates the feasibility of assisted colonization of lichens, immobile species with high microclimate sensitivity (Brooker et al. 2018).

Experimentation and pilot studies can be used in tandem to set the stage for selecting among RAD options. For example, van Oppen and colleagues (2015) initially proposed sequential experiments to assess the feasibility of enhancing stress tolerance in corals by accelerating natural processes, a concept they termed "assisted evolution." These experiments were actualized at Australia's National Sea Simulator, where heat-tolerant corals are being created by cross breeding, gene editing, selective breeding through multigenerational rearing in overheated conditions, and manipulating their microbiome. Although these laboratory experiments show promising results, a national committee is considering pilot field studies that may include corralling and steering coral spawn toward degraded reefs and farming hardier corals for transplanting purposes (Cornwall 2019).

Employ bet hedging. In some cases, it may be possible to employ multiple RAD strategies simultaneously in different management areas or sequentially in the same areas (Schuurman et al. 2021). *Resist* approaches may attempt to maintain current conditions as long as possible; *accept* or *direct* approaches can simultaneously be employed to explore potential future trajectories elsewhere in the landscape or ecoregion. For example, iteratively increasing temperatures favor warm-water sport fish species such as largemouth bass (*Micropterus salmoides*) over cool-water species such as walleye (*Sander vitreus*; Tingley et al. 2019). Across a region in which walleye fisheries are declining, management actions could include *resist* strategies, such as stocking to compensate for reduced natural reproduction of walleye; hybrid strategies (somewhere between *resist* and *accept*), such as reduced creel limits to allow a walleye fishery to persist, albeit at lower levels; or *direct* strategies such as stocking warm-tolerant species such as saugeye (*Sander canadensis* × *vitreus*) to maintain similar functions of a top predator in the ecosystem. As we learn about potential climate futures and ecosystem transformation intensifies, adaptive management efforts can be allocated to those RAD approaches deemed likely to be most compatible with stakeholder desires (box 2).

Informed risk taking

Planning in the face of uncertainty is inherently risky, especially with a paucity of information or when the climate trajectory is unclear. Making choices is a critical part of all planning processes. However, implementation in a changing world requires different types of information to support effective decision making within the middle and outer loops and also whether (and, if so, when) to leap between loops. Addressing these additional information needs will be a balancing act and likely require increased coordination across agencies and partners to maximize information sharing with limited resources. It is an open question as to how a manager or program should most effectively allocate limited science resources under each RAD pathway between the demands for informing the pathway decisions (i.e., figure 1, outer loop) versus refining objectives (i.e., figure 1, middle loop) and adjusting management actions (i.e., figure 1, inner loop).

These information needs will be particularly novel when managers deliberately *direct* the trajectory of change away from historical conditions. Not only may there be high uncertainty about the feasibility (and perhaps desirability) of stewarding the outcome, the ecological trajectory and outcome may differ from what is expected (figure 2). Management pathways can help describe current understanding about the timing and series of interventions needed to shape the ecological trajectory toward a desired future condition (Magness et al. 2021).

Although informed risk taking is a long-term goal of adaptive management, the magnitude of uncertainty associated with strong ecological trajectories and ecosystem transformation overwhelms the existing quantitative-decision approaches. For instance, to reduce uncertainty and better inform future decisions, multidisciplinary adaptive strategies couple coarse-scale global climate models with fine-scale regional ecosystem and socioeconomic models (Hollowed et al. 2020). Testing both species and management responses to ecosystem trajectories under current climate-change scenarios help identify better management practices that need to evolve under future ecosystem states to minimize impacts on fisheries, coastal communities, and economies (Holsman et al. 2019, 2020).

Fortunately, periodic review and update of management actions and objectives, complemented by monitoring, experimentation, pilot studies, and bet hedging, can better identify and increase tolerance for risks. Acknowledging that trajectories, objectives, and actions will change because of uncertainty can increase cooperation in the management process and provide the confidence to adapt with ecosystem transformation. Although risks may be reduced, uncertainty will never be eliminated from an "uncontrollable," nonstationary world, so navigating ecosystem transformation successfully is not a path traversed once to a final state but, rather, a perpetual journey iterating through the RAD adaptive management cycle (figures 1 and 2). Adding adaptive management and associated technical expertise among management agencies and their collaborators can increase capacity and help streamline uptake of these planning approaches in a transforming world.

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From: Steve Manlow <smanlow@lcfrb.gen.wa.us>
Sent: Thursday, November 17, 2022 1:07 PM
To: Amanda Ward <Amanda.Ward@ucsrb.org>; Alex Conley <aconley@ybfwrb.org>; John Foltz (john@snakeriverboard.org) <john@snakeriverboard.org>
Subject: Avian Predation

WHERE TO PUT THE BIRDS? RESEARCH SAYS CORMORANTS CHASED OFF COLUMBIA RIVER ESTUARY ISLAND EAT FAR MORE SALMON, STEELHEAD UPSTREAM

NOVEMBER 16, 2022

Double-crested cormorants will eat many times more salmon and steelhead per bird as a proportion of their diet the farther they are pushed upstream in the Columbia River estuary, according to a presentation this week at the Northwest Power and Conservation Council's Fish and Wildlife Committee meeting.

Fearing that birds at East Sand Island, the largest cormorant colony on the Columbia River, were taking too big a chunk out of the run of salmon and steelhead migrating downriver, NOAA Fisheries and the U.S. Army Corps of Engineers in 2016 set out to significantly reduce the colony's size by culling and harassing the birds. They were successful in moving the cormorants off the island, but many of the birds instead took up residence further upstream on the Astoria-Megler Bridge.

However, an avian predator's diet downriver where saltwater prevails is far more varied than it is just seven miles upriver at the bridge where fresh and saltwater mix, James Lawonn of the Oregon Department of Fish and Wildlife told the Fish and Wildlife Committee, Tuesday, Nov. 15.

In his study, he has determined that birds in this mixing zone are eating 4.2 times the number of salmon and steelhead than when they resided on East Sand Island, and if they move into the freshwater zone it is 8.6 times the number of salmonids. That's because food available to the cormorants at the bridge in the mixing zone and further

upriver in freshwater include a much larger proportion of salmonids.

Now Lawonn is saying that the cormorants nesting on the bridge should be moved or pushed back downstream to East Sand Island and managed as a smaller colony.

Until recently, the largest double-crested cormorant colony in the Columbia River basin was located on East Sand Island near the mouth of the river. That is a saltwater environment where the food supply for the cormorants is a mix of salmon and steelhead, along with other saltwater forage fish. The majority of cormorants' diet from this colony was fish other than salmonids, Lawonn said, although the birds still had an impact on salmon and steelhead, many of which are listed under the Endangered Species Act as threatened or endangered.

The population of cormorants at East Sand Island peaked at an average of 13,337 breeding pairs between 2004 and 2014, about 97 percent of all nesting pairs in the estuary, according to Lawonn. That was up from just 131 breeding pairs from a 1979-80 survey.

Recognizing a growing threat to salmon and steelhead recovery in the basin, NOAA Fisheries added Reasonable and Prudent Alternative 46 to its 2014 biological opinion of the Columbia and Snake river power system. The RPA called for significantly reducing the East Sand Island population of double-crested cormorants on the island.

With that as their guide, and with the help of the Department of Agriculture's Wildlife Services, the U.S. Army Corps of Engineers implemented a 2015 – 2020 double-crested cormorant management plan to reduce breeding abundance on East Sand Island. By 2018-21 the population of cormorants dropped to an average of 1,694 breeding pairs, although the average during that period was just 258 pairs, Lawonn said in his presentation (see Nov. 8 Council Memorandum.)

The cormorants simply relocated to the Astoria-Megler Bridge. That colony, which already existed, grew from 333 breeding pairs in 2014 to a peak of 5,081 pairs in 2020, before declining slightly to 4,151 pairs in 2021. Oregon's Department of Transportation is currently hazing birds on the bridge so that ODOT can paint it.

Populations at other colony sites also grew. By 2021, the overall abundance of the cormorants in the Columbia River estuary was 5,599 breeding pairs in 2021, 42 percent of the abundance during the period 2004-2014.

There was also a shift from the marine zone in the lower estuary where the birds can be found on navigation aids and in Trestle Bay, as well as East Sand Island, to areas farther upriver where salmon and steelhead constitute a much larger proportion of cormorants' diets. The Astoria-Megler Bridge and the Desdemona Sands pilings are in the mixing zone, whereas Rice Island, Miller Sands, the Longview Bridge and Troutdale Towers near Portland are in the freshwater zone. There are 11 colony sites in all and all of them are in some way man-made (the islands are composed of dredge spoils).

But only 3 percent of estuary-wide breeding abundance occurred upriver of the marine zone during 2004–2014, compared to 89 percent in 2021, Lawonn said. And, predation on salmon and steelhead rose. In 2021, estimated cormorant predation on steelhead across the estuary was equivalent to 26,479 pairs on East Sand Island, or about 169 percent of average predation during 2004–2014.

There is no clear management plan for the cormorants, Lawonn said. The Corps claims authority to manage just 2 colonies besides East Sand Island (Rice Island and Miller Sands), but research is showing that displaced cormorants are going to areas not managed by the Corps.

Overall, the change in distribution of cormorants from 2004 to 2021 in the estuary has been stark. The population of the birds in the marine zone dropped 96 percent. The mixing zone grew by 5,029 percent**,** the freshwater zone grew by 349 percent and the proportion of salmonids in cormorants' diet increased the further upriver the birds moved.

The consumption of juvenile steelhead by cormorants in the freshwater zone, Lawonn found, is 8.6 times more than at East Sand Island in the marine zone, and consumption in the mixing zone where the Astoria-Megler Bridge is located is 4.3 times more than at East Sand Island.

Total predation by cormorants in 2021 was equivalent to having 26,479 breeding pairs of cormorants feeding on salmon and steelhead. The pre-management population was just 15,670 breeding pairs and the RPA 46 management target is 5,380 to 5,939 breeding pairs.

Management of the Astoria-Megler Bridge and possibly other estuary colony sites will be necessary if managers wish to reduce estuary-wide double-crested cormorant predation to the equivalent of 5,380–5,939 breeding pairs on East Sand Island, a goal suggested in various federal documents related to hydrosystem management, Lawonn said.

Lawonn also had this advice:

- Dissuasion at Astoria-Megler Bridge and other target colonies should be paired with social attraction at East Sand Island;

- Adaptive management likely necessary in perpetuity;

- Possible cost for first 4 years of management ≥ $3 M annually.

–Mike O'Bryant, obryants@comcast.net

For background, see:

— CBB, March 10, 2022, WHACK-A-MOLE: AGENCY THAT CHASED SALMON-EATING CORMORANTS OFF ESTUARY ISLAND NOW HAZING RE-LOCATED BIRDS ON ASTORIA BRIDGE OVER COLUMBIA RIVER, HTTPS://CBBULLETIN.COM/WHACK-A-MOLE-AGENCY-THAT-CHASED-SALMON-EATING-CORMORANTS-OFF-ESTUARY-ISLAND-NOW-HAZING-RE-LOCATED-BIRDS-ON-ASTORIA-BRIDGE-OVER-COLUMBIA-RIVER/

— CBB, July 20, 2018, "Fewer Cormorants Nest At East Sand Island, Observers Document Bald Eagle Predation On Eggs," https://cbbulletin.com/fewer-cormorants-nest-at-east-sand-island-observers-document-bald-eagle-predation-on-eggs/

— CBB, May 4, 2018, "Cormorants Return To East Sand Island But No Lethal Removal This Year; Hazing, Egg Take," https://cbbulletin.com/440651.aspx

–CBB, March 16, 2018, "Corps Decides Not to Cull Estuary Cormorants In 2018, Will Continue Hazing, Egg Removal," https://cbbulletin.com/440367.aspx/

–CBB, September 22, 2017, "Estuary Cormorants Nesting In Low Numbers; Corps Unsure If Culling Will Resume Before Season Ends," https://cbbulletin.com/439600.aspx

–CBB, August 11, 2017, "Due To Low Numbers Of Estuary Cormorants Showing Nesting Activity, Culling Remains Suspended," https://cbbulletin.com/439412.aspx

–CBB, July 7, 2017, "Corps Continues Suspension Of Culling Salmon-Eating Cormorants In Estuary," https://cbbulletin.com/439223.aspx

–CBB, June 16, 2017, "With Cormorant Nesting On East Sand Island Stalled, Boat-Based Shooting Of Birds Suspended," https://cbbulletin.com/439105.aspx

–CBB, April 28, 2017, "Third Year Of Shooting Salmon-Eating Cormorants, Oiling Nests: Goal Is To Kill 2,409 Birds," https://cbbulletin.com/438803.aspx

— CBB, September 9, 2016, "Court Allows Continued Culling Of Cormorants In Columbia Estuary To Reduce Predation On Salmonids," https://cbbulletin.com/437461.aspx

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SKAGIT LAND TRUST
Saving Land for Tomorrow
30th ANNIVERSARY

SKAGIT UPDATE

FALL 2022

"We've been working on Barney Lake for 30 years. What's going to happen in the next 30 years? 60 years? 90 years? What's going to become of this place?" - Keith Wiggers, SLT Co-Founder

Let's Keep Barney Lake Remarkable

"That Trumpeter Swans were nearly extinct, and Barney Lake played a central role in the recovery of the largest swans in the world, is only one of the many remarkable things about Barney Lake," says Executive Director Molly Doran.

Faced with immediate and near-term opportunities to conserve the last parcels of undeveloped wetland and forest at Barney Lake, **Skagit Land Trust is launching the Barney Lake Futures Campaign to raise funds for land conservation acquisitions, habitat restoration efforts, and wildlife compatible viewing access.**

"This conservation area is going to experience immense pressure in the years to come," says Stewardship Director Regina Wandler. "There will be homes built right up to the edge of everything that is protected. It's also a wonderful place for people to have experiences in nature to gain a sense of obligation to help protect places that these birds and animals need very badly."

Skagit Land Trust recently added ten acres of wetland to the 371 acres the Trust owns and manages at Barney Lake. **We now have the immediate opportunity to purchase five more acres of mature forest on the lake's edge. The Trust also wants to be prepared to conserve other undeveloped properties on Barney Lake to buffer the wetland and provide educational viewing opportunities.**

Generous members have provided a $40,000 match for all gifts made by November 16th to the Barney Lake Fund. Please consider a gift today to ensure a healthy future for this critical natural area.

Barney Lake teems with wildlife. In the winter, the lake provides refuge for hundreds of migrating trumpeter swans and other waterfowl who rest and feed there overnight. Maturing forest near the wetlands provides great blue herons space to nest. Beavers work to expand and improve wetlands on the site. Barney Lake, Nookachamps and Trumpeter creeks,

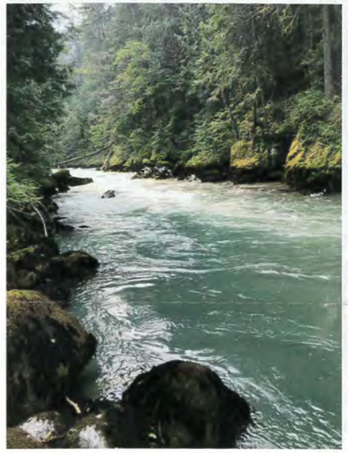
Continued on page 5...

Annual Report

Dear Members and Partners,

It was our 30th great year for conservation thanks to you, our members, supporters, volunteers, landowners, and partners.

This past fiscal year, six land protection projects were completed and fifteen new protection projects were started. Over one-half mile of marine shoreline was protected on the edge of the Padilla Bay National Estuarine Research Reserve and on Samish (Alice) Bay. You helped us add nesting habitat and needed forest area to the incredible March Point Heronry. You also assisted us to partner on five projects, including at Deception Pass State Park where 78 acres is soon to be added to this "most visited" park in Washington State. The freshwater and marine shoreline we have conserved grew to over 47 miles, and over 10,000 acres of wetland, farmland, open space, and wildlife habitat are now permanently conserved with your help.



The Trust is grateful for the 6,108 hours of volunteer service donated to us in the past fiscal year. 317 volunteers gave 3,144 hours of time to help steward and restore land, work on public policy, facilities, community science, outreach, youth programs, and more. Our 18 hardworking board members collectively gave almost 3,000 hours of time.

Top left:, Cascade River land conserved

Top right: forest habitat added to the March Point Heronry;

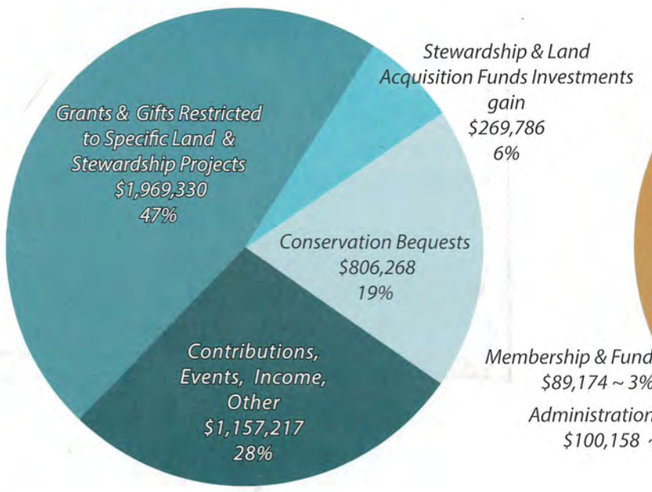
Bottom, over ½ mile of Padilla and Samish Bay shoreline was protected at the entrance to Samish Island

With the 91 conservation areas and conservation easements we own and manage, plus hundreds of acres of land we manage for partners, our stewardship staff and volunteers were busy. Several conservation areas had major clean-ups in preparation for wildlife habitat restoration. Volunteers planted thousands of native trees and shrubs and enthusiastically helped to build or expand three trails. After a long hiatus with the pandemic, we were able to restart our in-person Youth Program. A wonderful new camera system was added at the March Point Heronry, and much more.

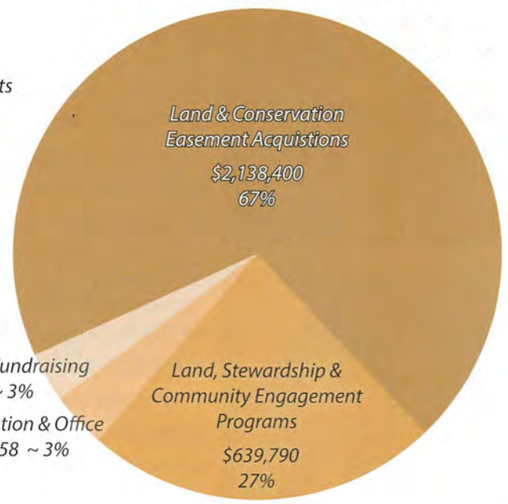
Clockwise from top: Youth at Barney Lake; Volunteer planting at Tope Ryan; Volunteer grubbing blackberry at Samish Island; Big Lake Elementary field trip to Utopia

Financials for April 1, 2021 - March 31, 2022

REVENUE $3,574,879



EXPENSES & LAND $3,177,535



Cameras Capture a Fuller Picture of Life in the March Point Heronry

The 2022 heron nesting season at the March Point Heronry came to a successful close during the week of September 5th, when volunteer camera monitors no longer found herons during their surveys. This year saw multiple nests with two broods of chicks, extending the season later than normal.

Volunteers surveyed the same nests each week from their home computer by operating one of three wildlife cameras the Trust installed earlier this year. They watched as the heron pairs courted, laid eggs, and raised young. Data collected during this project is being compiled to establish the annual chronology of nesting, and measuring productivity within the colony to learn more about herons.

Many thanks to Anne Winkes, Sue Ehler, Shirley Hoh, Sarah Zabel, Mike Antrim, May Haley, Sharon Howard, Terry Armstrong, Ava Meredith, Gloria Hubacker, Tracy Ouellette, Laurette Culbert, Jim Scheltens & Levy Scheltens for their diligence. They contributed nearly 500 hours of observation time since April! Training for next season will be offered in the spring.

Clockwise from top to bottom: A heron with two eggs; adult heron and just born chick; juvenile heron standing behind an adult heron; nearly adult size juveniles crowd into a nest (some juvenile herons didn't leave until Sept as part of a 2nd brood); volunteer Sue Ehler had company as she observed the herons!

New Faces at Skagit Land Trust

With a growing number of Conservation Areas and Easements to care for across Skagit County, the Stewardship Department welcomed Kayla Seaforth (she/her/hers) to the team this summer as our Stewardship Coordinator for Eastern County properties.

Kayla joins the Trust from Orcas Island, where she spent the last four years working in the stewardship department for the San Juan County Land Bank. Kayla is familiar with the Western Washington landscape, having grown up in Snohomish and attended college at Washington State University. She spent a few years as a Washington Conservation Corps crew member in Skagit and Whatcom Counties and is excited to be back in the area.

Gabby Jacunski (she/her/hers) joins Skagit Land Trust as our 2022-2023 Community Engagement AmeriCorps member. She will help with communication and outreach, along with supporting youth and education opportunities such as Community Science projects and Conservation Classroom programs. She will also assist with work parties and volunteer events. Gabby grew up and went to school in the northeast, where she recently graduated from the University of Connecticut with a degree in Environmental Science. She's excited to explore the Pacific Northwest, and loves to read and cook.

...Barney continued from page 1

and other seasonal wetlands provide habitat for an array of songbirds, amphibians, plants, and wildlife.

The trumpeter swan conservation story speaks to how special Barney Lake is. By 1900, known trumpeter swan numbers worldwide had plummeted to below 100, and extinction seemed imminent. Their down, skin, and feathers were prized. Lead shot added to their demise.

In the 1950's a population of summer nesting and breeding trumpeters was discovered on the Copper River in Alaska. Hope for recovery grew. Researchers decided that to help swans recover, they had to know where they wintered so that habitat could be conserved. **And where did the first migrating swans returning to the lower 48 states end up? Barney Lake.** Absent for almost 60 years, six majestic birds were found on the lake in the late 1950's. Over 8,000 trumpeter swans now winter in Skagit County, which is the largest wintering population in the USA.

Yet, why Barney Lake? Barney Lake is a class I wetland. **This type of wetland would be impossible to recreate within a human lifetime.** It is the largest remaining freshwater wetland in western Skagit County. The 'Lake' consists of shallow emergent wetlands rich with plants that waterfowl love.

Juvenile salmon find refuge in its quiet waters during floods. Th**e 160-acre lake easily grows to over 750 acres in wet winters. Trumpeters and other waterfowl need the undisturbed lake at night to rest, eat, and sleep away from predators and humans.** Trumpeters, with up to 10 ft wingspans, run across the water to take off. They need the long runway and the expansive wetland that Barney Lake offers.

It is no coincidence that the trumpeters have chosen an agricultural valley. 80% of wetlands in the northwest have been lost from centuries past. With trumpeters' traditional wetland food sources greatly diminished, during the day we often see them foraging in farm fields to supplement their diet.

This top-class wildlife refuge is currently "hidden" by its geography, but it won't remain that way. "Barney Lake is on the edge of Mount Vernon. We know the city and communities will grow around it over time," says Molly. "**If we want this wetland to be there for wildlife, we must buffer Barney Lake while we still can, and we must educate the community about its importance."**

"It is important for us to connect people with Barney," says Stacy Dahl, the Trust's Volunteer & Education Programs Coordinator. "I've brought the Kulshan Creek Neighborhood Youth Program out here. They learn about why it's important to conserve nature close to their home, not only for them, but their children, and the children after that."

"Barney Lake is exactly the kind of place that we need the Trust to protect. The swans and hundreds of waterfowl who come here to feed and rest, **they are telling us this is an important place, and we need to pay attention to that**," says board member Tim Manns.

Please make a gift today to the Barney Lake Fund with the envelope found in this newsletter. There is a space to note that your contribution is for Barney Lake. Please let us know if you plan to make a gift from an IRA or Donor Advised Fund.

Your donation by November 16th will be matched and go TWICE as far to protect and care for this remarkable conservation area.

Visit *www.skagitlandtrust.org* to learn more, **RSVP for our zoom presentations about Barney Lake on Oct 20th & 27th**, and see videos on the Trust's work at Barney Lake.

Life-Long Learning on the Land

When Sarah Zabel moved to Anacortes in the summer of 2020, she wondered how she would meet people.

"Truth be told, I met the forests, wetlands, and deer first," she said. "But even in the pandemic, it wasn't long before I met wonderful folks in my neck of the woods helping care for these lands and wildlife."

As a librarian and early childhood educator, books have always been a driving force in her life. In fitting fashion, books lead Sarah to Skagit Land Trust. She came to the Trust's website to learn more about the SLT Reads book club, and found herself exploring the properties page and signing up to volunteer for stewardship work parties.

"My first project was at Tope Ryan, planting live stakes of willow to battle the invasive reed canary grass. I learned so much, like how to plant in standing water, how elk can outsmart a plant protector, and the importance of truly waterproof gear."

Being able to connect and learn from other volunteers has kept Sarah coming back to steward the land these past two years.

"Each time I volunteer, I come home with more than when I left. Frequently, more mud, but mostly more connection to this place and to the people. I also learn so much from the other volunteers - about birding, wildlife, and trail building. I enjoy the contented exhaustion after a day of meaningful work. I may come home with a sore back, but I always return with a full heart."

One of Sarah's favorite projects was the Samish Island Flower Farm Trail. Over the course of a winter, she and a team of volunteers flagged out a trail, bushwhacked through the understory to remove plants, logs, and rocks, then graded and raked the new path that curves through the mature forest. "It was incredible to be part of the project all the way through," Sarah said. "We created a way for folks to experience this small forest more intimately - to see, smell, touch, and hear the wonders of what's just beyond the roadside."

How You Can Volunteer

Sarah volunteering on the solar system installation at the March Point Heronry

As Sarah says, "conservation is the best response to knowing that while my time on earth is short, my impact can be lasting - whether that's planting a tree, removing ivy, or talking with students at Utopia about the watershed. Conservation is a path of learning about my part in the ecosystem, and being mindful, creative, and strategic in how I use natural resources, all the while striving to leave things better than I found them."

Fall is planting season and we have a full schedule of work parties coming up. At Skagit Land Trust, we rely heavily on dedicated volunteers to help us meet our stewardship goals. We're very grateful for their time and effort. If you'd like to learn more about volunteering with the Trust, please visit our website and sign-up for an upcoming work party. We also have openings to volunteer with our Heron Camera Monitoring and Youth Programs. Contact Stacy Dahl, our Volunteer & Education Programs Coordinator, for information on all of these volunteer opportunities. stacyd@skagitlandtrust.org or call 360-428-7878 x212.

In Honor and Memorial Gifts (April 1, 2021 - Sept 1, 2022)

In honor of Bob Anderson
Linda Fenstermaker

In memory of Tom Andrak
MJ Andrak

In memory of Nola Beeler
Thomas Beeler

In honor of Feryll Blanc
Richard Revoyr

In memory of Thais Bock
Barbara Petersen

In memory of Ric Boge
Kari Boge

In memory of Lloyd John Brown
Wendy Brown

In memory of Wanda Bruns
Gregory and Carol Springs

In memory of Robert Burden
James Burden

In memory of Dr & Mrs Walter Campbell Crowe
Carol Steffy

In honor of Meggan Carrigg Davidson
Judy and Gordi Middleton

In memory of Catherine Carter
Chris and Jennifer Barker
Josette and Steve Carter
Laura Emerson Chandler Fund
Jack and Grace Hubbard

In honor of Joan Casey
John Watts

In memory of Harold Christenson
Karen and Doug Radcliffe

In memory of Gary & Karen Coselman
Robert and Victoria Bourns

In honor of Barbara Craner
Tom Glade and Brenda Lavender

In memory of Bruce Daniel
Malcolm Daniel and Darryl Morrison
Marcia Daniel

In honor of Della and Reese
Jack Rodman and Family

In memory of Ann Dursch
Robert Raymond and Dorothy Downes

In memory of Ben & Lois Engelbright
Larry and Alba Stevens
Skip Stevens
TJ Stevens and Todd Rubano
Annette Woolsey and Jim Shiflett

In memory of Bob Englund
Klaudia Englund

In honor of Deb Ensey
Marlene and Mark Schuck

In honor of Jeff Ernst & Dana Pound
Keith and Jan Wiggers

In memory of David Farrow
Christine Farrow

In memory of Don and Rita Fisher
David and Joanne Witiak

In honor of Jon Frazier
Nadene Frazier-Westphall

In memory of Arlene French
Christopher Campbell
Eileen Lambertson
Nancy and David Ridgway

In memory of Marilyn E Garner
Elizabeth and Michael Jackets

In honor of Greg & Judy Gehrke
Jaye Stover

In memory of Joan Graves Vanderhoof
Andrew and Marie Vanderhoof

In memory of Nila Grube
Stacy and King Dahl

In memory of Betty Haldeman
Stephanie Fohn
Laurie Pinard
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Those We've Lost (October 2021- September 2022)

In the past year we have lost some foundational members of Skagit Land Trust. They were charter members, land or conservation easement donors, longtime supporters, land stewards, and artists who shared their talents to save local lands. They helped rally the community to conserve places across the Skagit. Many were part of our Cedar Legacy Circle. We miss these members and honor them for helping to create a natural legacy in the Skagit.




Pictured above from left to right Doris Holmes, Linda Hunt, Claudia Maple, and Bill Pfeifer

Not pictured are Nola Beeler, Robert Burden, Barbara Craner, Lin Folsom, Arlene French, Marilyn Gardner, Shirley Haley, Von Kuehn, Howard Pellet, Ronald Pera, Roger Robinson, David Strong, Jim Tsitsiragos, Chris Turletes, and Harold Wiggers.

They are remembered.

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Every effort was made to ensure all members are listed correctly. If you discover any errors, please accept our apologies and contact us so that we can make a correction.

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Skagit Land Trust conserves wildlife habitat, agricultural and forest lands, scenic open space and shorelines for the benefit of our community and as a legacy for future generations.

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Use the envelope inside this newsletter. Please note that your contribution is for the Barney Lake Fund

Join Us For An Upcoming Event!

Learn more & RSVP Online - www.skagitlandtrust.org

Oct 20 — Zoom Presentation on Barney Lake Campaign — 6pm

Oct 21 — Day Creek Work Party — 9am-12pm

Oct 27 — Zoom Presentation on Barney Lake Campaign — 6pm

Oct 30 — Muddy Creek Halloween Work Party — 12-4pm

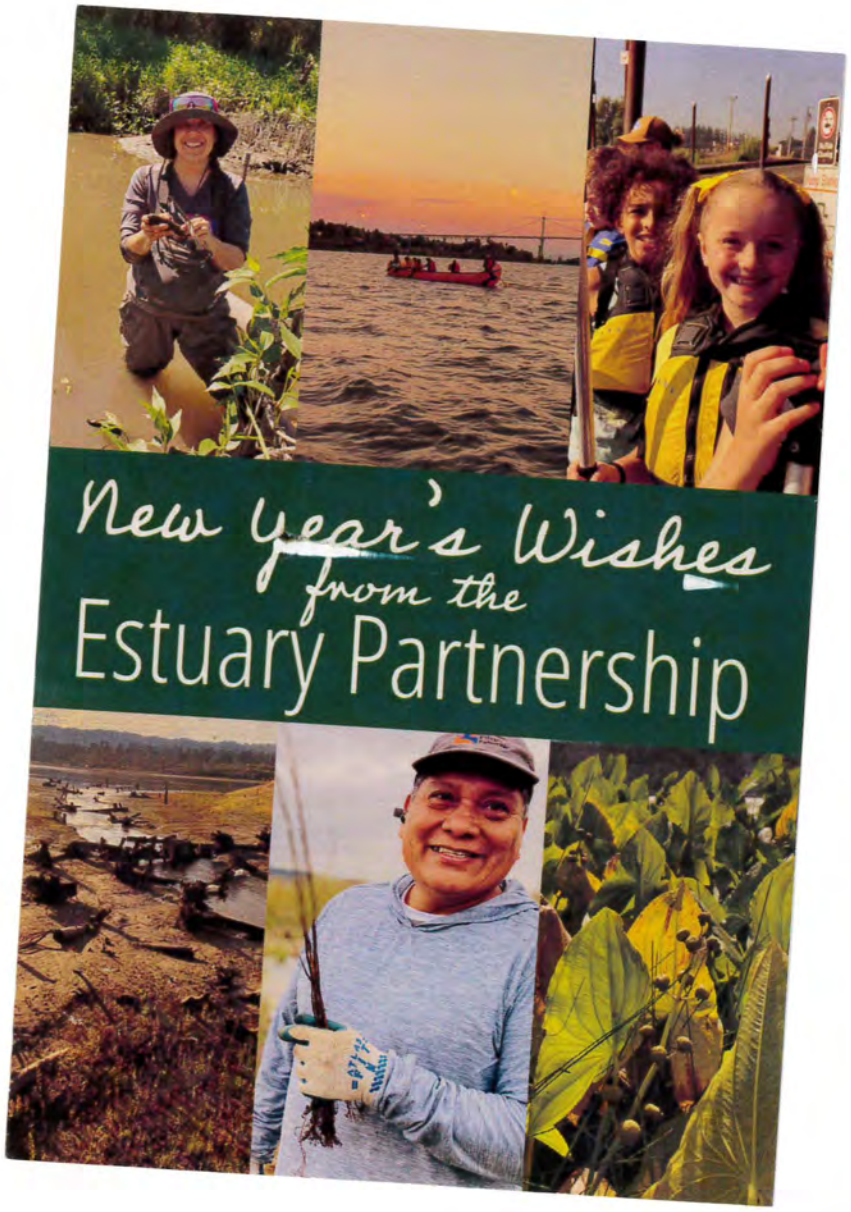
Nov 5 — Minkler Lake Work Party — 10am-2pm

Nov 11 — Tope Ryan Work Party — 9am-12pm

Nov 18 — Samish Island Work Party — 9am-12pm

Nov 25 — Opt Outside — Samish Is. Trail Maintenance & Beach Walk 9am-12pm

The lands conserved and protected by Skagit Land Trust have been inhabited and stewarded by numerous tribes and Indigenous peoples since time immemorial. We recognize and respect the inherent, indigenous, and treaty rights of the Coast Salish People who have deep and abiding connections to these places. We seek to partner with local tribes as we conserve and care for these lands and waters.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Wishing you a happy winter season!

We are grateful for your partnership in 2022. Thank you for all the ways you support our mission, to protect and restore the lower Columbia River and estuary, for current and future generations of fish, wildlife, and people.

Your gift this season buoys our efforts to restore the river and inspire the next generation of river stewards. Donate today at estuarypartnership.org or scan the QR code.

Photos (left to right top): Senior Scientist Sarah Kidd at Franz Lake; Big Canoe at sunset; students ready to board the Big Canoes at Scappoose Bay; (left to right bottom): Gibbons Creek at Steigerwald; Field Technician Alvey Seeyouma holds bareroot spirea; wapato grows at Steigerwald.

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VOLUME 28 | ISSUE 2 | FALL 2022

the REDD

THE NEWSLETTER OF THE SKAGIT FISHERIES ENHANCEMENT GROUP

Dedicated to Restoring Salmon for Future Generations

Fixing Passage Barriers in Carey's Creek

By **ERIN MATTHEWS** - *Habitat Restoration Coordinator*

It has been almost exactly 2 years since Skagit Fisheries Enhancement Group (SFEG) staff were last hip deep in Carey's Creek, a clear, cold, stream located in Hamilton Washington. We found ourselves back again on August 30th 2022 for yet another successful construction project and fish rescue/relocation.

Carey's Creek connects Carey's Lake, Carey's Slough and the Skagit River and is teeming with native salmonids and other native fish, mollusks, crustaceans, and amphibians. Over the past century humans have done quite a bit of damage to this habitat, including building at least 19 road crossings, several of which blocked adult and juvenile salmon and trout from utilizing parts of this watershed for decades. SFEG, the Washington Department of Transportation, The City of Hamilton, Skagit County Public Works, Forterra (a Seattle based non-profit), Puget Sound Energy (PSE), the US Fish and Wildlife Service (USFWS), the Salmon Funding Recovery Board (SRFB), and local tribes have all been working in Hamilton to improve these undersized culverts and enhance the aquatic habitat here.

Not only do these projects allow fish to access the high-quality habitats in this system, they also put local contractors to work, and restore natural water flow regimes by allowing water to drain into the Skagit River instead of being held up upstream of inadequate pipes. This August, with the support of a willing private landowner and funding from PSE, Skagit Fisheries Enhancement Group staff oversaw the complete removal of a problem culvert and restoration of the stream channel. Locals who utilize the Rails to Trails trail in Hamilton may be familiar with this crossing. From the public trail, locals can stand on the public bridge and look north to see the undersized pipes. Those familiar with this creek know that these culverts are often plugged by beaver dams or debris. In the summer, schools of salmon can often be observed swimming just downstream of this crossing.

CONTINUED ON PAGE 3

■ *An excavator places sand dam blocks (foreground) while the SFEG fish rescue crew identifies and releases rescued fish (background)*

■ *An SFEG technician uses a photarium to identify a healthy juvenile coho salmon during a construction native organism rescue*

IN THIS ISSUE:

the REDD

REDD: *A female salmon uses her tail to dig a nest in the gravel. After she deposits her eggs the male fertilizes them. The female then covers the fertilized eggs and the resulting nest is called a redd.*

MISSION

Our mission is to educate and engage the community in habitat restoration and watershed stewardship to enhance wild salmonids.

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From the Director

By ALISON STUDLEY - *Executive Director*

It's a wonderful thing to have interns working among us again here at Skagit Fisheries! Usually, we are fortunate to have several interns helping us with monitoring, planting, and education programs at any given time of the year. Back in March of 2020, we were sad to tell interns that their internships had suddenly ended due to the pandemic and colleges closing. However, interns are back in full swing again this year. Since this spring we have had 8 interns with us increasing our ability to get great work done.

Four student interns were with us this spring and summer primarily assisting with vegetation monitoring and plant care at our native plant nursery. These four interns collectively gathered data at 26 planting sites to determine the success of our riparian planting efforts and gather data about how well different techniques worked. We also had a fifth intern working with us on a GIS project this summer, using his newly learned skills to help develop projects for salmon.

This fall, we are thrilled to have 3 more student interns with us. Two (Tori and Kaitlyn) are specifically helping with school education programs. They are visiting schools, providing lessons to students and most importantly leading field activities by local creeks teaching kids about salmon and watershed stewardship. Later they will be helping students fill giant aquariums at their schools with salmon eggs and teaching them about the incredible salmon life cycle. This is such a wonderful program to help students learn about salmon, water quality, and watershed health. And it's an even better program to also get to have the opportunity to provide young adults the opportunity to gain valuable experience to further their own careers in science and education.

This fall, we also welcome Chaney as a spawner survey intern. This internship involves going out each week to conduct spawner surveys with our staff and assist our staff with data entry and reporting. Of course the most fun part is going in the field and learning to identify redds and the different salmon species. Spawner survey data is shared with state and tribal co-managers to document numbers of salmon returning and help inform future escapement goals.

Interns serve an incredible valuable purpose here at Skagit Fisheries, not only for the work they are doing for us, but for the knowledge they can share with us as well. We love having young adults passionate about conservation and the environment working with us and sharing their enthusiasm for learning with us.

This year, we made a commitment to raise funds so that we can offer paid internships. We realize that offering free internships provides valuable experiences for interns, however, there are many young people who couldn't afford to take a free internship. In order to make our internships available to all, the board of directors initiated a fundraising campaign to build an Internship Fund to enable us to provide paid internships so that individuals will not need to choose between a paid job or pursuing an internship that may further their career in conservation.

We look forward to this initiative expanding the number of internships we can offer to local students and expanding the diversity of young people who can apply.

Erica and Meredith walking on an overgrown trail at the Gilligan site

Fixing Passage Barriers

CONTINUED FROM PAGE 1

Our construction projects always occur during the time of year when they are the least impactful to salmonids, however Carey's Creek is a productive nursery habitat for many species of native fish all year round! That is why our crew was out in late August with nets and buckets, safely relocating the fishes, amphibians, and invertebrates from the construction area to a safe downstream area. We identified many healthy coho salmon, minnows, lamprey, crayfish, freshwater mussels and more! The project was completed in less than one week.

Before this restoration project these two side by side culverts were less than 8 feet across. They often collected debris and became plugged. This prevented salmon passage, disrupted normal water flows, and caused sediment to collect at this site. Now the new channel is nearly 50 ft wide. Even the tiniest freshly hatched salmonid can reach the 3.8 miles of upstream salmon habitat including 4.5 acres freshwater emergent wetland, 27 acres freshwater forest/shrub wetland, and 7 acres of pond habitat.

An SFEG staff member holds a live freshwater mussel before moving it out of the restoration construction area

Wildlife at Conservation Areas

By **BENGT MILLER** - ***Stewardship Coordinator***

While the mission of the Skagit Fisheries Enhancement Group is to restore wild salmon populations for future generations, that does not happen in a vacuum. One of the overarching principles of ecology is the interconnectedness of everything. If one chooses to scale this up it can easily become overwhelming. Instead of spiraling out of control I prefer to do the mental gymnastics required to get to a place where I can simplify it by saying 'What is good for salmon is good for everything else.' This was most recently demonstrated to me when I looked at the pictures I had downloaded from a game camera installed at a conservation property owned by Seattle City Light. SFEG has been doing restoration work at this particular site for about a decade. The large field that was once the main feature of the property is now dappled with mid-size native trees planted by volunteers and school groups. This planting was ostensibly done for the purpose of salmon habitat restoration but as the following photographs demonstrate myriad other species have also benefited. The game camera also showed people using their public lands for a variety of purposes. When done responsibly human use does not exclude wildlife use; we are part of the interconnectedness. Again, what's good for the salmon is good for the whole; it's a pacific northwest mantra.

Fish and Farms in Skagit County

a Personal History

By **RICK HALEY** - *SFEG Board Member*

I joined Skagit County Public Works as the Water Quality Analyst in July, 2002 after spending the first half of my career in stream ecology and environmental toxicology. At that time the County was right in the middle of what some thought of as the Fish vs Farms battles. The battlefield was the County's attempt to enact a Critical Areas Ordinance for agricultural areas, and the battle lines were drawn around compliance with the Growth Management Act.

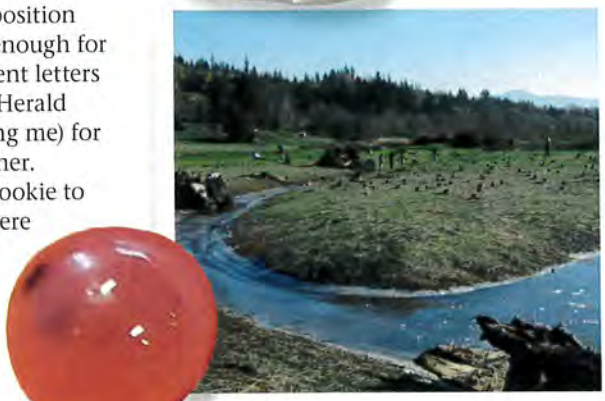
Each public meeting on the subject brought out passionate advocates for what some viewed as diametrically opposed stances: Ensuring protection for our dwindling salmon populations, or protection of farming as a viable economic activity. Hard feelings and strong words were common. Any activity to protect riparian areas was seen by some as the death knell for agriculture in the Skagit Valley, while any compromise to ensure agricultural viability was cast as putting Skagit salmon on the fast track to extinction. There were plenty of unreasonable proposals from all sides of the issue. State, Tribal, and Federal entities (Ecology, EPA, Department of Agriculture, Department of Fisheries and Wildlife, Upper Skagit and Swinomish Tribes, and others) got involved as the issue gained state and regional attention. Local special interest groups such as the Friends of Skagit County and the Skagit County Cattlemen were also active participants in the process.

Fence showing riparian restoration on left, pasture on right

At the County we were caught right in the middle. We had a statutory requirement to comply with the Growth Management Act (GMA) and provide protection to salmon-bearing streams, but a compelling need to maintain Skagit County's status as the leading agricultural area of western Washington. Plus the GMA also required preservation of agricultural lands. The County had previously tried a couple of approaches, including ignoring the GMA requirements or requiring stream buffers in ag areas that were smaller than those required on non-agricultural lands but were to be managed to provide enhanced functionality. The first approach resulted in lawsuits from fish advocates, the latter approach drew fire from all sides

as either an unconstitutional imposition on farmland or as not sufficient enough for fish protection. There were frequent letters to the editor in the Skagit Valley Herald castigating County staff (including me) for not catering to one side or the other.

County staff, including me, a rookie to local government proceedings, were tasked with coming up with a Critical Areas for Agriculture ordinance that met both of these seemingly competing goals: protection of farmland and protection of fish. We had innumerable staff meetings with County and outside counsel, including every Friday morning which we took to calling "The Breakfast Club." Even in internal meetings there was sometimes tension as we wrestled with the twin obligations to protect farms and fish.



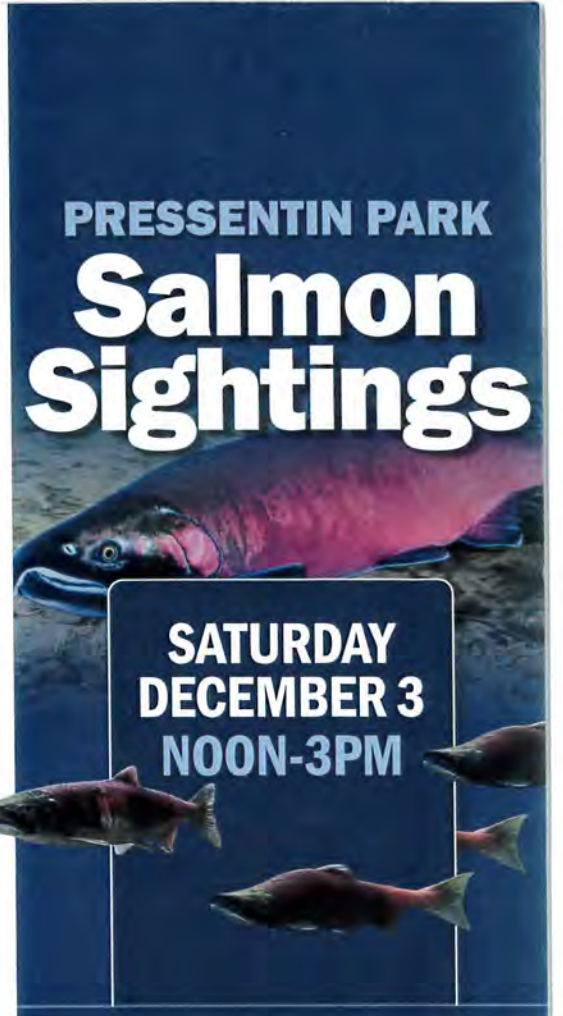
■ *Riparian and instream habitat restoration along farmland in the Samish watershed*

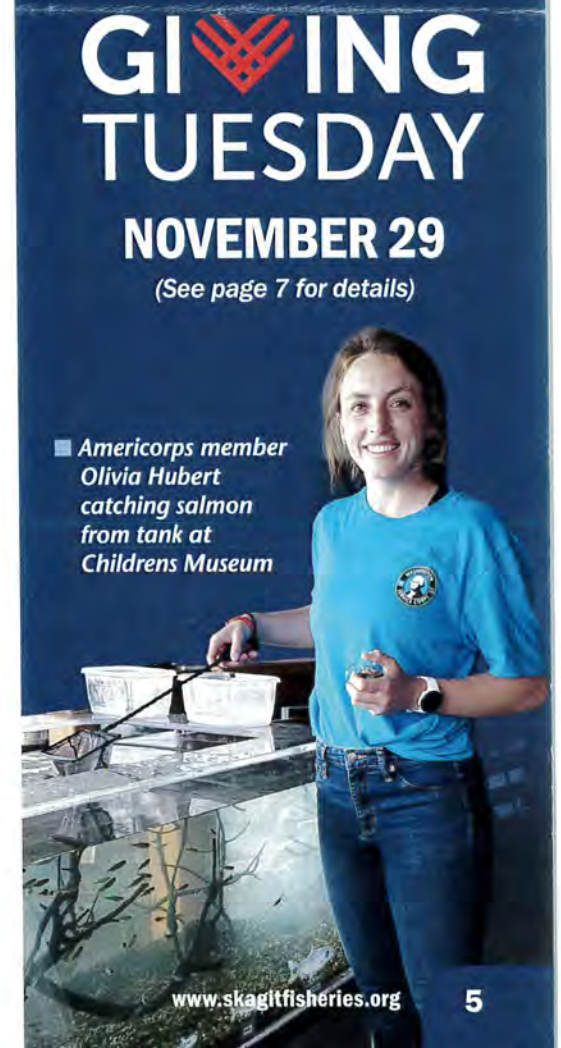
It was at this time that I became aware of the Skagit Fisheries Enhancement Group. SFEG staff and directors stayed out of the GMA fray and went about their business of seeking cooperative solutions to fish habitat issues. While the County and advocates for fish and/or farms worked through the seemingly endless political and legal processes, SFEG just got things done on the ground. SFEG's status as a non-regulatory organization opened doors that might have been closed to government programs.

The County eventually enacted Critical Areas regulations that required agricultural landowners to "do no harm," to protect existing riparian habitat, and to follow a set of "watercourse protection measures" that had to do with keeping pollutants out of the streams among other goals. Since these were seen by the state as "less than fully protective" measures, the County committed to monitoring fish habitat and water quality on an ongoing basis. The water quality monitoring became my focus, but the issue didn't die there as no one was happy with that result, for the same reasons as before: these regulations were seen as either not protective enough for the salmon habitat or too much of an imposition on the landowners.

The inevitable continuing litigation put the County in legal limbo, and it was at this point that the State tasked the Ruckelshaus Center (a joint venture of the University of Washington and Washington State University) to find statewide solutions to the farms and fish issues. The result of that process was the Voluntary Stewardship Program, which asked counties to achieve compliance with Growth Management Act goals through incentivized voluntary activities and habitat restoration programs. This approach is still in progress and it remains to be seen if this will result in meaningful fish restoration and protection of agricultural lands. One positive result of the Ruckelshaus Center/VSP process has been the lowering of the temperature of the debate in the Skagit Valley. Fish and farm advocates still have differing views on the issues but the level of vitriol is seemingly reduced.

In the meantime, Skagit Fisheries continues its own voluntary stewardship. SFEG programs demonstrate that it doesn't have to be "fish or farms." Purely voluntary restoration activities may not restore all the habitat that's needed to recover salmon populations, but SFEG programs are playing a leading role in fish restoration in the Skagit Valley.





■ *Americorps member Olivia Hubert catching salmon from tank at Childrens Museum*

Connor, Charlotte, Erica, and Meredith on their last day at the nursery all together

A Few Mosquito Bites Later: Looking Back on a Summer Internship with SFEG

By **CONNOR GARROD** - *Former Intern*

Hi everyone! My name is Connor and this summer I had the most amazing opportunity to be an intern with Skagit Fisheries. I am currently a senior at Western Washington University in the College of the Environment studying freshwater and terrestrial ecology.

Being from Arizona, I was not the person to ask about native Washington plants before I was an intern at SFEG. I was only familiar with one type of tree: ponderosa pine. Now I am familiar with most of the conifers and deciduous trees and some shrubs native in the Pacific Northwest. I was exposed to these plants the second I started on my first day at the nursery. My fellow intern and I were put to work inventorying the entire nursery. We counted thousands of plants that day! I spent countless hours at the SFEG native plant nursery this summer watering plants, moving plants into beds, discarding dead plants, weeding, making willow stakes, and sitting in the cool shade of the alder trees as a break from the 90-degree weather that accompanied it all.

Monitoring was one of the most fun parts of the internship (depending on the site we were sent to that day). If you asked me how I liked monitoring after a day spent monitoring at Granstrom, Hamilton, or Lower Day Slough, I would tell you it was my favorite part of the internship. We got to spend 8 hours outside surrounded by the most beautiful scenery of the Skagit Valley identifying trees such as Douglas fir, Grand fir, Sitka spruce (ouch), Bigleaf maple, and Western hemlock. Sometimes we spent as much as 30 minutes trying to identify one plant that wasn't very common at the sites. Normally that plant came out to be Douglas Hawthorn. If you asked me how I liked monitoring after a day spent monitoring at Gilligan or Anderson, I would say I would have rather gone to the nursery. I'm glad I'm learning early in my days as a scientist that field work isn't always partly cloudy skies or a walk in the park. Sometimes those days include a field work person's greatest enemies: mosquitoes, blackberry, stinging nettle, thunderstorms, and did I mention mosquitoes? No amount of bug spray could have prepared me for those days. As much as those days were hard, I wouldn't trade the experience for anything.

Three times this summer I had the pleasure of working alongside SFEG staff in fish seining projects at Cedar Grove and South Fork. I would consider myself more of a "plant gal", but my first project with fish was a blast. We saved thousands upon thousands of sticklebacks, as well as some coho and chinook salmon. We even caught some amphibians, both native and invasive. I knew before moving to Washington that salmon are a huge part of the ecological history, so getting to work with them firsthand was such a great insight.

I am so grateful to the SFEG staff for the opportunity to learn and grow in the environmental science field. I received valuable advice for life after college that I will hold near and dear as I finish my last year and venture out into the "real world". Thank you for letting me be one of your interns and thank you for all the amazing work you all continue to do, SFEG!

Sincerely,
CONNOR GARROD

■ *Connor dressed in full fish rescue attire at South Fork*

Interns and AmeriCorps are vital to Skagit Fisheries

These young adults are passionate about serving their communities and making a difference for the future of salmon. Funds are needed to increase the number of opportunities and the diversity of individuals who participate. Unpaid internships can only attract those who can afford unpaid positions. With your help, we can create more opportunities for ALL those interested.

Donate now to support future conservation leaders.

GIVING TUESDAY

NOVEMBER 29, 2022

www.skagitfisheries.org/ways-to-give

Scan the QR code above to explore options, visit www.skagitfisheries.org/ways-to-give or call the office at 360-336-0172

BECOME A MEMBER

Members make salmon recovery possible. Help ensure successful salmon restoration efforts continue by becoming a member today.

DONATE

Show your commitment to the future stewardship of our local watersheds by making a donation today. Consider a recurring donation!

VOLUNTEER

We recruit and train volunteers to achieve our goal of increased public awareness for salmon habitat restoration. All volunteer projects are based on learning through hands-on activities.

STOCK / IRA GIFTS

Make your gift an investment in the future of Salmon.

LEGACY GIVING

Make a lasting impact on the future of Salmon.

PLAN A FACEBOOK FUNDRAISER

Organize a Facebook Birthday Fundraiser in support of Skagit Fisheries.

DONATE A USED CAR

Vehicle pickup and transportation are free. Fill out the form and we do the rest.

AMAZON SMILE / FREDMEYER

Shop through Amazon Smiles and FredMeyer Community Rewards.

Skagit Fisheries Enhancement Group is a 501(c)3 nonprofit organization. All contributions are tax deductible to the extent that the law allows. Tax ID#: 94-3165939

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Events and Volunteer Opportunities

Salmon Sightings

December 3 ***Pressentin Park***
All events Noon-3pm

Join us at various locations around the Skagit and Samish Watersheds in hopes of seeing spawning salmon! Experts will be on hand to talk about salmon habitat and local restoration efforts. More info at www.skagitfisheries.org. **Parking at some of these sites is ex-stream-ly limited, so please carpool!**

Fall Planting Party

November 12 ***(Saturdays) 10am-1pm***

Help restore native riparian plants in the Skagit Watershed! **Registration is helpful!** More info and sign up at www.skagitfisheries.org. Limited parking will be available, so please carpool!

COUNCIL OF REGIONS UPDATE for the SRFB's December 7, 2022 Meeting

Prepared by Alex Conley, Chair

The Council of Regions (COR) brings together the state's seven Salmon Recovery Regions to 1) share information among the regions, GSRO & RCO, 2) provide input to the Salmon Recovery Funding Board & 3) coordinate activities that address shared needs of the regional organizations. Since the last SRFB meeting:

1. COR has continued to work with RCO, GSRO and partners to coordinate and track responses to federal infrastructure funding opportunities and to complete the unprecedented 2022 SRFB grant round. We are proud to note that regions and lead entities were able to work together on short order to develop robust regional project lists of up to 10x the funding amounts regularly received.
2. **COR sent a letter to the governor in support of RCO's budget requests** for the SRFB grant program and regional and lead entity organizational capacity. We are eager to see the Governor's proposed budget and to engage with partners to highlight the need for these and other critical salmon recovery funding sources.
3. COR has **held monthly COR calls and organized COR participation** in groups such as SRNet and the Fish Barrier Removal Board. Huge thanks to RCO Director Duffy for her quarterly check-in calls and to Erik Neatherlin for organizing quarterly check-in calls with WWDFW leadership.
4. The **four Columbia River Regions continue to meet monthly** to discuss and coordinate regional input on Columbia River policy and priorities with other state partners.

Specific Council of Regions Input for the December SRFB Meeting:

Item #4: Large Project Funding Awards

It is great to see this grant round come to a close with today's funding awards to the Track Two Large Project List developed by the regions. That we were all able to work together on short notice to set criteria and develop robust project lists for an unprecedented level of funding testifies to the strength of the grant program and partnerships that the SRFB has built over the last 23 years.

Item #5a: Identifying 2023 PCSRF IIJA Projects:

The regions recommend a modified version of Option 1, in which the overall regular grant round amount is increased by the amount of the IIJA funds and allocated using the existing formulas, but in which RCO staff can review all projects submitted statewide and chose the projects that best fit NOAA criteria. Regional lists would not need to be adjusted as any project chosen for IIJA funding would free up state and regular PCSRF funds that could go to other projects and regional lists. This is a best of both worlds approach that utilizes the existing grant processes, can be adapted as we get more clarity on the IIJA amount and criteria from NOAA, and allows only those projects from around the state that best meet those criteria to be funded with IIJA dollars.

Option 2 requires us to significantly adjust local and regional grant rounds, without allowing for significant increases in project size (as distributing IIJA funds by allocation would limit project sizes to sizes already often run through regular grant rounds), while potentially resulting in a suite of projects less competitive with NOAA than the modified 1 above.

Option 3 requires developing criteria and processes for both regional and statewide evaluations even as the actual funding level available from NOAA will not be known until the tail end of the grant round. If the SRFB choses this path, significant effort will need to be dedicated to developing this program prior to the application window for lead entity grant rounds (January to April). This is likely to be challenging; we believe a modified Option 1 can work effectively without creating this additional burden on limited staff and partner capacity.

Item #5b: Targeted Investments: The regions thank all those that worked to make the 2022 Targeted Investment grant round run smoothly. This year we were lucky to be able to use the TI grant round to cue up projects for the large project funding option as well, which made for a successful combination that supported work throughout the state. We look forward to sharing our perspectives on with staff as they evaluate criteria and options for future Targeted Investment grant rounds.

Item #6: Manual 18 changes

We'd like to thank Nick Norton and RCO for queuing up relevant updates to manual 18 and working closely with us and other partners in the process. The proposal in front of you includes many broadly supported improvements to the grant round policies.

Items #7: Upland Funding Policy

A number of regions and lead entities expressed concerns with the initial draft upland policies. The revised alternatives before you are all much more workable. We thank staff for solicitating feedback on the preliminary draft and addressing that input.

Items #8: Salmon Work Plan Development

The Regions are excited to see the 2023-25 Biennial Work Plan for the Governor's Salmon Recovery Strategy hit the streets, and would like to express our thanks to Katie, Erik and the rest of the team for consistently working with us to incorporate regional input into the plan. This coordinated inter-agency process is a big step forward for salmon recovery in the state!

Item #9: Monitoring

The Regions would like to thank the Board for the monitoring discussion at the September SRFB meeting and the reconvening of the monitoring committee that followed. We are excited to support the proposal to allocate additional funding to the 2023 Regional Monitoring program and encourage the Board to support the staff recommendation.

SKAGIT LAND TRUST
Saving Land for Tomorrow
30th ANNIVERSARY

SKAGIT UPDATE

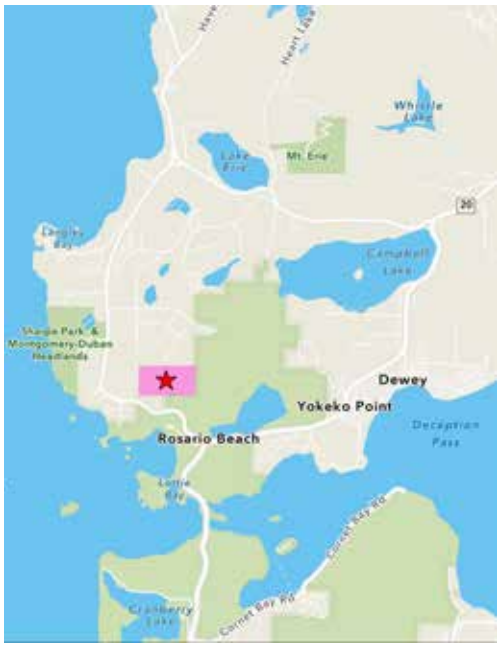
WINTER 2022

Deception Pass Park Grows Thanks to Grassroots Effort

"This protection opportunity was almost lost so many times," says Molly Doran, Executive Director of Skagit Land Trust. "It is so gratifying to know it has all come together."

After three years of work, the partnership of Skagit Land Trust, Washington State Parks & Recreation, Skagit County Parks & Recreation, and South Fidalgo community members is on track to expand Deception Pass State Park by 78 acres. Thanks to the commitment of these project partners and a conservation minded private landowner, this adjacent acreage will become part of the park by the end of the year.

"Deception Pass is the most visited state park in the system," says Washington State Parks Program Manager Nikki Fields. "I am excited that we've had an opportunity to expand the diversity of what the park offers, protect the largest remaining property within the park's long-term boundary from development, and help connect the park to other public lands in the area."



Skagit Land Trust served in a coordinating role to get the property ready for purchase by the park. The Trust and its members also assisted the park in applying for a state grant, gathering letters of support and matching funds, and navigating the intricacies of this three-year conservation effort.

"Skagit Land Trust, the South Fidalgo community, Skagit County Parks, and Deception Pass staff all were behind this grassroots effort," says Skagit County Parks & Recreation Director Brian Adams. "This is a huge accomplishment that will be enjoyed by recreationalists and wildlife in perpetuity. The Trust was instrumental in making this acquisition project a reality."

"After much work through a wide array of partners and community members I am elated that the purchase of this parcel will protect the view shed from North Beach and provide future opportunities for visitors to explore another part of Deception Pass State Park," says Jason Armstrong,

Continued on page 2...

...Deception continued from page 1

Hiking possibilities on the property.

Area Manager for Deception Pass State Park. "I look forward to a thoughtful trail development plan where people get to explore the High G Mountain area and hopefully connect the trails system to Sharpe's Park."

The property is surrounded by current park boundaries and features a rich mosaic of rocky balds, the southern side of Mount High-G, and an important viewshed from Bowman Bay. Water from the property drains to Bowman Bay and Pass Lake basins. Ownership of this land allows the park more control over what happens in these two watersheds.

"Washington State Parks would like to thank our partners on this project," says Fields. "Our acquisition grants can be quite competitive, and partnerships like the ones that formed to save this property really make the difference between the projects that are funded and those that aren't."

Future Forest Frontiers

Board President Mark Hitchcok and Stewardship Director Regina Wandler looking out across the young trees on the property.

In October of 2022 Skagit Land Trust purchased 80 acres of forestlands near Marblemount. The forest, which is in a working forest classification, is located just south of the confluence of the Cascade and Skagit Rivers. It features regrowth of cedar, alder, and Douglas fir trees. The property connects to other forests, which provide important habitat corridors for wildlife. Several creeks run through the property, ultimately connecting to the Cascade River. Protecting the property benefits water quality and salmon habitat.

"The property is lovely with rocky outcroppings, creeks, young conifers growing up in forest canopy openings, and a diverse understory," says Conservation Project Manager Kari Odden. "Keeping the property in forestland protects sustainable forest resources as well as wildlife habitat."

One unique feature of the property is found beneath the forest floor. The bedrock of the property is made up of Shuksan greenshist, the same rock found at the once proposed quarry near Rockport. By conserving this land now, the Trust was able to eliminate any future mining potential.

"The Trust is interested in additional ways to ensure that the large tracts of forestland in Skagit County remain undeveloped. Resource and working forests such as this continue to filter our drinking water and provide upland forest habitat for wildlife across the foothills of the North Cascades," says Stewardship Director Regina Wandler. "We look forward to learning more about the future of sustainable forestry in the Skagit."

One of many rock faces found on the property.

Destruction of forests contributes more to carbon emissions than all the world's trucks, cars, ships, trains, and planes combined. We must find ways to maintain our forest lands, both as wildlife and recreation areas and as sustainably managed forest resource lands. Owning a sustainably managed resource forest, such as this one, is an opportunity for the Trust to explore how working forests contribute to our ecosystem and community.

"This was a great opportunity for the Trust to acquire a young, thriving forest from which to explore emerging markets for ecosystem services," says Board President Mark Hitchcock. "Our experiences will help inform future working-forest conservation easements."

IRA Giving Just Made Sense for Couple Passionate about Protecting Wild Places

Eric Hall and Susie Wilson have seen a lot of changes in the 50 years they have lived in the Skagit. They've witnessed development spread from town centers to the more rural and wild parts of the County. Loving the outdoors and wildlife, and knowing that natural lands are limited, Eric and Susie started donating to Skagit Land Trust in 2012.

"With everything else that's going on in the world, I find it more important than ever to support Skagit Land Trust," says Susie. "People need the peacefulness of conserved areas to escape for a while and return refreshed. It might be a matter of just viewing an area where man's influence is not so obvious or being able to walk those lands and re-boot."

Through Trust events Eric and Susie found a community of like-minded people working together to protect the natural places needed for clean water, air, wildlife, and people.

"Skagit Valley is a beautiful and treasured place," says Eric. "Conservation, if done wisely, is a way to ensure that the great parts remain for future generations."

Since becoming members, Susie and Eric have supported the work of the Trust in a variety of ways from volunteering, sharing photography from Trust properties, and making financial gifts. This year, looking at the Required Minimum Distribution they needed to take from their IRA, they decided the best use of those funds would be to support the work of the Trust.

"Since we can be comfortable without all of that income, it makes sense to pass some or all of that retirement income on to an organization that is accomplishing goals that we share," says Susie.

Eric and Susie found the donation process easy. With one form, they directed the institution holding their IRA to transfer funds to the Trust. They would recommend this donation option to anyone looking for a tax-savvy way to support charities they care about.

Susie and Eric's travels to natural wonders around the world have deepened their love of nature and inspired them to protect the place they call home.

"When reaching the age of taking the Required Minimum Distribution (RMD), if one is not dependent on that income for living, it makes perfect sense to donate, since that income becomes non-taxable if it is a traditional IRA," says Susie.

Eric and Susie say that given the Trust's track record over the years, they are convinced that this is the best way to direct their local conservation efforts. "The amount of land, and its diversity, is growing to be a great success for Skagit. Why not continue a good thing?"

If you are interested in supporting Skagit Land Trust with a gift from your IRA, Donor Advised Fund, or with appreciated stock, please contact Development & Outreach Director Laura Hartner, laurah@skagitlandtrust.org.

Have you recently made a gift to the Trust with an IRA? Please be sure to contact us and let us know! Sometimes the Trust receives no information on the person making a gift through their IRA. When this happens, we're unable to send an acknowledgment letter or share our thanks with the member. We currently have one generous gift that we have not been able to connect to the person who gave it. If you have been waiting for a thank you letter and think this might be you, please contact the Trust – 360-428-7878. Thank you for your support!

Double Your Gift to Skagit Lands and Waters on Giving Tuesday

Mark your calendars for November 29th

On Giving Tuesday (November 29th) our community will be coming together to make a difference in the world around us. This special day encourages each of us to unite, do good, and exercise generosity. Your donation to Skagit Land Trust during Giving Tuesday will make a positive impact on nature in the Skagit. It will protect places for wildlife. It will connect the next generation with lands they care for.

Your gift on November 29th will go further! All gifts during Giving Tuesday will be doubled thanks to a $10,000 matching fund.

2023 will be an important year in Skagit Land Trust's history. You can have a huge impact on the coming year by making a gift during Giving Tuesday.

Want to make your gift go even further? Rise to our Skagit Sustainer Challenge!
For our 30th Anniversary year, we are looking for 30 new Skagit Sustainers, who make a recurring monthly or quarterly gift to the Trust. Ongoing gifts of any amount from sustaining members allow the Trust to have funds on hand when the chance to save a special place arises.

Thanks to a generous match from a Trust board member, we also have a dedicated $6,000 match for all new Skagit Sustainers gifts. Your recurring donation will be doubled for the value of your full year of giving and go twice as far to protect and care for lands in the Skagit in the year to come.

Giving Tuesday is about looking for ways to support the causes you care about and help your community. Here at Skagit Land Trust, one of our goals is to inspire the next generation to care about the natural lands of the Skagit. We do this by bringing students out to learn on Trust lands, and by supporting other organizations in the community with their efforts to connect the community to the outdoors.

This year for Giving Tuesday, Skagit Land Trust is partnering with the Mount Vernon Parks & Recreation Department on their "Explore Outdoors" Backpack program. These backpacks will include Skagit Land Trust's new field guide on the plants and animals of the Skagit along with supplies for families to explore nature close to home. **When you donate $100 or more to Skagit Land Trust on Giving Tuesday, we'll donate a field guide to the backpack program.** Our goal is to have member support for 100 field guides. This is a great opportunity to support two organizations working to connect and educate the community on the importance of natural spaces.

During this season we take time to reflect on what we are grateful for. Here at Skagit Land Trust, we are grateful for you. Thanks to your membership support, critical natural lands in the Skagit will be here for generations of people and wildlife to enjoy. Thank you!

Interested in making a gift of stock, from your IRA, or a Donor Advised Fund? Many members have found this to be a smart and tax-savvy way to support land conservation here in the Skagit. You can learn more about these giving options on our website, skagitlandtrust.org, or by emailing Laura Hartner, laurah@skagitlandtrust.org.

SLT's 100 out of 100 Score Lets Donors Give With Confidence

Skagit Land Trust recently learned that Charity Navigator lists the Trust as a four-star charity with a 100 out of 100 score for our accountability and finances.

"I love Charity Navigator and I use it both personally and for other clients," says Leslie Menard with Benchmark Business Services. "I'm beyond thrilled to see that score for Skagit Land Trust!"

Charity Navigator is an online independent organization that the public can use to review the overall health of a non-profit. Since 2001, the website has rated 200,000 charities.

"From an objective insider position, this non-profit has an amazing team working hard individually and collectively with commitment and deep caring to support the mission," says Leslie, whom the Trust began contracting with for bookkeeping services in 2020. "The Trust's rating on Charity Navigator is well-earned."

The rating lets the public know that Skagit Land Trust meets or exceeds best practices and industry standards across all areas tracked and is a highly-effective charity.

"I started using Charity Navigator personally in 2010," Leslie says. "It was eye-opening because I realized some of my favorite charities at the time were not using donated funds very efficiently or effectively."

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Lasting Stewardship

After learning more about the Trust's mission, Leslie decided she wanted to support this work as a donating member too. "Asphalt is unforgiving and relentless," says Leslie. "Skagit Land Trust is effectively and efficiently using grants and contributions to save what we love about this green (sometimes soggy) valley. I am so happy to be a part of it."

Executive Director Molly Doran says - "It is an honor to have both Charity Navigator's highest rating as well as our accreditation status awarded by the national Land Trust Accreditation Commission. Third party verification helps us report to our donors. The Trust's board and staff are deeply indebted to our members and supporters, and we strive to make sure we maintain that trust."

Come Experience the Birds Of Winter at a Trumpeter Swan Viewing Event at Barney Lake

Skagit Land Trust has multiple events planned this winter to allow Trust members and the community to view hundreds of Trumpeter Swans as they take off for the day from their overnight resting spot at Barney Lake.

Trust staff and local birding experts will lead groups to viewing areas near the main part of the lake. There, as the sun's first rays burn the mist off the water, guests will listen as a chorus of migrating waterfowl greet the day with squawks, honks, and general chatter.

Be sure to bring your binoculars for a closer look at the variety of waterfowl that use the lake. Hawks, eagles, and great blue heron are often spotted during these visits.

Not a morning person? We also have a "Goodnight Swan" walk to view the birds as they come back to the lake in the evening. For more information, visit www.skagitlandtrust.org.

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Saving Land for Tomorrow

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Skagit Land Trust conserves wildlife habitat, agricultural and forest lands, scenic open space and shorelines for the benefit of our community and as a legacy for future generations.

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Mark Your Calendars!
Giving Tuesday is November 29th

Read inside to learn about special matching fund opportunities

Join Us For An Upcoming Event!

Learn more & RSVP Online - www.skagitlandtrust.org

November 25 — Opt Outside at Samish Island — 9am-12pm

December 3 — Barney Lake Work Party — 9am-12pm

December 9 — Barr Creek Work Party — 10am-2pm

December 10 — Swanrise — 7:15am-9am

December 16 — Samish Miles Work Party — 9am-12pm

January 7 — Swanrise — 7:30am-9am

January 16 — MLK Day of Service at Cumberland — 4:15pm-5:30pm

January 21 — Goodnight Swans — 4:15pm-5:30pm

The lands conserved and protected by Skagit Land Trust have been inhabited and stewarded by numerous tribes and Indigenous peoples since time immemorial. We recognize and respect the inherent, indigenous, and treaty rights of the Coast Salish People who have deep and abiding connections to these places. We seek to partner with local tribes as we conserve and care for these lands and waters.