

# Salmon Recovery Grant Funding Report

**Item 8: 2022 Grant Overview** 

September 2022



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#### **Part 1: Introduction**

Since 1999, the Salmon Recovery Funding Board (SRFB) has been distributing state and federal money to protect and restore salmon habitat. Honoring the "Washington Way" of ground-up salmon recovery decision-making, the board works closely with local watershed groups known as lead entities<sup>1</sup> to identify projects for funding and with regional organizations<sup>2</sup> to prioritize funding.

Lead entities and regional organizations rely on their NOAA approved recovery plans to select projects. This partnership has resulted in the board distributing almost \$1.37 billion to 3,333 projects statewide, all with the goal of bringing salmon back from the brink of extinction.

This report presents information on the process used to review the 2022 applications and develop funding recommendations for the board to consider at its September 21-22, 2022, meeting.

#### **New in 2022**

Several key factors have impacted salmon recovery work this year. They include:

- Additional state and federal funding directed toward salmon recovery work. These increases resulted in
  - A larger pot of funding for the board's Targeted Investment program; and,
  - A \$75 million supplemental appropriation from the State Legislature to the Salmon Recovery Account, increasing overall grant round allocations as well as creating a source of funding for large projects

<sup>1</sup>Lead entity groups, authorized under Revised Code of Washington Chapter 77.85, are established in a local area by agreement between the county, cities, and tribes, which choose a coordinating organization for the lead entity. Each lead entity has a citizen committee to rank projects after its technical advisory committee evaluates the scientific and technical merits of projects. Consistent with state law and SRFB policies, all projects seeking funding must be reviewed and prioritized by a lead entity to be considered by the SRFB.

<sup>&</sup>lt;sup>2</sup> A regional recovery organization is defined as an entity under <u>RCW 77.85.99</u> for the purpose of recovering salmon, which is recognized in statute or by the Governor's Salmon Recovery Office.

(greater than \$5 million).

• Concurrently, inflation has increased to levels not seen in 40 years, drastically increasing project costs, well beyond original estimates.

All these events created a unique year, requiring adaptation and flexibility, testing the "Washington Way". What we learned is that Washington's salmon recovery foundation is resilient, as the salmon recovery regions, lead entities, and sponsors all stepped up to meet these challenges, resulting in great projects and robust ranked project lists.

#### **Funding Overview**

Funding for the 2022 salmon recovery grants comes from two main accounts: the Salmon Recovery and Puget Sound Restoration and Acquisition (PSAR) accounts.

#### Salmon Recovery Grants

- **\$20 million,** a combination of state capital bonds and the Pacific Coastal Salmon Recovery Fund, which is a federal award to the Recreation and Conservation Office (RCO) administered by the National Oceanic and Atmospheric Administration (NOAA). See Table 1 for the regional allocation of these funds.
- \$75 million in supplemental state funding for two project categories:
  - \$25 million for projects less than \$5 million in total costs. See Table 2 for regional allocation and Table 3 for lead entity allocations.
  - \$50 million for projects greater than \$5 million in total costs. See Table 4 for regional allocation.
- **\$8.6 million** from state capital bonds and the Pacific Coastal Salmon Recovery Fund (PCSRF) for the Targeted Investment program, focused on orca recovery and based on statewide competition versus an allocation formula.
- \$1 million for unanticipated cost increases in 2022.

This year, the board will be approving and funding grants for salmon recovery projects for all the categories identified in the bullets above.

#### **PSAR Grants**

This state capital bond-funded program focuses on the Puget Sound and Hood Canal and is jointly administered by RCO and the Puget Sound Partnership. The Legislature will set the amount of funding during the 2023-2025 biennial budget

process. In the 2021-2023 biennium, this account was funded at nearly \$53 million.

The Puget Sound Salmon Recovery Region has 15 lead entities and allocates the PSAR funding based on a formula approved by the Puget Sound Leadership Council. The formula directs the first \$30 million of PSAR funds be allocated to Puget Sound watershed projects by lead entity ranked list (PSAR regular round). See Table 5.

Anything above \$30 million funds a sequenced list of regional, large capital projects approved by the Salmon Recovery Council, Leadership Council, and SRFB. Large capital project funding requests must exceed \$1 million or a watershed's entire PSAR allocation based on a \$30 million funding level, whichever is less.

**Table 1. SRFB Regular \$20 Million Regional Funding Allocation Formula** 

Salmon Recovery Region	Allocation	Percent
Hood Canal Coordinating Council*	\$480,000	2.40
Lower Columbia Fish Recovery Board**	\$4,000,000	20.00
Northeast Washington	\$380,000	1.90
Puget Sound Partnership*	\$7,600,000	38.00
Snake River Salmon Recovery Board	\$1,688,000	8.44
Upper Columbia Salmon Recovery Board	\$2,062,000	10.31
Washington Coast Sustainable Salmon Partnership	\$1,914,000	9.57
Yakima Basin Fish and Wildlife Recovery Board**	\$1,876,000	9.38
	\$20,000,000	

<sup>\*</sup>Hood Canal is in the Puget Sound Salmon Recovery Region for Chinook and steelhead but is a separate salmon recovery region for summer chum. Hood Canal's allocation is 2.4 percent, but it also receives \$775,512 of the Puget Sound Partnership's regional SRFB allocation for Chinook and steelhead. Hood Canal's total allocation is 6.28 percent or \$1,255,512, and Puget Sound's is 34.12 percent or \$6,824,488.

<sup>\*\*</sup>There is one new project and one cost increase submitted by the Klickitat County Lead Entity. Klickitat is receiving \$108,000 from the Lower Columbia Fish Recovery Board's regional allocation and \$562,800 from the Yakima Basin Fish and Wildlife Recovery Board's regional allocation.

**Table 2. SRFB \$25 Million Supplemental Regional Funding Allocation** 

Salmon Recovery Region	Allocation	Percent
Hood Canal Coordinating Council*	\$564,350	2.40
Lower Columbia Fish Recovery Board**	\$4,702,914	20.00
Northeast Washington***	\$902,205	1.90
Puget Sound Partnership*	\$8,935,537	38.00
Snake River Salmon Recovery Board	\$1,984,630	8.44
Upper Columbia Salmon Recovery Board	\$2,424,352	10.31
Washington Coast Sustainable Salmon Partnership	\$2,250,345	9.57
Yakima Basin Fish and Wildlife Recovery Board**	\$2,205,667	9.38
RCO Administration	\$1,030,000	
	\$25,000,000	

<sup>\*</sup>Hood Canal is in the Puget Sound Salmon Recovery Region for Chinook and steelhead but is a separate salmon recovery region for summer chum. Hood Canal's allocation is 2.4 percent but it also receives \$911,791 of the Puget Sound Partnership's regional SRFB allocation for Chinook and steelhead. Hood Canal's total allocation is 6.28 percent or \$1,476,141, and Puget Sound's is 34.12 percent or \$8,023,746.

<sup>\*\*</sup>Klickitat County lead entity receives \$788,679, from two regions. The Yakima Basin Fish and Wildlife Recovery Board provides \$661,700 from their regional allocation. The Lower Columbia Fish Recovery Board provides \$126,979 from their regional allocation.

<sup>\*\*\*</sup>NE Washington is receiving an additional \$455,428 from the top of the \$25 million supplemental funds and is foregoing any allocation from the \$50 million supplemental funds.

**Table 3. SRFB Regular and Supplemental Lead Entity Funding Allocation** 

		\$25 Million	\$20 Million	
Lead Entity	Other	Allocation	Allocation	Total
Chehalis Basin Lead Entity		\$852,881	\$746,406*	\$1,599,287
Green/Duwamish and				
Central Puget Sound				
Watershed (WRIA 9)				
Lead Entity		\$386,547	\$328,772	\$715,319
Hood Canal Coordinating				
Council Lead Entity		\$1,476,141	\$1,255,512	\$2,731,653
Island County Lead Entity		\$284,324	\$241,828	\$526,152
Lake Washington/Cedar/				
Sammamish Watershed				
(WRIA 8) Lead Entity		\$511,717	\$435,234	\$946,951
Lower Columbia Fish				
Recovery Board				
Lead Entity		\$4,575,935	\$3,892,000	\$8,467,935
Kalispel Tribe-Pend Oreille				
Lead Entity	\$455,430	\$446,777	\$380,000	\$1,282,207
Kennedy-Goldsborough				
Basin (WRIA 14) Salmon				
Recovery Lead Entity		\$275,064	\$233,952	\$509,016
Klickitat Lead Entity		\$788,679	\$670,800	\$1,459,479
Nisqually River Salmon				
Recovery Lead Entity		\$492,171	\$418,610	\$910,781
North Olympic Peninsula				
Lead Entity for Salmon		\$845,361	\$719,010	\$1,564,371
North Pacific Coast				
Lead Entity		\$462,671	\$387,918*	\$850,589
Puyallup and Chambers				
Watershed Salmon				
Recovery Lead Entity		\$663,642	\$564,452	\$1,228,094
Quinault Indian Nation				
Lead Entity		\$437,017	\$377,499*	\$814,516
San Juan County Lead				
Entity for				
Salmon Recovery		\$362,832	\$308,602	\$671,434
Skagit Watershed Council				
Lead Entity		\$1,464,014	\$1,245,197	\$2,709,211

		\$25 Million	\$20 Million	
Lead Entity	Oth	er Allocation	Allocation	Total
Snake River Salmon				
Recovery Board				
Lead Entity		\$1,984,630	\$1,688,000	\$3,672,630
Snohomish Basin				
Lead Entity		\$668,072	\$568,219	\$1,236,291
Stillaguamish River				
Salmon Recovery				
Co-Lead Entity		\$651,968	\$554,522	\$1,206,490
Upper Columbia Salmon				
Recovery Board				
Lead Entity		\$2,424,352	\$2,062,000	\$4,486,352
West Sound Partners for				
Ecosystem Recovery				
Lead Entity		\$347,936	\$295,932	\$643,868
Willapa Bay Lead Entity		\$497,776	\$402,177*	\$899,953
WRIA 1 Watershed				
Management Board				
Lead Entity		\$840,127	7 \$714,559	\$1,554,686
WRIA 13 Salmon Habitat				
Recovery Lead Entity		\$229,972	\$195,599	\$425,571
Yakima Basin Fish and				
Wildlife Recovery Board				
Lead Entity		\$1,543,967	\$1,313,200	\$2,857,167
	\$455,430	\$23,514,571	\$20,000,000	\$43,970,001

<sup>\*</sup>The Washington Coast Salmon Recovery Region has four lead entities and allocates amounts to each lead entity based on their project lists each year.

**Table 4. SRFB \$50 Million Supplemental Regional Funding Allocation Formula** 

Salmon Recovery Region	Allocation	Percent
Hood Canal Coordinating Council	\$4,794,000	10
Lower Columbia Fish Recovery Board	\$9,588,000	20
Puget Sound Partnership	\$14,382,000	30
Snake River Salmon Recovery Board	\$4,794,000	10
Upper Columbia Salmon Recovery Board	\$4,794,000	10
Washington Coast Sustainable Salmon Partnership	\$4,794,000	10
Yakima Basin Fish and Wildlife Recovery Board	\$4,794,000	10
RCO Administration	\$2,060,000	
	\$50,000,000	100

Table 5. Projected Allocation of \$30 Million in PSAR Funding

Water Resource		Estimated
Inventory Area	Watershed	Amount <sup>3</sup>
1	Nooksack	\$2,392,906
2	San Juan Islands	\$1,033,444
_3 and 4	Skagit	\$4,169,897
5	Stillaguamish	\$1,856,976
6	Island	\$809,829
7	Snohomish	\$1,902,846
8	Lake Washington/Cedar/Sammamish	\$1,475,509
9	Green <sup>4</sup>	\$1,100,987
10 and 12	Puyallup/White and Chambers/Clover	\$1,890,232
_11	Nisqually	\$1,401,834
_13	Thurston	\$655,019
_14	Mason	\$783,454
_15	East Kitsap <sup>5</sup>	\$991,014
15, 16, and 17	Hood Canal <sup>6</sup>	\$2,597,026
17, 18, and 19	Elwha-Dungeness-Strait <sup>7</sup>	\$2,407,813
Hood Canal summer chum <sup>8</sup>		\$1,410,202

<sup>&</sup>lt;sup>3</sup>The total project funding amounts do not include administrative costs.

<sup>&</sup>lt;sup>4</sup>WRIA 9 includes 52 shoreline miles from Vashon Island from WRIA 15 (Vashon Island).

<sup>&</sup>lt;sup>5</sup>WRIA 15 excludes shoreline miles from Vashon Island (52) and areas in Hood Canal south of Foulweather Bluff (100).

<sup>&</sup>lt;sup>6</sup>Shoreline miles in Hood Canal are east and south of the Clallam County line and Foulweather bluff.

<sup>&</sup>lt;sup>7</sup>Shoreline miles in the Strait of Juan de Fuca are west of the Clallam County line to Cape Flattery.

<sup>&</sup>lt;sup>8</sup>Hood Canal Summer Chum Evolutionary Significant Unit receives 5 percent of the total PSAR capital funds.

#### **PSAR Large Capital Projects**

Any PSAR funding greater than \$30 million is allocated to a ranked, large capital project list. The list contains projects that are high priority and significantly large in scope (i.e., scale, complexity, and cost). Each watershed proposes these projects to the region, the SRFB Review Panel reviews them, and the Puget Sound Partnership ranks and prioritizes them before they come to the SRFB for approval. This year, 12 projects were reviewed by the Puget Sound Partnership and 8 applications were submitted to the SRFB for funding, requesting \$36.7 million (Attachment 6).

The Puget Sound Partnership's criteria for prioritizing include the following:

- Results in an improvement of abundance, productivity, diversity, and/or spatial distribution for one or more populations of listed Evolutionary Significant Units.
- Benefits multiple listed salmon and steelhead populations.
- Level of design work completed for project (for restoration projects).
- Stage of project development (for acquisition projects).
- Match funding provided by project sponsor.
- Makes progress toward a Puget Sound *Action Agenda* target for protection or restoration of habitat (e.g., shoreline armoring, eelgrass, estuaries).

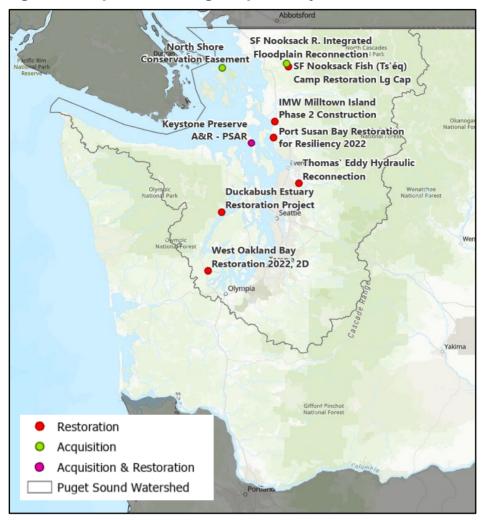


Figure 1. Map of PSAR Large Capital Projects

## **Targeted Investment Projects**

The SRFB adopted a policy enabling targeted investments in 2020. A targeted investment is a project that addresses a SRFB-identified priority or priorities to accelerate progress towards achieving salmon recovery. The general parameters of the policy are to fund targeted investments if: 1) the annual regional status quo allocation<sup>9</sup> has been met, 2) the project addresses one or more strategic priorities as determined by the SRFB, and 3) the project cannot be funded within the current allocation or sub-allocation to lead entities. A proposal is submitted by the salmon recovery regional organization and must be endorsed by the lead entity.

A targeted investments project is not part of the annual lead entity ranking process. The project will follow the lead entity's initial review schedule; however, once the

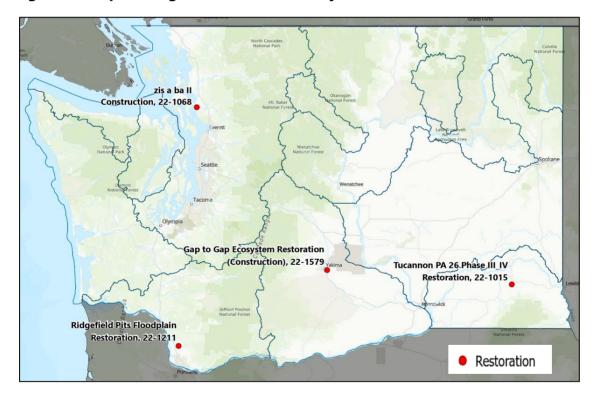
<sup>&</sup>lt;sup>9</sup>Status-quo refers to an \$18 million annual grant round allocation. The annual allocation is a combination of federal and state funds.

preliminary review panel process is complete, the regional organization selects one project for final submittal by June 27.

On June 2, 2021, the SRFB determined \$3.7 million was available for targeted investments in the 2021-2023 biennium and selected one policy priority: Southern Resident orca recovery.

In July 2022, NOAA notified the RCO that Washington State's award for 2022 Pacific Coastal Salmon Recovery Funding was \$18 million and an additional \$6 million in Infrastructure Investment and Jobs Act (IIJA) funding, for a total of \$24 million. The SRFB decided to direct some of the additional IIJA funding for targeted investments. An additional \$4.9M was added to the Targeted Investments Program, resulting in a total of \$8.6 million for these projects.

On July 13, 2022, the SRFB review panel evaluated and scored the four targeted investments projects. The ranked table and map of the four projects are below.



**Figure 2. Map of Targeted Investment Projects** 

**Table 6. Targeted Investment Grant Applications** 

Project Number	Salmon Recovery Region	Sponsor	Project Name	Grant Request	Targeted Investment
22-1068	Puget Sound	Stillaguamish Tribe of Indians	zis a ba 2 Final Design and Construction	\$4,977,891	\$4,977,891
22-1579	Middle Columbia River	Yakima County	Gap-to-Gap Ecosystem Restoration Construction	\$4,796,974	\$3,612,109
22-1211	Lower Columbia River	Lower Columbia Estuary Partnership	Ridgefield Pits Floodplain Restoration	\$8,700,000	
22-1015	Snake River	Columbia Conservation District	Tucannon PA 26 Phase 3-4 Restoration	\$792,000	
			Totals	\$19,266,865	\$8,590,000

#### **Regional Monitoring Projects**

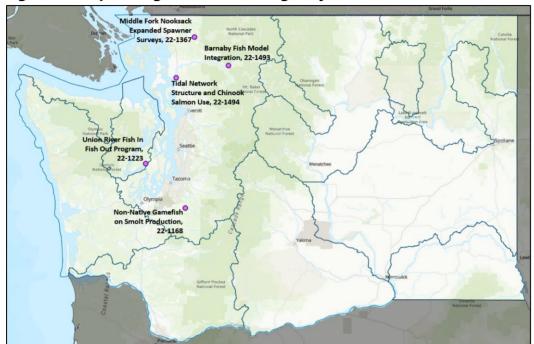
A regional salmon recovery organization may use up to 10 percent of its annual allocation for monitoring activities if the project meets all the following conditions:

- Certified by the region.
- Meets a high priority data gap.
- Can be accomplished in 3 years.

The project should complement ongoing monitoring efforts and be consistent or compatible with methods and protocols used throughout the state. Data collected must be available to RCO and the public. The region must explain why SRFB funds, rather than other funds, are necessary to accomplish the monitoring. In addition to the criteria, there is a cap on available monitoring funds from the PCSRF of \$350,000.

This year, the Monitoring Panel reviewed five regional monitoring proposals submitted by lead entities requesting \$346,759. The Monitoring Panel reviewed the proposals for eligibility and soundness before submitting them to the SRFB for funding consideration.

Monitoring proposals are in Attachment 7 and included in the lead entities' ranked lists of projects and allocations in Attachment 9. The funding motions also are provided with the materials for your reference.



**Figure 3. Map of Regional Monitoring Projects** 

## **Grant Round Principles**

The basic elements of the regional funding allocation approach carry over from previous funding cycles and include the following:

- Reliance on regional salmon recovery plans and lead entity strategies.
- Review of individual projects by the SRFB Review Panel to identify *Projects of Concern*.
- Provision of flexibility, recognizing different circumstances across the state.
- Recognition of efficiencies and flexibility where possible.

The SRFB also commits to continuing the following key principles:

- Allocate salmon recovery funds regionally.
- The SRFB Review Panel does not evaluate the quality of lead entity habitat strategies that are part of recovery plans already submitted to the Governor's Salmon Recovery Office and the National Marine Fisheries Service. Regional

organizations ensure the submitted lists of projects are consistent with the regional recovery plans.

- The evaluation process is collaborative. The SRFB Review Panel works with lead entities and project applicants throughout the process to address project design issues and reduce the likelihood that projects submitted are viewed as *Projects of Concern*.
- Each region has different complexities, ranging from varying numbers of watersheds to areas with vastly differing sizes of human populations. These complexities require different approaches to salmon recovery.
- Lead entities are and will continue to be a crucial and fundamental part of the recovery effort.
- Support continues for areas without regional recovery plans (coast and northeast).
- A statewide strategic approach to salmon recovery will continue.
- Funds must be used efficiently to address both listed and non-listed species.

#### **SRFB Decisions for September**

**Salmon Grants:** The board will be asked to approve up to \$95 million for projects using state and federal salmon funding. As per prior board direction, any of the \$25 million in supplemental funding that is unobligated is to carryforward to the 2023 grant cycle. If any of the \$50 million supplemental funds remain unobligated after September, the board will determine its disposition at the December 2022 SRFB meeting. RCO will initiate contracts for the approved projects as soon as possible. These projects are displayed in Attachment 9 by region and lead entity.

**Targeted Investment Grants:** The board will be asked to approve a targeted investment project list. RCO will initiate contracts for the approved projects as soon as possible. See Attachment 4 for the targeted investment projects.

**PSAR Grants:** The board will be asked to approve project lists for PSAR funding. RCO will initiate contracts for the approved projects when the PSAR account is funded in July 2023, applying the approved Puget Sound Partnership allocation formula as shown in Table 5. These projects are displayed in Attachment 9 by region and lead entity.

**PSAR Large Capital Projects:** The board will be asked to approve a PSAR large capital project list. RCO will initiate contracts for the approved projects if the PSAR account is funded in July 2023 above the \$30 million level. These projects are

displayed in Attachment 6.

**Regional Monitoring Projects:** The final project lists contain five monitoring projects in two regions, requesting \$346,759. These projects are submitted and included on lead entity and region project lists for SRFB approval in Attachment 7 and are included in the \$20 million allocation of salmon state and federal funding.

All projects described in this section used <u>Manual 18: Salmon Recovery Grants</u> as guidance and completed the technical review process with the SRFB Review Panel.

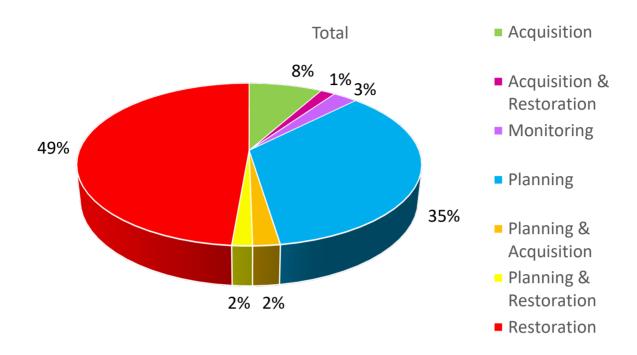
#### **Elements of the Grant Round**

In the spring, sponsors submitted 290 pre-applications in PRISM, RCO's project database, for the 2022 grant cycle. Between April and June 2022, the lead entities coordinated project site visits with the SRFB Review Panel and RCO staff. The site-visits allowed the SRFB Review Panel to see project sites, acquire project details, and provide feedback to the sponsors to improve the projects. At the end of the review process, 185 projects advanced to the SRFB for consideration. See figures 4 and 5 for grant applications by project type and location, respectively.

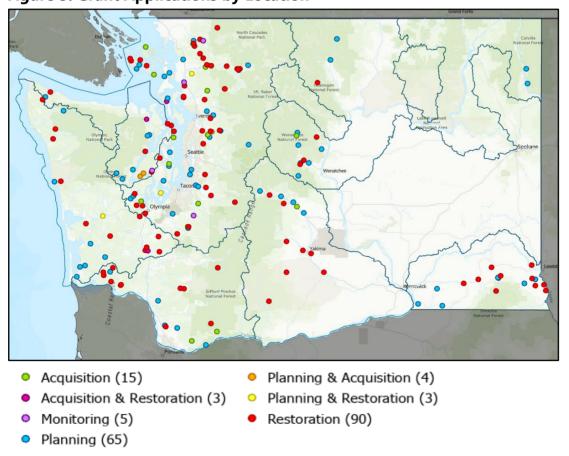
Each regional area and corresponding lead entities prepared their ranked lists of salmon projects within the parameters of available funding.

Several lead entities also identified alternate projects on their lists. These projects must go through the entire lead entity, region, and SRFB review process. Project alternates may receive funding within one year from the original SRFB funding decision only if another project that was designated to be funded cannot be completed or is funded by an entity other than RCO.

Figure 4. 2022 Grant Applications by Project Type



**Figure 5. Grant Applications by Location** 



#### **Ranked Lists and Funding Allocations**

If a lead entity does not have enough projects to fully obligate its entire allocation, it may contribute funding to projects in other lead entities. The project receiving the contribution must be included on the project lists of both the lead entity receiving the funding and the lead entity providing the funding. This ensures funding goes to those areas in need as a response to the yearly variations in project lists. RCO will not adjust a lead entity's allocation based on these contributions to other lead entities as has been done in the past. Instead, a lead entity must include the projects it would like to contribute funding toward on its own ranked list.

#### **Guidance Manual**

Manual 18: Salmon Recovery Grants remains the guidance document for entities applying for funding through the SRFB.

In September 2021, the review panel raised some topics that RCO staff drafted during 2022, and would like to explore for consideration in the 2023 manual update, including acquisition of upland areas and the costs and composition of riparian plantings. These will be discussed at the board's September meeting.

#### **Part 2: SRFB Review Panel Comments**

The SRFB Review Panel is contracted by RCO and is comprised of eight members with a broad range of knowledge and experience in salmon habitat restoration and protection approaches, watershed processes, ecosystem approaches to habitat restoration and protection, and project development and management. Members' expertise covers a range of issues faced by lead entities and sponsors of SRFB projects. Review panel biographies can be found on RCO's Web site.

The SRFB Review Panel allows the SRFB to meet the requirements of the federal Pacific Coastal Salmon Recovery Fund's technical review process. The panel reviews all grant applications to help ensure that each project is: 1) technically sound, meaning that a proposed project provides a benefit to salmon, 2) is likely to be successful, and 3) does not have costs that outweigh the anticipated benefits. Applications labeled *Projects of Concern* do not meet these criteria and will be forwarded to the board for its consideration unless the lead entity withdraws the application. The review panel does not otherwise rate, score, or rank projects. Members of the panel may review project designs to satisfy project conditions or at the request of staff.

#### **Project Review Process**

The review panel worked throughout the year reviewing projects both before and after the application deadline. This review helps lead entities and sponsors improve each project's benefits to fish and certainty of successful implementation. The benefit and certainty criteria used by the review panel in its evaluation of projects is found in *Manual 18: Salmon Recovery Grants*, Appendix G, and is Attachment 3 in this report. The panel based its evaluations and comments on the following:

- Complete applications due 2 weeks before the early project site visits and consultations. First set of Review Panel Comment Forms.
- Phone calls with lead entities and sponsors for project statuses of *Needs More Information* or *Project of Concern*.
- Final application materials submitted by lead entities and regional organizations.
- Final set of review panel comments after application deadline.

The review process involved an effort to provide early feedback based on complete applications and site visits. Lead entities could complete their site visits by March or May, and the review panel provided initial comment forms.

Teams of two panel members completed the initial review for each lead entity's portfolio of projects. The initial review consisted of reading applicants' proposals and supporting documentation; participating in remote or field-based presentations with sponsors, local technical advisory committee members, and lead entity and RCO staff; and preparing initial review comments. Before submitting the initial evaluations back to sponsors, the two-person teams sought input from the entire panel for selected projects that warranted more in-depth discussion.

Projects with complete applications received a status of *Clear*, requiring no further revisions for those applications. Twenty-three percent of applications (68 out of 290 applications) reviewed in March or May were cleared.

Some applications still lacked information to complete the technical review and received a status of *Needs More Information*. In most cases, providing additional information addressed the concerns. If the review panel saw potential issues with projects not meeting evaluation criteria, the projects were noted as *Projects of Concern*. The panel specifically identified the concerns, and if and how sponsors could address them. Many applications were withdrawn from further consideration after initial feedback from lead entity technical groups and the SRFB Review Panel.

After initial project reviews, a team of two review panel members conducted a one-hour phone call with each lead entity to clarify comments. Final applications that were not previously cleared were submitted by June 27 for funding consideration. The review panel reviewed all remaining final applications and responses to early comments. The panel then met July 12-14 to discuss final project proposals and responses to applications. The review panel updated project comment forms with post-application comments by July 21. Projects at that time received a status of either *Clear*, *Conditioned*, or *Project of Concern*.

Lead entities could either withdraw the *Projects of Concern* and/or *Conditioned Projects* from their project lists or include them and forward their project lists to the SRFB for funding consideration. A table of all conditioned projects grouped by region and lead entity is outlined in Attachment 8.

The interaction with the review panel and the feedback to sponsors improves projects and ensures a clear benefit to salmonids in each watershed. The goal of this thorough review process is to have top priority, technically sound projects submitted to the SRFB for funding consideration.

## **Projects of Concern**

The 2022 SRFB policies governing a *Project of Concern* are the same as in previous grant rounds. Lead entities and regional organizations must have submitted their final lists to RCO by August 12, 2022. A regional organization or lead entity had to

decide by that date whether to leave a *Project of Concern* on its list for funding consideration.

The sponsor and lead entity have an opportunity to discuss the project at the SRFB funding meeting. If lead entities withdraw a *Project of Concern* before the funding meeting, alternates may be considered for funding. Should the board decide not to approve a *Project of Concern*, the lead entity allocation will be reduced by the project's requested funding amount.

The intent of this policy is both to signal that the board is unlikely to fund a *Project of Concern* and to ensure that lead entities and regional organizations are convinced of the merits of such projects before submitting them to the board.

**Table 7. Project Review History** 

Process Step	Number of Projects
Initial Review	290
Projects Submitted on Ranked Lists	185*
Projects Withdrawn After Review	105
Projects of Concern at Final Review	3
Final Projects of Concern Submitted to SRFB	0
*Includes monitoring projects and previously funded	projects receiving additional funding this year

<sup>\*</sup>Includes monitoring projects and previously funded projects receiving additional funding this year for cost increases or because they only were partially funded previously.

Before the final project review meeting, there were three *Projects of Concern*. All three were subsequently withdrawn by the sponsors. There are no *Projects of Concern* advancing to the SRFB for funding consideration in 2022.

## **Conditioned Projects**

The review panel labeled 21 projects as *Conditioned* because it felt the projects needed to meet specific conditions to satisfy the board's benefit, certainty, and cost-effectiveness criteria. Attachment 8 contains a summary of the *Conditioned* projects and their review panel conditions.

The review panel continues to use "conditioning" of projects as a tool for strengthening project design and ensuring proposals that may contain elements of uncertainty but otherwise meet the board's evaluation criteria may proceed to an RCO grant agreement. A typical project condition consists of assigning an intermediate review between the selection of a preferred project alternative and the preliminary design. Another common condition might be to direct the elimination of a component of a project because it is inconsistent with the board's theme of restoration of natural processes or provides no added benefit to salmon. RCO staff works with the review panel to track *Conditioned* projects.

#### **Adjustments to Project Lists**

From the time of the board's allocation decisions through the June application deadline, lead entities and regional organizations worked collaboratively to meet their funding targets and to submit a portfolio of projects. Sometimes when projects were withdrawn because of a *Project of Concern* designation or because they received funding from other sources, regions and lead entities had to work with grant applicants to adjust project funding amounts and scopes to fit the funding targets or meet a review panel concern or condition. Ranked lists were adjusted accordingly. Applicants also may submit alternate projects on their ranked lists.

Applicants working through the lead entity and region could adjust project costs (if warranted) through August 12. Those adjustments are defined as the following:

- Any *Conditioned* project that needs a change in the application.
- Any Project of Concern where a scope or budget change would address the review panel recommendation and remove the designation.
- Any project that has been modified, without a significant change in scope, to meet the intra-regional funding allocation determined by the regional organization and its partners.
- Any project that has been withdrawn by the sponsor or lead entity.

#### **SRFB Review Panel Observations**

As part of an effort to support the SRFB's goal of funding effective, high-benefit projects for recovering salmon around the state, the panel offers the following observations of relevant issues noted during this grant cycle.

## 2022 Virtual and Field-Based Project Presentations

With the loosening of COVID-19 protocols, many lead entities had in-person presentations with sponsors, lead entity staff, RCO grants managers, and review panel members. The review panel members appreciated the opportunity to discuss projects in person and to review site conditions. Other lead entities used virtual site presentations exclusively or a combination of virtual and field presentations.

Certain project types, such as large acquisitions or assessments, often are reviewed more efficiently with virtual presentations and allow for the effective use of visuals, including drone video footage. On the other hand, virtual tours have limitations and may highlight favorable site conditions while neglecting to show other problems that would be obvious during a site visit.

#### **Conditioned Project Review**

The review panel occasionally conditions projects for further review and evaluation to help ensure that the project design maximizes habitat benefits and has a high certainty of success. Once the project sponsor has submitted the design documents, the review panel typically will complete a *Conditioned* project review within 30 days. Unfortunately, during the SRFB funding round from March through July, particularly in years with the addition of PSAR and targeted investment funds, the review panel had a difficult time meeting the 30-day deadline. The review panel would recommend increasing the response time for the review of *Conditioned* projects to 60 days. The panel also recommends having a more formal process for how sponsors respond to review panel comments because these comments are not well tracked and grants managers may change over time. Sponsors of *Conditioned* projects should be required to submit a succinct memorandum that describes how they have addressed the issues raised in the conditions.

#### National Flood Insurance Program Regulatory Issues

Most salmon habitat restoration projects in a flood-risk area require a Conditional Letter of Map Revision by the Federal Emergency Management Agency. In the past, a habitat restoration project just needed to meet a no-rise standard based on hydraulic modeling and be able to avoid going through the map revision process. Now, restoration projects that could impact base flood elevations in a regulatory floodway are being required to follow the map revision process. This process is time-consuming, expensive, and impacts project sponsors across the state. The review panel recommends working with county and the Federal Emergency Management Agency regulators to identify opportunities for reviewing no-rise flood elevation standards without going through the formal map revision process.

## Stream Assessments that Support Recovery Plan Updates

The SRFB grant process is focused on implementation of restoration projects and limits the amount of money that many regions can spend on assessments that do not directly lead to project development. These assessments include passage barrier inventories and general habitat surveys. The typical limit for assessments in a region is \$200,000, although due to higher levels of funding this grant round the limit was increased to \$300,000.

The Upper Columbia River Salmon Recovery Region submitted two stream habitat assessment projects to collect data on current conditions so information could be fed into its regional habitat restoration model. While the data being collected does not lead directly to project development, the habitat restoration model will be used to help identify the location and the type of restoration work that will provide the

greatest benefit to salmon recovery. The two proposed assessments were the highest ranked projects in the region. The high ranking of these projects shows the importance of this type of assessment to regional recovery plans. The SRFB may want to consider exempting or increasing the limit for assessments that directly contribute to salmon recovery models and plan updates.

#### **New Stream Restoration Approaches**

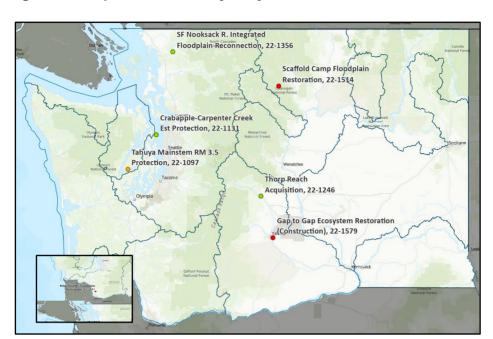
The review panel noted two relatively new restoration approaches in this grant round: 1) stage zero stream restoration, and 2) headwater stream restoration for alluvial water storage.

The stage zero stream restoration approach typically is applied to incised stream channels and involves complete regrading of the valley bottom and loose emplacement of the woody materials that were uprooted during the regrading. While the stage zero restoration actions involve a high degree of disturbance to the channel and riparian community, the results from past projects, primarily on federal land, suggest that high-quality, complex habitat that improves water storage and restores a more anastomosing channel pattern can be created. The primary challenge for project sponsors and review panel members is figuring out the appropriate settings for applying this heavy-handed, but seemingly effective restoration technique.

Headwater stream restoration projects typically focus on smaller creeks that are outside the anadromous fish zone and often are typed as non-fish-bearing. The projects generally involve the addition of woody materials in the form of beaver dam analogues, post-assisted log structures, and logjams to help capture sediment and increase alluvial water storage. While these types of projects can be effective in improving localized water storage, the effects of headwater alluvial water storage on downstream flows are not well established. While the benefits of increased streamflow are enticing, particularly in eastern Washington stream basins, further research and evaluation may be needed to better establish the effectiveness of these types of headwater alluvial storage projects for increasing flows in downstream fish-bearing reaches. In addition, a process should be established that would place any water savings from such projects into a water trust that preserves the additional flow for improved fish habitat.

## **Noteworthy Projects**

As in previous years, the review panel would like to highlight a few project proposals that have the potential to result in large-scale actions that will make significant contributions to implementing local or regional salmon recovery plans. This year, the review panel identified six projects that merit special attention.



**Figure 6. Map of Noteworthy Projects** 

**Table 8. Noteworthy Projects** 

Project Number and Name	Sponsor	Description	Project Type
22-1514 Scaffold Camp Floodplain Restoration	Yakama Nation	The Scaffold Camp project will increase floodplain connectivity on the middle Twisp River by adding large wood and excavating a 1,000-foot relict channel to create a 2,400-foot-long perennial side channel. The project will benefit multiple life stages of Endangered Species Act-listed salmonids.	Restoration
22-1131 Crabapple- Carpenter Creek Estuary Protection	Great Peninsula Conservancy	The Crabapple-Carpenter Creek acquisition will protect 50 acres of largely undisturbed, high-quality estuarine habitat in a rapidly urbanizing area in Kingston. The fee-simple purchase includes protections of 3 acres of salt marsh, 20 acres of tidal flats, and 10 acres of freshwater wetland and riparian habitat along Crabapple Creek that would benefit native chum and coho salmon.	Acquisition

Project Number and Name	Sponsor	Description	Project Type
22-1097 Tahuya Mainstem River Mile 3.5 Protection	Great Peninsula Conservancy	This fee-simple acquisition will protect about 130 acres of floodplain and riparian forest along 1 mile of the Tahuya River. In addition to preventing future development, the purchase will allow for future process-based restoration work to improve habitat conditions and floodplain connectivity. The project has the potential to particularly benefit Endangered Species Act-threatened Hood Canal summer chum populations.	Acquisition
22-1356 South Fork Nooksack River. Integrated Floodplain Reconnection Acquisition	Whatcom County	This project will acquire about 700 acres of floodplain, riparian forest, and steep slopes along 4 miles of the South Fork Nooksack River. The project will facilitate removal of several hundred feet of historic levee that would reconnect more than 130 acres of floodplain habitat. The acquisition would benefit multiple salmon species, including threatened Chinook and steelhead stocks.	Acquisition
22-1246 Thorp Reach Acquisition	Kittitas Conservation Trust	The Thorp Reach acquisition will acquire 235 acres of former Yakima River floodplain, including 1.18 miles of Yakima River shoreline that will benefit multiple salmon and steelhead stocks. While levees and flow modification of the mainstem channel have disrupted natural processes, future restoration work could readily increase floodplain connection and reduce flooding risks and flood insurance requirements in the local community.	Acquisition
22-1579 Gap- to-Gap Ecosystem Restoration	Yakima County	This project will reactivate 340 acres of Yakima River floodplain and restore normative historic flows that will reduce flood elevations and increase access to	Restoration

Project Number and Name	Sponsor	Description	Project Type
		almost 5 miles and 35 acres of side- channel habitat for threatened chinook and steelhead stocks.	

#### **Targeted Investment Process**

For the first time, the review panel assessed and ranked projects for the Targeted Investments Program. Four regions submitted applications that proposed improving Chinook salmon populations for the benefit of Southern Resident orca recovery in the Salish Sea.

**Table 9. Targeted Investments Program** 

Salmon Recovery Region	Project	Project Number
Lower Columbia River	Ridgefield Pits Floodplain	<u>22-1211</u>
	Restoration	
Snake River	Tucannon PA 26 Phase 3-4	<u>22-1015</u>
	Restoration	
Puget Sound	zis a ba II Construction	22-1068
Middle Columbia River	Gap-to-Gap Ecosystem	22-1579
	Restoration	

The proposed habitat actions are aimed at specific Chinook salmon stocks that have been designated as a high priority for improving feeding conditions for Southern Resident orcas. The scores for each priority salmon stock were established ahead of time and based on the National Oceanic and Atmospheric Administration's National Marine Fisheries Service's and Washington Department of Fish and Wildlife's *Southern Resident Killer Whale Priority Chinook Stocks Report* (2018). The review panel used additional scoring criteria, including whether multiple salmon life stages or stocks were addressed, the level of natural process-based restoration, the readiness to proceed with construction, resiliency to climate change, and the level of matching funds.

All four targeted investment proposals scored well in terms of benefits to priority Chinook stocks and addressing multiple life stages and stocks. More variability was seen in the scoring for the level of process-based restoration, how clearly goals and objectives were stated, and the leverage of matching funds. Ultimately, the review panel rated the Zis a ba II Construction and the Gap-to-Gap Ecosystem Restoration

as the two highest ranking targeted investment projects. Both projects focused on large-scale, process-based restoration and leveraged a substantial amount of matching funds. The Ridgefield Pits Floodplain Restoration project scored slightly lower than other projects in terms of process-based restoration actions, uncertainty about readiness to proceed, and the amount of match funding. The Tucannon PA 26 Phase 3-4 Restoration project scored slightly lower based on its more modest scale of habitat gain and its limited ability to leverage matching funds beyond the minimum 15 percent match requirement.

Overall, the review panel felt that the scoring process provided a fair and reasonable approach for ranking the targeted investment proposals. The weighting of scores may need to be re-evaluated to better reflect a project's likelihood of increasing Chinook populations in the Salish Sea where the Southern Resident orcas are generally feeding. The leverage of additional funds also appeared to play an important role in differentiating between projects relative to other criteria. For future rounds, the review panel would like to have more time to discuss the relative merits of each project and to establish a more consistent understanding of how to interpret the scoring criteria.

#### Recommendations

The following is a summary of key recommendations based on the general observations for the 2022 grant round:

- The scoring system for the targeted investment program may need to be adjusted to better reflect a project's benefits to Chinook populations in the Salish Sea that Southern Resident orca feed upon.
- The review panel recommends having a more formalized process for how sponsors respond to comments on *Conditioned* projects and increasing the response time for the review of *Conditioned* projects to 60 days.
- The review panel recommends working with county and Federal Emergency Management Administration regulators to identify opportunities for reviewing no-rise flood elevation standards without going through the formal map revision process.
- The review panel recommends exempting or increasing the limit for assessments that directly feed into salmon recovery models and plan updates.

## Part 3: Region Summaries

#### Introduction

The SRFB continues to allocate funding regionally rather than to individual lead entities. The following section of the report provides links to the RCO Web site to the region annual summaries about their grant processes. The responses are direct submittals from the regions.

## **Region Summaries**

**Hood Canal** 

Lower Columbia River

Middle Columbia River

**Puget Sound** 

**Snake River** 

**Upper Columbia River** 

**Washington Coast** 

Northeast Region

# Attachment 1: 2022 Grant Schedule

Date	Action	Description
January to April	Submit complete project application materials at least 2 weeks before site visit (required)	At least 2 weeks before the site visit, applicants for all projects, including regional monitoring projects, must submit a complete application in PRISM (See Application Checklist). The lead entity provides applicants with a project number before work can begin in PRISM.
Track 1 February 1 to March 18 Or	Site visits (required)	RCO screens all applications for completeness and eligibility. The SRFB Review Panel evaluates projects using Manual 18, Appendix F criteria. RCO staff and review panel members attend lead antity organized site visits. Site visits may
<b>Track 2</b> April 4 to May 13		entity-organized site visits. Site visits may be virtual.
March 23	SRFB Review Panel meeting	Track 1: SRFB Review Panel and RCO staff meet to discuss projects and complete comment forms for projects visited in February and March.
April 1	First comment form for February and March site visits	Track 1: Applicants receive SRFB Review Panel comments identifying projects as Clear, Conditioned, Needs More Information, or Project of Concern. RCO staff accepts Clear applications and returns Conditioned, Needs More Information, and Project of Concern applications so applicants may update and respond to comments. The Monitoring Panel will provide comments for monitoring projects.
April 12-13	Conference call (Optional)	Track 1: Lead entities may schedule a 1-hour conference call with project applicants, RCO staff, and one SRFB Review Panel member to discuss <i>Needs More Information</i> , <i>Project of Concern</i> , or <i>Conditioned</i> projects in their lead entities.
May 18	SRFB Review Panel meeting	Track 2: SRFB Review Panel and RCO staff meet to discuss projects and complete

Date	Action	Description
		comment forms for projects visited in April and May.
May 25	<b>First comment form</b> for April and May site visits	Track 2: Applicants receive SRFB Review Panel comments identifying projects as Clear, Conditioned, Needs More Information, or Project of Concern. RCO staff accepts Clear applications and returns Conditioned, Needs More Information, and Project of Concern applications so applicants may update and respond to comments. The Monitoring Panel will provide comments for monitoring projects.
June 7-8	Conference call (Optional)	Track 2: Lead entities may schedule a 1-hour conference call with project applicants, RCO staff, and one SRFB Review Panel member to discuss <i>Needs More Information</i> , <i>Project of Concern</i> , or <i>Conditioned</i> projects in their lead entities.
June 27 by Noon	<b>Due Date:</b> Applications due	Applicants submit final revised application materials in PRISM. All projects, including monitoring and targeted investment, must be submitted by this date. See <a href="ApplicationChecklist">Application Checklist</a> .
July 13-14	SRFB Review Panel meeting	SRFB Review Panel and RCO staff meet to discuss projects and complete comments. SRFB Review Panel will score targeted investment projects.
July 21	Final comment form	Applicants receive the final SRFB Review Panel comments, identifying projects as Clear, Conditioned, or Project of Concern. The Monitoring Panel will provide final comments for monitoring projects.
August 8	<b>Due Date:</b> Accept SRFB Review Panel condition	Applicants with <i>Conditioned</i> projects must indicate whether they accept the conditions or will withdraw their projects.
August 12	<b>Due Date:</b> Lead entity ranked list	Lead entities submit ranked lists via PRISM.
August 19	<b>Due Date:</b> Regional submittal	Regional organizations submit their Regional Area Summary and Project Matrix.
September 7	Final grant report available for public review	The final funding recommendation report is available online for SRFB members and public review.

## **Attachment 1: Grant Schedule**

Date	Action	Description
September	SRFB funding	SRFB awards grants. Public comment period
21-22	meeting	available.

#### Attachment 2: SRFB Review Panel Evaluation Criteria

The criteria below are from Appendix F in Manual 18.

Projects that have a low benefit to salmon, a low likelihood of success, or costs that outweigh the anticipated benefits will be designated as *Projects of Concern* by the SRFB Review Panel to ensure that all projects are technically sound. The review panel will not otherwise rate, score, or rank projects. It is expected that projects will follow best management practices and meet local, state, and federal permitting requirements.

The SRFB Review Panel uses the SRFB Individual Comment Form to capture its comments on individual projects.

When a *Project of Concern* is identified, the sponsor will receive a comment form identifying the evaluation criteria on which the status was determined. Before the regional area meetings, the regional recovery organization that represents the area where the project is located can contact the review panel chair with further questions. At the regional area meetings, there is opportunity for the review panel to discuss project issues and work with the regional recovery organization and the regional technical team advisors to determine if the issues can be resolved before the list of *Projects of Concern* is presented to the SRFB.

#### **Criteria**

For acquisition and restoration projects, the panel will determine that a project is not technically sound and cannot be significantly improved if it meets any of the following conditions:

- 1. It is unclear there is a problem to salmonids the project is addressing. For acquisition projects, this criterion relates to the lack of a clear threat if the property is not acquired.
- 2. Information provided or current understanding of the system is not sufficient to determine the need for or the benefit of the project.
- 3. Incomplete application or proposal.
- 4. Project goal or objectives not clearly stated or do not address salmon habitat protection or restoration.
- 5. Project sponsor has not responded to review panel comments.

- 6. Acquisition parcel prioritization (for multi-site proposals) is not provided or the prioritization does not meet the project's goal or objectives.
- 7. The project is dependent on other key conditions or processes being addressed first.
- 8. The project has a high-cost relative to the anticipated benefits and the project sponsor failed to justify to the satisfaction of the review panel.
- 9. The project does not account for the conditions or processes in the watershed.
- 10. The project may be in the wrong sequence with other habitat protection, assessments, or restoration actions in the watershed.
- 11. The project does not work towards restoring natural watershed processes or prohibits natural processes.
- 12. It is unclear how the project will achieve its stated goals or objectives.
- 13. It is unlikely that the project will achieve its stated goals or objectives.
- 14. There is low potential for threat to habitat conditions if the project is not completed.
- 15. The project design is not adequate or the project is sited improperly.
- 16. The stewardship description is insufficient or there is inadequate commitment to stewardship and maintenance, which likely would jeopardize the project's success.
- 17. The main focus is on supplying a secondary need, such as education, stream bank stabilization to protect property, or water supply.

## **Additional Criteria for Planning Projects**

For planning projects (e.g., assessment, design, inventories, and studies), the review panel will consider the criteria for acquisition and restoration projects (1-13) and the following additional criteria. The review panel will determine that a project is not

technically sound and cannot be improved significantly if it meets any of the following criteria:

- The project does not address information important to understanding the watershed, is not directly relevant to project development or sequencing, and will not clearly lead to beneficial projects.
- The methodology does not appear to be appropriate to meet the goals and objectives of the project.
- There are significant constraints to the implementation of projects following completion of the planning project.
- The project does not clearly lead to project design or does not meet the criteria for filling a data gap.
- The project does not appear to be coordinated with other efforts in the watershed or does not use appropriate methods and protocols.

#### Attachment 3: Guide for Lead Entity Benefit and Certainty Criteria

## **Benefit and Certainty Criteria**

The SRFB developed the following criteria several years ago for evaluating benefit to fish and certainty of project success. With the evolution of lead entity strategies and recovery plans, the SRFB shifted to a technical evaluation of site-specific projects using the *Project of Concern* criteria. The benefit and certainty criteria listed below only is used for lead entity guidance in their evaluations of projects through their local processes.

Benefit Criteria				
Identified and Prioritized in the Strategy	High BENEFIT Project	Medium BENEFIT Project	Low BENEFIT Project	
Watershed Processes and Habitat Features	Addresses high priority habitat features and/or watershed process that significantly protect or limit the salmonid productivity in the area. Acquisition: More than 60 percent of the total project area is intact habitat, or if less than 60 percent, project must be a combination	May not address the most important limiting factor but will improve habitat conditions.  Acquisition: 40-60 percent of the total project area is intact habitat, or if less than 40-60 percent, project must be a combination that includes restoration.  Assessments: Will lead to	Does not address an important habitat condition in the area.	

Benefit Crit	teria		
	that includes restoration.  Assessment: Crucial to understanding watershed processes, is directly relevant to project development or sequencing, and clearly will lead to new projects in high priority areas.	new projects in moderate priority areas and is independent of addressing other key conditions first.	
Areas and Actions	Is a high priority action in a high priority geographic area.  Assessment:	May be an important action but in a moderate priority geographic area.	Addresses a lower priority action or geographic area.
	Fills an important data gap in a high priority area.	Assessment: Fills an important data gap but is in a moderate priority area.	
Scientific	Is identified through a documented habitat assessment.	Is identified through a documented habitat assessment or scientific opinion.	Is unclear or lacks scientific information about the problem being addressed.

Benefit Crit	teria		Benefit Criteria								
Species Addresses multiple species or unique populations of salmonids essential for recovery or Endangered Species Act-listed fish species or non-listed populations primarily supported by natural spawning. Documented fish use.		Addresses a moderate number of species or unique populations of salmonids essential for recovery or Endangered Species Actlisted fish species or non-listed populations primarily supported by natural spawning. Documented fish use.	Addresses a single species of a low priority. Documented fish use.								
Life History	Addresses an important life history stage or habitat type that limits the productivity of the salmonid species in the area or project addresses multiple life history requirements.	Addresses fewer life history stages or habitat types that limit the productivity of the salmonid species in the area or partially addresses fewer life history requirements.	Is unclear about the salmonid life history being addressed.								
Costs	Has a low- cost relative to the predicted	Has a reasonable cost relative to the	Has a high-cost relative to the predicted benefits for that particular project type in that location.								

Benefit Criteria						
benefits for	predicted					
the project	benefits for					
type in that	the project					
location.	type in that					
	location.					

Certainty Crite	Certainty Criteria							
Identified and								
Prioritized in the Strategy	High CERTAINTY Project	Medium CERTAINTY Project	Low CERTAINTY Project					
Appropriate	Scope is appropriate to meet its goals and objectives.	Is moderately appropriate to meet its goals and objectives.	The methodology does not appear to meet the goals and objectives of the project.					
Approach	Is consistent with proven scientific methods.	Uses untested or incomplete scientific methods.	Uses untested or ineffective methods.					
	Assessment: Methodology will address effectively an information or data gap or lead to effective implementation of prioritized projects within 1-2 years of completion.	Assessment: Methods will effectively address a data gap or lead to effective implementation of prioritized projects within 3-5 years of completion.						
Sequence	Is in the correct sequence and is independent of other actions being taken first.	Is dependent on other actions being taken first that are outside the scope of this project.	May be in the wrong sequence with other protection and restoration actions.					
Threat	Addresses a high potential threat to salmonid habitat.	Addresses a moderate potential threat to salmonid habitat.	Addresses a low potential threat to salmonid habitat.					

Certainty Crite Identified and	eria		
Prioritized in the Strategy	High CERTAINTY Project	Medium CERTAINTY Project	Low CERTAINTY Project
Stewardship	Clearly describes and funds stewardship of the area or facility for more than 10 years.	Clearly describes but does not fund stewardship of the area or facility for more than 10 years.	Does not describe or fund stewardship of the area or facility.
Landowner	Landowners are willing to have work done.	Landowners potentially contacted and likely will allow work.	Landowner willingness is unknown.
Implementati on	Actions are scheduled, funded, and ready to take place and have few or no known constraints to successful implementation including projects that may result from this project.	Have few or no known constraints to successful implementation as well as other projects that may result from this project.	Actions are unscheduled, unfunded, and not ready to take place, and have several constraints to successful implementation.

# Attachment 4: Targeted Investment Project List

Project Number	Region	Sponsor	Project	Funding Request	Targeted Investment
22-1068	Puget Sound	Stillaguamish Tribe of Indians	zis a ba II Final Design and Construction	\$4,977,891	\$4,977,891
22-1579	Middle Columbia River	Yakima County	Gap-to-Gap Ecosystem Restoration Construction	\$4,796,974	\$3,612,109
22-1211	Lower Columbia River	Lower Columbia Estuary Partner	Ridgefield Pits Floodplain Restoration	\$8,700,000	
22-1015	Snake River	Columbia Conservation District	Tucannon PA 26 Phase 3-4 Restoration	\$792,000	
			Totals	\$19,266,865	\$8,590,000

# Attachment 5: Targeted Investment Project Evaluation Criteria

Priority Be	enefit-10	points						
Orca	0-10	The project focuses on habitat	actions that benefit	specific stock				
Recovery	based	groups that are a high priority in the Southern Resident orca						
Benefit	on	task force recommendations, as listed below. Proposals that						
	stock	protect, restore, and enhance salmonid production in areas						
	group	determined critical to successful feeding will receive the highest						
		score. Scores based on NOAA I	Fisheries and Washin	gton				
		Department of Fish and Wildlife	e (2018) Southern Re	esident Killer				
		Whale Priority Chinook Stocks	Report.					
		ESU/ Stock Group Run Type Score						
		Northern Puget Sound	Fall	10				
		Southern Puget Sound Fall 10						
		Lower Columbia	Fall	10				
		Upper Columbia and Snake	Fall	8				
		Lower Columbia	Spring	8				
		Middle Columbia	Fall	8				
		Snake River	Spring-Summer	8				
		Northern Puget Sound	Spring	8				
		Washington Coast	Spring	7				
		Washington Coast Fall 7						
		Middle and Upper Columbia Spring 7						
		Spring						
		Southern Puget Sound	Spring	5				

Species and	Habita	t Benefits–20 points
Species	0-5	Proposal addresses multiple orca prey stocks, and multiple life history stages for one or more orca prey stocks will receive the highest score.  5=multiple life stages of a single orca prey stock or multiple stocks  3=single life stage of a single orca prey stock  0=no orca prey stock
Ecological Processes and Limiting Factors	0-10	Projects that recover habitat through process-based solutions will receive the highest scores.  • Project identifies limiting factor and life history stage for target stocks  • Project results in a high functioning site that restores or protects ecosystem processes  • Surrounding conditions support the project  • The site is resilient to future degradation  • The project is designed to be resilient to climate change  • Sustainable over time, self-sustaining, or naturally increasing benefit; temporary fixes will score lower  • Hardened infrastructure solutions are acceptable but will score lower  8-10 The project restores significant natural processes to the site and significantly improves limiting factors  5-7=The project restores moderate levels of natural processes and/or moderately improves limiting factors  0-4=The project has limited restoration of natural processes and doesn't adequately address limiting factors
Scale of Benefit	0-5	A higher number of quantified benefits and measurable restoration benchmarks will receive the highest score.  Restores access to and/or protects high quality, functional habitat for the target Chinook stocks measured by metrics such as:  • Salmon habitat gain in miles • Salmon habitat improved in acres • Salmon habitat protected in acres • Measurable improvements in flow conditions • Measurable improvements in water quality • Improvements in life-stage specific survival rates

#### **Species and Habitat Benefits–20 points**

5=A significant gain in salmon access or habitat from restoration or prevention of habitat loss from protection measures

3=A moderate gain in salmon access or habitat from restoration or prevention of habitat loss from protection measures 0=Little or no gain in salmon access or habitat from restoration or prevention of habitat loss from protection measures

# Likelihood to Succeed–20 Points Appropriate 0-5 Goals and ob

### Appropriate Scope with Clear Goals and Objectives

Goals and objectives of the project have been clearly communicated within a scope that is achievable and fitting for the project.

- Project addresses root cause of problem identified.
- Objective's support and refine biological goals.
- Objectives are specific quantifiable actions to achieve stated goal (See Manual 18).
- Proposals that demonstrate the project is in the correct sequence and is independent of other actions being taken first will receive the highest score.

5=Goals and objectives are clearly communicated and achievable with implementation of the proposed project 3=Goals and objectives are not entirely clear or may not all be achievable with implementation of the proposed project 0=Project does not address root causes of identified problems or unlikely to meet objectives

### Logical Approach and Schedule

0-5

Proposals that demonstrate readiness to proceed will receive the highest score.

- An appropriate and achievable time frame and order of events to complete the project
- Level of design complete
- Permit stage

4-5=Project is ready to proceed with an appropriate level of design completed and most permitting requirements completed 0-3=Project must still complete important design elements or still require significant permit review

#### Landowner 0-5 Support

Evidence of project support from directly impacted landowners (written or verbal during site visit) will receive the highest score.

Likelihood to Succeed–20 Points					
		4-5=Project has evidence of support from impacted landowners (letter of support, landowner acknowledgement) 0-3=Project does not have strong evidence of landowner support			
Sponsor/ Participants Experience	0-5	Past experience with restoration and/or acquisition projects reflects a higher likelihood of future success. Proposal sponsors that have successfully implemented salmon restoration projects will receive the highest score.  4-5=Project sponsor has demonstrable experience with successful project implementation.  0-3=Project sponsor has little or no demonstrated experience with project implementation.			

Cost-10 Points (All Projects)						
Best Use of Public Funds	0-5	A well justified funding request that demonstrates good use of funds, availability of matching funds, and a clear and complete budget will receive the highest score.  4-5 Project has a clear budget and justified costs.  0-3=Project has a less clear budget and justification of costs.				
Leverage Additional Funds	0-5	The proposal leverages additional funds (not including federal Pacific Coastal Salmon Recovery Fund). Any project that leverages 50% or more of the total project cost will receive the highest score. Leveraged funds must be clearly documented in the Cost Estimate Spreadsheet, but do not need to be used as official match for the application request as long as the 15% match requirement is met.  4-5=Project leverages 50% or more in matching funds.  0-3=Project leverages less than 50% in matching funds.				

#### Attachment 6: PSAR Large Capital Project Lists

Rank	Project Number and Type	Grant Applicant Project Name	Grant Request	Match	Proposed Salmon Funding	Proposed PSAR Funding	PSAR Large Capital Request	Total Proposed Award
1	22-1068	Stillaguamish Tribe of Indians	\$4,977,891	\$4,492,650	\$0	\$0	\$0	\$0
	Restoration	zis a ba 2 Construction <sup>10</sup>						
2	22-1467	Washington Department of Fish and Wildlife	\$3,845,192	\$0	\$0	\$0	\$3,845,192	\$3,845,192
	Restoration	Intensively Monitored Watershed-Milltown Island Phase 2 Construction						
3	22-1063	The Nature Conservancy	\$1,729,060	\$0	\$0	\$0	\$1,729,060	\$1,729,060
	Restoration	Port Susan Bay Restoration for Resiliency						
4	22-1091	Hood Canal Salmon Enhancement Group	\$19,794,000	\$0	\$0	\$0	\$620,000	\$620,000
	Restoration	Duckabush Estuary Restoration Project 11						
5	22-1085	Whidbey Camano Land Trust	\$1,878,000	\$7,590,500	\$356,534	\$0	\$1,521,466	\$1,878,000
	Acquisition, Restoration	Keystone Preserve Acquisition and Restoration						
6	<u>22-1360</u>	Nooksack Indian Tribe	\$9,975,123	\$1,760,789	\$0	\$0	\$9,975,123	\$9,975,123
	Restoration	South Fork Nooksack Fish Camp						
		Restoration <sup>12</sup>						
7	22-1356	Whatcom County Public Works	\$2,900,000	\$1,455,000	\$0	\$0	\$2,900,000	\$2,900,000
	Acquisition							

<sup>&</sup>lt;sup>10</sup>This project is expected to be fully funded through the Targeted Investment Program.

<sup>&</sup>lt;sup>11</sup>This project is conditioned. This project will receive Large Supplemental Funding from the Puget Sound Salmon Recovery Region (\$14,382,000) and the Hood Canal Salmon Recovery Region (\$4,794,000).

<sup>&</sup>lt;sup>12</sup>This project is conditioned.

	Project					Proposed	Proposed	PSAR Large	Total
	Number and	Grant Applicant		Grant		Salmon	PSAR	Capital	Proposed
Rank	Type	Project Name		Request	Match	Funding	Funding	Request	Award
		South Fork Nooksack River Integrated							
		Floodplain Reconnection							
8	<u>22-1439</u>	San Juan Preservation Trust		\$3,050,000	\$578,250	\$0	\$942,865	\$2,107,135	\$3,050,000
	Acquisition	North Shore Conservation Easement							
9	22-1033	Snohomish County Surface Water		\$5,433,225	\$0	\$0	\$0	\$5,433,225	\$5,433,225
	Restoration	Management							
		Thomas' Eddy Hydraulic Reconnection							
10	<u>22-1175</u>	Squaxin Island Tribe		\$5,310,449	\$1,766,913	\$0	\$0	\$5,310,449	\$5,310,449
	Restoration	West Oakland Bay Restoration 2D							
			Total	\$58,892,940	\$17,644,102	\$356,534	\$942,865	\$33,441,650	\$34,741,049

# Attachment 7: Regional Monitoring Project List

Number	Name	Sponsor	Region	Request
22-1168	Non-native Game Fish on Smolt Production	Washington Department of Fish and Wildlife	Puget Sound (Puyallup/Chambers)	\$124,533
22-1223	Union River Fish In- Fish Out Program 2022-24	Hood Canal Salmon Enhancement Group	Hood Canal	\$112,336
22-1367	Middle Fork Nooksack Expanded Spawner Surveys	Lummi Nation	Puget Sound (WRIA 1)	\$60,000
22-1493	Barnaby Fish Model Integration	Skagit River System Cooperative	Puget Sound (Skagit)	\$22,398
22-1494	Tidal Network Structure and Chinook Salmon Use	Skagit River System Cooperative	Puget Sound (Skagit)	\$27,492
			Total	\$346,759

# Attachment 8: Conditioned Projects List

#### **Salmon State Projects**

Conditioned Projects=32 Project of Concern=0

### Lead Entity: Green/Duwamish and Central Puget Sound Watershed (WRIA 9) Lead Entity

Number Type	Sponsor Project Name	Initial Review	Final Review
22-1041	King County Water and Land	Needs more	Conditioned
Planning	Resources Division	information	Α
	Auburn Narrows Floodplain		
	Restoration Preliminary		
22-1044	King County Water and Land	Project of	Conditioned
Restoration	Resources Division	Concern	Α
	Flaming Geyser Restoration		
22-1045	King County Water and Land	Needs more	Conditioned
Planning	Resources Division	information	Α
	Hamakami Levee Restoration		
	Conceptual Design		

#### **Lead Entity: Hood Canal Coordinating Council**

Number	Sponsor		F. 15 .
Туре	Project Name	Initial Review	Final Review
<u>22-1087</u>	Hood Canal Salmon Enhancement	Conditioned	
Restoration	Group	Α	
	Union River Estuary Levee Removal		
22-1091	Hood Canal Salmon Enhancement	Conditioned	
Restoration	Group	Α	
	Duckabush Estuary Restoration Project		
<u>22-1095</u>	Hood Canal Salmon Enhancement	Needs more	Conditioned
Planning	Group	information	Α
	Lower Big Quilcene Moon Valley		
	Reach Final Design		

22-1096	Hood Canal Salmon Enhancement	Needs more	Conditioned
Planning	Group	information	Α
	Big Quilcene River Lower One Mile		
	Final Habitat Design		

#### **Lead Entity: Kalispel Tribe-Pend Oreille Lead Entity**

Number	Sponsor		
Type	Project Name	<b>Initial Review</b>	Final Review
22-1609	The Lands Council	Needs more	Conditioned
Planning	Mill Creek Design Phase 2	information	

#### **Lead Entity: Klickitat Lead Entity**

Number	Sponsor		
Туре	Project Name	<b>Initial Review</b>	Final Review
<u>22-1547</u>	Confederated Tribes and Bands of the	Needs more	Conditioned
Restoration	Yakama Nation	information	Α
	White Creek Wood Replenishment		
	Phase 2		
22-1547	Confederated Tribes and Bands of the	Needs more	Conditioned
Restoration	Yakama Nation	information	Α
	White Creek Wood Replenishment		
	Phase 2		

#### **Lead Entity: Lower Columbia Fish Recovery Board**

Number	Sponsor		
Туре	Project Name	Initial Review	Final Review
<u>22-1272</u>	Department of Fish and Wildlife	Conditioned	
Restoration	Elochoman Barrier Removal and	Α	
	Restoration		

# **Lead Entity: Nisqually River Salmon Recovery Lead Entity**

Number	Sponsor		
Туре	Project Name	<b>Initial Review</b>	Final Review
<u>22-1178</u>	South Puget Sound Salmon	Needs more	Conditioned
Planning	Enhancement Group	information	Α
	Shadow Valley Fish Passage Design		
22-1180	Mason Conservation District	Needs more	Conditioned
Planning	Gosnell Creek Large Woody Materials	information	
	and Fish Passage Design		

#### **Lead Entity: Quinault Indian Nation**

Number	Sponsor		
Type	Project Name	<b>Initial Review</b>	Final Review
22-1227	Quinault Indian Nation	Needs more	Conditioned
Planning	Fish Passage Barrier Inventory Phase 1	information	Α

# **Lead Entity: Skagit Watershed Council**

Number	Sponsor		
Туре	Project Name	<b>Initial Review</b>	Final Review
22-1460	Skagit Fish Enhancement Group	Conditioned	
Restoration	Skagit Riparian Restoration 2022	Α	

#### **Lead Entity: Snake River Salmon Recovery Board**

Number	Sponsor		
Туре	Project Name	Initial Review	Final Review
<u>22-1006</u>	Asotin County Conservation District	Needs more	Conditioned
Restoration	Asotin PA 06 Restoration	information	Α
<u>22-1009</u>	Asotin County Conservation District	Conditioned	
Planning	Asotin Creek PA 3.2 Design	Α	
<u>22-1016</u>	Confederated Tribes of the Umatilla	Needs more	Conditioned
Planning	Reservation	information	Α
	Túuši Wána Design Project Touchet		
	River		
	River Mile 14		
22-1017	Confederated Tribes of the Umatilla	Conditioned	
Planning	Reservation	Α	
	Walla Walla River Mile 32.5 Design		

#### **Lead Entity: Snohomish Basin Lead Entity**

Number	Sponsor		
Туре	Project Name	Initial Review	Final Review
22-1034	Snohomish County Conservation and	Conditioned	
Planning	Natural Resources Surface Water	Α	
	Management		
	Shinglebolt Slough Restoration		
	Design		

<u>22-1135</u>	Adopt A Stream Foundation	Needs more	Conditioned
Restoration	Woods Creek Railroad Bridge	information	Α
	Removal Construction		

#### **Lead Entity: West Sound Partners for Ecosystem Recovery**

Number	Sponsor		
Туре	Project Name	Initial Review	Final Review
<u>22-1098</u>	Wild Fish Conservancy	Needs more	Conditioned
Planning	Finn Creek Estuary Restoration Project	information	Α
<u>22-1112</u>	Mid Sound Fisheries Enhancement	Needs more	Conditioned
Planning	Group	information	Α
	Long Lake Predation Assessment		
<u>22-1345</u>	Washington Department of Fish and	Needs more	Conditioned
Planning and	Wildlife	information	Α
Restoration	McNeil Island-Floyds Cove Phase 1		

### **Lead Entity: WRIA 1 Watershed Management Board**

Number Type	Sponsor Project Name	Initial Review	Final Review
22-1357	Nooksack Indian Tribe	Needs more	Conditioned
Planning	South Fork Nooksack (Nuxw7íyem)	information	A
3	Hardscrabble-Todd Design		
22-1360	Nooksack Indian Tribe	Needs more	Conditioned
Restoration	South Fork Nooksack Fish (Ts'éq)	information	Α
	Camp Restoration Large Capital		
22-1364	Lummi Nation	Needs more	Conditioned
Restoration	South Fork Nooksack River	information	Α
	Cavanaugh Island Phase 2 Restoration		

### Lead Entity: Yakima Basin Fish and Wildlife Recovery Board

Number	Sponsor		
Туре	Project Name	<b>Initial Review</b>	Final Review
22-1523	Kittitas Conservation Trust	Needs more	Conditioned
Planning	Hanson Ponds 30 Percent Design	information	Α
<u>22-1527</u>	Mid-Columbia Fisheries Enhancement	Conditioned	
Restoration	Group	Α	
	Lower Cowiche Floodplain Restoration		
	Cost Increase		

22-1573	Mid-Columbia Fisheries Enhancement	Needs more	Conditioned
Restoration	Group	information	Α
	Cowiche Creek Design and		
	Restoration at		
	River Mile 0.7		
22-1580	Yakima County Public Services	Conditioned	
Restoration	Naches Cowiche Floodplain		
	Restoration		
22-1631	Mid-Columbia Fisheries Enhancement	Conditioned	
Planning	Group	Α	
_	Whiskey Creek Barriers Design		

#### Attachment 9: Ranked Project Lists

# **Hood Canal Salmon Recovery Region**

Regional Allocation \$2,731,653 Remaining \$243,878

#### **Hood Canal Coordinating Council Lead Entity**

Salmon Allocation \$2,731,653 Remaining Allocation \$243,878

**PSAR Allocation** 

\$0 PSAR allocations set at zero until the Legislature funds the program.

пооа	Alternate or	inating Counc Project	ii Lead Entity			Proposed	Proposed	PSAR Large	Total
	Partially	Number	Grant Applicant	Grant		Salmon	PSAR	Capital	Proposed
Rank	Funded	and Type	Project Name	Request	Match	Funding	Funding	Request	Award
1		<u>20-1105</u>	Mason Conservation District	\$570,000	\$100,589	\$1,100,000	\$0	\$0	\$1,100,000
		Restoration	Skokomish River Mile 6.5 Restoration Phase 1 <sup>13</sup>						
2		22-1097	Great Peninsula Conservancy	\$1,424,800	\$255,000	\$0	\$1,424,800	\$0	\$1,424,800
		Acquisition, Planning	Tahuya Mainstem River Mile 3.5 Protection						
3		<u>22-1095</u>	Hood Canal Salmon Enhancement Group	\$706,265	\$124,635	\$0	\$706,265	\$0	\$706,265
		Planning	Lower Big Quilcene Moon Valley Reach Final Design						

<sup>&</sup>lt;sup>13</sup>Project 20-1105 is a request is to fully fund a project partially funded in 2020.

Hood	Canal Coord	inating Counc	il Lead Entity						
Rank	Alternate or Partially Funded	Project Number and Type	Grant Applicant Project Name	Grant Request	Match	Proposed Salmon Funding	Proposed PSAR Funding	PSAR Large Capital Request	Total Proposed Award
4		22-1096 Acquisition, Planning	Hood Canal Salmon Enhancement Group Big Quilcene River Lower One Mile Final Habitat Design	\$883,660	\$155,940	\$0	\$883,660	\$0	\$883,660
5		22-1223 Monitoring	Hood Canal Salmon Enhancement Group Union River Fish-In Fish-Out Program 2022-24	\$112,336	\$21,450	\$112,336	\$0	\$0	\$112,336
6		22-1093 Acquisition, Planning	Mason Conservation District Skokomish South Fork Large Woody Materials Phase 6 Design	\$199,650	\$0	\$199,650	\$0	\$0	\$199,650
7	Partially Funded	20-1119 Restoration	North Olympic Salmon Coalition  Snow Creek Uncas Preserve Restoration 14	\$905,779	\$192,493	\$468,065	\$0	\$0	\$468,065
8	Partially Funded	18-1228 Acquisition, Planning	Jefferson County Dosewallips River Powerlines Acquisition and Design <sup>15</sup>	\$288,647	\$52,917	\$217,945	\$0	\$0	\$217,945
9		22-1087 Restoration	Hood Canal Salmon Enhancement Group Union River Estuary Levee Removal	\$205,800	\$44,200	\$205,800	\$0	\$0	\$205,800
10		22-1079 Acquisition, Restoration	Jefferson Land Trust Salmon Creek Ruck Acquisition and Restoration	\$420,290	\$376,375	\$0	\$420,290	\$0	\$420,290

<sup>&</sup>lt;sup>14</sup>Project 20-1119 is a cost increase for a 2020 project.

<sup>&</sup>lt;sup>15</sup>Project 18-1228 is a cost increase for a 2020 project.

	Alternate							PSAR	
	or	Project				Proposed	Proposed	Large	Total
Rank	Partially Funded	Number and Type	Grant Applicant Project Name	Grant Request	Match	Salmon Funding	PSAR Funding	Capital Request	Proposed Award
11		<u>22-1090</u>	Hood Canal Salmon Enhancement Group	\$57,479	\$10,144	\$57,479	\$0	\$0	\$57,479
		Acquisition, Planning	Lilliwaup Creek Restoration Feasibility						
12		22-1092	Hood Canal Salmon Enhancement Group	\$557,669	\$100,000	\$0	\$557,669	\$0	\$557,669
		Acquisition, Planning	Tahuya River White Owl Reach Acquisition and Design						
13		<u>22-1094</u>	Mason Conservation District	\$126,500	\$0	\$126,500	\$0	\$0	\$126,500
		Acquisition, Planning	South Fork Skokomish Fish Passage Design						
	Partially	<u>22-1091</u>	Hood Canal Salmon Enhancement Group	\$19,794,000	\$0	\$0	\$0	\$620,000	\$620,000
	Funded	Restoration	Duckabush Estuary Restoration Project 16						
			Total	\$26,252,875	\$1,433,743	\$2,487,775	\$3,992,684	\$620,000	\$7,100,459
			Remaining			\$243,878	(\$3,992,684)		

<sup>&</sup>lt;sup>16</sup>Project 22-1091 will be receiving \$14,382,000 in Large Supplemental Funding from the Puget Sound Salmon Recovery Region and \$4,794,000 in Large Supplemental Funding from the Hood Canal Salmon Recovery Region.

# **Lower Columbia River Salmon Recovery Region**

Regional Allocation \$8,702,914 Remaining \$489,112

Klickitat Lead Entity

Salmon Allocation \$1,459,479<sup>17</sup> Remaining \$489,112

Rank	Project Number and Type	Grant Applicant Project Name	Grant Request	Match	Proposed Salmon Funding	Total Proposed Award
1	<u>22-1547</u>	Confederated Tribes and Bands of the Yakama Nation	\$245,000	\$45,000	\$245,000	\$245,000
	Restoration	White Creek Wood Replenishment Phase 2				
2	21-1241	Columbia Land Trust	\$352,500	\$1,503,057	\$725,367	\$725,367
	Acquisition	Upper Rattlesnake Creek Conservation 18				
		Tot	al \$597,500	\$1,548,057	\$970,367	\$970,367
		Remainir	g		\$489,112	

<sup>&</sup>lt;sup>17</sup>The Klickitat Lead Entity received \$234,979 from the Lower Columbia River Salmon Recovery Region and \$1,224,500 from the Middle Columbia River Salmon Recovery Region.

<sup>&</sup>lt;sup>18</sup>Project 21-1241 is a request to fully fund and provide a cost increase to a project partially funded in 2021.

# Lower Columbia Fish Recovery Board Lead Entity

Salmon Allocation Remaining

\$8,467,935 \$0

Lower	Columbia Fis	h Recovery Board	Lead Entity				
Rank	Alternate or Partially Funded	Project Number and Type	Grant Applicant Project Name	Grant Request	Match	Proposed Salmon Funding	Total Proposed Award
1	Partially	<u>22-1273</u>	Cowlitz Indian Tribe	\$947,250	\$2,522,010	\$315,076	\$315,076
	Funded	Restoration	Cispus-Yellowjacket Phase 4 Restoration				
2		<u>22-1218</u>	Cowlitz Indian Tribe	\$636,502	\$295,389	\$636,502	\$636,502
		Restoration	West Fork Grays Restoration Phase 1				
3		<u>22-1217</u>	Cowlitz Indian Tribe	\$820,381	\$1,320,000	\$820,381	\$820,381
		Restoration	Upper East Fork Grays Restoration				
4	Alternate	<u>22-1211</u>	Lower Columbia Estuary Partnership	\$8,700,000	\$4,747,500	\$0	\$0
		Restoration	Ridgefield Pits Floodplain Restoration 19				
5		<u>22-1076</u>	Columbia Land Trust	\$136,269	\$24,100	\$136,269	\$136,269
		Planning	Wind River Double Bend Conservation				
6		<u>22-1072</u>	Lower Columbia Fish Enhancement Group	\$199,826	\$0	\$199,826	\$199,826
		Planning	Goble Mulholland and Upper Coweeman Design				
7		22-1229	Columbia River Estuary Study Taskforce (CREST)	\$452,397	\$153,750	\$452,397	\$452,397
		Restoration	Clear Creek Reconnection				
8		<u>22-1215</u>	Lower Columbia Estuary Partner	\$162,859	\$0	\$162,859	\$162,859
		Planning	Lower Woodard Creek Final Design				

<sup>&</sup>lt;sup>19</sup>Project 22-1211 will be funded by Lower Columbia Fish Recovery Board's Large Supplemental funding.

Lower	Columbia Fis	h Recovery Board	Lead Entity				
Davida	Alternate or Partially Funded	Project Number	Grant Applicant	Grant	Match	Proposed Salmon	Total Proposed
Rank 9	runaea	and Type 22-1207	Project Name Mid-Columbia Fisheries Enhancement Group	Request \$256,650	\$45,550	Funding \$256,650	Award \$256,650
9		Restoration	Beaver Reach Side-Channel Restoration	\$230,030	ψ+3,330	¥230,030	¥230,030
10		<u>22-1136</u>	Columbia Land Trust	\$1,000,000	\$5,097,264	\$1,000,000	\$1,000,000
		Acquisition	West Fork Washougal Conservation				
11		22-1214	Lower Columbia Estuary Partnership	\$182,109	\$0	\$182,109	\$182,109
		Planning	East Fork Lewis River Habitat Improvements Final Design				
12		22-1212	Lower Columbia Estuary Partnership	\$299,731	\$60,030	\$299,731	\$299,731
		Planning	Lower Columbia Barrier Assessment				
13	Partially	22-1074	Lower Columbia Fish Enhancement Group	\$9,588,000	\$654,000	\$2,465,969	\$2,465,969
	Funded	Restoration	STHD 1-Reaches A, B, C, D, and Loch Creek <sup>20</sup>				
14		<u>22-1213</u>	Lower Columbia Estuary Partner	\$199,297	\$0	\$199,297	\$199,297
		Planning	Mason Creek Final Design				
15		<u>22-1073</u>	Lower Columbia Fish Enhancement Group	\$67,313	\$12,030	\$67,313	\$67,313
		Restoration	Grays Fossil and Crazy Johnson Stewardship				
16		<u>22-1219</u>	Cowlitz Indian Tribe	\$169,444	\$0	\$169,444	\$169,444
		Planning	Blaney Creek Design				
17		<u>22-1271</u>	Cascade Forest Conservancy	\$249,146	\$46,337	\$249,146	\$249,146
		Restoration	Restoration on Stump Creek and Caddis Creek				
18		<u>22-1181</u>	Wahkiakum Conservation District	\$256,031	\$45,391	\$256,031	\$256,031

<sup>&</sup>lt;sup>20</sup>Project 22-1074 will be funded by Lower Columbia Fish Recovery Board's Large Supplemental funding.

				Remaining			\$0	
				Total	\$25,065,341	\$15,497,851	\$8,467,935	\$8,467,935
	Funded	Restoration	Elochoman Barrier Removal and Restoration					
19	Partially	22-1272	Washington Department of Fish and Wildlife		\$742,136	\$474,500	\$598,935	\$598,935
		Restoration	Riparian Buffer Stewardship					
Rank	Funded	and Type	Project Name		Request	Match	Funding	Award
	Alternate or Partially	Project Number	Grant Applicant		Grant		Proposed Salmon	Total Proposed

# **Middle Columbia River Salmon Recovery Region**

Regional Allocation \$4,081,667 Remaining \$489,112

Klickitat Lead Entity

Salmon Allocation \$1,459,479<sup>21</sup> Remaining \$489,112

Rank	Project Number and Type	Grant Applicant Project Name	Grant Request	Match	Proposed Salmon Funding	Total Proposed Award
1	<u>22-1547</u>	Confederated Tribes and Bands of the Yakima Nation	\$245,000	\$45,000	\$245,000	\$245,000
	Restoration	White Creek Wood Replenishment Phase 2				
2	<u>21-1241</u>	Columbia Land Trust	\$352,500	\$1,503,057	\$725,367	\$725,367
	Acquisition	Upper Rattlesnake Creek Conservation				
		Total	\$597,500	\$1,548,057	\$970,367	\$970,367
		Remaining			\$489,112	

<sup>&</sup>lt;sup>21</sup>The Klickitat Lead Entity received \$234,979 from the Lower Columbia River Salmon Recovery Region and \$1,224,500 from the Middle Columbia River Salmon Recovery Region.

# Yakima Basin Fish and Wildlife Recovery Board Lead Entity

Salmon Allocation \$2,857,167 Remaining \$0

RankAlternate or Partially Project Number and Type AlternateGrant Applicant Project NameGrant Request Project NameMatch FundingAlternate22-1579 RestorationYakima County\$4,796,974 Gap-to-Gap Ecosystem Restoration (Construction)\$4,796,974 \$4,951,850\$175,000 \$940,178122-1246 AcquisitionKittitas Conservation Trust Acquisition\$940,178 Thorp Reach Acquisition\$175,000 \$940,178\$940,178222-1571 RestorationConfederated Tribes and Bands of the Yakima Nation River Mile 89.5 Project Phase 2\$960,000 \$205,800\$50,798\$285,000322-1576 Sonfederated Tribes and Bands of the Yakima Nation\$285,000 \$50,798\$285,000	Total Proposed Award \$0
Restoration Gap-to-Gap Ecosystem Restoration (Construction)  1 22-1246 Kittitas Conservation Trust \$940,178 \$175,000 \$940,178 Acquisition Thorp Reach Acquisition  2 22-1571 Confederated Tribes and Bands of the Yakima Nation \$960,000 \$205,800 \$960,000 Restoration River Mile 89.5 Project Phase 2	
1 22-1246 Kittitas Conservation Trust \$940,178 \$175,000 \$940,178 Acquisition Thorp Reach Acquisition 2 22-1571 Confederated Tribes and Bands of the Yakima Nation \$960,000 \$205,800 \$960,000 Restoration River Mile 89.5 Project Phase 2	\$940,178
Acquisition Thorp Reach Acquisition  2 22-1571 Confederated Tribes and Bands of the Yakima Nation \$960,000 \$205,800 \$960,000  Restoration River Mile 89.5 Project Phase 2	\$940,178
2 <u>22-1571</u> Confederated Tribes and Bands of the Yakima Nation \$960,000 \$205,800 \$960,000 Restoration River Mile 89.5 Project Phase 2	
Restoration River Mile 89.5 Project Phase 2	
	\$960,000
3 <u>22-1576</u> Confederated Tribes and Bands of the Yakima Nation \$285,000 \$50,798 \$285,000	
	\$285,000
Restoration Wahtum Creek Culvert Replacement (Design-Build)	
4 <u>22-1523</u> Kittitas Conservation Trust \$147,009 \$25,963 \$147,009	\$147,009
Planning Hanson Ponds 30 Percent Design	
5 <u>22-1575</u> Trout Unlimited Inc. \$36,212 \$7,000 \$36,212	\$36,212
Restoration Little Creek Channel Complexity Pilot Project	
6 <u>22-1614</u> Trout Unlimited Inc. \$199,298 \$0 \$199,298	\$199,298
Planning Swauk Creek Supplemental Flows P&C Design	
7 <u>22-1527</u> Mid-Columbia Fisheries Enhancement Group \$87,366 \$15,802 \$87,366	\$87,366
Restoration Lower Cowiche Floodplain Restoration Cost Increase	
8 Alternate <u>22-1485</u> Confederated Tribes and Bands of the Yakima Nation \$663,855 \$117,151 \$0	\$0
Restoration Tieton River Restoration Site 4	
9 <u>22-1631</u> Mid-Columbia Fisheries Enhancement Group \$98,800 \$0 \$98,800	\$98,000
Planning Whiskey Creek Barriers Design	Ψ30,000

	Funded	Planning	Cabin Creek Restoration Assessment				
11	Partially	<u>22-1567</u>	Mid-Columbia Fisheries Enhancement Group	\$85,000	\$15,000	\$31,304	\$31,304
	Funded	Restoration	Cowiche Creek Design and Restoration at River Mile 0.7				
10	Partially	<u>22-1573</u>	Mid-Columbia Fisheries Enhancement Group	\$82,660	\$14,650	\$72,000	\$72,000
Rank	Alternate or Partially Funded	Project Number and Type	Grant Applicant Project Name	Grant Request	Match	Proposed Salmon Funding	Total Proposed Award

# **Northeast Washington Salmon Recovery Region**

Regional Allocation \$1,282,207 Remaining \$928,207

Kalispel Tribe-Pend Oreille Lead Entity

Salmon Allocation \$1,282,207 Remaining \$928,207

Rank	Project Number and Type	Grant Applicant Project Name	Grant Request	Match	Proposed Salmon Funding	Total Proposed Award
1	<u>22-1615</u>	Pend Oreille Conservation District	\$197,500	\$35,000	\$197,500	\$197,500
	Planning	Skookum Creek Fish and Farm Enhancement Planning				
2	22-1609	The Lands Council	\$156,500	\$23,474	\$156,500	\$156,500
	Planning	Mill Creek Design Phase 2				
		Total	\$354,000	\$58,474	\$354,000	\$354,000
		Remaining			\$928,207	

# **Puget Sound Salmon Recovery Region**

Regional Allocation \$14,848,235 Remaining \$1,713,448

# Green/Duwamish and Central Puget Sound Watershed (WRIA 9) Lead Entity

Salmon Allocation

\$715,319

**PSAR Allocation** 

\$0 PSAR allocation set at zero until the Legislature funds the program.

Green	/Duwamish	and Central F	Puget Sound Watershed (WRIA 9) Lead Entity						
Rank	Alternate or Partially Funded	Project Number and Type	Grant Applicant Project Name	Grant Request	Match	Proposed Salmon Funding	Proposed PSAR Funding	PSAR Large Capital Request	Total Proposed Award
1	Partially Funded	21-1002 Restoration	King County Flaming Geyser State Park Riparian Revegetation <sup>22</sup>	\$295,895	\$104,105	\$163,018	\$0	\$0	\$163,018
2		22-1041 Planning	King County Auburn Narrows Floodplain Restoration Preliminary	\$300,987	\$99,013	\$0	\$300,987	\$0	\$300,987
3		22-1043 Planning	Kent Lower Russell Road-Habitat Area A	\$300,000	\$200,000	\$0	\$300,000	\$0	\$300,000
4	Partially Funded	22-1044 Restoration	King County Flaming Geyser Restoration	\$410,000	\$90,000	\$69,424	\$300,000	\$0	\$369,424
5		22-1045 Planning	King County Hamakami Levee Restoration Conceptual Design	\$132,877	\$67,123	\$132,877	\$0	\$0	\$132,877
6		22-1047 Planning	Tukwila Nelsen Side Channel	\$300,000	\$54,000	\$100,000	\$200,000	\$0	\$300,000

<sup>&</sup>lt;sup>22</sup>Project 21-1002 is to fully fund a project partially funded in 2021.

			Ren	aining			\$0	(\$1,100,987)		
				Total	\$1,989,759	\$664,241	\$715,319	\$1,100,987	\$0	\$1,816,306
		Planning	Gilliam Creek Fish Passage Preliminary Design							
7		<u>22-1049</u>	Tukwila		\$250,000	\$50,000	\$250,000	\$0	\$0	\$250,000
Rank	Funded	and Type	Project Name		Request	Match	Funding	Funding	Request	Award
	Partially	Number	Grant Applicant		Grant		Salmon	PSAR	Capital	Proposed
	or	Project					Proposed	Proposed	Large	Total
	Alternate								PSAR	
Green	/Duwamish	and Central	Puget Sound Watershed (WRIA 9) Lead Entity							

# Island County Lead Entity

Salmon Allocation \$526,152 Remaining \$20,150

		Remaining			\$20,150	\$0		
		Total	\$2,027,468	\$7,590,500	\$506,002	\$0	\$1,521,466	\$2,027,468
	Acquisition, Restoration	Keystone Preserve Acquisition and Restoration <sup>23</sup>						
2	<u>22-1085</u>	Whidbey Camano Land Trust	\$1,878,000	\$7,590,500	\$356,534	\$0	\$1,521,466	\$1,878,000
	Planning	Race Lagoon Passage–Culverts 1893 and 1894						
1	<u>22-1089</u>	Skagit Fisheries Enhancement Group	\$149,468	\$0	\$149,468	\$0	\$0	\$149,468
Rank	Project Number and Type	Grant Applicant Project Name	Grant Request	Match	Proposed Salmon Funding	Proposed PSAR Funding	PSAR Large Capital Request	Total Proposed Award

<sup>&</sup>lt;sup>23</sup>This project is requesting PSAR Large Capital funds. If the project is not awarded that funding, Island County will allocate all available PSAR funds to this project.

# Kennedy-Goldsborough Basin (WRIA 14) Salmon Recovery Lead Entity

Salmon Allocation \$509,016 Remaining \$0

	Alternate								
	or	Project				Proposed	Proposed	PSAR Large	Total
	Partially	Number	Grant Applicant	Grant		Salmon	PSAR	Capital	Proposed
Rank	Funded	and Type	Project Name	Request	Match	Funding	Funding	Request	Award
1		22-1177	South Puget Sound Salmon Enhancement	\$228,000	\$45,000	\$228,000	\$0	\$0	\$228,000
		Restoration	Group						
			Griggs Creek Griffinwood Fish Passage						
2		22-1180	Mason Conservation District	\$199,100	\$0	\$199,100	\$0	\$0	\$199,100
		Planning	Gosnell Creek Large Woody Materials and						
			Fish Passage Design						
3		22-1178	South Puget Sound Salmon Enhancement	\$100,000	\$0	\$81,916	\$18,084	\$0	\$100,000
		Planning	Group						
			Shadow Valley Fish Passage Design						
4	Partially	22-1176	Capitol Land Trust	\$1,000,000	\$3,245,000	\$0	\$818,009	\$0	\$818,009
	Funded	Acquisition	Hudson Cove Habitat Protection						
10		22-1175	Squaxin Island Tribe	\$5,310,449	\$1,766,913	\$0	\$0	\$5,310,449	\$5,310,449
		Restoration	West Oakland Bay Restoration 2D						
			Total	\$6,837,549	\$5,056,913	\$509,016	\$836,093	\$5,310,449	\$6,655,558
			Remaining			\$0	(\$836,093)		

# Lake Washington/Cedar/Sammamish Watershed (WRIA 8) Lead Entity

**Salmon Allocation** \$946,951 Remaining

\$0

Rank	Alternate or Partially Funded	Project Number and Type 22-1191	Grant Applicant Project Name Seattle	<b>Grant Request</b> \$2,144,088	Match \$1,548,912	Proposed Salmon Funding \$686,578	Proposed PSAR Funding \$1,457,510	PSAR Large Capital Request \$0	Total Proposed Award \$2,144,088
		Restoration	Cedar River Upper Royal Arch Habitat Enhancement			. ,	. , ,	·	. , ,
2		22-1190	King County	\$100,000	\$226,500	\$100,000	\$0	\$0	\$100,000
		Restoration	Seawest Granston (Middle Bear) Natural Area Restoration						
3	Partially	20-1061	Bothell	\$183,400	\$32,784	\$160,373	\$0	\$0	\$160,373
	Funded	Planning	East Side Wayne Sammamish- Waynita Restoration Design <sup>24</sup>						
			Total	\$2,427,488	\$1,808,196	\$946,951	\$1,457,510	\$0	\$2,404,461
			Remaining			\$0	(\$1,457,510)		

<sup>&</sup>lt;sup>24</sup>Project 20-1061 is a cost increase for a previously funded project.

# Nisqually River Salmon Recovery Lead Entity

Salmon Allocation \$910,781 Remaining \$0

Rank	Alternate or Partially Funded	Project Number and Type	Grant Applicant Project Name	Grant Request	Match	Proposed Salmon Funding	Proposed PSAR Funding	PSAR Large Capital Request	Total Proposed Award
	Partially	22-1057	Nisqually Land Trust						
1	Funded	Acquisition	Middle Ohop Creek Protection	\$2,353,950	\$415,403	\$910,781	\$1,150,000	\$0	\$2,060,781
		22-1059	South Puget Sound Salmon Enhancement Group						
2	Alternate	Restoration	Middle Ohop Restoration River Mile 5.6	\$1,586,600	\$282,000	\$0	\$0	\$0	\$0
			South Puget Sound Salmon Enhancement Group						
		22-1061	Mashel River Assessment River Mile 3.5-						
3	Alternate	Planning	7.1	\$146,200	\$25,800	\$0	\$0	\$0	\$0
		22-1058	Nisqually Land Trust						
4	Alternate	Planning	Muck Creek Protection Outreach	\$42,895	\$7,575	\$0	\$0	\$0	\$0
			Total	\$4,129,645	\$730,778	\$910,781	\$1,150,000	\$0	\$2,060,781
			Remaining			\$0	(\$1,150,000)		

# North Olympic Peninsula Lead Entity for Salmon

Salmon Allocation \$1,564,371 Remaining \$478,564

North	Olympic Pe Alternate	ninsula Lead E	ntity for Salmon						
	or Partially	Project Number	Grant Applicant	Grant		Proposed Salmon	Proposed PSAR	PSAR Large Capital	Total Proposed
Rank	Funded	and Type	Project Name	Request	Match	Funding	Funding	Request	Award
1		22-1187	Lower Elwha Klallam Tribe	\$842,412	\$150,000	\$0	\$842,412	\$0	\$842,412
		Restoration	Little Hoko River Wood Restoration						
2		22-1084	North Olympic Salmon Coalition	\$1,456,552	\$3,284,728	\$1,015,889	\$440,663	\$0	\$1,456,552
		Restoration	Johnson Creek Triple Culvert Restoration						
3		22-1083	North Olympic Salmon Coalition	\$43,983	\$249,235	\$43,983	\$0	\$0	\$43,983
		Planning	Hoko River Tributary Fish Passage Design						
4		22-1439	San Juan Preservation Trust	\$3,050,000	\$578,250	\$0	\$651,163	\$2,107,162	\$3,050,000
		Acquisition	North Shore Conservation Easement 25						
	Partially	21-1094	Lower Elwha Klallam Tribe	\$455,720	\$81,133	\$0	\$191,613	\$0	\$191,613
	Funded	Restoration	Elwha River Vegetation Enhancement <sup>26</sup>						
	Partially	21-1101	North Olympic Salmon Coalition	\$175,907	\$39,000	\$25,935	\$0	\$0	\$25,935
	Funded	Restoration	Dungeness Riparian Recovery Phase 3 <sup>27</sup>						
			Total	\$6,024,574	\$4,382,346	\$1,085,807	\$2,125,851	\$2,107,162	\$5,610,495
			Remaining			\$478,564	(\$2,125,851)		

<sup>&</sup>lt;sup>25</sup>This project is in the San Juan lead entity and is included on its list.

<sup>&</sup>lt;sup>26</sup>Project 21-1094 is a request to fully fund a project partially funded in 2021.

<sup>&</sup>lt;sup>27</sup>This request is to fully fund a project partially funded in 2021.

# Puyallup and Chambers Watershed Salmon Recovery Lead Entity

Salmon Allocation \$1,228,094 Remaining \$0

Rank	Alternate or Partially Funded	Project Number and Type	Grant Applicant Project Name	Grant Request	Match	Proposed Salmon Funding	Proposed PSAR Funding	PSAR Large Capital Request	Total Proposed Award
1		22-1166 Restoration	South Puget Sound Salmon Enhancement Group	\$1,300,061	\$229,736	\$0	\$1,300,061	\$0	\$1,300,061
			Greenwater Phase 4 (River Mile 4.0-4.8)						
2		22-1165	Enumclaw	\$1,743,651	\$783,849	\$1,153,480	\$590,171	\$0	\$1,743,651
		Restoration	Boise Creek at Enumclaw Golf Course Construction						
3	Partially	22-1171	Forterra	\$1,019,944	\$179,991	\$74,614	\$0	\$0	\$74,614
	Funded	Acquisition	South Prairie Creek Acquisition (River Mile 1.1-4.8)						
			Tota	\$4,063,656	\$1,193,576	\$1,228,094	\$1,890,232	\$0	\$3,118,326
					Remaining	\$0	(\$1,890,232)		

## San Juan County Lead Entity for Salmon Recovery

Salmon Allocation \$671,434 Remaining \$0

San Ju	an County L	ead Entity for	Salmon Recovery						
Rank 1	Alternate or Partially Funded Partially Funded	Project Number and Type 21-1148 Acquisition	Grant Applicant Project Name San Juan Preservation Trust McArdle Bay Shoreline Conservation Easement 28	Grant Request \$416,250	<b>Match</b> \$634,650	Proposed Salmon Funding \$107,648	Proposed PSAR Funding \$0	PSAR Large Capital Request \$0	Total Proposed Award \$107,648
2		22-1424 Acquisition	San Juan County Land Bank Watmough Bay Addition	\$500,000	\$2,098,457	\$0	\$500,000	\$0	\$500,000
3		22-1439 Acquisition	San Juan Preservation Trust  North Shore Conservation Easement <sup>29</sup>	\$3,050,000	\$578,250	\$0	\$291,702	\$2,107,162	\$3,050,000
4		22-1418 Restoration	Northwest Straits Marine Conservation Foundation Sorensen Shoreline Armor Removal Project	\$170,000	\$45,757	\$170,000	\$0	\$0	\$170,000
5		22-1421 Restoration	Friends of the San Juans Neck Point Pocket Beach Habitat Restoration	\$168,028	\$29,665	\$0	\$168,028	\$0	\$168,028

<sup>&</sup>lt;sup>28</sup>This request is to fully fund a project partially funded in 2021.

<sup>&</sup>lt;sup>29</sup>This project will receive \$651,163 in PSAR funds from the North Olympic Peninsula and is included on its ranked list.

San Ju	an County L	ead Entity fo	r Salmon Recovery						
Rank	Alternate or Partially Funded	Project Number and Type	Grant Applicant Project Name	Grant Request	Match	Proposed Salmon Funding	Proposed PSAR Funding	PSAR Large Capital Request	Total Proposed Award
6		22-1423	Friends of the San Juans	\$297,500	\$52,500	\$223,786	\$73,714	\$0	\$297,500
		Planning	San Juan County 20-Year Eelgrass Health Assessment						
7		22-1428	San Juan County	\$170,000	\$30,000	\$170,000	\$0	\$0	\$170,000
		Planning	Backshore Roads Feasibility Study						
8	Alternate	22-1420	San Juan Island Conservation District	\$136,000	\$44,000	\$0	\$0	\$0	\$0
		Rest	San Juan Island Eelgrass Recovery – Phase 2						
9	Alternate	22-1419	San Juan Island Conservation District	\$141,000	\$60,000	\$0	\$0	\$0	\$0
		Rest	Garrison Creek Watershed Riparian Zones						
			Total	\$5,048,778	\$3,573,279	\$671,434	\$1,033,444	\$2,107,162	\$3,812,040
				Remaining		\$0	(\$1,033,444)		

## Skagit Watershed Council Lead Entity

Salmon Allocation \$2,709,211 Remaining \$97,000

Skagit	Watershed C	ouncil Lead Er	ntity						
Rank	Alternate or Partially Funded	Project Number and Type	Grant Applicant Project Name	Grant Request	Match	Proposed Salmon Funding	Proposed PSAR Funding	PSAR Large Capital Request	Total Proposed Award
1		22-1467 Restoration	Washington Department of Fish and Wildlife Intensively Monitored Watershed-Milltown Island Phase 2 Construction <sup>30</sup>	\$3,845,192	\$0	\$0	\$0	\$3,845,192	\$3,845,192
2		22-1442 Acquisition, Planning	Skagit Land Trust Skagit Watershed Habitat Acquisition Phase 6a	\$850,000	\$150,000	\$850,000	\$0	\$0	\$850,000
3		22-1595 Acquisition	Seattle City Light Skagit Watershed Habitat Acquisition Phase 6b	\$850,000	\$150,000	\$787,880	\$62,120	\$0	\$850,000
4		22-1454 Restoration	Skagit River System Cooperative Alder Creek Riparian Restoration	\$204,000	\$0	\$0	\$204,000	\$0	\$204,000
5		22-1452 Restoration	Skagit River System Cooperative Barnaby Slough Riparian Restoration	\$223,000	\$0	\$0	\$223,000	\$0	\$223,000
6		22-1458 Restoration	Skagit River System Cooperative Davis Slough Riparian Restoration	\$368,000	\$0	\$0	\$368,000	\$0	\$368,000

 $<sup>^{30}</sup>$ Project 22-1467 will be funded by the Puget Sound Partnership with its Large Supplemental Funding.

Skagit	: Watershed C	ouncil Lead Er	ntity						
Rank	Alternate or Partially Funded	Project Number and Type	Grant Applicant Project Name	Grant Request	Match	Proposed Salmon Funding	Proposed PSAR Funding	PSAR Large Capital Request	Total Proposed Award
7		22-1465	Skagit River System Cooperative	\$545,000	\$481,000	\$545,000	\$0	\$0	\$545,000
		Planning	Intensively Monitored Watershed-Similk Estuary Restoration Final Design						
8		22-1460	Skagit Fisheries Enhancement Group	\$224,000	\$0	\$0	\$224,000	\$0	\$224,000
		Restoration	Skagit Riparian Restoration						
9		22-1466	Upper Skagit Indian Tribe	\$180,000	\$32,000	\$0	\$180,000	\$0	\$180,000
		Planning	Clark Creek Feasibility						
10		22-1462	Skagit Fisheries Enhancement Group	\$108,246	\$20,350	\$108,246	\$0	\$0	\$108,246
		Planning, Restoration	East Fork Nookachamps Restoration						
11		22-1450	Skagit Fisheries Enhancement Group	\$128,194	\$0	\$0	\$128,194	\$0	\$128,194
		Planning	Intensively Monitored Watershed-Bowman Bay Feasibility						
	Partially	22-1140	Tulalip Tribes	\$849,434	\$150,000	\$121,195	\$0	\$0	\$121,195
	Funded	Acquisition	Snohomish Floodplain Acquisitions Phase 2 <sup>31</sup>						
		22-1459	Skagit Fisheries Enhancement Group	\$150,000	\$0	\$150,000	\$0	\$0	\$150,000
		Restoration	Collaborative Skagit Riparian Planting A						
		22-1493	Skagit River System Cooperative	\$22,398	\$6,314	\$22,398	\$0	\$0	\$22,398
		Monitoring	Barnaby Fish Model Integration						

<sup>&</sup>lt;sup>31</sup>Project 22-1140 is in the Snohomish Basin Lead Entity.

Skagit	: Watershed C	ouncil Lead En	tity						
Rank	Alternate or Partially Funded	Project Number and Type	Grant Applicant Project Name	Grant Request	Match	Proposed Salmon Funding	Proposed PSAR Funding	PSAR Large Capital Request	Total Proposed Award
		22-1494	Skagit River System Cooperative	\$27,492	\$12,571	\$27,492	\$0	\$0	\$27,492
		Monitoring	Tidal Network Structure and Chinook Salmon Use						
		22-1596	Skagit River System Cooperative	\$150,000	\$0	\$0	\$150,000	\$0	\$150,000
		Restoration	Collaborative Skagit Riparian Planting B						
			Total	\$8,724,956	\$1,002,235	\$2,612,211	\$1,539,314	\$0	\$7,996,717
			Remaining			\$97,000	(\$1,539,314)		

## Snohomish Basin Lead Entity

Salmon Allocation \$1,236,291 Remaining \$0

Snoho	mish Basin I Alternate	Lead Entity							
	or Partially	Project Number	Grant Applicant	Grant		Proposed Salmon	Proposed PSAR	PSAR Large Capital	Total Proposed
Rank 1	Funded	and Type 22-1033	Snohomish County	Request \$5,433,225	Match \$0	Funding \$0	Funding \$0	Request \$5,433,225	Award \$5,433,225
		Restoration	Thomas' Eddy Hydraulic Reconnection <sup>32</sup>						
2		22-1034	Snohomish County	\$227,800	\$40,200	\$227,800	\$0	\$0	\$227,800
		Planning	Shinglebolt Slough Restoration Design						
3		22-1143	Tulalip Tribes	\$622,319	\$110,000	\$622,319	\$0	\$0	\$622,319
		Acquisition, Planning	Tualco Valley Preliminary Design and Acquisition						
4		22-1145	Tulalip Tribes	\$282,586	\$50,000	\$282,586	\$0	\$0	\$282,586
		Planning	Holy Cross Levee Removal and Enhancement Planning						
5	Partially	22-1140	Tulalip Tribes	\$849,434	\$150,000	\$103,586	\$596,109	\$0	\$699,695
	Funded	Acquisition	Snohomish Floodplain Acquisitions Phase 2 <sup>33</sup>						

<sup>&</sup>lt;sup>32</sup>Project 22-1033 is requesting PSAR Large Capital funds. If the project is not awarded PSAR Large Capital funds, Snohomish Basin will allocate \$1,980,500 in PSAR funds to this project.

<sup>&</sup>lt;sup>33</sup>Project 22-1140 will receive \$28,544 from WRIA 1 and \$121,195 from Skagit and is included on their lists. The proposed PSAR funding amount will be revised should the Thomas' Eddy project not receive PSAR Large Capital funding.

			Remaining			\$0	(\$1,902,846)		
			Total	\$9,241,582	\$742,450	\$1,236,291	\$1,902,846	\$5,433,225	\$8,572,362
		Restoration	Woods Creek Riparian Planting						
11	Alternate	22-1148	Snohomish Conservation District	\$100,000	\$25,000	\$0	\$0	\$0	\$0
	Funded	Restoration	Woods Creek Railroad Bridge Removal Construction <sup>38</sup>						
10	Partially	22-1135	Adopt A Stream Foundation	\$649,512	\$115,250	\$0	\$230,031	\$0	\$230,031
		Planning	Peoples Creek Channel Restoration Design <sup>37</sup>						
9		22-1139	Tulalip Tribes	\$137,876	\$0	\$0	\$137,876	\$0	\$137,876
		Planning	Lower Miller Floodplain Restoration Design <sup>36</sup>						
8		22-1149	King County	\$150,000	\$99,000	\$0	\$150,000	\$0	\$150,000
		Planning	Pilchuck Armoring Removal Planning <sup>35</sup>						
7		22-1138	Tulalip Tribes	\$176,830	\$0	\$0	\$176,830	\$0	\$176,830
		Restoration	Sultan River Floodplain Restoration Construction <sup>34</sup>						
6		22-1186	Snohomish County Public Utilities District	\$612,000	\$153,000	\$0	\$612,000	\$0	\$612,000
Rank	mish Basin L Alternate or Partially Funded	Project Number and Type	Grant Applicant Project Name	Grant Request	Match	Proposed Salmon Funding	Proposed PSAR Funding	PSAR Large Capital Request	Total Proposed Award

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<sup>&</sup>lt;sup>34</sup>Project 22-1186: The proposed PSAR funding amount will be revised should the Thomas' Eddy project not receive PSAR Large Capital funding.

<sup>&</sup>lt;sup>35</sup>Project 22-1138: The proposed PSAR funding amount will be revised should the Thomas' Eddy project not receive PSAR Large Capital funding.

<sup>&</sup>lt;sup>36</sup>Project 22-1149: The proposed PSAR funding amount will be revised should the Thomas' Eddy project not receive PSAR Large Capital funding.

<sup>&</sup>lt;sup>37</sup>Project 22-1139: The proposed PSAR funding amount will be revised should the Thomas' Eddy project not receive PSAR Large Capital funding.

<sup>&</sup>lt;sup>38</sup>Project 22-1135: The proposed PSAR funding amount will be revised should the Thomas' Eddy project not receive PSAR Large Capital funding.

#### Stillaguamish River Salmon Recovery Co-Lead Entity

Salmon Allocation \$1,206,490 Remaining \$201,515

**PSAR Allocation** 

\$0 PSAR allocation set at zero until the Legislature funds the program.

Rank	Alternate or Partially Funded	Project Number and Type	Grant Applicant Project Name	Grant Request	Match	Proposed Salmon Funding	Proposed PSAR Funding	PSAR Large Capital Request	Total Proposed Award
1	Alternate	22-1068	Stillaguamish Tribe of Indians	\$4,977,891	\$4,492,650	\$0	\$0	\$0	\$0
		Restoration	zis a ba II Construction <sup>39</sup>						
2		22-1063	The Nature Conservancy	\$1,729,060	\$0	\$0	\$0	\$1,729,060	\$1,729,060
		Restoration	Port Susan Bay Restoration for Resiliency						
3		22-1069	Stillaguamish Tribe of Indians	\$1,656,840	\$294,000	\$0	\$1,656,840	\$0	\$1,656,840
		Acquisition	North Fork Stillaguamish Floodplain Acquisitions						
4		22-1031	Snohomish County	\$504,975	\$89,125	\$504,975	\$0	\$0	\$504,975
		Restoration	Jim Creek Construction						
5		22-1030	Snohomish County	\$500,000	\$88,250	\$500,000	\$0	\$0	\$500,000
		Restoration	Chatham Acres Final Design and Construction						
			Total	\$9,368,766	\$4,964,025	\$1,004,975	\$1,656,840	\$1,729,060	\$4,390,875
			Remaining			\$201,515	(\$1,656,840)		

<sup>&</sup>lt;sup>39</sup>Project 22-1068 is anticipated to receive full funding from the Targeted Investment Program.

## West Sound Partners for Ecosystem Recovery

Salmon Allocation \$643,868 Remaining \$0

West S	Sound Partne Alternate	ers for Ecosysto	em Recovery					PSAR	
Rank	or Partially Funded	Project Number and Type	Grant Applicant Project Name	Grant Request	Match	Proposed Salmon Funding	Proposed PSAR Funding	Large Capital Request	Total Proposed Award
1		22-1131	Great Peninsula Conservancy	\$491,920	\$1,042,200	\$0	\$491,920	\$0	\$491,920
2		Acquisition 22-1098	Crabapple-Carpenter Creek Estuary Protection Wild Fish Conservancy	\$188,000	\$0	\$188,000	\$0	\$0	\$188,000
		Planning	Finn Creek Estuary Restoration Project						
3		22-1100 Restoration	Mid Sound Fisheries Enhancement Group  Rose Point Embayment Restoration	\$909,598	\$161,001	\$455,868	\$453,730	\$0	\$909,598
4	Partially Funded	22-1110 Acquisition	Great Peninsula Conservancy Salmonberry Creek Protection	\$488,100	\$320,000	\$0	\$45,364	\$0	\$45,364
5	Alternate	22-1121 Planning	Mid Sound Fisheries Enhancement Group Fletcher Bay Road Fish Passage Restoration	\$146,000	\$12,000	\$0	\$0	\$0	\$0
6	Alternate	22-1319 Restoration	Bainbridge Island Land Trust Barnabee Farms Springbrook Creek Restoration	\$200,000	\$175,109	\$0	\$0	\$0	\$0
7	Alternate	22-1345 Planning, Restoration	Washington Department of Fish and Wildlife McNeil Island-Floyds Cove Phase 1	\$502,750	\$634,000	\$0	\$0	\$0	\$0
8	Alternate	22-1120 Restoration	Mid Sound Fisheries Enhancement Group Skunk Bay Armor Removal	\$35,000	\$15,000	\$0	\$0	\$0	\$0
9	Alternate	22-1111 Restoration	Kitsap Conservation District WCC Riparian Restoration Projects	\$242,000	\$42,756	\$0	\$0	\$0	\$0

				Remaining			\$0	(\$991,014)		
				Total	\$3,396,638	\$2,415,566	\$643,868	\$991,014	\$0	\$1,634,882
		Planning	Long Lake Predation Assessment							
11	Alternate	22-1112	Mid Sound Fisheries Enhancement Group		\$75,000	\$13,500	\$0	\$0	\$0	\$0
		Planning	Henderson Bay Armor Removal Design							
10	Alternate	22-1126	Pierce County Conservation District		\$118,270	\$0	\$0	\$0	\$0	\$0
Rank	Funded	and Type	Project Name		Request	Match	Funding	Funding	Request	Award
	Partially	Number	Grant Applicant		Grant		Salmon	PSAR	Capital	Proposed
	or	Project					Proposed	Proposed	Large	Total
	Alternate								PSAR	
West S	Sound Partne	rs for Ecosyst	em Recovery							

#### WRIA 1 Watershed Management Board

Salmon Allocation \$1,554,686 Remaining \$708,247

WRIA	1 Watershed	l Managemen	t Board						
Rank	Alternate or Partially Funded	Project Number and Type	Grant Applicant Project Name	Grant Request	Match	Proposed Salmon Funding	Proposed PSAR Funding	PSAR Large Capital Request	Total Proposed Award
1		22-1358 Restoration	Nooksack Indian Tribe South Fork Nooksack (Nuxw7?yem) Homesteader Phase 2 Restoration	\$413,295	\$1,150,000	\$413,295	\$0	\$0	\$413,295
2		22-1357 Planning	Nooksack Indian Tribe South Fork Nooksack (Nuxw7?yem) Hardscrabble-Todd Design	\$297,700	\$52,550	\$297,700	\$0	\$0	\$297,700
3		22-1366 Restoration	Lummi Nation Middle Fork Porter Creek Reach Phase 2 Restoration	\$46,900	\$2,065,844	\$46,900	\$0	\$0	\$46,900
4		22-1360 Restoration	Nooksack Indian Tribe  South Fork Nooksack Fish (Ts??q)  Camp Restoration 40	\$9,975,123	\$1,760,789	\$0	\$0	\$9,975,123	\$9,975,123
5		22-1364 Restoration	Lummi Nation  South Fork Nooksack River Cavanaugh Island Phase 2 Restoration <sup>41</sup>	\$950,771	\$167,800	\$0	\$950,771	\$0	\$950,771

<sup>&</sup>lt;sup>40</sup>Project 22-1360: If this project is not funded by the PSAR Large Capital program, then WRIA 1 will fund it with \$2,174,322 in 23-25 PSAR and \$384,487.00 in Salmon Funding.

<sup>&</sup>lt;sup>41</sup>Project 22-1364: The proposed PSAR funding amount will be revised should the Fish Camp project not receive PSAR Large Capital funding.

			Remaining			\$708,247	(\$2,393,906)		
			Total	\$22,113,354	\$7,982,449	\$846,439	\$2,393,906	\$12,875,123	\$16,115,468
		Monitoring	Middle Fork Nooksack Expanded Spawner Surveys						
		22-1367	Lummi Nation	\$60,000	\$12,000	\$60,000	\$0	\$0	\$60,000
		Acquisition	South Fork Nooksack River Integrated Floodplain Reconnection						
		22-1356	Whatcom County	\$2,900,000	\$1,455,000	\$0	\$0	\$2,900,000	\$2,900,000
Fu	unded	Acquisition	Snohomish Floodplain Acquisitions Phase 2						
Pa	artially	22-1140	Tulalip Tribes	\$849,434	\$150,000	\$28,544	\$0	\$0	\$28,544
		Restoration	North Fork Nooksack (Xwq?I?m) Boyd Reach Restoration						
7 Al	Alternate	22-1361	Nooksack Indian Tribe	\$3,748,780	\$661,566	\$0	\$0	\$0	\$0
Fu	unded	Restoration	South Fork Nooksack Camp 18 Phase 2 <sup>42</sup>						
6 Pa	artially	22-1365	Lummi Nation	\$2,871,351	\$506,900	\$0	\$1,443,135	\$0	\$1,443,135
or Pa	Alternate or Partially funded	Project Number and Type	Grant Applicant Project Name	Grant Request	Match	Proposed Salmon Funding	Proposed PSAR Funding	PSAR Large Capital Request	Total Proposed Award

<sup>&</sup>lt;sup>42</sup>Project 22-1365: The proposed PSAR funding amount will be revised should the Fish Camp project not receive PSAR Large Capital funding, and if there are not cost increases in other active WRIA 1 projects.

## WRIA 13 Salmon Habitat Recovery Lead Entity

Salmon Allocation \$425,571 Remaining \$229,972

Rank	Project Number and Type	Grant Applicant Project Name		Grant Request	Match	Proposed Salmon Funding	Proposed PSAR Funding	PSAR Large Capital Request	Total Proposed Award
1	22-1162	Wild Fish Conservancy		\$161,545	\$28,508	\$145,599	\$15,946	\$0	\$161,545
	Restoration	Deschutes Tributary Final Design and Implementation							
2	22-1161	Tumwater		\$257,550	\$1,459,450	\$0	\$257,550	\$0	\$257,550
	Restoration	Percival Creek Fish Passage Barrier Removal							
3	22-1160	South Puget Sound Salmon Enhancement Group		\$183,382	\$32,400	\$50,000	\$133,382	\$0	\$183,382
	Restoration	Evergreen Bulkhead							
			Total	\$602,477	\$1,520,358	\$195,599	\$406,878	\$0	\$602,477
		Rema	aining			\$229,972	(\$406,878)		

## **Snake River Salmon Recovery Region**

Regional Allocation \$3,672,630 Remaining \$802,852

Snake River Salmon Recovery Board Lead Entity

Salmon Allocation \$3,672,630 Staying \$802,852

Snake	<b>River Salmon F</b>	Recovery Boar	d Lead Entity				
	Alternate or	Project					
	Partially	Number	Grant Applicant			<b>Proposed Salmon</b>	<b>Total Grant</b>
Rank	Funded	and Type	Project Name	<b>Grant Request</b>	Match	Funding	Award
1	Partially	22-1015	Columbia Conservation District	\$792,000	\$141,455	\$545,500	\$545,500
	Funded	Restoration	Tucannon PA 26 Phase 3-4 Restoration				
2		22-1006	Asotin County Conservation District	\$225,000	\$80,000	\$225,000	\$225,000
		Restoration	Asotin PA 06 Restoration				
3		22-1013	Nez Perce Tribe	\$121,986	\$23,550	\$121,986	\$121,986
		Restoration	Cummings Creek Channel Complexity				
4		22-1011	Asotin County Conservation District	\$70,000	\$30,500	\$70,000	\$70,000
		Restoration	Kelly Creek PA 45 Restoration				
5		22-1019	Walla Walla County Conservation District	\$349,504	\$62,500	\$349,504	\$349,504
		Restoration	Touchet River Mile 42 Restoration Phase 1				
6		22-1007	Asotin County Conservation District	\$164,500	\$70,500	\$164,500	\$164,500
		Restoration	Couse Creek PA 78 Restoration				
7		22-1024	Trout Unlimited Inc.	\$123,131	\$22,000	\$123,131	\$123,131
		Restoration	Panjab Creek Low-Tech, Process-Based Restoration				
8		<u>22-1021</u>	Confederated Tribes of the Umatilla Indian Reservation	\$150,001	\$27,000	\$150,001	\$150,001
		Planning	Tucannon River Project Area 5-15 Assess and Design				

Snake	River Salmon I Alternate or	Recovery Boar Project	d Lead Entity				
	Partially	Number	Grant Applicant			Proposed Salmon	Total Grant
Rank	Funded	and Type	Project Name	Grant Request	Match	Funding	Award
9		22-1010	Asotin County Conservation District	\$96,000	\$24,000	\$96,000	\$96,000
		Planning	Asotin Creek PA 11.2 Design				
10		22-1012	Asotin County Conservation District	\$43,600	\$18,700	\$43,600	\$43,600
		Restoration	Tenmile Creek PA 68.1 Construction				
11		22-1009	Asotin County Conservation District	\$84,000	\$21,000	\$84,000	\$84,000
		Planning	Asotin Creek PA 3.2 Design				
12		22-1023	Trout Unlimited Inc.	\$106,231	\$28,000	\$106,231	\$106,231
		Restoration	Snake Region Beaver Relocation Framework				
13		22-1017	Confederated Tribes of the Umatilla Indian Reservation	\$165,000	\$60,000	\$165,000	\$165,000
		Planning	Walla Walla River Mile 32.5 Design				
14		22-1026	Pomeroy Conservation District	\$116,325	\$20,999	\$116,325	\$116,325
		Restoration	Tumalum Creek LTPBR Phase 4				
15		22-1003	Palouse Conservation District	\$249,000	\$44,000	\$249,000	\$249,000
		Restoration	Steptoe Creek Culvert 2 Replacement				
16		22-1004	Palouse Conservation District	\$45,000	\$7,942	\$45,000	\$45,000
		Restoration	Steptoe Creek Post-assisted Log Structures Phase 2				
17		22-1016	Confederated Tribes of the Umatilla Indian Reservation	\$65,000	\$11,500	\$65,000	\$65,000
		Planning	T?u?i W?na Design Project Touchet River River Mile 14				
18		22-1018	Confederated Tribes of the Umatilla Indian Reservation	\$150,000	\$15,000	\$150,000	\$150,000
		Planning	McNary National Wildlife Refuge Design				
			Total	\$3,116,278	\$708,646	\$2,869,778	\$2,869,778
			Remaining			\$802,852	

#### **Upper Columbia River Salmon Recovery Region**

Regional Allocation \$4,486,352 Remaining \$1,544,111

## Upper Columbia Salmon Recovery Board Lead Entity

Salmon Allocation \$4,486,352 Remaining \$1,544,111

Upper	Columbia Salr	non Recovery Board Lead Entity				
	Project Number	Grant Applicant			Proposed Salmon	Total Proposed
Rank	and Type	Project Name	Grant Request	Match	Funding	Award
1	22-1509	Cascade Columbia Fisheries Enhancement Group	\$150,122	\$53,840	\$150,122	\$150,122
	Planning	Level 2 Surveys Priority Reaches-Upper Columbia				
2	22-1506	Methow Salmon Recovery Foundation	\$149,878	\$30,000	\$149,878	\$149,878
	Planning	Lower Chewuch Reach Re-Assessment				
3	22-1508	Cascade Columbia Fisheries Enhancement Group	\$750,000	\$350,000	\$750,000	\$750,000
	Restoration	Restore Lower Peshastin Creek Construction				
4	22-1514	Confederated Tribes and Bands of the Yakima Nation	\$402,376	\$207,284	\$402,376	\$402,376
	Restoration	Scaffold Camp Floodplain Restoration				
5	22-1512	Cascadia Conservation District	\$198,230	\$212,535	\$198,230	\$198,230
	Restoration	Entiat Tributary Baseflow and Habitat Restoration				
6	22-1499	Chelan County	\$136,107	\$24,725	\$136,107	\$136,107
	Planning	Lower Chiwawa AU Area D Preliminary Design				
7	22-1513	Confederated Tribes and Bands of the Yakima Nation	\$67,500	\$13,000	\$67,500	\$67,500
	Acquisition	Upper Wenatchee Acquisition				
8	22-1497	Chelan County	\$661,757	\$146,000	\$661,757	\$661,757
	Restoration	Peshastin River Mile 4.3 Side Channel Restoration				

Upper	pper Columbia Salmon Recovery Board Lead Entity									
Rank	Project Number and Type	Grant Applicant Project Name	Grant Request	Match	Proposed Salmon Funding	Total Proposed Award				
9	22-1502	Chelan County	\$128,500	\$22,750	\$128,500	\$128,500				
	Planning	Entiat 4.6 (1D Reach) Preliminary Design								
10	22-1501	Chelan County	\$99,021	\$17,475	\$99,021	\$99,021				
	Planning	Upper Peshastin Stream and Road Restoration								
11	22-1495	Chelan County	\$63,750	\$11,250	\$63,750	\$63,750				
	Planning	Upper Wenatchee River Mile 40.5-41.5 Conceptual Design								
12	22-1492	Chelan County	\$135,000	\$0	\$135,000	\$135,000				
	Planning	Peshastin River Mile 3.2-3.8 Design								
		Total	\$2,942,241	\$1,088,859	\$2,942,241	\$2,942,241				
		Remaining			\$1,544,111					

## **Washington Coast Salmon Recovery Region**

Regional Allocation \$4,164,345 Remaining \$785,825

## Chehalis Basin Lead Entity

Salmon Allocation \$1,599,287 Remaining \$21,157

Chehal	is Basin Lead E	intity					
Rank	Alternate or Partially Funded	Project Number and Type	Grant Applicant Project Name	Grant Request	Match	Proposed Salmon Funding	Total Proposed Award
1		22-1040	Chehalis Basin Fisheries Task Force	\$401,767	\$195,316	\$401,767	\$401,767
		Planning, Restoration	Camp Creek at Schafer Boom Road Fish Barrier Correction				
2		22-1052	Thurston County	\$80,000	\$1,180,908	\$80,000	\$80,000
		Restoration	Thompson Creek at Thompson Creek Road Fish Passage Construction				
3		22-1042	Chehalis Basin Fisheries Task Force	\$75,053	\$675,482	\$75,053	\$75,053
		Restoration	Newskah Tributary at Newskah Road 2 Fish Passage Construction				
4		22-1132	Trout Unlimited Inc.	\$249,310	\$44,300	\$249,310	\$249,310
		Restoration	Coal Creek Fish Passage Restoration				
5		22-1133	Lewis County	\$387,006	\$1,348,822	\$387,006	\$387,006
		Acquisition, Restoration	Berwick Creek at Logan Fish Passage Construction				
6		22-1054	Lewis Conservation District	\$52,000	\$292,528	\$52,000	\$52,000
		Restoration	Middle Fork Newaukum Tributary-Alpha Fish Passage Construction				
7		22-1053	Thurston County	\$50,000	\$874,941	\$50,000	\$50,000
		Restoration	Dempsey Creek Tributary at Shawn Drive Southwest Fish Passage Construction				

Chehal	is Basin Lead E	intity						
Rank 8	Alternate or Partially Funded	Project Number and Type 22-1134	Grant Applicant Project Name Lewis County		Grant Request \$257,955	Match \$1,031,819	Proposed Salmon Funding \$257,955	Total Proposed Award \$257,955
		Restoration	Berwick Creek at Labree Fish Passage Construction					
9	Partially Funded	22-1332 Planning	Willapa Bay Regional Fisheries Enhancement Group Armstrong Creek Restoration and Barrier Correction <sup>43</sup>		\$144,500	\$25,500	\$25,039	\$25,039
				Total	\$1,697,591	\$5,669,616	\$1,578,130	\$1,578,130
				Remaining			\$21,157	

 $<sup>^{43}</sup>$ Project 22-1332 is located in the Willapa Bay Lead Entity.

## North Pacific Coast Lead Entity

Salmon Allocation \$850,589 Remaining \$450,152

	Alternate	Project					
	or Partially	Number	Grant Applicant	Grant		Proposed Salmon	Total Proposed
Rank	Funded	and Type	Project Name	Request	Match	Funding	Award
1		22-1343	Pacific Coast Salmon Coalition	\$167,923	\$30,187	\$167,923	\$167,923
		Restoration	Morganroth Springs Fish Passage Restoration				
2		22-1334	Trout Unlimited Inc.	\$171,215	\$0	\$171,215	\$171,215
		Planning	Upper Wisen Creek Fish Passage Phase 1				
3		22-1336	Trout Unlimited Inc.	\$29,541	\$5,300	\$29,541	\$29,541
		Restoration	Cassel Creek Derelict Culvert Removal				
	Partially	22-1332	Willapa Bay Regional Fisheries Enhancement Group	\$144,500	\$25,500	\$31,758	\$31,758
	Funded	Planning	Armstrong Creek Restoration and Barrier Correction <sup>44</sup>				
			Total	\$513,179	\$60,987	\$400,437	\$400,437
			Remaining			\$450,152	

<sup>&</sup>lt;sup>44</sup>Project 22-1132 is located in the Willapa Bay Lead Entity.

## Quinault Indian Nation Lead Entity

Salmon Allocation \$814,516 Remaining \$314,516

	Project						
	Number	Grant Applicant			Р	roposed Salmon	Total Proposed
Rank	and Type	Project Name		<b>Grant Request</b>	Match	Funding	Award
	22-1227	Quinault Indian Nation					
1	Planning	Fish Passage Barrier Inventory Phase 1		\$200,000	\$35,295	\$200,000	\$200,000
	22-1048	Quinault Indian Nation					
2	Restoration	Lower Quinault Invasive Plant Control Phase 9		\$300,000	\$52,942	\$300,000	\$300,000
			Total	\$500,000	\$88,237	\$500,000	\$500,000
		Re	emaining			\$314,516	

## Willapa Bay Lead Entity

Salmon Allocation \$899,953 Remaining \$0

	Alternate or Partially	Project Number	Grant Applicant			Proposed Salmon	Total Proposed
Rank	Funded	and Type	Project Name	<b>Grant Request</b>	Match	Funding	Award
1		22-1570	Pacific Conservation District	\$200,000	\$0	\$200,000	\$200,000
		Planning	Middle Nemah River Phase 3 Design				
2		22-1064	Sea Resources	\$200,000	\$0	\$200,000	\$200,000
		Planning	Clearwater Creek Bridge Design				
3		22-1582	Pacific Conservation District	\$243,950	\$43,050	\$243,950	\$243,950
		Restoration	Howard Creek Barrier Replacement-Letsinger Phase 2				
4		22-1581	Pacific Conservation District	\$168,300	\$29,700	\$168,300	\$168,300
		Planning	Willapa River Mile 35 In-stream and Riparian Design				
5	Partially	22-1332	Willapa Bay Regional Fisheries Enhancement Group	\$144,500	\$25,500	\$87,703	\$87,703
	Funded	Planning	Armstrong Creek Restoration and Barrier Correction				
6	Alternate	22-1062	Columbia River Estuary Study Taskforce (CREST)	\$67,960	\$0	\$0	\$0
		Planning	South-Greenhead-Bear Confluence Preliminary Design <sup>45</sup>				
			Total	\$1,024,710	\$98,250	\$899,953	\$899,953
			Remaining			\$0	

 $<sup>^{45}</sup>$ Project 22-1062 will be fully funded with contributions from the North Pacific Lead Entity and Chehalis Basin Lead Entity.

#### **Attachment 10: Project Descriptions**

## **Hood Canal Salmon Recovery Region**

#### **Hood Canal Coordinating Council Lead Entity**

#### **Mason Conservation District Restoring a Skokomish River Reach**

The Mason Conservation District will use this grant to buy 46.49 acres of floodplain and place six logjams in the Skokomish River. The work will restore a 0.4-mile reach of the river. Adding logjams to a river creates places for fish to rest, feed, and hide from predators. It also slows the river, which reduces erosion and allows small rocks to settle to the riverbed, creating areas for salmon to spawn. Finally, logs change the flow of the river, creating riffles and pools, which give salmon more varied habitat. This project will result in restoration of critical Chinook and chum salmon habitat and creation of 0.4 mile of side channel habitat. The Mason Conservation District will contribute \$100,589 in a state grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (20-1105)

# **Great Peninsula Conservancy Protecting the Tahuya River**

This project will protect, through a fee-simple acquisition, 1 mile of Tahuya mainstem river and ~130 acres of floodplain and riparian forest in a critical reach of the river for Hood Canal summer chum recovery. During this phase, demolition and removal of farm infrastructure and relocation of eligible tenants will take place. GPC will also perform basic hydrologic, habitat, fish use survey and develop topographic information to develop restoration alternatives and a conceptual design of a preferred alternative for a future planning phase. The project directly addresses the main limiting factor for salmon recovery in the watershed by reducing excessive sediment issues and is among the top three restoration priorities of the recent Tahuya River watershed assessment. Subsequent phases will restore about 40 acres of crucial floodplain and a half mile of side-channel habitat by removing significant existing bank armoring currently causing high flows and sediment loads in the lower mainstem. The river is used by chum salmon and steelhead trout, both of which are species listed as threatened with extinction under the federal Endangered Species Act. The Great Peninsula Conservancy will contribute \$255,000 in a state grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1097)

## **Hood Canal Salmon Enhancement Group Designing Restoration for the Moon Valley Reach**

The Hood Canal Salmon Enhancement Group will use this grant to complete the final design of plans to re-connect the Big Quilcene River to at least 100 acres of its historical floodplain, restore the river's migration zone, increase the length of the river, and decrease its slope to create better habitat for salmon. The river is used by chum salmon and steelhead trout, both of which are species listed as threatened with extinction under the federal Endangered Species Act. The Hood Canal Salmon Enhancement Group will contribute \$124,635 in another grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1095)

## **Hood Canal Salmon Enhancement Group Big Quilcene R Lower One Mile Final Habitat Design**

The Hood Canal Salmon Enhancement Group will use this grant to complete the final design of habitat elements on the lower Big Quilcene River, as part of the Lower One Mile project. The habitat final design will address channel reconfiguration, floodplain restoration, habitat improvements, large woody debris placement, and replanting. The river is used by chum salmon and steelhead trout, both of which are listed as threatened with extinction under the federal Endangered Species Act. The Hood Canal Salmon Enhancement Group will contribute \$155,940 in another grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1096)

# **Hood Canal Salmon Enhancement Group Monitoring Chum Salmon in the Union River**

The Hood Canal Salmon Enhancement Group will use this grant to continue researching summer chum salmon in the Union River. The researchers' goal is to estimate the number of chum salmon migrating to the ocean, their survival rates, and the timing of the migration. This program has been collecting data since 2018 and this grant will continue the data collection through 2024. Results from this project will provide a stronger measure of chum recovery throughout Hood Canal and a better means of evaluating the effects of habitat restoration, climate change impacts, and other factors influencing salmon recovery. Chum salmon is a species listed as threatened with extinction under the federal Endangered Species Act. The Hood Canal Salmon Enhancement Group will contribute \$21,450 in a state grant, staff labor, and donated labor. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1223)

# Mason Conservation District Designing Placement of Logjams in the South Fork Skokomish River

The Mason Conservation District will use this grant to develop final designs, in coordination with the U.S. Forest Service, for adding logjams to the South Fork Skokomish River. Adding logjams to a river creates places for fish to rest, feed, and hide from predators. It also slows the river, which reduces erosion and allows small rocks to settle to the riverbed, creating areas for salmon to spawn. Finally, logs change the flow of the river, creating riffles and pools, which give salmon more varied habitat. The river is used by Chinook salmon and steelhead trout, both of which are species listed as threatened with extinction under the federal Endangered Species Act, and by coho salmon, which is a federal species of concern. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1093)

# **North Olympic Salmon Coalition Restoring Snow Creek Uncas Preserve**

The North Olympic Salmon Coalition will use this grant to design, permit, and place logjams in a half mile of Snow Creek. Adding logjams to a creek creates places for fish to rest, feed, and hide from predators. It also slows the water, which reduces erosion and allows small rocks to settle to the bottom, creating areas for salmon to spawn. Finally, logs change the flow of the water, creating riffles and pools, which give salmon more varied habitat. In addition, the coalition will widen portions of the floodplain and excavate side channels to create off-channel habitat, where the water is calmer. The creek is used by steelhead trout and chum salmon, both of which are species listed as threatened with extinction under the federal Endangered Species Act, and by coho salmon, which is a federal species of concern. The North Olympic Salmon Coalition will contribute \$192,493. Visit RCO's online Project Snapshot for more information and photographs of this project. (20-1119)

# Jefferson County Designing Restoration of the Dosewallips River's Powerlines Reach

The Jefferson County Public Health Department will use this grant to develop conceptual and preliminary designs for restoration actions that will improve habitat and floodplain connectivity for chum salmon in the largely protected and unconfined Powerlines Reach of the Dosewallips River. In addition, the designs will call for purchase of the shoreline in the lower Lazy C for future restoration. The County will acquire access agreements or easements. The restoration work will aim to protect core habitats and restore normal river systems. Visit RCO's online Project Snapshot for more information

#### and photographs of this project. (18-1228)

## **Hood Canal Salmon Enhancement Group Removing a Union River Estuary Levee**

The Hood Canal Salmon Enhancement Group will use this grant to remove two levees in the Theler wetlands in the Union River estuary. This project will result in the removal of 7,300 cubic yards of fill material from the southern part of the estuary. A new levee, not funded by this grant, will be built further inland, allowing the re-connection of 7 acres of estuarine wetland habitat. The river is used by chum salmon, which is a species listed as threatened with extinction under the federal Endangered Species Act. The Hood Canal Salmon Enhancement Group will contribute \$44,200 in another grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1087)

# Jefferson Land Trust Conserving and Restoring Salmon Creek Ruck

The Jefferson Land Trust will use this grant to permanently protect approximately 156 acres of riparian habitat on Salmon Creek near the head of Discovery Bay, which is important spawning habitat for chum salmon, coho salmon, and steelhead trout. The creek is used by chum salmon and steelhead trout, both of which are listed as threatened with extinction under the federal Endangered Species Act, by coho salmon, which is a federal species of concern, and by cutthroat trout. The Jefferson Land Trust will contribute \$376,375 in a Conservation Futures grant, and a grant from the state Washington Wildlife and Recreation Program. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1079)

# **Hood Canal Salmon Enhancement Group Studying the Feasibility of Restoring Lilliwaup Creek**

The Hood Canal Salmon Enhancement Group will use this grant to assess 1.2 miles of Lilliwaup Creek from the mouth of the estuary to a half-mile above the falls and conduct a feasibility study of the full restoration of the creek and its estuary. The restoration would address a lack of spawning and rearing areas for chum salmon and other fish. The creek is used by chum salmon and steelhead trout, both of which are species listed as threatened with extinction under the federal Endangered Species Act, by coho salmon, which is a federal species of concern, and by pink salmon. The Hood Canal Salmon Enhancement Group will contribute \$10,144 in a grant from the state Estuary and Salmon Restoration Program. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1090)

## Hood Canal Salmon Enhancement Group Tahuya River White Owl Reach Acquisition & Design

This project includes the acquisition of two key parcels on the right bank that include the only bank armoring in this section of the river. One parcel contains residential structures (Parcel 1) and outbuildings while the other is undeveloped (Parcel 2). The project will create a preliminary design to remove the stone revetment located on Parcel 1 and maintain the attributes of Parcel 2 via a conservation easement. This assessment will investigate the impact to adjacent upstream and downstream parcels to determine if additional acquisition or conservation easements will need to be obtained in the next phase of the project (see landowner acknowledgement form attached). The Acquisition of the key developed parcels in this project area along with the removal of bank armoring, restoration of the streambank, and riparian vegetation reestablishment will protect and restore the river to access its historic floodplain and channel migration zone in this reach. These actions will allow for natural off-channel sediment deposition in the floodplain to occur which will reduce the amount of sediment carried to current Hood Canal summer chum spawning reaches downstream. This reach is also within an area where an upstream expansion of spawning could potentially occur. The river is used by Chum, which are listed as threatened with extinction under the federal Endangered Species Act; and Coho, which are a federal species of concern; and Hood Canal Salmon Enhancement Group will contribute \$100,000 in a state grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1092)

## Mason Conservation District Designing a Project to Improve Fish Passage in the South Fork Skokomish River

The Mason Conservation District will use this grant to develop permit-ready, preliminary designs for a project to improve fish passage on the South Fork Skokomish River. Work will include hosting stakeholder meetings, meeting with rock removal contractors to review safety and design criteria, securing access points for helicopter transport, developing a wildlife protection plan for during the rock blasting, and developing a detailed permitting plan and preliminary project designs. The river is used by Chinook salmon and steelhead trout, both of which are species listed as threatened with extinction under the federal Endangered Species Act. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1094)

# **Hood Canal Salmon Enhancement Group Duckabush Estuary Restoration Project**

The Hood Canal Salmon Enhancement Group, in partnership with the Washington Department of Fish and Wildlife, United States Army Corps of Engineers, and Washington Department of Transportation, will use this grant to reconnect the Duckabush River to its floodplain and wetlands by removing highway fill across the estuary, modifying local roads, elevating Highway 101 onto an estuary-spanning bridge, and reconnecting historical channels. The group will also upgrade four undersized culverts and construct an on-site facility to treat road runoff. Culverts are pipes or other structures that carry water under roads and often block fish migration because they are too steep, too tall, or too small to allow fish to pass through easily. The river is used by Chinook salmon and chum salmon, both of which are listed as threatened with extinction under the federal Endangered Species Act, by coho salmon, which is a federal species of concern, and by pink salmon. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1091)

#### **Lower Columbia River Salmon Recovery Region**

#### Klickitat Lead Entity

## The Confederated Bands and Tribes of the Yakama Nation Placing Logs in White Creek

The Yakama Nation will use this grant to place logs via helicopter in about 3 miles of White Creek. Adding logs to a creek creates places for fish to rest, feed, and hide from predators. It also slows the water, which reduces erosion and allows small rocks to settle to the bottom, creating areas for salmon to spawn. Finally, logs change the flow of the water, creating riffles and pools, which give salmon more varied habitat. The creek is used by middle Columbia River steelhead trout, which is a species listed as threatened with extinction under the federal Endangered Species Act. The Yakama Nation will contribute \$45,000 in a federal grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1547)

# **Columbia Land Trust Conserving Upper Rattlesnake Creek**

The Columbia Land Trust will use this grant to conserve 1.6 miles of Rattlesnake Creek, a tributary to the White Salmon River. This purchase will protect important spawning habitat and 120 acres of creek-side habitat. The area is connected to land owned by the state Department of Natural Resources, and once purchased, will complete the conservation of the upper reaches of this tributary. Permanently protecting this habitat is increasingly important because of growing development pressure in the lower reaches of the creek. The creek is used by middle Columbia River steelhead trout, which is a species listed as threatened with extinction under the federal Endangered Species Act. The Columbia Land Trust will contribute \$1.5 million in a federal grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1241)

#### Lower Columbia Fish Recovery Board

# **Cowlitz Indian Tribe Restoring the Cispus River**

The Cowlitz Indian Tribe, in partnership with the U.S. Forest Service and Cascade Forest Conservancy, will use this grant to place logjams in a half-mile of the Cispus River near Randle, and plant the riverbanks. Adding logjams to the floodplain will help slow the water creating pools and riffles, which salmon need for spawning and rearing. Planting

trees and shrubs along the riverbanks and in the floodplain will shade the water, cooling it for fish. The plants also drop branches and leaves into the water, which provide food for the insects that salmon eat. The river is used by Chinook and coho salmon and steelhead trout, all of which are species listed as threatened with extinction under the federal Endangered Species Act. The Cowlitz Indian Tribe will contribute \$2.5 million in federal and private grants. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1273)

# **Cowlitz Indian Tribe Continuing Restoration of the West Fork Grays River**

The Cowlitz Indian Tribe will use this grant to remove the derelict water intake infrastructure previously used for the Grays River State Fish Hatchery and build logjams in three-quarter mile of the West Fork Grays River. Adding logjams to a river creates places for fish to rest, feed, and hide from predators. It also slows the river, which reduces erosion and allows small rocks to settle to the riverbed, creating areas for salmon to spawn. Finally, logs change the flow of the river, creating riffles and pools, which give salmon more varied habitat. The Tribe also will plant the surrounding floodplain with Sitka spruce and western red cedar. Eventually the trees will drop branches into the river, which will create more pools and riffles, which salmon need for spawning and rearing. The river is used by Chinook, chum, and coho, all of which are species listed as threatened with extinction under the federal Endangered Species Act, and by steelhead trout. The Cowlitz Indian Tribe will contribute \$295,389 in a grant from the Brian Abbott Fish Barrier Removal Board grant program. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1218)

# **Cowlitz Indian Tribe Restoring the Upper East Fork Grays River**

The Cowlitz Indian Tribe will use this grant to build logjams and plant the banks along 2.5 miles of the Grays River. The Tribe plans to thin 20 acres of red alder-dominated stands and incorporate downed trees into the floodplain. Cleared areas will be replanted with conifers and maintained for 2-3 years. The Tribe also will place logjams and channel-spanning log structures in the river. Adding logs to a river creates places for fish to rest, feed, and hide from predators. It also slows the river, which reduces erosion and allows small rocks to settle to the riverbed, creating areas for salmon to spawn. Finally, logs change the flow of the river, creating riffles and pools, which give salmon more varied habitat. The work will reconnect side channels and floodplains and restore connectivity to the upper East Fork Grays River to benefit all fish in the downstream reaches of the Grays River watershed. The river is used by coho salmon, which is a

species listed as threatened with extinction under the federal Endangered Species Act, by steelhead trout, and by chum and Chinook salmon. The Cowlitz Indian Tribe will contribute \$1.3 million in a grant from the Washington Coast Restoration and Resiliency Initiative program. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1217)

## **Lower Columbia Estuary Partnership Restoring the Ridgefield Pits Floodplain**

The Lower Columbia Estuary Partnership will use this grant to restore 150 acres of the East Fork Lewis River floodplain by realigning and grading the Ridgefield Pits area. In a large flood in 1996, the river shifted course into nine abandoned gravel pits in the floodplain, causing widespread habitat degradation and the creation of areas of slow, warm water that benefit predatory fish. This project will increase habitat capacity and diversity, reduce river temperatures, and remove a thermal barrier that blocks access for summer steelhead trout and fall Chinook salmon to the upper 30 miles of the watershed. The floodplain is used by Chinook and chum salmon and steelhead trout, all of which are listed as threatened with extinction under the federal Endangered Species Act, and by coho salmon, which is a federal species of concern. The Lower Columbia Estuary Partnership will contribute \$4.7 million in a state grant and donation of land or property interest. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1211)

# **Columbia Land Trust Conserving the Double Bend Reach of Wind River**

The Columbia Land Trust will use this grant to buy 1.5 miles of Wind River shoreline and 0.7 mile of tributary shoreline. The purchase will protect 86 acres of riverbank and forest in the steeply sloping Double Bend reach that is prone to erosion. Ownership will enable the land trust to maintain and manage the shoreline and adjacent uplands as forestland. This is the fourth phase of conservation and will bring total conservation in the corridor to 3.5 miles. The river is used by Chinook salmon and steelhead trout, both of which are species listed as threatened with extinction under the federal Endangered Species Act. The Columbia Land Trust will contribute \$24,100 in donated cash. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1076)

# **Lower Columbia Fish Enhancement Group Designing Restoration of the Coweeman River**

The Lower Columbia Fish Enhancement Group will use this grant to design the next decade of restoration actions in the Coweeman River watershed, focusing on increasing spawning and rearing habitat for fish and restoring floodplain functions. Once implemented, the projects will help store sediment and improve water storage, which will produce cold water and increase flow along the entire length of the Coweeman River. The river is used by Chinook and chum salmon and steelhead trout, all of which are listed as threatened with extinction under the federal Endangered Species Act, and by coho salmon, which is a federal species of concern. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1072)

#### **Columbia River Estuary Study Taskforce Reconnecting Clear Creek**

The Columbia River Estuary Study Taskforce Project will use this grant to replace an undersized and structurally unsound culvert in Clear Creek under Elochoman Valley Road with a 55-foot-long bridge. The culvert completely blocks fish passage. Culverts are pipes or other structures that carry water under roads and often block fish migration because they are too steep, too tall, or too small to allow fish to pass through easily. The culverts block fish passage into high-quality habitat upstream. This project will improve access to upstream spawning grounds for Chinook, coho, and chum salmon; steelhead trout; and lamprey. The Wahkiakum County Public Works Department has been trying to replace this culvert for more than a decade since the State terminated its State Route 407 designation for Elochoman Valley Road. The creek is used by Chinook, chum, and coho salmon, all of which are listed as threatened with extinction under the federal Endangered Species Act. The Columbia River Estuary Study Taskforce will contribute \$153,750 in donations of equipment, materials, and services. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1229)

# **Lower Columbia Estuary Partnership Designing Restoration of Lower Woodard Creek**

The Lower Columbia Estuary Partnership will use this grant to develop final designs and secure permits for a project that will remove berms and roads along Woodard Creek to reconnect the creek to more than a half-mile of its historic floodplain. The work will occur on U.S. Forest Service land, a quarter-mile upstream of the State Route 14 bridge near Beacon Rock State Park. The project will raise the floodplain elevation to more historic conditions, which will help recreate important spawning and rearing habitat for

salmon, steelhead, and lamprey, and improve the storage of flood flows. The river is used by Chinook and coho salmon, which are species listed as threatened with extinction under the federal Endangered Species Act. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1215)

# Mid-Columbia Fisheries Enhancement Group Restoring Wind River Side Channels

The Mid-Columbia Fisheries Enhancement Group will use this grant to add wood structures, such as logs and root wads, in Wind River, just downstream of Beaver Campground in the Gifford Pinchot National Forest. Wood in the river creates places for fish to rest, feed, and hide from predators. It also slows the river, which reduces erosion and allows small rocks to settle to the riverbed, creating areas for salmon to spawn. Finally, the wood changes the flow of the river, creating riffles and pools, which give salmon more varied habitat. The work will help reconnect three side channels and improve habitat along about a half-mile of the Wind River. The river is used by steelhead trout, which is a species listed as threatened with extinction under the federal Endangered Species Act. The Mid-Columbia Fisheries Enhancement Group will contribute more than \$45,550 in donations of labor and materials. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1207)

# **Columbia Land Trust Conserving the West Fork Washougal River**

The Columbia Land Trust will use this grant to buy 307 acres of steeply sloped forestland surrounding both sides of the West Fork Washougal River and Jackson Creek. Historic logging and splash damming have damaged the river and creek habitat, causing channels to incise and disconnect from their floodplains. Protecting the habitat will provide an opportunity for the land to be restored and recover. The river and creek are used by steelhead trout, which is a species listed as threatened with extinction under the federal Endangered Species Act. The Columbia Land Trust will contribute more than \$5 million in federal and private grants and donations of land or property interest and cash. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1136)

## Lower Columbia Estuary Partnership Designing Improvements to the East Fork Lewis River

The Lower Columbia Estuary Partnership will use this grant to develop final designs for a project that will remove a quarter-mile of hardened shoreline to reconnect two

tributaries to the East Fork Lewis River. The work would improve the function of a 10-acre floodplain wetland and re-establish native plants along the banks, which will help cool the water. The project also would remove barriers to salmon and steelhead so that they can reach floodplain habitats during winter high-flows or seek cooler water in the summer. The river is used by steelhead trout and Chinook, chum, and coho salmon, all of which are species listed as threatened with extinction under the federal Endangered Species Act. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1214)

## Lower Columbia Estuary Partnership Assessing Fish Passage Barriers in the Lower Columbia River

The Lower Columbia Estuary Partnership will use this grant to evaluate and inventory fish passage barriers across the lower Columbia River region and develop an online mapping tool to make information available to the public and habitat managers. This project also will rank barriers in order of importance for correcting. The waterways are used by Chinook, chum, and coho salmon and steelhead trout, all of which are listed as threatened with extinction under the federal Endangered Species Act. The Lower Columbia Estuary Partnership will contribute \$60,030 in donation of services. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1212)

## **Lower Columbia Fish Enhancement Group Improving Habitat in the South Fork Toutle River**

The Lower Columbia Fish Enhancement Group will use this grant to restore nearly 5 miles of stream and 216 acres of floodplain habitat in the South Fork Toutle River. Work will include adding logjams to the floodplain. Logjams create places for fish to rest, feed, and hide from predators. They also slow the river, which reduces erosion and allows small rocks to settle to the riverbed, creating areas for salmon to spawn. Finally, logs change the flow of the river, creating riffles and pools, which give salmon more varied habitat. The enhancement group also will plant trees and shrubs along the riverbanks and in the floodplain to shade the water, cooling it for fish. The plants also drop branches and leaves into the water, which provide food for the insects that salmon eat. Finally, the roots of the plants help keep soil from entering the water, where it can smother fish spawning gravel. The river is used by Chinook, chum, and coho salmon and steelhead trout, all of which are species listed as threatened with extinction under the federal Endangered Species Act. The Lower Columbia Fish Enhancement Group will contribute \$654,000 in a state grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1074)

# Lower Columbia Estuary Partnership Designing the Restoration of East Fork Lewis River and Mason Creek

The Lower Columbia Estuary Partnership will use this grant to complete designs for restoration plans in sections of the East Fork Lewis River and Mason Creek. The designs will focus on improving fish habitat, improving access to important off-channel and wetland areas, and improving habitat conditions in cold-water areas. The river and creek are used by Chinook, chum, and coho salmon and steelhead trout, all of which are listed as threatened with extinction under the federal Endangered Species Act. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1213)

## Lower Columbia Fish Enhancement Group Maintaining Plants at Grays, Fossil, and Crazy Johnson Restoration Sites

The Lower Columbia Fish Enhancement Group will use this grant to maintain areas previously planted along the Grays River, Fossil Creek, and Crazy Johnson Creek restoration sites. The original projects planted more than 16 acres along Fossil Creek and the Grays River and removed more than 4 acres of invasive blackberries. This project will ensure the blackberries do not out-compete the previously planted trees. The enhancement group also will continue to engage landowners by providing regular updates at the local Grays River Habitat Enhancement District meetings. The area is used by Chinook, chum, and coho salmon, all of which are species listed as threatened with extinction under the federal Endangered Species Act, and by steelhead trout. The Lower Columbia Fish Enhancement Group will contribute \$12,030 in donations of labor and materials. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1073)

# **Cowlitz Indian Tribe Designing Restoration of Blaney Creek**

The Cowlitz Indian Tribe will use this grant to create a preliminary design for a project to redistribute landslide material to improve habitat in Blaney Creek, which is a tributary to the Grays River. Logs and boulders from three historic landslides sit on perched floodplains next to the creek and each new flood contributes more sediment, which is quickly moved downstream in incised channels. These materials also create migration barriers for fish. The Tribe will redistribute the landslide material, including old growth trees, boulders, and woody debris, and create a series of partially embedded, channel-spanning log structures. The log structures will improve fish habitat in several ways. They will create places for fish to rest, feed, and hide from predators; increase spawning habitat; and reconnect the channel with its historic floodplain. Reconnecting the

floodplain will help reduce transport of sediment downstream, store floodwaters during the winter, and improve flows during the summer. The creek is used by coho salmon, which is a species listed as threatened with extinction under the federal Endangered Species Act, and steelhead trout. Visit RCO's online Project Snapshot for <a href="mailto:more">more</a> information and photographs of this project. (22-1219)

# **Cascade Forest Conservancy Restoring Stump and Caddis Creeks**

The Cascade Forest Conservancy will use this grant to install structures like beaver dam replicas and logjams to improve fish habitat along Stump and Caddis Creeks where they join the South Fork Toutle River. Beaver dam replicas mimic beaver dams and slow the water and create pools, giving salmon places to rest, feed, and hide from predators. The dams also store water, which helps maintain water levels during the drier summer. Adding logjams changes the flow of the water, creating riffles, where fish spawn. The creeks are used by Chinook and coho salmon and steelhead trout, all of which are species listed as threatened with extinction under the federal Endangered Species Act. The Cascade Forest Conservancy will contribute \$46,337 in staff labor and donations of labor, materials, and services. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1271)

## Wahkiakum Conservation District Maintaining Riverbank and Floodplain Plantings

The Wahkiakum Conservation District will use this grant to maintain previously planted trees and shrubs in 21 areas along the Elochoman, Grays, and Skamokawa Rivers in Wahkiakum County and the Delameter and Germany Creeks in Cowlitz County. This maintenance will ensure the banks are fully stocked with healthy trees and shrubs. The trees and shrubs shade the water, cooling it for fish. They also drop branches and leaves into the water, which provide food for the insects that salmon eat. Finally, the roots of the plants help keep soil from entering the water, where it can smother fish spawning gravel. The rivers and creeks are used by Chinook, coho, and chum salmon and steelhead trout, all of which are species listed as threatened with extinction under the federal Endangered Species Act. The Wahkiakum Conservation District will contribute \$45,391 in a local grant and donated services. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1181)

#### Washington Department of Fish and Wildlife Removing a Barrier to Fish Passage at the Elochoman Hatchery

The Department of Fish and Wildlife will use this grant to remove the upper intake for the decommissioned Elochoman Salmon Hatchery, which is a barrier to fish passage. The department also will install a logjam in the Elochoman River where the intake was and plant the banks. The logjam will create places for fish to rest, feed, and hide from predators. It also will slow the water, which reduces erosion and allows small rocks to settle to the bottom, creating areas for salmon to spawn. The logjam also will allow the river to reconnect with its historic floodplain. The department also will plant trees and bushes along the riverbanks, which will shade the water, cooling it for fish. The plants also drop branches and leaves into the water, which provide food for the insects that salmon eat. Finally, the roots of the plants help keep soil from entering the water, reducing erosion. The river is used by Chinook, chum, and coho salmon, all of which are species listed as threatened with extinction under the federal Endangered Species Act, and by steelhead trout. The Department of Fish and Wildlife will contribute \$474,500. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1272)

### Middle Columbia Salmon Recovery Region

### Klickitat Lead Entity

## The Confederated Bands and Tribes of the Yakama Nation Placing Logs in White Creek

The Yakama Nation will use this grant to place logs via helicopter in about 3 miles of White Creek. Adding logs to a creek creates places for fish to rest, feed, and hide from predators. It also slows the water, which reduces erosion and allows small rocks to settle to the bottom, creating areas for salmon to spawn. Finally, logs change the flow of the water, creating riffles and pools, which give salmon more varied habitat. The creek is used by steelhead trout, which is a species listed as threatened with extinction under the federal Endangered Species Act. The Yakama Nation will contribute \$45,000 in a federal grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1547)

# **Columbia Land Trust Conserving Upper Rattlesnake Creek**

The Columbia Land Trust will use this grant to conserve 1.6 miles of Rattlesnake Creek, a tributary to the White Salmon River. This purchase will protect important spawning habitat and 120 acres of creek-side habitat. The area is connected to land owned by the state Department of Natural Resources, and once purchased, will complete the conservation of the upper reaches of this tributary. Permanently protecting this habitat is increasingly important because of growing development pressure in the lower reaches of the creek. The creek is used by mid-Columbia steelhead trout, which is a species listed as threatened with extinction under the federal Endangered Species Act. The Columbia Land Trust will contribute \$1.5 million in a federal grant. Visit RCO's online Project Snapshot for more information and photographs of this project.

### Yakima Basin Fish and Wildlife Recovery Board Lead Entity

### Yakima County Restoring Yakima River Floodplain

The Yakima County Flood Control Zone District will use this grant to setback levees on the Yakima River, in Yakima. Construction of numerous levees during the past century have interrupted natural processes resulting in a straightened river channel with reduced habitat. The flood control district will reestablish side channels on the Sportsman's State Park island, build a headgate on Blue Slough to provide water to a 4.6-mile-long natural side channel of the river, remove a levee just upstream of State Route 24 on Bureau of Reclamation land, remove the Cross Dike and levee, and regrade the majority of the Newland Pits as floodplain. The work will reactivate the Yakima River floodplain to reduce the height and speed of the river and to provide more back channels where salmon can spawn, rear, and migrate. The river is used by steelhead trout, which is a species listed as threatened with extinction under the federal Endangered Species Act, and by Chinook and coho salmon. Chinook salmon are a key food source for endangered Southern Resident orcas. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1579)

## **Kittitas Conservation Trust Conserving a Yakima River Reach in Thorp**

The Kittitas Conservation Trust will use this grant to conserve 235 acres, including more than a mile of Yakima River waterfront, in Thorp. The land includes riverbank forests, woodlands, shrub steppe, and wetlands. This conservation effort will protect habitats and migration corridors for Chinook and coho salmon; bull, rainbow, cutthroat, and steelhead trout; and other native fish and aquatic species. With the purchase of the land, the conservation trust will consider restoration projects that will reverse some of the human-built changes that disconnected the river from its historic floodplain. The river is used by steelhead trout, which is species listed as threatened with extinction under the federal Endangered Species Act, and by Chinook salmon. The Kittitas Conservation Trust will contribute \$175,000 in a state grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1246)

## The Confederated Bands and Tribes of the Yakama Nation Restoring Yakima River Habitat

The Yakama Nation, in partnership with the Mid-Columbia Fisheries Enhancement Group, will use this grant to restore natural floodplain processes to 946 acres of habitat by reconnecting about 9 miles of side channels along the Yakima River. The Tribe will connect two inlet structures, excavate sections of side channel, remove blockages in the channel, install two logjams and enhance a beaver dam, and plant the riverbanks. Adding logjams to a river creates places for fish to rest, feed, and hide from predators. It also slows the river, which reduces erosion and allows small rocks to settle to the riverbed, creating areas for salmon to spawn. Finally, logjams change the flow of the river, creating riffles and pools, which give salmon more varied habitat. Beaver dams slow the water and create pools, giving salmon places to rest and feed. The dams also

block water, creating consistent water levels, which is helpful to salmon in drier months. Planting trees and bushes along a river helps shade the water, cooling it for fish. The plants also drop branches and leaves into the water, which provide food for the insects that salmon eat. Finally, the roots of the plants help keep soil from entering the water, where it can smother fish spawning gravel. The Yakama Nation will contribute \$205,800 in another grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1571)

## The Confederated Bands and Tribes of the Yakama Nation Replacing Fish-Blocking Wahtum Creek Culverts

The Yakama Nation will use this grant to remove two failing and undersized culverts that are blocking fish passage in Wahtum Creek and replace them with a bridge to provide full access to 8 miles of habitat. Culverts are pipes or other structures that carry water under roads and often block fish migration because they are too steep, too tall, or too small to allow fish to pass through easily. The creek is used by steelhead trout, which is a species listed as threatened with extinction under the federal Endangered Species Act. The Yakama Nation will contribute \$50,798 in another grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1576)

# **Kittitas Conservation Trust Designing a Levee Setback at Hanson Ponds**

The Kittitas Conservation Trust will use grant to develop conceptual designs for a project to move levees separating the Cle Elum-owned gravel pits, now called Hanson Ponds, from the Yakima River. The levees constrict the floodplain, and the ponds provide poor off-channel habitat for young salmon. The project being designed is expected to improve nearly 82 acres of habitat along nearly 2.5 miles of the Yakima River and its off-channel, restore floodplain function, protect a regional sewer outfall and Interstate 90 infrastructure, and increase recreational opportunities by expanding hiking, nature viewing, and fishing opportunities. The river is used by steelhead trout, which is a species listed as threatened with extinction under the federal Endangered Species Act, and by Chinook and coho salmon and bull and rainbow trout. The Kittitas Conservation Trust will contribute \$25,963 in a state grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1523)

## Trout Unlimited, Inc. Improving Habitat in Little Creek

Trout Unlimited will use this grant to design and place 10 log structures in the lower reaches of Little Creek to improve habitat for young fish. Adding wood structures to a creek creates places for fish to rest, feed, and hide from predators. It also slows the water, which reduces erosion and allows small rocks to settle to the bottom, creating areas for salmon to spawn. Finally, they change the flow of the water, creating riffles and pools, which give salmon more varied habitat. The creek is used by steelhead trout, which is a species listed as threatened with extinction under the federal Endangered Species Act, by Chinook and coho salmon, and by bull trout. Trout Unlimited will contribute \$7,000 in a federal grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1575)

## Trout Unlimited, Inc. Designing Pipelines to Increase Water in Swauk Creek

Trout Unlimited will use this grant to design pipelines that will increase water flow in up to 3 miles of Swauk Creek. The creek, a tributary to the Yakima River, provides critical habitat for steelhead and bull trout, both of which are species listed as threatened with extinction under the federal Endangered Species Act, and important spawning and rearing habitat for Chinook and coho salmon, rainbow and westslope cutthroat trout, and Pacific lamprey. Currently, an irrigation pipeline delivers water about 1.6 miles upstream in Swauk Creek to a ranch, but the pipe lacks capacity to carry more water to help stream flows. Trout Unlimited will develop preliminary design for pipelines to convey up to 15 cubic feet per second from the Kittitas Reclamation District upstream 1.6 miles in Swauk Creek and conceptual designs for pipelines to convey flows of up to 10 cubic feet per second from 1.6 to 3 miles upstream. The designs will increase the amount of water in Swauk Creek while ensuring water users their full water amount. Once built, the pipelines will restore flows to Swauk Creek and cool its water to improve passage and rearing habitat. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1614)

## Mid-Columbia Fisheries Enhancement Group Restoring the Lower Cowiche Floodplain

The Mid-Columbia Fisheries Enhancement Group will use this grant to remove bank armoring, concrete, and about 5,000 cubic yards of fill along an old railroad berm on lower Cowiche Creek to allow the creek to access its floodplain. The enhancement group will plant the creek banks with native plants. Planting trees and bushes along a creek

helps shade the water, cooling it for fish. The plants also drop branches and leaves into the water, which provide food for the insects salmon eat. Finally, the roots of the plants help keep soil from entering the water, where it can smother fish spawning gravel. The enhancement group also will move a pump and build weirs or a roughened channel to preserve function of a landowner's irrigation outtake that will otherwise be rendered inoperable by the project. The creek is used by steelhead trout, which is a species listed as threatened with extinction under the federal Endangered Species Act. The Mid-Columbia Fisheries Enhancement Group will contribute \$15,802 in a federal grant. This is a cost increase for a previously funded project. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1527)

## The Confederated Bands and Tribes of the Yakama Nation Restoring Tieton River Habitat

The Yakama Nation will use this grant to reconnect the Tieton River to its floodplain and nearly a half-mile of side channel habitat. The Tribe will place boulders and logjams in the water and move the Tieton River nature trail to expand the floodplain. Adding boulders and logjams to a river creates places for fish to rest, feed, and hide from predators. It also slows the river, which reduces erosion and allows small rocks to settle to the riverbed, creating areas for salmon to spawn. Finally, boulders and logjams change the flow of the river, creating riffles and pools, which give salmon more varied habitat. In addition, the Tribe will plant trees and plants along 2.9 acres of riverbank. Planting trees and bushes along a river helps shade the water, cooling it for fish. The plants also drop branches and leaves into the water, which provide food for the insects salmon eat. Finally, the roots of the plants help keep soil from entering the water, where it can smother fish spawning gravel. The river is used by steelhead trout, which is a species listed as threatened with extinction under the federal Endangered Species Act. The Yakama Nation will contribute \$117,151. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1485)

# Mid-Columbia Fisheries Enhancement Group Whiskey Creek Barriers Design

Mid-Columbia Fisheries will use funds to complete final designs to improve fish passage at three partial barriers in the Whiskey Creek sub-basin of Mercer Creek. Whiskey Creek is managed as a distributary of the Wilson/Naneum system. Wilson and Naneum Creeks are bifurcated about a mile downstream of their confluence, and managed such that 50% of the irrigation-season flow is turned down each channel. Whiskey Creek lacks flow late in the irrigation season, but because it does not flow through extensive culverts under Ellensburg, it may provide one of the best upstream migration corridors for

steelhead through the Ellensburg Reach and on up into the forested Naneum Creek watershed. Whiskey Creek is low gradient, with spawning sized gravel and cobble substrate. Groundwater upwelling and inputs from historic tiles contribute groundwater to the stream, and likely maintain summer temperatures within the range preferred by salmon and trout. Steelhead/rainbow, chinook, coho and lamprey have been shown to use Whiskey Creek, so this project will seek to increase usage of this migratory corridor .Restoring passage to the Naneum headwaters is a priority for steelhead recovery in the Yakima basin (Yakima Steelhead Recovery Plan Upper Yakima Action #7). The river is used by Steelhead, which are listed as threatened with extinction under the federal Endangered Species Act; and Chinook. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1631)

## Mid-Columbia Fisheries Enhancement Group Cowiche Creek Design & Rest at RM 0.7

Mid-Columbia Fisheries proposes to design and implement a small restoration project to improve instream and riparian habitat and floodplain function in lower Cowiche Creek to benefit ESA-listed Mid-Columbia Steelhead, coho, and other native salmonids. The project will expand and extend the benefits of the "Lower Cowiche Floodplain Restoration" (PRISM 21-1197) that is currently in the permitting process. In the RM 0.7 site, Cowiche Creek is incised and disconnected from its floodplain by concrete slabs armoring the bank, a railroad berm and imported fill material. The berm and fill are also inhibiting the establishment of native riparian vegetation at this location. The grant will support design, permitting, and implementation of a small project to remove the concrete slabs and fill, including removal of approx. 65 feet of the railroad berm, installation of a wood structure, and the replacement of non-native weeds with a native, woody riparian plant community. The project was re-scoped from the original design application based on input from the local technical committee. The river is used by Steelhead, which are listed as threatened with extinction under the federal Endangered Species Act; and Mid-Columbia Fisheries Enhancement Group will contribute \$14,650 in an other grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1573)

### Mid-Columbia Fisheries Enhancement Group Cabin Creek Restoration Assessment

Mid Columbia Fisheries (MCF) will work with Kittitas Conservation Trust (KCT) to complete a Cabin Creek Restoration Assessment to identify potential restoration opportunities in the Cabin Creek watershed, with a focus on geological processes, fish passage, habitat, water temperature and sediment delivery. They will work with

partnering organizations and a geomorphologist to develop a full understanding of legacy impacts from human activities in and around the project area, and of historic and existing geomorphic and hydrologic conditions in the watershed. They will also analyze the existing data on landslide risk and activity, and the limited data that are available on historical channel migration, bank erosion, channel incision and floodplain connectivity. LIDAR data are available for the lower portion of the watershed. MCF and KCT will perform hydrologic analysis assuming current and projected future conditions, and identify how the elevated drainage network and degraded channel conditions in the watershed impact peak and baseflows. They will perform field surveys to refine the characterization of geomorphic processes, including presence and function of large wood, sediment transport, and alluvial water storage. They will focus on areas identified as having high restoration potential in the data analysis process, and on areas of known fish passage impediments. Throughout the assessment, MCF and KCT will coordinate with interested parties. The river is used by Steelhead, which are listed as threatened with extinction under the federal Endangered Species Act; and Chinook Mid-Columbia Fisheries Enhancement Group will contribute \$15,000 in staff labor. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1567)

### **Northeast Washington Salmon Recovery Region**

### Kalispel Tribe-Pend Oreille Lead Entity

## Pend Oreille Conservation District Preventing Water Loss in Skookum Creek

The Pend Oreille Conservation District will use this grant to create a preliminary design to fix a failing irrigation canal that diverts water from Skookum Creek, a major coldwater tributary of the Pend Oreille River. The headgate is on Best Chance Road, east of the town of Usk. The design will replace the open irrigation canal and unscreened diversion at the canal's headgate with a closed, on-demand system that will eliminate water loss. Currently, the canal loses up to 66 million cubic feet per second of water during the summer and fall. The saved water will be returned to Skookum Creek to benefit of westslope cutthroat trout and mountain whitefish. The conservation district will screen the point of diversion to prevent fish entering the canal and to increase the number of fish in Skookum Creek. The Pend Oreille Conservation District will contribute \$35,000 in a state grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1615)

# The Lands Council Designing the Restoration of Mill Creek at a New Bridge

The Lands Council will use this grant to develop a final design for restoring the migration zone of Mill Creek at the site of a new bridge. A road is being moved out of the creek's migration zone and a bridge is being built, which will allow the creek to use its floodplain. This bridge is on land owned by the U.S. Forest Service. The creek is used by bull and westslope cutthroat trout The Lands Council will contribute \$23,474 in donated services. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1609)

### **Puget Sound Salmon Recovery Region**

### Green/Duwamish and Central Puget Sound Watershed (WRIA 9) Lead Entity

# **King County Planting the Banks of the Green River in Flaming Geyser State Park**

The King County Water and Land Resources Division will use this grant to remove invasive plants, and plant native trees and shrubs on 8 acres along 0.4 mile of the Green River in Flaming Geyser State Park. Historic removal of tall trees from the banks of the river allows too much sunlight to reach the water, heating it to temperatures deadly for salmon. The river is used by Chinook salmon and steelhead trout, both of which are species listed as species threatened with extinction under the federal Endangered Species Act, by coho salmon, which is a federal species of concern, and by chum and pink salmon. King County will contribute \$104,105 in a local grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1002)

# **King County Auburn Narrows Floodplain Restoration Preliminary**

The King County Water and Land Resources Division will use this grant to complete preliminary designs to improve habitat in the middle Green River. An existing levee prevents the river from accessing the floodplain and the river lacks quality juvenile rearing habitat. The designs will detail the removal of the levee and a section of road in the floodway, placing large woody materials in the river, and planting native plants along the shoreline. Adding large woody materials like logs to a river creates places for fish to rest, feed, and hide from predators. It also slows the river, which reduces erosion and allows small rocks to settle to the riverbed, creating areas for salmon to spawn. Finally, logs change the flow of the river, creating riffles and pools, which give salmon more varied habitat. Planting trees and bushes along a shoreline helps shade the water, cooling it for fish. The plants also drop branches and leaves into the water, which provide food for the insects that salmon eat. Finally, the roots of the plants help keep soil from entering the water, where it can smother fish spawning gravel. The river is used by Chinook salmon, which is listed as threatened with extinction under the federal Endangered Species Act. King County will contribute \$99,013 in cash. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1041)

#### Kent

#### **Lower Russell Road Habitat Area A**

The City of Kent will conduct an alternatives analysis; wetland design; hydrogeological study; archaeological survey; geotechnical studies; stakeholder coordination; refinements to the 60% preliminary design; monitoring, maintenance and adaptive management plan; and, begin preparing permit application documents to construct Habitat Area A formerly a part of the larger Lower Russell Levee Setback project (16-1899) on the lower Green River near Van Doren's Landing Park. The preliminary conceptual design includes the construction of approximately 5.7 ac of off-channel habitat achieved by grading and reshaping the river bank, excavating low benches, installing large wood, and planting native vegetation. Primary species supported is juvenile Chinook salmon. The project is expected to provide near-term rearing and refuge habitat for juvenile salmon, assist in flood storage and reduce flood risk, increase floodplain habitat connectivity, maintain or increase species diversity in the GRNRA, enhance the wildlife functionality of wetlands through native plantings and woody debris placement, and increase native, noninvasive cover of both wetland emergents and woody species. This is part of the Salmon Habitat Plan Strategy to protect, restore, and enhance floodplain connectivity. Riparian forest The river is used by Chinook salmon, steelhead trout, and chum salmon, all of which are listed as threatened with extinction under the federal Endangered Species Act, and by coho salmon, which is a federal species of concern. The City of Kent will contribute \$200,000 in a local grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1043)

## **King County Restoring the Green River**

The King County Water and Land Resources Division will use this grant to place logs in the Green River and plant its banks with native trees and shrubs. Adding logs to a river creates places for fish to rest, feed, and hide from predators. It also slows the river, which reduces erosion and allows small rocks to settle to the riverbed, creating areas for salmon to spawn. Finally, logs change the flow of the river, creating riffles and pools, which give salmon more varied habitat. Planting trees and bushes along a shoreline helps shade the water, cooling it for fish. The plants also drop branches and leaves into the water, which provide food for the insects that salmon eat. Finally, the roots of the plants help keep soil from entering the water, where it can smother fish spawning gravel. The river is used by Chinook salmon and steelhead trout, both of which are species listed as threatened with extinction under the federal Endangered Species Act. King County will contribute \$90,000 in a local grant. Visit RCO's online Project Snapshot

for more information and photographs of this project. (22-1044)

# **King County Designing Restoration of the Hamakami Levee**

The King County Water and Land Resources Division will use this grant to develop a conceptual design to create and enhance salmon rearing habitat in the Green River. The finished project would replace one-third mile of the levee with logiams to mimic the functions of the old levee. In addition, the finished project calls for removal of invasive plants and planting native trees and shrubs along the river. Adding logs to a river creates places for fish to rest, feed, and hide from predators. It also slows the river, which reduces erosion and allows small rocks to settle to the riverbed, creating areas for salmon to spawn. Finally, logs change the flow of the river, creating riffles and pools, which give salmon more varied habitat. Planting trees and bushes along a shoreline helps shade the water, cooling it for fish. The plants also drop branches and leaves into the water, which provide food for the insects salmon eat. Finally, the roots of the plants help keep soil from entering the water, where it can smother fish spawning gravel. The river is used by Chinook salmon, which is a species listed as threatened with extinction under the federal Endangered Species Act. King County will contribute \$67,123 in a local grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1045)

# Tukwila Improving the Nelsen Side Channel of the Green River

The City of Tukwila, in partnership with DirtCorps, will use this grant to secure permits and complete preliminary designs for a project to reconnect the Green River to its historic channel, improve habitat in the river, and create 1 acre of off-channel habitat. The future habitat improvements will include placing wood structures in the river and planting the riverbanks. Planting trees and bushes along a riverbank helps shade the water, cooling it for fish. The plants also drop branches and leaves into the water, which provide food for the insects that salmon eat. Finally, the roots of the plants help keep soil from entering the water, where it can smother fish spawning gravel. Adding woody structures like logs to a stream creates places for fish to rest, feed, and hide from predators. It also slows the river, which reduces erosion and allows small rocks to settle to the riverbed, creating areas for salmon to spawn. Finally, logs change the flow of the river, creating riffles and pools, which give salmon more varied habitat. The river is used by Chinook salmon and steelhead trout, both of which are species listed as threatened with extinction under the federal Endangered Species Act. Tukwila will contribute \$54,000 in a local grant. Visit RCO's online Project Snapshot for more information and

#### photographs of this project. (22-1047)

# Tukwila Gilliam Creek Fish Passage Preliminary Design

The City of Tukwila will use this grant to survey a fish passage on Gilliam Creek and determine whether to remove or upgrade an underperforming culvert, which is mostly blocking fish passage, and then create preliminary designs for its solution. Culverts are pipes or other structures that carry water under roads and often block fish migration because they are too steep, too tall, or too small to allow fish to pass through easily. The river is used by Chinook salmon and steelhead trout, both of which are listed as threatened with extinction under the federal Endangered Species Act. The City of Tukwila will contribute \$50,000 in a local grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1049)

### Island County Lead Entity

## Skagit Fisheries Enhancement Group Designing Replacement of Fish Barriers under Race Road

The Skagit Fisheries Enhancement Group will use this grant to design the replacement of two culverts and a private crossing that are blocking fish passage. The culverts are under Race Road near Coupeville. Culverts are pipes or other structures that carry water under roads and often block fish migration because they are too steep, too tall, or too small to allow fish to pass through easily. The culverts are on two coastal streams that drain to Race Lagoon, which is an important pocket estuary for migrating salmon from the Skagit, Stillaguamish, and Snohomish Rivers. Pocket estuaries and small coastal streams such as these provide important feeding, resting, and hiding habitat as young salmon transition from freshwater to saltwater. The private crossing will be replaced with a small bridge. Removing the barriers will open critical rearing habitat for juvenile salmon. The streams are used by Chinook and chum salmon, both of which are listed as threatened with extinction under the federal Endangered Species Act, by coho salmon, which is a federal species of concern, and by pink salmon. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1089)

# Whidbey Camano Land Trust Removing Shoreline Armor

The Whidbey Camano Land Trust will use this grant to buy 175 acres, including more than a half-mile of shoreline and bluff, and to remove a beach house and shoreline

armoring along Admiralty Bay. Armoring, which can include boulders or concrete bulkheads, causes waves to remove the fine gravel and plants on the shore that salmon rely on for food and spawning. The bay is used by Chinook and chum salmon, both of which are species listed as threatened with extinction under the federal Endangered Species Act, and by coho salmon, which is a federal species of concern. The Whidbey Camano Land Trust will contribute \$7.5 million in a combination of federal and state grants, a grant from the state Estuary and Salmon Restoration Program, and donations of cash. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1085)

# Kennedy-Goldsborough Basin (WRIA 14) Salmon Recovery Lead Entity

## South Puget Sound Salmon Enhancement Group Removing a Griggs Creek Fish Passage Barrier

The South Puget Sound Salmon Enhancement Group will use this grant to remove a culvert that is blocking fish passage under a private road near the mouth of Griggs Creek, a tributary to Schneider Creek in Thurston County. Culverts are pipes or other structures that carry water under roads and often block fish migration because they are too steep, too tall, or too small to allow fish to pass through easily. The work will open passage in Griggs Creek for the first time in several decades. The project is being coordinated with two other barrier removal projects that will remove the last remaining barriers in the system. The creek is used by steelhead trout, which is a species listed as threatened with extinction under the federal Endangered Species Act, by coho salmon, which is a federal species of concern, and by chum salmon. The South Puget Sound Salmon Enhancement Group will contribute \$45,000 in another grant and donated cash. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1177)

## Mason Conservation District Designing Restoration of Gosnell Creek

The Mason Conservation District will use this grant to complete final designs for projects to restore Gosnell Creek and a tributary. The projects include placing large woody materials, such as logs and tree root wads, along 0.7 mile of Gosnell Creek, removing a barrier to fish passage in an unnamed tributary to the creek, and placing beaver dam replicas in the tributary's floodplain. Adding logs to a creek creates places for fish to rest, feed, and hide from predators. It also slows the water, which reduces erosion and

allows small rocks to settle to the bottom, creating areas for salmon to spawn. Finally, logs change the flow of the water, creating riffles and pools, which give salmon more varied habitat. Replicas of beaver dams also slow the water and create pools. The dams also block water, creating consistent water levels, which is helpful to salmon in drier months. The creek is used by steelhead trout, which is a species listed as threatened with extinction under the federal Endangered Species Act, by coho salmon, which is a federal species of concern, and by chum salmon. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1180)

## South Puget Sound Salmon Enhancement Group Designing a Fish Passage Project in Shadow Valley

The South Puget Sound Salmon Enhancement Group will use this grant to complete a preliminary design for a project that will replace a wooden fish ladder with a fish-passable structure and a stream channel at a private road crossing on a tributary to Mill Creek. Correction of the fish passage barrier will result in opening fish passage in this system for the first time in several decades. The tributary is used by steelhead trout, which is a species listed as threatened with extinction under the federal Endangered Species Act, by coho salmon, which are a federal species of concern, and by chum salmon and cutthroat trout. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1178)

## Capitol Land Trust Hudson Cove Habitat Protection

This project will purchase a conservation easement (CE) over 228 acres of mostly undeveloped forestland and shoreline on the Steamboat Island Peninsula in Olympia. The property hosts 8,500 feet of mostly undeveloped, forested, Totten Inlet shoreline, a 7.8-acre pocket estuary, and 4,745 feet of perennial and seasonal streams. The shoreline forest is of very high quality in terms of age and species diversity, and there is an abundance of overhanging trees and shrubs on most of the shoreline. Hudson Cove hosts areas of salt marsh and mud flats. The "upland" forest contains areas of riparian habitat, cedar groves, and stands that have been harvested and resemble more typical managed forests. The river is used by Steelhead, which are listed as threatened with extinction under the federal Endangered Species Act; and Coho, which are a federal species of concern; and Chum. Capitol Land Trust will contribute \$3,245,000 in a Conservation Futures grant, a federal grant, a grant from the state Washington Wildlife and Recreation Program, and a private grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1176)

## **Squaxin Island Tribe West Oakland Bay Restoration 2D**

The proposed project will complete the North salt marsh lobe of the larger West Oakland Bay Conservation and Restoration project. Phases 1 (LWD construction) and 4 (Eagle Point conservation), 2 South salt marsh lobe, and 2 West saltmarsh lobe have been completed. The funding will complete the project. Restoration components include the removal of almost 1/4 mile of bulkhead and the enhancement of 17 acres of saltmarsh to promote the growth of intertidal vegetation. All restoration will occur in areas rated as High Priority and Enhance High Priority. Designs are complete and all permits are in place. The river is used by Chinook, Steelhead, which are listed as threatened with extinction under the federal Endangered Species Act; and Coho, which are a federal species of concern; and Chum Squaxin Island Tribe will contribute \$1,766,913 in another grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1175)

### Lake Washington/Cedar/Sammamish Watershed (WRIA 8) Lead Entity

#### **Seattle**

#### Restoring the Upper Royal Arch Reach of the Cedar River

Seattle Public Utilities will use this grant to remove bank armoring and other structures, create side channels, plant, and place large wood structures in the upper Royal Arch reach of the Cedar River. Adding wood structures to a river creates places for fish to rest, feed, and hide from predators. It also slows the river, which reduces erosion and allows small rocks to settle to the riverbed, creating areas for salmon to spawn. Finally, wood structures change the flow of the river, creating riffles and pools, which give salmon more varied habitat. Planting trees and bushes along riverbanks helps shade the water, cooling it for fish. The plants also drop branches and leaves into the water, which provide food for the insects salmon eat. Finally, the roots of the plants help keep soil from entering the water, where it can smother fish spawning gravel. The river is used by Chinook salmon and steelhead trout, both of which are species listed as threatened with extinction under the federal Endangered Species Act. Seattle will contribute \$1.8 million in a local grant and cash. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1191)

# **King County Restoring the Banks of Bear Creek**

The King County Water and Land Resources Division will use this grant to plant trees and shrubs along Bear Creek to raise water levels and cool the water, restoring critical salmon habitat. Planting trees and bushes along a shoreline helps shade the water, cooling it for fish. The plants also drop branches and leaves into the water, which provide food for the insects salmon eat. Finally, the roots of the plants help keep soil from entering the water, where it can smother fish spawning gravel. The creek is used by Chinook salmon and steelhead trout, both of which are species listed as threatened with extinction under the federal Endangered Species Act, and by coho salmon, which is a federal species of concern. King County will contribute \$226,500 in a local grant and cash. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1190)

#### **Bothell**

#### **Planning Habitat Restoration at former Wayne Golf Course**

The City of Bothell will use this grant to assess alternatives and complete conceptual designs to improve habitat on the east side of the former Wayne Golf Course along the Sammamish River. This 31.6-acre area presents a unique opportunity for habitat restoration with 1,000 feet of Sammamish River shoreline and the lower 1,200 feet of Waynita Creek flowing through the site. The Sammamish River lacks riverbank plantings at this location, which causes the water to be too warm for salmon returning to spawn. The river also lacks habitat variety, floodplain connection, and resting areas. The purpose of this project is to collect data on-site, including wetland and critical area surveys and groundwater monitoring, to develop restoration alternatives that will significantly improve habitat, rearing opportunities, and cold-water refuge for salmon. Bothell will contribute \$32,784 in cash and staff labor. Visit RCO's online Project Snapshot for more information and photographs of this project. (20-1061)

### Nisqually River Salmon Recovery Lead Entity

# Nisqually Land Trust Conserving Land Along Middle Ohop Creek

The Nisqually Land Trust will use this grant to buy up to 98 acres, including nearly 1 mile of shoreline along the primary spawning reach of Ohop Creek. The land is in the Ohop Valley and along the steep valley bluff that contains seeps and springs that drain to the valley. The creek is used by Chinook salmon and steelhead trout, both of which are

species listed as threatened with extinction under the federal Endangered Species Act, by coho salmon, which is a federal species of concern, and by chum and pink salmon. The Nisqually Land Trust will contribute \$415,403 in a state grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1057)

## **South Puget Sound Salmon Enhancement Group Middle Ohop Restoration River Mile 5.6**

This proposal is for a restoration (construction) grant for stream and riparian treatments along 1,000+ feet of Ohop Creek within the designated Middle Reach of the Ohop watershed. The project area for this proposal includes five adjacent tax parcels, some of which have recently been acquired for conservation and restoration, located near Highway 161, Eatonville, WA. The project area and surrounding reach is a key salmon spawning reach for several species of salmon, including ESA listed Nisqually Fall Chinook, winter steelhead, coho, chum, and pink salmon. Key impairments which will be addressed as part of the project include bank armoring and stream channelization, limited in-stream habitat, limited occurrence of wood, and poor riparianquality. Overall restoration goals for the project reach include increasing habitat complexity, increasing floodplain connectivity, improving riparian condition, adding large wood, decreasing embeddedness, and generally improving salmonid spawning and rearing habitat. Final Engineering designs for the project site will be produced prior to construction. The river is used by Chinook, Steelhead, which are listed as threatened with extinction under the federal Endangered Species Act; and Coho, which are a federal species of concern; and Chum, Pink. South Puget Sound Salmon Enhancement Group will contribute \$282,000 in another grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1059)

## South Puget Sound Salmon Enhancement Group Mashel River Assessment River Mile 3.5-7.1

This proposal is for an assessment and planning grant focusing on the lower Mashel River between river miles 3.5-7.1. Project goals include updating estimates of the amounts and locations of wood and log jams, wood recruitment frequency, assessing habitat metrics such as pool frequency, documenting currently accepted literature and scientific metrics for wood-loading targets, modelling hydraulic conditions of existing and proposed wood features, and reporting recommendations for future target conditions within the study area. Deliverables for this project will include a report summarizing results of the assessment which will include recommendations for restoration goals, a GIS database/maps, modelling results, and conceptual designs. This project will compliment current and on-going assessment work between river miles 0-

7.1, effectively completing the assessment area. This project is intended to benefit Nisqually Fall Chinook, coho, chum, and pink salmon, and winter steelhead. The river is used by Chinook, Steelhead, which are listed as threatened with extinction under the federal Endangered Species Act; and Coho, which are a federal species of concern; and Chum, Pink. South Puget Sound Salmon Enhancement Group will contribute \$25,800 in another grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1061)

## Nisqually Land Trust Muck Creek Protection Outreach

Muck Creek, a tributary to the Nisqually River, has been identified as a priority for steelhead recovery; however, there has not yet been significant focus on conservation of private lands along Muck Creek and its tributaries. The Nisqually Land Trust proposes to 1) complete a conservation feasibility analysis for privately owned properties in the Muck Creek sub-basin; 2) contact owners of priority in-stream, riparian, floodplain, and wetland habitats in the sub-basin to survey their interest in permanently protecting their property; and 3) complete initial due diligence and property valuation for up to two high priority conservation projects if willing landowners are identified. The feasibility analysis will create a ranked list of properties for landowner outreach based on conservation project criteria, including parcel zoning, land use, proximity to priority habitats, and size; publicly available ownership and real estate information; and the reach-scale habitat and water resources prioritization and site-specific data included in the Muck Creek Streamflow and Habitat Restoration Strategy. The Muck Creek Strategy is currently being developed by WRIA 11 salmon recovery partners through separate funding. The river is used by Steelhead, which are listed as threatened with extinction under the federal Endangered Species Act; and Coho, which are a federal species of concern; and Chum Nisqually Land Trust will contribute \$7,575 in another grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1058)

### North Olympic Peninsula Lead Entity for Salmon

# **Lower Elwha Klallam Tribe Placing Wood in the Little Hoko River**

The Lower Elwha Klallam Tribe will use this grant to place logs via helicopter in 25 locations along about 3 miles of the Little Hoko River. Adding logs to a river creates places for fish to rest, feed, and hide from predators. It also slows the river, which reduces erosion and allows small rocks to settle to the riverbed, creating areas for salmon to spawn. Finally, logs change the flow of the river, creating riffles and pools,

which give salmon more varied habitat. The river is used by Chinook and chum salmon, and steelhead trout, all of which are listed as threatened with extinction under the federal Endangered Species Act, and by coho salmon, which is a federal species of concern. The Lower Elwha Klallam Tribe will contribute \$150,000 in another grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1187)

#### North Olympic Salmon Coalition Restoring Fish Passage in Johnson Creek

The North Olympic Salmon Coalition will use this grant to replace three culverts with a structure that will open nearly 16 acres of rearing and 2.4 miles of spawning and rearing habitat in Johnson Creek. Culverts are pipes or other structures that carry water under roads and often block fish migration because they are too steep, too tall, or too small to allow fish to pass through easily. The Johnson B tributary runs in a roadside ditch before meeting Johnson Creek at the culvert outlets. The tributary and road are impacting each other. Johnson B is too straight, has no plants along its bank, no woody materials in its waters, and is eroding the road. Johnson B historically contained some of the highest densities of salmon redds (nests) in the area. By replacing the culverts, the water flow processes will improve. The coalition also will move the Johnson B tributary to the adjacent forest and place large woody materials in the water to improve the salmon habitat. Adding woody materials, such as logs and root wads, to a stream creates places for fish to rest, feed, and hide from predators. It also slows the water, which reduces erosion and allows small rocks to settle to the bottom, creating areas for salmon to spawn. Finally, logs change the flow of the water, creating riffles and pools, which give salmon more varied habitat. The creek is used by Chinook salmon and steelhead trout, both of which are listed as threatened with extinction under the federal Endangered Species Act, and by coho salmon, which is a federal species of concern. The North Olympic Salmon Coalition will contribute \$3.2 million in a federal grant and a grant from the Brian Abbott Fish Barrier Removal Board. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1084)

## North Olympic Salmon Coalition Designing Fish Passage in a Hoko River Tributary

The North Olympic Salmon Coalition will use this grant to complete designs for replacement of the Clallam County road culvert on an unnamed Hoko River tributary. Culverts are pipes or other structures that carry water under roads and often block fish migration because they are too steep, too tall, or too small to allow fish to pass through easily. The culvert replacement will open about 1 mile of salmon and steelhead

spawning and rearing habitat. The river is used by Chinook salmon and steelhead trout, both of which are listed as threatened with extinction under the federal Endangered Species Act, and by coho salmon, which is a federal species of concern. The North Olympic Salmon Coalition will contribute \$249,235 in a grant from the Brian Abbott Fish Barrier Removal Board. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1083)

## San Juan Preservation Trust North Shore Conservation Easement

The North Shore Conservation Easement (CE) acquisition includes a 58.42-acre parcel with 0.54 acre of private tidelands located on the northwestern shoreline of Orcas Island in the San Juan Islands. The property encompasses upland and nearshore habitats located within the North Shore Orcas Watershed that benefit juvenile and adult Chinook salmon and forage fish. The property also is part of the Waldron-President's Channel High Priority Fish Use Region and is identified as a Tier II Priority Protection Parcel (PIAT II 2017). The San Juan Preservation Trust, in partnership with the SJC Land Bank, are requesting PSAR funds to help protect the 12.74 acres of riparian, wetland, and tideland habitats within 200' of the shoreline area that are most beneficial and critical to salmon recovery. The CE would include the entire parcel; however, the PSAR funding request is only for the shoreline portion of the CE, which currently has substantial ecological impacts from residential development and the threat of additional development if not protected. There are 6 cabins located within 200' of the shoreline area that would be removed and the associated backbeach habitats restored. The North Shore CE would eliminate 10 development rights and the opportunity for subdivision of the parcel. In addition, the CE will allow public access to the shoreline and private tidelands that connect with much more expansive public tidelands further west to Point Doughty Natural Area Preserve. The river is used by Chinook, which are listed as threatened with extinction under the federal Endangered Species Act; and Chum. San Juan Preservation Trust will contribute \$578,250 in a local grant, donation of land or property interest, donations of cash, and staff labor. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1439)

## Mason Conservation District South Fork Skokomish Fish Passage Design

This project will expand on the fish passage assessment and conceptual designs developed under Project 14-1334 by implementing the following actions: a. Host stakeholder meetings to work through concerns, design criteria, considerations, etc. This process will involve multiple different interest groups and agencies including WDFW,

whitewater community, landowners, NOAA, etc. This objective will be completed by June 2024. b. Meet with several rock removal contractors to review the safety and design criteria that will need to be considered by January 2024. c. Secure access points with acceptable clearance for helicopter loading and transport by June 2024. d. Work with permit agencies to develop a fish and wildlife protection plan during rock removal (e.g. Blasting) and develop a detailed permitting plan and timeline by December 2024. e. Develop permit ready preliminary designs by December 2024. The river is used by Chinook, Steelhead, which are listed as threatened with extinction under the federal Endangered Species Act. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1094)

## North Olympic Salmon Coalition Restoring Dungeness Shoreline

The North Olympic Salmon Coalition will use this grant to remove invasive plants on 36 acres along the Dungeness River near Sequim. The coalition also will plant and seed 14 acres with native shrubs and trees and maintain the plantings for 3 years to improve plant survival. About 20 percent of historic riverbank plants and trees have been removed in the lower Dungeness River corridor. Planting trees and bushes along a river helps shade the water, cooling it for fish. As the plants mature, they drop leaves into the river, providing food for insects that young salmon eat. Mature trees that fall into the river provide habitat and refuge from swift currents and predators. Finally, roots of the plants prevent soil from entering the water and smothering fish spawning gravel. The river is used by Chinook and chum salmon and steelhead and bull trout, all of which are species listed as threatened with extinction under the federal Endangered Species Act. Coho salmon, a federal species of concern, also inhabit the Dungeness. The North Olympic Salmon Coalition will contribute \$39,000 in a federal grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1101)

### Puyallup and Chambers Watershed Salmon Recovery Lead Entity

## South Puget Sound Salmon Enhancement Group Greenwater Phase 4 (RM 4.0-4.8)

This project is located on the Greenwater River between river mile 4.0 to 4.8. The project proposes to remove remnant road fill and armoring from the floodplain, remove weirs from the mouth of Midnight Creek, and install large wood structures through the nearly 1-mile reach. The proposed fill for removal is constraining the Greenwater River channel and disconnecting forested floodplain habitat. The weirs at the mouth of Midnight creek are limiting fish passage and sediment dynamics to build the alluvial fan at this tributary

confluence. Due to the floodplain constrictions imposed by the road fill and armoring, velocities through the project reach exceed 7 feet per second during annual bankful flow levels creating a plain bed with little wood accumulations though much of the project area. This project will connect existing grants (21-1040) and proposed matching grants to remove 12,000cy of floodplain fill and armor from legacy forest roads and install 30 large wood strutures and 80 indviudal pieces of wood to induce hydraulic complexity, reduce velocity and redd scour, increase pool frequency and depth with overhead cover, and reconnect floodplain processes. The river is used by Chinook, Steelhead, which are listed as threatened with extinction under the federal Endangered Species Act; and Coho, which are a federal species of concern; and Pink. South Puget Sound Salmon Enhancement Group will contribute \$229,736 in another grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1166)

#### **Enumclaw**

#### **Rerouting Boise Creek at Enumclaw Golf Course**

The City of Enumclaw will use this grant to re-route about one-third mile of Boise Creek to a historic channel along the steep hillside of Enumclaw Golf Course to improve both water quality and habitat for Chinook salmon and steelhead trout. The City also will plant the creek banks and place large woody material in the channel. Planting trees and bushes along a shoreline helps shade the water, cooling it for fish. The plants also drop branches and leaves into the water, which provide food for the insects salmon eat. Finally, the roots of the plants help keep soil from entering the water, where it can smother fish spawning gravel. Adding woody materials like logs to a stream creates places for fish to rest, feed, and hide from predators. It also slows the river, which reduces erosion and allows small rocks to settle to the bottom, creating areas for salmon to spawn. Finally, logs change the flow of the water, creating riffles and pools, which give salmon more varied habitat. The creek is used by Chinook and chum salmon, and steelhead trout, all of which are species listed as threatened with extinction under the federal Endangered Species Act, by coho salmon, which is a federal species of concern, and by pink salmon. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1165)

#### **Forterra**

#### **South Prairie Creek Acquisition**

In this acquisition project, Forterra Northwest proposes to acquire critical salmon habitat in the South Prairie Creek Watershed. The overarching goal of this acquisition is to add to the mosaic of adjacent protected and restored floodplain properties. Purchase of

either of these properties will allow for continued floodplain restoration and salmon enhancement efforts associated with the larger South Prairie Creek Preserve, a collaborative effort between regional partners including Pierce County, Pierce County Conservation District, South Puget Sound Salmon Enhancement Group, Puyallup Tribe of Indians, and the Puyallup/Chambers Salmon Recovery Lead Entity. This proposal includes due diligence and acquisition. This initial step will ensure that these parcels are preserved and safeguarded from development. Forterra will work with the partners listed above to determine the best long-term owner of the properties. The properties will then be incorporated into long term restoration planning to enhance habitat and restore floodplain function. Preservation and future restoration will support Chinook, steelhead, coho, chum, pink, and cutthroat trout, and bull trout. Two potential properties have been identified as priority parcels and this acquisition could include all acreage or a subset of riverside acreage. Further outreach in the coming month will result in the selection of specific parcels and acreage to be purchased. The river is used by Chinook, Steelhead, which are listed as threatened with extinction under the federal Endangered Species Act; and Coho, which are a federal species of concern; and Chum, Pink. Forterra NW will contribute \$179,991 in another grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1171)

### San Juan County Lead Entity for Salmon Recovery

## San Juan Preservation Trust Conserving McArdle Bay Shoreline

The San Juan Preservation Trust will use this grant to buy a voluntary land preservation <sup>46</sup> agreement for nearly 12 acres of McArdle Bay shoreline on southern Lopez Island. The land includes high-quality near-shore habitat, about 346 feet of shoreline, 212 feet of a pocket beach with overhanging vegetation, and a mid-sized feeder bluff. Protecting the land from development will help protect the ecological attributes of McArdle Bay, which are key to the success of juvenile salmon using the San Juan Islands. The bay is used by Chinook salmon, which is a species listed as threatened with extinction under the federal Endangered Species Act. The San Juan Preservation Trust will contribute \$634,650 in staff labor and donations of cash and land or property interest. This project received partial funding in 2021. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1148)

<sup>&</sup>lt;sup>46</sup>Also called a conservation easement, a voluntary land preservation agreement is when the landowner voluntarily sells the right to develop the property. A permanent restriction on future development and subdivision is added to the property title.

## San Juan County Land Bank Watmough Bay Addition

Watmough Bay, located at the south end of Lopez Island, is designated as one of four top priority fish use regions in San Juan County (SJC). It is the only one of these four areas in SJC to consistently host US origin juvenile Chinook. Puget Sound salmon recovery efforts also identify this region as having a high presence probability for unmarked juvenile Chinook salmon, juvenile chum salmon and pink salmon. This area Watmough Bay recently became a documented spawning site for surf smelt and it is currently a one-egg site for Pacific sand lance. The Land Bank was notified that the Higgins family, the owners of the last, unprotected parcel at Watmough, was interested in selling. After months of negotiations, the Land Bank successfully purchased the property; forever alleviated the threat of development; and created a contiguous 1.67 miles of protected shoreline. The property was purchased in February of 2022 with a waiver of retroactivity from the Recreation and Conservation Office. Protection of intact habitat is San Juan County's highest priority strategy for recovering Puget Sound salmonids. This project implements a high priority action. Similar to the 2007 acquisition at Watmough Bay, the Land Bank seeks to recover a percentage (20%) of the acquisition expenses by partnering with the Salmon Recovery Funding Board. The Land Bank will also apply to the Aquatic Lands Enhancement Board. Public opportunities for hiking and wildlife viewing are anticipated in the future. The river is used by Chinook, which are listed as threatened with extinction under the federal Endangered Species Act; and San Juan County of will contribute \$2,098,457 in a grant from the state Aquatic Lands Enhancement Account, and voter-approved bonds. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1424)

## San Juan Preservation Trust North Shore Conservation Easement

The North Shore Conservation Easement (CE) acquisition includes a 58.42-acre parcel with 0.54 acres of private tidelands located on the northwestern shoreline of Orcas Island in the San Juan Islands. The property encompasses upland and nearshore habitats located within the North Shore Orcas Watershed that benefit juvenile and adult Chinook salmon and forage fish. The property also is part of the Waldron-President's Channel High Priority Fish Use Region and is identified as a Tier II Priority Protection Parcel (PIAT II 2017). The San Juan Preservation Trust, in partnership with the SJC Land Bank, are requesting PSAR funds to help protect the 12.74 acres of riparian, wetland, and tideland habitats within 200' of the shoreline area that are most beneficial and critical to salmon recovery. The CE would include the entire parcel; however, the PSAR funding request is only for the shoreline portion of the CE, which currently has substantial ecological

impacts from residential development and the threat of additional development if not protected. There are 6 cabins located within 200' of the shoreline area that would be removed and the associated backbeach habitats restored. The North Shore CE would eliminate 10 development rights and the opportunity for subdivision of the parcel. In addition, the CE will allow public access to the shoreline and private tidelands that connect with much more expansive public tidelands further west to Point Doughty Natural Area Preserve. The river is used by Chinook, which are listed as threatened with extinction under the federal Endangered Species Act; and Chum. San Juan Preservation Trust will contribute \$578,250 in a local grant, donation of land or property interest, donations of cash, and staff labor. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1439)

## Northwest Straits Marine Conservation Foundation Removing a Bulkhead on Weeks Point

The Northwest Straits Marine Conservation Foundation will use this grant to remove a 1950s, 160-foot long, timber bulkhead. The bulkhead contains toxic creosote components, which are leaching contaminants into the water. For decades, the bulkhead has inhibited natural sediment accumulation along the shoreline and instead promoted scouring of sediment. The land is at the tip of Weeks Point, a peninsula that separates Fisherman Bay from Weeks Wetland, a significant estuarine wetland to the east. Removal of the bulkhead, restoration of the beach, and rebuilding of shoreline habitats will result in significant habitat improvements in an area that is home to Pacific sand lance and likely Chinook salmon. Restoring the beach will restore the natural sediment drift pattern along the point, expand the spawning habitat for the fish salmon eat, and serve as a model for other landowners. The area is used by Chinook salmon, which is a species listed as threatened with extinction under the federal Endangered Species Act, and by coho salmon, which is a federal species of concern. The Northwest Straits Marine Conservation Foundation will contribute \$45,757 in a grant from the state Estuary and Salmon Restoration Program and donated cash. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1418)

## Friends of the San Juans Neck Point Pocket Beach Habitat Restoration

Friends of the San Juans proposes to implement a priority armor and intertidal rock removal and beach enhancement project along 500 linear feet of pocket beach located at Neck Point on the west end of Shaw Island. The goal of this restoration project is to improve critical habitat for juvenile salmon and salmon prey. The project site includes nearly 200 feet of unnecessary rock armor adjacent to another 300 linear feet of

extensive intertidal rock debris from decades of failing roadway armoring. While a larger infrastructure resiliency and lagoon restoration project is still needed for this area, the proposed northern beach restoration components (that would also need to be completed during a larger project) can be achieved now, providing improved habitat for juvenile salmon and forage fish immediately. Project actions include removal of 180 linear feet of large rock shoreline armor as well as the cleanup of 177 cubic yards of failed revetment rock along 300 linear feet of shoreline adjacent to the armor removal. The project will restore 500 feet of marine shoreline and unbury over 6,000 square feet of intertidal beach at a documented forage fish spawning site. The entire site will be nourished with sand and pea gravel, and the backshore along the armor removal site will be replanted with native plants. Existing grant funding for design and permitting tasks will make this a shovel-ready project for implementation in the fall of 2023 or 2024. The river is used by Chinook, which are listed as threatened with extinction under the federal Endangered Species Act. Friends of the San Juans will contribute \$29,665 in another grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1421)

#### Friends of the San Juans Reassessing Eelgrass Health in San Juan County

The Friends of the San Juans will use this grant to assess eelgrass health in San Juan County. The funding would reassess areas evaluated in 2003, providing updated mapping data and supporting an analysis of what has changed during the past 20 years. The results will expand the understanding of the status of eelgrass and improve the effectiveness of recovery efforts. In 2003, the Friends of the San Juans and the Washington Department of Natural Resources mapped the deep-water edge and shoreline extent of eelgrass for all the marine shorelines in the county and surveyed 19 embayments. The area is used by Chinook salmon, which is a species listed as threatened with extinction under the federal Endangered Species Act. The Friends of the San Juans will contribute \$52,500 in another grant and donated services. The friends group is requesting an additional \$73,714 from the Puget Sound Acquisition and Requisition grant program that will be considered by the Legislature in 2023. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1423)

# San Juan County Studying the Feasibility of Moving Backshore Roads

The San Juan County Department of Environmental Stewardship will use this grant to determine if three, high-priority degraded shorelines can be restored for habitat for juvenile salmon and the fish they eat. The County will be considering whether roads and

utilities can be moved, removed, or abandoned and the cost involved. The County also will hold a series of meetings to educate neighboring communities about the benefits of restoration and the risks to infrastructure and property with sea-level rise and more severe storms, and to seek participation in the decision on whether to manage retreat from the shorelines. Restoration concepts and maps will be created as part of the feasibility study. The County will use the work to prioritize and pursue funding to restore sensitive shoreline habitats that serve endangered salmon and the fish they rely on for food. The area is used by Chinook salmon, which is a species listed as threatened with extinction under the federal Endangered Species Act. San Juan County will contribute \$30,000 in staff labor. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1428)

## San Juan Islands Conservation District San Juan Islands Eelgrass Recovery Phase 2

The San Juan Islands Conservation District seeks funding to continue eelgrass meadow restoration efforts at Bell Point in Westcott Bay and begin at multiple other sites in the San Juan Islands. Rapid disappearance of eelgrass in the San Juan's has been documented at widespread sites since the early 2000s. This loss is not fully understood but carries with it many severe environmental, economic and cultural impacts. In the context of salmon recovery alone, healthy eelgrass is one of the most critical components for long term Chinook salmon survival because it hosts the eggs of forage fish that salmon prey on and provides safe harbor for the juvenile salmon themselves. In 2022-2024, our project team is seeking funding to continue the work we started in 2019. Specific objectives include: 1. Expand seed collection site from one (current) location to 3-4 locations; 2. Increase Eelgrass Cultivation System (ECS) capacity by 8-10x to harvest and store significantly more seeds; 3. Continue repeated seed planting and monitoring at Bell Point, and after Spring 2022 analysis, select techniques for export to additional sites in San Juan County. 4. Community involvement-determine the degree to which local residents and landowners can contribute to program success; 5. Maintain a seed bank, progress report and program manual to support broader eelgrass seeding efforts. The river is used by Chinook, which are listed as threatened with extinction under the federal Endangered Species Act. San Juan Islands Conservation District will contribute \$44,000 in a private grant, donation of services, and donation of supplies. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1420)

### San Juan Islands Conservation District Garrison Creek Watershed Riparian Zones

The San Juan Islands Conservation District is seeking funding to restore riparian habitat along Garrison Creek within the critical Garrison Creek Watershed on San Juan Island. The 2022 SJC Salmon Recovery Chapter Update identified riparian restoration projects in Garrison Creek as high priorities for salmon restoration. Garrison Creek hosts one of the last known population of native Coastal cutthroat trout (CCT) in San Juan County, and juvenile Chinook salmon are known to historically occupy Garrison Bay in high numbers just downstream. Our proposal seeks funding to implement five discrete riparian restoration plans that resulted from outreach to landowners by project partners in 2021. In addition, we seek funding for outreach, planning and implementation efforts necessary to continue restoration in Garrison and other key watersheds through 2024. The success of our program's recent outreach efforts will be coupled with a trained, local labor force - the Islands Conservation Corps - which stands ready to implement, maintain and expand projects on the ground more than has previously been achievable. The river is used by Chinook, which are listed as threatened with extinction under the federal Endangered Species Act. San Juan Islands Conservation District will contribute \$60,000. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1419)

### Skagit Watershed Council Lead Entity

## Washington Department of Fish and Wildlife IMW Milltown Island Phase 2 Construction

WDFW is moving forward to construct an estuary restoration project on Milltown Island in the South Fork Skagit River. The project will directly create additional habitat features and restore water, sediment and wood delivery to the 220-acre site allowing natural processes to create and sustain habitats that will be resilient to climate change into the future. The project will improve estuary habitats for Chinook salmon, waterfowl, beaver and other fish and wildlife. Estuary rearing habitat gains for Chinook will result in additional food for orca. The current proposal includes project construction and native vegetation establishment. WDFW will work with engineers, a construction company and tribal partners (SRSC) to complete the work. Specific activities include removing portions of the perimeter dike and cross-dike, excavating channels and tidal headwaters, creating topographic relief, managing weeds and planting native vegetation. The total cost of project implementation is \$5.4M. This request is for \$3.9M; \$1.5M is provided by other state and federal sources. The river is used by Chinook, which are listed as threatened with extinction under the federal Endangered Species Act. Visit RCO's online Project

Snapshot for more information and photographs of this project. (22-1467)

# Skagit Land Trust Conserving Habitat in the Skagit River Watershed

The Skagit Land Trust and Seattle City Light will use this grant to continue their efforts to conserve high-quality habitat in the Skagit River system. The two will buy 18 acres of the Skagit River near South Lyman Ferry Road and Cape Horn Road. The work will include reaching out to landowners and evaluating sites. The river is used by Chinook salmon, which is a species listed as threatened with extinction under the federal Endangered Species Act. The Skagit Land Trust will contribute \$150,000 in donated cash. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1442)

## Seattle 2022 Skagit Watershed Habitat Acquisition VI (b)

The Skagit Land Trust and Seattle City Light will use this grant to continue their efforts to conserve high-quality habitat in the Skagit River system. The two will buy 18 acres of the Skagit River near South Lyman Ferry Road and Cape Horn Road. The work will include reaching out to landowners and evaluating sites. The river is used by Chinook salmon, which is a species listed as threatened with extinction under the federal Endangered Species Act. Seattle will contribute \$150,000 in donated cash. Seattle is requesting an additional \$62,120 from the Puget Sound Acquisition and Requisition grant program that will be considered by the Legislature in 2023. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1595)

# **Skagit River System Cooperative Alder Creek Riparian Restoration**

Skagit River System Cooperative request funds to conduct riparian restoration in the Skagit River Watershed. This project will work with a private landowner to control invasive species and restore native riparian restoration on 17 acres within the riparian buffers of the middle Skagit River and Alder Creek. The primary restoration goal at all sites is to protect and restore functional riparian and floodplain forests. This project addresses the riparian impairment issue, and will lead to functioning riparian zones that provide shade and structure for both spawning adult and rearing juvenile Chinook salmon. The river is used by Chinook, Steelhead, which are listed as threatened with extinction under the federal Endangered Species Act; and Coho, which are a federal species of concern; and Chum, Pink. Visit RCO's online Project Snapshot for more

information and photographs of this project. (22-1454)

## **Skagit River System Cooperative Barnaby Slough Riparian Restoration**

Skagit River System Cooperative request funds to conduct riparian restoration in the Barnaby Reach of the Skagit River. This project will work with major landowners Seattle City Light, Washington Department of Fish and Wildlife, and The Nature Conservancy to protect and restore functional riparian and floodplain forests. This project will restore native vegetation on fifteen acres of riparian buffer along Barnaby Slough, which is part of an extensive network of off-channel habitats associated with the Skagit River. This project addresses the riparian impairment issue, and will lead to functioning riparian zones that provide shade and structure for both spawning adult and rearing juvenile Chinook salmon. The river is used by Chinook, Steelhead, which are listed as threatened with extinction under the federal Endangered Species Act; and Coho, which are a federal species of concern; and Chum. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1452)

## **Skagit River System Cooperative Davis Slough Riparian Restoration**

This project will control invasive species and restore native vegetation on 29 acres associated with Davis Slough within the floodplain of the middle Skagit River. The project includes restoring vegetation along riparian buffers and in a riverine wetland. This project addresses the riparian impairment issue, and will lead to functioning riparian zones that provide shade and structure for both spawning adult and rearing juvenile Chinook salmon. The river is used by Chinook, which are listed as threatened with extinction under the federal Endangered Species Act; and Coho, which are a federal species of concern. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1458)

# **Skagit River System Cooperative Designing Restoration of the Similk Estuary**

The Skagit River System Cooperative will use this grant to develop final designs for a project that will raise a road, build a bridge, and restructure the waterway underneath to improve habitat for salmon. The future project will excavate a tidal channel through a beach berm and road to create a 17-acre pocket estuary in the drained wetland at Similk, build branching tidal channels in the pocket estuary to mimic natural conditions, raise Satterlee Road, and build a bridge over the new tidal channel. Satterlee Road is the

only land access to Fidalgo and Whidbey Islands but sits well below the high-tide elevation and is threatened by pump failure and sea level rise. The county-maintained pumphouse and drainage network will be removed and Satterlee Road will be elevated out of danger. The area is used by Chinook salmon, which is a species listed as threatened with extinction under the federal Endangered Species Act, and by chum and pink salmon. The Skagit River System Cooperative will contribute \$481,000 in a federal grant and a grant from the state Estuary and Salmon Restoration Program. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1465)

## **Skagit Fisheries Enhancement Group Skagit Riparian Restoration**

Skagit Fisheries Enhancement Group is requesting funds to conduct riparian floodplain restoration and planting projects in two Tier 1 areas of the middle and upper Skagit River. The primary restoration goal at both sites is to enhance habitat in Tier 1 priority areas for endangered Chinook salmon, by protecting and restoring functional riparian and floodplain forests. This project works towards that overall goal by establishing native plant communities and conducting and invasive species control. The two project sites are: Ovenell, owned by the US Forest Service, and Young's Slough, privately owned and enrolled in a long-term conservation easement with the Skagit Land Trust. Proposed restoration at both sites includes control of invasive species and new planting in open areas. In addition, natural riparian forest processes will be enhanced at both sites through planting conifers and late successional species along the slough and mainstem (Young's Slough), and side channel (Ovenell) thereby enhancing long term diversity, resilience, and habitat value within at least one site potential tree height in these existing deciduous forests. The river is used by Chinook, Steelhead, which are listed as threatened with extinction under the federal Endangered Species Act; and Coho, which are a federal species of concern; and Chum, Pink. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1460)

# **Upper Skagit Indian Tribe Clark Creek Feasibility**

Develop restoration alternatives, determine feasibility of each alternative, and identify the preferred alternative to maximize habitat improvements in Clark Creek and the nearby Cascade River floodplain, focusing on process-based restoration where possible when working within the built environment. We propose to advance planning for a suite of coordinated actions in Clark Creek and the nearby Cascade River, including reconnection of floodplain adjacent alluvial fan, restored flow in historic floodplain tributary channels, replacement of fish passage barriers at road crossings, and

increased connectivity of side channels, which would benefit tier 1 Chinook habitats and multiple ESA-listed Chinook populations. The river is used by Chinook, Steelhead, which are listed as threatened with extinction under the federal Endangered Species Act; and Coho, which are a federal species of concern; and Chum, Pink Upper Skagit Indian Tribe will contribute \$32,000 in staff labor. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1466)

## **Skagit Fisheries Enhancement Group Planning Restoration of Kennedy Creek**

The Skagit Fisheries Enhancement Group will use this grant to plan a project to open fish passage in Kennedy Creek and develop a planting plan for 5 acres along a quarter-mile of the creek. The creek has been damaged by grazing and the channel was straightened and held in place by a series of weirs, which now are blocking fish passage. The creek is used by Chinook salmon and steelhead trout, both of which are species listed as threatened with extinction under the federal Endangered Species Act, by coho salmon, which is a federal species of concern, and by chum and pink salmon. The Skagit Fisheries Enhancement Group will contribute \$20,350 in a state grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1462)

## Skagit Fisheries Enhancement Group IMW- Bowman Bay Feasibility

This project aims to determine the feasibility of reconnecting a historic tidal wetland with Bowman Bay, specifically if a connection can be naturally maintained. Bowman Bay, a 2,100 foot long pocket beach, is on the southwest shore of Fidalgo Island within Skagit County SFEG, Northwest Straits Foundation (NWSF), and the Skagit MRC have been working together to restore nearshore habitat in this area. In 2015, NWSF removed more than 600-feet of rip-rap from along the beach. Currently, volunteers at restoration projects at Bowman Bay are actively improving survival of juvenile fish, building populations of ESA-listed salmon and bull trout, and providing an essential food source for the endangered Southern Resident orca population. The next step in our overall nearshore restoration strategy for the Park is to re-establish natural hydrologic connectivity with a 3-acre wetland located at the south end of Bowman Bay. The area is currently disconnected from the bay by an elevated trail berm with two to three buried pipes including a small culvert installed under the trail footbridge. This culvert, FD39, under the trail footbridge was assessed as not passible for fish by WDFW. The wetland was historically partially filled, drained, and hatchery ponds with buried outlet pipes were installed. The project proposes to assess the reestablishment of flow and natural connectivity and tidal exchange at the site. An elevated boardwalk would provide

continued trail access. The river is used by Chinook, which are listed as threatened with extinction under the federal Endangered Species Act; and Coho, which are a federal species of concern; and Chum, Pink. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1450)

## **Tulalip Tribes Conserving Snohomish River Floodplain**

The Tulalip Tribes will use this grant to 30 acres in the Skykomish and Pilchuck River watersheds. The long-term goal is to conserve a corridor along the Snohomish and its major tributaries where floodplain and riverine processes are allowed to function naturally. The rivers are used by Chinook salmon and steelhead trout, both of which are species listed as threatened with extinction under the federal Endangered Species Act, by coho salmon, which is a federal species of concern, and by chum and pink salmon. The Tulalip Tribes will contribute \$150,000 in another grant. Tulalip Tribes is requesting an additional \$596,109 from the Puget Sound Acquisition and Requisition grant program that will be considered by the Legislature in 2023. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1140)

## Skagit Fisheries Enhancement Group Planting Riverbanks and Floodplains in the Skagit River Watershed

The Skagit Fisheries Enhancement Group will use this grant to plant the riverbanks and floodplains in the Skagit River watershed. The land is publically owned or in conservation status but has been degraded by past activities. Restoration will include treating invasive species, installing native plantings, and providing 3 years of maintenance to ensure plant survival. Planting trees and bushes along a shoreline helps shade the water, cooling it for fish. The plants also drop branches and leaves into the water, which provide food for the insects salmon eat. Finally, the roots of the plants help keep soil from entering the water, where it can smother fish spawning gravel. The river is used by Chinook salmon and steelhead trout, both of which are species listed as threatened with extinction under the federal Endangered Species Act, by coho salmon, which is a federal species of concern, and by chum and pink salmon. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1459)

## Skagit River System Cooperative Using a Fish Modeling Tool

The Skagit River System Cooperative will use this grant to test a grid-based tool to predict fish abundances outside Barnaby Slough. The cooperative wants to test the tool

to see if the approach is useful in the Skagit River system for helping with the designs of restoration projects. The river is used by coho salmon, which is a federal species of concern. The Skagit River System Cooperative will contribute \$6,314 in another grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1493)

## Skagit River System Cooperative Tidal Network Structure and Chinook salmon Use

The Skagit River System Cooperative will use this grant to evaluate how the structure of a tidal channel affects fish use of the channel. The cooperative will use past and current data collection activities that observe Chinook salmon densities and fish community structure across tidal channel networks. The river is used by Chinook salmon, which is a species listed as threatened with extinction under the federal Endangered Species Act. The Skagit River System Cooperative will contribute \$12,571 in a state grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1494)

# **Skagit River System Cooperative 2022 Collaborative Skagit Riparian Planting B**

Skagit River System Cooperative (SRSC) is requesting funds to conduct riparian restoration in the Skagit River Watershed. This coordinated proposal focuses on riparian and floodplain planting projects and will engage major landowners and partners Seattle City Light and the Skagit Land Trust to address riparian restoration needs in Tier 1 priority areas. his project addresses the riparian impairment issue through invasive weed control and planting native plant species, and will lead to functioning riparian zones that provide shade and structure for both spawning adult and rearing juvenile Chinook salmon. The primary restoration goal at all sites is to protect and restore functional riparian and floodplain forests and address riparian restoration needs (including invasive species) in Tier 1 priority areas. All sites are currently within conservation ownership, and all proposed restoration includes new invasive species treatments and native plantings. This project proposal includes 3-4 years of site maintenance to ensure plant survival. The river is used by Chinook, Steelhead, which are listed as threatened with extinction under the federal Endangered Species Act; and Coho, which are a federal species of concern; and Chum, Pink. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1596)

### **Snohomish Basin Lead Entity**

## **Snohomish County Thomas' Eddy Hydraulic Reconnection**

Snohomish County's Surface Water Management Division proposes to construct restoration elements at Thomas' Eddy on the Snohomish River to improve the quality and quantity of channel edge and off-channel habitat and connectivity between the main channel, floodplain, and associated floodplain waterbodies. The project is located in the Bob Heirman Wildlife Preserve between river mile 16 and 18 of the Snohomish River. In the 1930s, levee construction in this area isolated more than 200 acres of Snohomish River floodplain including approximately 1.5 miles of off/side channel habitat and added nearly a mile of modified and rip-rapped edge to the river. Proposed restoration actions include removal of large portions of levee, side channel connection, edge habitat enhancements, large wood placement, and riparian planting. This proposal is to fund construction of the preferred alternative identified in recent project outreach and planning efforts. Floodplains by Design funded 30% design (attached in PRISM). An ongoing SRFB grant (18-1617) that funded 60% design is nearing completion. Streamflow Restoration grant funds are being sought for final design and permitting. All future phases of this project will continue to involve substantial engagement with the Tulalip Tribes, Snohomish County Parks, neighboring flood control districts, and stakeholders including the Heirman family, fishing community, adjacent farmers, birders, and other park users. The river is used by Chinook, Steelhead, which are listed as threatened with extinction under the federal Endangered Species Act; and Coho, which are a federal species of concern; and Chum, Pink. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1033)

# **Snohomish County Designing Restoration of Shinglebolt Slough**

Snohomish County's Surface Water Management Division will use this grant to design a project that will restore Shinglebolt Slough, increasing the diversity of habitat and the amount of habitat to about three-quarter mile of side channel and up to 900 feet of edge habitat. The future project calls for the excavation of a filled and cut-off side-channel habitat, reconnection and enhancement of a remnant side-channel, placement of logjams, plantings, and treatment of invasive knotweed. Adding logjams to a slough creates places for fish to rest, feed, and hide from predators. It also slows the water, which reduces erosion and allows small rocks to settle to the bottom, creating areas for salmon to spawn. Finally, logjams change the flow of the water, creating riffles and pools, which give salmon more varied habitat. Planting trees and bushes along the

slough banks helps shade the water, cooling it for fish. The plants also drop branches and leaves into the water, which provide food for the insects salmon eat. Finally, the roots of the plants help keep soil from entering the water, where it can smother fish spawning gravel. The slough is used by Chinook salmon and steelhead trout, both of which are species listed as threatened with extinction under the federal Endangered Species Act, and by coho salmon, which is a federal species of concern, and by chum and pink salmon. Snohomish County will contribute \$40,200 in a state grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1034)

#### Tulalip Tribes Conserving and Designing Restoration Projects in the Tualco Valley

The Tulalip Tribes will use this grant to buy 20 acres of Haskel and Riley Sloughs, which flow through the Tualco Valley and have the potential to provide critical spawning and rearing habitat. The Tribe also will complete preliminary designs for projects that will modify a dike in Haskel Slough and increase connectivity and improve water quantity and quality in the two sloughs. The Tualco Valley is at the heart of the Snohomish River basin where the Skykomish and Snoqualmie Rivers join to form the Snohomish River. Both sloughs largely have been disconnected by levees or other modifications, significantly reducing salmon access and habitat. The future work is expected to enhance rearing and resting habitat in the sloughs. The sloughs are used by Chinook salmon and steelhead trout, both of which are species listed as threatened with extinction under the federal Endangered Species Act, by coho salmon, which is a federal species of concern, and by chum and pink salmon. The Tulalip Tribes will contribute \$110,000 in another grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1143)

# **Tulalip Tribes Planning Removal of the Holy Cross Levee**

The Tulalip Tribes will use this grant to complete assessment, designs, outreach, and permits for a project to remove up to 1,000 feet of a levee along the Middle Pilchuck River on land owned by Holy Cross Catholic Church. The levee impedes natural river processes and salmon access to critical off-channel habitat. The Tribe also will install large woody materials, such as logs and tree root wads, to facilitate natural side-channel formation. Adding logs to a river creates places for fish to rest, feed, and hide from predators. It also slows the river, which reduces erosion and allows small rocks to settle to the riverbed, creating areas for salmon to spawn. Finally, logs change the flow of the river, creating riffles and pools, which give salmon more varied habitat. The work will encourage natural river processes such as channel migration and side channel formation

to increase critical spawning and rearing habitat for virtually all salmon species. The river is used by Chinook salmon and steelhead trout, both of which are species listed as threatened with extinction under the federal Endangered Species Act, by coho salmon, which is a federal species of concern, and by chum and pink salmon. The Tulalip Tribes will contribute \$50,000 in another grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1145)

#### **Tulalip Tribes Conserving Snohomish River Floodplain**

The Tulalip Tribes will use this grant to 30 acres in the Skykomish and Pilchuck River watersheds. The long-term goal is to conserve a corridor along the Snohomish and its major tributaries where floodplain and riverine processes are allowed to function naturally. The rivers are used by Chinook salmon and steelhead trout, both of which are species listed as threatened with extinction under the federal Endangered Species Act, by coho salmon, which is a federal species of concern, and by chum and pink salmon. The Tulalip Tribes will contribute \$150,000 in another grant. Tulalip Tribes is requesting an additional \$596,109 from the Puget Sound Acquisition and Requisition grant program that will be considered by the Legislature in 2023. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1140)

#### **Snohomish County Public Utility District No. 1 Sultan River Floodplain Restoration Const.**

This habitat restoration project will use a combination of physical interventions and flow management to re-engage and restore select portions of the Sultan River floodplain to provide salmonid rearing habitat within an expanded side channel network. Of the 16 miles of river downstream of Culmback Dam, approximately 13 miles (80%), lies within a confined canyon. The lowermost 3 miles, just upstream of the confluence with the Skykomish River, is an alluvial floodplain. This area, near the town of Sultan, includes a combination of residential properties, park lands, and agricultural areas. The proposed project will redistribute flow into the floodplain environment within park and agricultural areas and establish a defined path for the return of these flows to the river. The activated, more frequently watered off-channel habitat will provide juvenile salmonid rearing habitat and refugia during high flow conditions. This is an expansion of an existing side channel network that currently provides prime rearing habitat. In addition to the redistribution of flows laterally from the main channel, the physical interventions will provide structural complexity and hydraulic diversity in the project area. The project will also provide increased diversity in spawning habitat important for building resiliency in existing and future salmonid populations. Included in this project is the removal of

invasive weeds and installation of riparian plantings along this new channel. The river is used by Chinook, Steelhead, which are listed as threatened with extinction under the federal Endangered Species Act; and Coho, which are a federal species of concern; and Chum, Pink. Snohomish County Public Utility District No. 1 will contribute \$153,000 in a local grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1186)

#### **Tulalip Tribes Pilchuck Armoring Removal Planning**

The Tulalip Tribes will work with a private landowner and the City of Snohomish to begin the design phase (Phase I) of the removal of armoring along the Pilchuck River between RM 25 and 26 associated with an abandoned water transmission main. This proposal is to conduct a geomorphic reach scale assessment, generate an alternative designs concepts and work with the landowner to complete preliminary design and associated permitting for the preferred alternative for removal of the armoring along the property. When all phases of this restoration have been implemented, it is expected to result in the removal or softening of approximately 600 - 2000 linear feet of bank armoring and associated waterline on the Pilchuck River. The project is downstream of the former City of Snohomish water treatment facility associated with a water transmission main recently made obsolete with the removal of the Pilchuck River Diversion Dam. This bank armoring is within the Middle Pilchuck sub-basin, which has been prioritized for as a mainstem primary restoration sub-basin strategy group (Snohomish Basin Recovery Plan, 2005). Restoration of functioning riparian and floodplain conditions on this property will aid in achieving salmon recovery goals. Armoring removal and in-stream restoration will increase connectivity to onsite wetlands and off-channel habitat, increase flood storage, improve riparian conditions, improve in-stream habitat, and improve water quality. The river is used by Chinook, Steelhead, which are listed as threatened with extinction under the federal Endangered Species Act; and Coho, which are a federal species of concern; and Chum, Pink. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1138)

#### **King County Lower Miller Floodplain Restoration Design**

King County will use this grant to develop a preliminary plan for restoring the lowermost mile of the Miller River, its floodplain, and its confluence with the Skykomish River to improve salmon migration and habitat. This plan will include the removal of about 900 feet of Old Cascade highway and a small culvert over Spree Creek, as well as the

removal or reconfiguration of about 1,400 feet of existing flood control facilities, the removal of invasive plant species, the replanting of native vegetation and the placement of woody materials in the channel. Planting trees and bushes along a shoreline helps shade the water, cooling it for fish. The plants also drop branches and leaves into the water, which provide food for the insects salmon eat. Finally, the roots of the plants help keep soil from entering the water, where it can smother fish spawning gravel. Adding woody materials like logs to a stream creates places for fish to rest, feed, and hide from predators. It also slows the river, which reduces erosion and allows small rocks to settle to the riverbed, creating areas for salmon to spawn. Finally, logs change the flow of the river, creating riffles and pools, which give salmon more varied habitat. The river is used by Chinook salmon and steelhead trout, both of which are listed as threatened with extinction under the federal Endangered Species Act, by coho salmon, which is a federal species of concern, and by pink salmon. King County will contribute \$99,000 in cash. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1149)

#### **Tulalip Tribes Peoples Creek Channel Restoration Design**

This project involves planning, permitting, and outreach for the replacement/removal of two stream crossings, and the realignment/re-meandering of approximately 1,100 feet of stream channel along with riparian planting and the remediation of ongoing accumulation of sediments in this reach. An existing flood retention berm is present on the south side of the stream and is designed to remediate flood risks to approximately 900 linear feet of adjacent agricultural land which is abutting this project area to the North and South. This flood retention berm will be modified and repositioned further to the south to provide additional room for a reconstructed channel with added habitat elements including LWD and riparian plantings. The goal of the project is to reconnect all available upstream anadromous habitat through the removal of 2 fish passage barrier culverts, enhancement of available habitat quantity/quality, and enhancement of water quality for salmon including coho and juvenile chinook. This project will also aim to address ongoing sediment deposition and flood risk concerns posed by the landowner in this location that will help with stream function resiliency over the long term to mutually benefit fish use while allowing agricultural benefits to remain on adjacent properties. The river is used by Chinook, Steelhead, which are listed as threatened with extinction under the federal Endangered Species Act; and Coho, which are a federal species of concern; and Chum, Pink. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1139)

# Adopt A Stream Foundation Woods Creek RR Bridge Removal Construction

This request is for the final phase of this project in which a defunct creosote railroad (RR) bridge will be removed and the site will be restored. This project is a result of two prior RCO grants 16-1639 and 20-1135 in which cultural resources, permitting, and final designs were completed. This project will remove a wooden creosote RR trestle that spans lower Woods Cr. and restore the surrounding areas through the installation of LWD and riparian vegetation as specified in the attached Chinook Engineering designs. The abandoned railroad bridge contains over 60 creosote-treated log pilings, creosotetreated logs threaten the fitness of salmonids, particularly at the egg and juvenile lifehistory stage by leaching highly toxic polycyclic aromatic hydrocarbons (PAHs). The RR bridge degrades water quality, disrupts stream processes, and creates a fish passage barrier when large quantities of debris rack up on its pilings. Lower Woods Cr. is within the Skykomish River floodplain and provides crucial off-channel rearing habitat for juvenile Chinook and other salmonids from both Woods Cr. and the Skykomish River. Chinook salmon use is documented in lower Woods Cr. for spawning as well as rearing. According to the Woods Cr. Habitat Conditions Report (2013), fish production in this reach is limited by low LWD volumes and frequency. Wood that regularly racks up on the bridge is periodically removed, often entirely from the system, only to exacerbate the downstream lack of LWD. The river is used by Chinook, Steelhead, which are listed as threatened with extinction under the federal Endangered Species Act; and Coho, which are a federal species of concern; and Chum, Pink. Adopt A Stream Foundation will contribute \$115,250 in donations of equipment, materials, and services. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1135)

### **Snohomish Conservation District Planting the Banks of Woods Creek**

Restoration project: SCD will complete riparian and wetland restoration planting of at least 10 acres in priority reaches of sub-basin on private property. Landowner willingness already obtained for at least 3 acres of planting. All sites will have planting plans created before planting. The Snohomish River Basin Salmon Conservation Plan identified restoring hydrologic and sediment processes (for peak flow and base flow) through restoring wetland functions and values, and reforestation the highest priority action within West Fork Woods Creek (Rural Streams - Primary Restoration sub-basin strategy group, page 11-57 & 11-58). In 2013, SCD began a large-scale riparian reforestation initiative in the Woods Creek watershed to improve salmon habitat. To prioritize this effort, the District compiled and collected water temperature data from 2009-2012 and used land-cover data to develop a Woods Creek Action Plan for Riparian

Restoration. The Plan sets a goal of 80% forest cover within 50 feet of the mainstem and quantifies this target at 45 acres within identified priority reaches. Since 2013, SCD has utilized several funidng sources to establish riparian buffers along Woods Creek and its tributaries on private property. With this funding request, the District intends to continue this effort of riparian and wetland buffer establishment. SCD has pending approval from the Washington Department of Ecology for grant funding to match funds with this proposal. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1148)

#### Stillaguamish River Salmon Recovery Co-Lead Entity

#### **Stillaguamish Tribe of Indians Restoring Zis a Ba**

The Stillaguamish Tribe of Indians will use this grant to to remove eight buildings and utilities, set back a dike, and excavate channels to reconnect wetlands on more than 230 acres between Hatt Slough and the Old Stillaguamish River. The work will restore estuary rearing habit for salmon, especially Chinook salmon, which are a critical source of food for endangered Southern Resident killer whales. Historically, the land, which is called zis a ba and owned by the Stillaguamish Tribe, was a complex mosaic of brackish wetlands that helped support the abundant wildlife upon which local tribes depended. In the late 1800s, the land was diked and farmed. Completing this project has the potential to bring the restored area of the Stillaguamish delta to more than 700 acres. This is an important project for the Whidbey basin because tidal wetland restoration opportunities of this scale are rare. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1068)

#### The Nature Conservancy Port Susan Bay Restoration for Resiliency 2022

The Nature Conservancy (TNC) will complete Phase 2 construction of the Port Susan Bay (PSB) Restoration for Resiliency project to improve functionality of key ecological processes on 115 acres of estuarine tidal marsh in the Stillaguamish Delta. Work includes excavating distributary channels, blind tidal channels and outlets, removing remnant dike material, and creating areas of mid and high marsh. Project goals are to increase critically-located habitat area, connectivity and diversity, improve tidal exchange, and expand freshwater distribution and residence time. Increasing functional estuary habitat will expand juvenile rearing capacity for several salmon species, including ESA-listed Chinook. TNC is exploring the use of explosives, a novel approach, to create a portion of the channel network in the interest of reducing costs and site

impacts. If effective, blasting will be paired with traditional excavation in the restoration area. This project expands upon the 35 acres restored in Phase 1 (previous phase) and is key to work across the watershed: it ensures that the value of upstream salmon recovery projects is not lost at the estuary due to a habitat bottleneck. Similarly, these restoration actions at PSB are vital to address before planned hydrologic connection with adjacent restoration currently under development. Overall, it is part of an integrated effort by the Sustainable Lands Strategy (SLS) to advance fish, flood, and farm benefits in the watershed. The river is used by Chinook, Steelhead, which are listed as threatened with extinction under the federal Endangered Species Act; and Coho, which are a federal species of concern. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1063)

### Stillaguamish Tribe of Indians Acquiring North Fork Stillaguamish Floodplain

The Stillaguamish Tribe of Indians will purchase and protect at least five properties encompassing more than 100 acres of riparian and floodplain habitat along more than 2.7 miles of North Fork Stillaguamish River, focusing on areas prioritized in the 2020 Stillaguamish Acquisition Strategy. The proposed project targets properties from the Cicero bridge, as far upstream as Fortson, east of Darrington. The number of acres protected will depend on the appraised property values and landowner willingness to sell. This project will connect previously protected parcels to advance the long-term effort of restoring a corridor of lands along Chinook bearing waters from spawning grounds to tidelands. The goal of the project is both to protect ecosystem processes and allow for additional large wood, riparian, and floodplain restoration projects in the future. This project also works incrementally towards the floodplain, riparian, large wood, and acquisition targets in the 2005 Stillaguamish Chinook Recovery Plan by providing several locations for future engineered log jam installations and riparian planting. The river is used by Chinook, Steelhead, which are listed as threatened with extinction under the federal Endangered Species Act; and Coho, which are a federal species of concern; and Chum, Pink. Stillaguamish Tribe of Indians will contribute \$294,000 in another grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1069)

# Snohomish County Restoring Jim and Vos Creeks

Snohomish County's Surface Water Management Division will use this grant to place logjams in Jim Creek, east of Arlington, and smaller wood structures in Vos Creek, a tributary that delivers cool water to the reach. Adding logjams to a creek creates places

for fish to rest, feed, and hide from predators. It also slows the water, which reduces erosion and allows small rocks to settle to the bottom, creating areas for salmon to spawn. Finally, logjams change the flow of the water, creating riffles and pools, which give salmon more varied habitat. In addition, the County will plant native trees and shrubs on 3.7 acres to establish a buffer along Jim Creek. Planting trees and bushes along a creek bank helps shade the water, cooling it for fish. The plants also drop branches and leaves into the water, which provide food for the insects salmon eat. Finally, the roots of the plants help keep soil from entering the water, where it can smother fish spawning gravel. The project is designed to improve the quantity and quality of rearing and spawning habitat for Chinook salmon and steelhead trout, both of which are species listed as threatened with extinction under the federal Endangered Species Act, as well as for other salmon species. Snohomish County will contribute \$89,125 in a state grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1031)

# Snohomish County Restoring Chatham Acres along the North Fork Stillaguamish River

Snohomish County's Surface Water Management Division will use this grant to install logiams and plant the banks of the North Fork Stillaguamish River at its 27-acre Chatham Acres property, to improve habitat for salmon. The property is on the inside of a large meander bend on the North Fork Stillaguamish River between Oso and Darrington. A 1,500-foot-long side channel flows across the meander bend. The County will place logiams in the river's side channel and along the river's edge, remove fill at the abandoned road at the side channel to promote better floodplain connectivity, and plant native trees along the water and in the forested floodplain. Adding logiams to a river creates places for fish to rest, feed, and hide from predators. It also slows the river, which reduces erosion and allows small rocks to settle to the riverbed, creating areas for salmon to spawn. Finally, logjams change the flow of the river, creating riffles and pools, which give salmon more varied habitat. Planting trees and bushes along a riverbank helps shade the water, cooling it for fish. The plants also drop branches and leaves into the water, which provide food for the insects salmon eat. Finally, the roots of the plants help keep soil from entering the water, where it can smother fish spawning gravel. The river is used by Chinook salmon and steelhead trout, both of which are species listed as threatened with extinction under the federal Endangered Species Act, by coho salmon, which is a federal species of concern, and by chum and pink salmon. Snohomish County will contribute \$88,250 in staff labor. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1030)

#### West Sound Partners for Ecosystem Recovery

#### **Great Peninsula Conservancy Protecting the Crabapple-Carpenter Creek Estuary**

The Great Peninsula Conservancy will use this grant to permanently protect 50 acres of habitat and forest in the Crabapple-Carpenter Creek estuary that supports chum, cutthroat, and coho runs and migrating juvenile Chinook salmon. Once purchased, the Conservancy will enhance habitat by placing large woody material in the river and planting plants along the shoreline. Adding logs to a creek creates places for fish to rest, feed, and hide from predators. It also slows the creek, which reduces erosion and allows small rocks to settle to the riverbed, creating areas for salmon to spawn. Finally, logs change the flow of the river, creating riffles and pools, which give salmon more varied habitat. Planting trees and bushes along a shoreline helps shade the water, cooling it for fish. The plants also drop branches and leaves into the water, which provide food for the insects salmon eat. Finally, the roots of the plants help keep soil from entering the water, where it can smother fish spawning gravel. The creek is used by Chinook salmon and chum salmon, both of which are listed as threatened with extinction under the federal Endangered Species Act, by coho salmon, which is a federal species of concern, and by cutthroat trout. The Great Peninsula Conservancy will contribute \$1,042,200 in a grant from the state Estuary and Salmon Restoration Program. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1131)

#### Wild Fish Conservancy Restoring Finn Creek

The Wild Fish Conservancy will use this grant to design, permit, and construct a restoration project to improve habitat in Finn Creek, near Hansville. The conservancy plans to restore the natural processes of the creek by building a berm around the park, removing two culverts, placing large woody materials in the creek, and planting native vegetation along the creekbanks. The work will meet community desires to reduce flooding by recreating a barrier embayment. Removing the culverts will improve fish migration. Culverts are pipes or other structures that carry water under roads and often block fish migration because they are too steep, too tall, or too small to allow fish to pass through easily. Adding woody materials like logs to a creek creates places for fish to rest, feed, and hide from predators. It also slows the creek, which reduces erosion and allows small rocks to settle to the riverbed, creating areas for salmon to spawn. Finally, logs change the flow of the creek, creating riffles and pools, which give salmon more varied habitat. Planting trees and bushes along the creekbanks will help shade the water, cooling it for fish. The plants also drop branches and leaves into the water, which

provide food for the insects salmon eat. Finally, the roots of the plants help keep soil from entering the water, where it can smother fish spawning gravel. The creek is used by Chinook and chum salmon, both of which are species listed as threatened with extinction under the federal Endangered Species Act, and by coho salmon, which is a federal species of concern. The Wild Fish Conservancy will contribute \$285,020 in a grant from the state Estuary and Salmon Restoration Program. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1098)

#### Mid Sound Fisheries Enhancement Group Restoring Rose Point Embayment

The Mid Sound Fisheries Enhancement Group will use this grant to restore a historic embayment connected to a stream at Rose Point near Eglon to improve habitat for migrating salmon. The enhancement group will remove 770 feet of bulkhead and berms and fill to restore about 2 acres of salt marsh. The enhancement group also will recreate two barrier spits, reconnect the stream to the salt marsh, replace an undersized bridge that blocks fish passage, restore about 500 feet of channelized stream upstream of the bridge, and replant native vegetation along the stream and shoreline next to the restored estuary. Planting trees and bushes along a shoreline helps shade the water, cooling it for fish. The plants also drop branches and leaves into the water, which provide food for the insects salmon eat. Finally, the roots of the plants help keep soil from entering the water, where it can smother fish spawning gravel. The stream is used by Chinook and chum salmon and steelhead trout, all of which are species listed as threatened with extinction under the federal Endangered Species Act, and by coho salmon, which is a federal species of concern. The Mid Sound Fisheries Enhancement Group will contribute \$251,000 in a federal grant, a grant from the state Estuary and Salmon Restoration Program, another grant, and donated labor. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1100)

# **Great Peninsula Conservancy Salmonberry Creek Protection**

The Salmonberry Creek Protection project will permanently protect ~85 acres of prime salmon habitat on Salmonberry Creek within the Curley Creek watershed. The primary goal of the project is protection of over a mile of Salmonberry Creek and tributaries, which are low gradient reaches heavily utilized by coho for spawning and rearing, and designated critical habitat of Puget Sound steelhead. Salmonberry Creek is a critical component of the Curley Creek watershed and protection and future restoration of the site will have watershed-level benefits. Building on existing adjacent easements and restoration efforts, Great Peninsula Conservancy will purchase a ~85 acre conservation

easement. The main target property is under single ownership with a supportive landowner who is willing to bargain sale 40% of the value of the easement. Immediate benefits include protection of a half mile of Salmonberry Creek and ~3,000 of high-quality tributaries, mature riparian forest and extinguishment of 6 development rights adjacent to the riparian areas. Protection also opens the opportunity for future restoration of the half mile of Salmonberry creek currently confined to a straight ditch, and reconnection to ~25 acres of floodplain. Protection and restoration of the project has watershed-level benefits to flow regimes through water storage, reducing peak winter floods, improving summer flow and improving prime coho spawning and rearing habitat. The river is used by Steelhead, which are listed as threatened with extinction under the federal Endangered Species Act; and Coho, which are a federal species of concern. Great Peninsula Conservancy will contribute \$320,000 in donated cash. Visit RCO's online Project Snapshot for more information and photographs of this project.

#### Mid Sound Fisheries Enhancement Group Fletcher Bay Road Fish Passage Restoration

Mid Sound Fisheries Enhancement Group proposes to complete final designs to replace the Fletcher Bay Rd NE culvert on Springbrook Creek with a bridge and restore approximately 400' of stream channel (including the section of creek that is currently confined within the culvert). The project is located on Bainbridge Island. The crossing under Fletcher Bay Road NE is a partial fish barrier that includes a series of concrete weirs and bank armoring upstream and downstream of the culvert, and an undersized (5 ft. wide x 100 ft. long) steel culvert. Restoration of fish passage and in-stream habitat conditions at this location is the highest-priority restoration project in the watershed. Conceptual designs for the culvert replacement and stream restoration were developed by Wild Fish Conservancy as part of the Springbrook Creek Watershed Assessment (2018). Preliminary and final designs are currently being developed using SRFB funding from 21-1058, in coordination with a partner advisory team. The goal of the project is to restore fish passage and in-stream habitat conditions low in the Springbrook Creek watershed to benefit salmonid populations and improve the capacity of the stream to accommodate hydrologic changes associated with climate change. The project supports ESA threatened Puget Sound steelhead, coho, chum, and cutthroat trout, and may also benefit non-natal juvenile Chinook salmon rearing in Fletcher Bay. This project is a cost increase to 21-1058. The river is used by Steelhead, which are listed as threatened with extinction under the federal Endangered Species Act; and Coho, which are a federal species of concern; and Chum. Mid-Puget Sound Fisheries Enhancement Group will contribute \$23,700 in donations of labor and services. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1121)

# **Bainbridge Island Land Trust Barnabee Farms Springbrook Creek Restoration**

The Barnabee Farm Springbrook Stream Restoration project will result in a final engineered design, permitting and removal of a 67% fish passage barrier undersized culvert and over 80 linear feet of rock armor on Springbrook Creek, a stream federally designated as critical habitat for ESA threated Puget Sound steelhead. A bridge crossing will be installed, root wads will be installed along the bank and native vegetation will be installed along the stream where armor is removed. The Barnabee Farm project takes place on private land at stream mile 0.39. It was identified in the Springbrook Creek Watershed Assessment (SCWA) (Project 14-1547) as the second highest priority stream restoration project. It will provide fish access to over 3.76 miles of upstream fish habitat, widen this section of channel to reflect natural stream conditions, improve connectivity between intact stream reaches adjacent to the existing undersized culvert, allow for the ability for the stream to withstand anticipated higher flows anticipated in a changing climate, and allow for wood and sediment transport. Using the conceptual design developed by Wild Fish Conservancy (WFC) as part of the SCWA and updated May 2022, a final design will be developed with the landowner, WFC, and other stakeholders, permitting will be completed, a construction bid package will be developed, and construction will be implemented. Project success monitoring will take place for up to three years. The river is used by Steelhead, which are listed as threatened with extinction under the federal Endangered Species Act; and Coho, which are a federal species of concern; and Chum. Bainbridge Island Land Trust will contribute \$175,109 in a grant from the Fish Barrier Removal Board Grant Program, donation of labor, and staff labor. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1319)

## Washington Department of Fish and Wildlife McNeil Island-Floyds Cove Phase 1

The department will use this grant to complete final designs to restore tidal exchange and reconnect a pocket estuary (Floyds Cove) and coastal stream (Bodley Cr) on McNeil Island, implement the project on Floyds Cove, and complete initial implementation tasks at Bodley Cr. McNeil Island offers a unique opportunity to protect and restore habitat in a large setting within South Puget Sound. Much of the marine shoreline is in a natural state, retaining high quality due to limited public access. However, development related to over 100 yrs as a federal/state penitentiary (closed 2011) resulted in some locations being highly impacted and relict debris along the shorelines. WDFW and Dept. of Natural Resources are working with Dept. of Corrections to restore the shoreline to natural state, while retaining the function of the perimeter road for island operations.

The roadway bisects Bodley Cr and Floyds Cove, disconnecting impounded wetlands from tidal influence by undersized culverts, which are now failing. At Floyd Cove, WDFW will replace the culvert with a 60' bridge to restore full tidal exchange and fish passage, remove shore armor and debris, and install beach nourishment. At Bodley Cr, WDFW will remove the standpipe to lower the impounded pond and install beaver dam analogs. WDFW will replace the culvert at Bodley Cr in a later phase. This project will benefit juvenile salmonids, including Chinook, forage fish and other estuarine fish and wildlife. The river is used by Chinook, Steelhead, which are listed as threatened with extinction under the federal Endangered Species Act; and Coho, which are a federal species of concern; and Chum, Pink. Department of Fish and Wildlife will contribute \$634,000 in a grant from the state Estuary and Salmon Restoration Program, and donation of services. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1345)

#### Mid Sound Fisheries Enhancement Group Skunk Bay Armor Removal

Mid Sound Fisheries Enhancement Group propose to remove 60 feet of concrete groin, three creosoted wood piles, and scattered concrete debris to restore sediment transport processes and nearshore habitat along a high-priority segment of shoreline on the northern Kitsap Peninsula. A small amount of beach nourishment will be needed following the debris removal. The project is construction-ready, with the feasibility report, site plan, and permitting completed with support from Shore Friendly Kitsap. The project will improve nearshore habitat conditions for out-migrating juvenile Chinook, steelhead, and coho salmon, forage fish, and eelgrass beds. The river is used by Chinook, Steelhead, which are listed as threatened with extinction under the federal Endangered Species Act; and Coho, which are a federal species of concern. Mid-Puget Sound Fisheries Enhancement Group will contribute \$15,000 in a grant from the state Estuary and Salmon Restoration Program, and donations of cash. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1120)

#### **Kitsap Conservation District Riparian Restoration Projects**

The Kitsap Conservation District's stream restoration program has restored stream and riparian areas in Chico, Curley, Blackjack, Clear, Dogfish and Olalla watersheds through the Backyard Habitat program, and other state funded grants. A focus of these projects is to create healthy riparian areas and forest cover in these high priority watersheds to help increase salmon and steelhead populations. Previously, KCD has utilized the Mission Creek Department of Correction Women's Crew annually to maintain these sites

and restore new sites. However, Covid has put a stop to this program and KCD is unable to achieve site maintenance and stewardship without a labor source. This funding will be utilized to obtain a Washington Conservation Corps Crew to maintain restored sites and conduct weed removal and planting on streamside areas. KCD's projects have addressed many habitat concerns, like removing fish barriers, bank armoring and garbage removal, as well as weed removal and riparian restoration. Maintenance of these projects will ensure longevity of the projects and protect past investments. Continued assistance with weed control, plant replacement, and other actions, will be conducted to achieve intended long-term site conditions and habitat goals. Noxious and invasive weeds continue to threaten plant establishment in our project areas. Deer, beaver and vole browse are also threats to plant health on some sites and tree protectors are needed. The river is used by Steelhead, which are listed as threatened with extinction under the federal Endangered Species Act; and Coho, which are a federal species of concern; and Chum. Kitsap Conservation District will contribute \$42,756 in a local grant and staff labor. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1111)

#### Pierce Conservation District Henderson Bay Armor Removal Design

Pierce Conservation District proposes to complete preliminary restoration designs for shoreline armor removal on Henderson Bay in Pierce County. The project will benefit forage fish and salmonids using the nearshore. Removal of up to 700 feet of armor will restore natural shoreline sediment processes by allowing the feeder bluff to erode over time and contribute sediment to the beach. This will also reconnect existing mature marine riparian vegetation, providing shade and organic debris to the nearshore. The project site is a large, forested residential parcel under a Conservation Easement with Great Peninsula Conservancy and registered in the Pierce County Open Space Program (RCW 84.34 CURRENT USE). There is approximately 700 feet of shoreline armor of various materials, including creosote-treated wood, concrete, and rock on the shoreline, which the landowners are willing to remove. We expect at least 500 feet can be removed and returned to natural shoreline with no impact to the residence on the property. Some soft shore protection may be needed immediately waterward of the residence. This design phase will include site assessments and preliminary design of any soft shore protection and return walls needed to protect the residence and adjacent armor. The river is used by Chinook, which are listed as threatened with extinction under the federal Endangered Species Act. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1126)

# Mid Sound Fisheries Enhancement Group Long Lake Predation Assessment

Mid Sound Fisheries Enhancement Group (MSFEG) proposes to implement Phase-1 of a non-native fish predation study. Phase-1 will assess the feasibility of a smolt trapping technique to estimate juvenile Coho and Steelhead abundance in the Curley Cr Watershed (Kitsap County). With a proven means to provide unbiased estimates of salmonid abundance, MSFEG and partners will later develop a study plan and conduct a Phase-2 assessment of bass predation effects in the watershed that likely limit the recovery of Coho and Steelhead populations. The project goal is to inform management actions to minimize non-native fish predation effects from state-managed bass fisheries, protect the abundance and diversity of wild salmonid populations, and improve the effectiveness of habitat restoration activities for recovery of Puget Sound salmon fisheries. In 2017, the Curley Cr Watershed Assessment, Protection, and Restoration Plan (Suguamish Tribe 2017) recommended an updated assessment of bass predation effects in Long Lake (Bonar et al. 2004), along with management actions to reduce the abundance of primary non-native predators. This was followed by the Puget Sound Steelhead East Kitsap DIP Recovery Plan that identified non-native fish species as a priority pressure to juvenile salmonids with High to Very High severity (Suguamish Tribe 2020). In 2021, partners from 10 organizations ranked predation issues in Long Lake as one of the highest priorities of the Watershed Assessment recommendations. The river is used by Steelhead, which are listed as threatened with extinction under the federal Endangered Species Act; and Coho, which are a federal species of concern. Mid-Puget Sound Fisheries Enhancement Group will contribute \$13,500 in a federal grant and donated services. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1112)

#### WRIA 1 Watershed Management Board

# **Nooksack Indian Tribe Restoring the South Fork Nooksack River's Homesteader Reach**

The Nooksack Indian Tribe will use this grant to build logjams in 0.4 mile of the South Fork Nooksack River at Homesteader Reach, north of Acme. Adding logjams to a river creates places for fish to rest, feed, and hide from predators. It also slows the river, which reduces erosion and allows small rocks to settle to the riverbed, creating areas for salmon to spawn. Finally, logjams change the flow of the river, creating riffles and pools, which give salmon more varied habitat. The Tribe also will grade the floodplain channel along the left bank. In summer 2021, more than 2,500 Chinook salmon died on the spawning grounds before spawning. Scientists believe the deaths were caused by water

that was too warm and too low and by degraded habitat. This reach is one of the few remaining high-priority areas in the lower South Fork for which restoration is needed. It is heavily used by Chinook returning to the Skookum hatchery upstream. The project will reduce risk of a future fish deaths by creating deep, cold pools. The river is used by chum salmon and steelhead and bull trout, all of which are species listed as threatened with extinction under the federal Endangered Species Act, by coho salmon, which is a federal species of concern, by cutthroat trout, and by sockeye and pink salmon. The Nooksack Indian Tribe will contribute \$1.1 million in a federal grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1358)

#### Nooksack Indian Tribe Designing Restoration of the South Fork Nooksack River

The Nooksack Indian Tribe will use this grant to analyze and complete near final designs for restoration of 1.9 miles of the South Fork Nooksack River's Hardscrabble-Todd reach near Van Zandt. In summer 2021, more than 2,500 Chinook salmon died on the spawning grounds before spawning. Scientists believe the deaths were caused by water that was too warm and too low and by degraded habitat. This reach has the lowest number of cold, deep pools of any reach in the lower South Fork. The reach is expected to be heavily used by Chinook returning to the Skookum hatchery as part of the South Fork Nooksack Chinook population-rebuilding program. The project will reduce risk of a future fish deaths by designing restoration actions that will promote formation of deep, complex pools. The river is used by Chinook salmon and steelhead trout, both of which are species listed as threatened with extinction under the federal Endangered Species Act; by coho salmon, which is a federal species of concern; by chum, sockeye, and pink salmon; and by cutthroat trout. The Nooksack Indian Tribe will contribute \$52,550 in a federal grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1357)

## **Lummi Nation Restoring the Porter Creek Reach of the Middle Fork Nooksack River**

The Lummi Nation will use this grant to restore the Middle Fork Nooksack River, north of Mosquito Lake Road in Whatcom County. The Tribe will build 27 logjams and 4 flood fence post arrays, excavate 1,040 feet of side channels, and plant 2.5 acres along the river and its tributary. Adding logjams to a river creates places for fish to rest, feed, and hide from predators. It also slows the river, which reduces erosion and allows small rocks to settle to the riverbed, creating areas for salmon to spawn. Finally, logs change the flow of the river, creating riffles and pools, which give salmon more varied habitat. Planting trees and bushes along a river helps shade the water, cooling it for fish. The

plants also drop branches and leaves into the water, which provide food for the insects salmon eat. Finally, the roots of the plants help keep soil from entering the water, where it can smother fish spawning gravel. The river is used by Chinook salmon and steelhead trout, both of which are species listed as threatened with extinction under the federal Endangered Species Act, by coho salmon, which is a federal species of concern, and by chum, sockeye, and pink salmon as well as Southern Resident orca. The Lummi Nation will contribute more than \$2 million in a federal grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1366)

#### Nooksack Indian Tribe South Fork Nooksack Fish (Ts'éq) Camp Restoration

The Nooksack Tribe will restore 2.4 miles of mainstem riverine habitat and reconnect associated floodplain habitat in the South Fork (SF) Nooksack River Fish Camp Reach (RM 7.3-9.7), near Acme, in Whatcom County. Restoration involves construction of 9 large log jams, 17 small log jams, and 18 woody bank structures, as well as removal of over 4500 ft of riprap bank hardening and 3000 ft of revetment. The goal of the project is to restore upstream migration, holding, spawning and rearing habitat to improve abundance and productivity of SF Nooksack Early Chinook, which is essential for recovery of the ESA-listed Puget Sound Chinook ESU. In summer 2021, over 2500 Chinook died on the spawning grounds before they could spawn due to high temperatures, low flows and degraded habitat. The Fish Camp reach overlaps a zone of groundwater discharge and is one of the few remaining high priority areas in the lower SF for which restoration is needed. It is heavily used by Chinook returning to the Skookum hatchery upstream. The project will reduce the risk of a future Chinook mortality event by forming deep, complex pools that will provide temperature refuge for holding and rearing Chinook. Restoration will also benefit ESA-listed steelhead and bull trout; coho, chum, riverine sockeye, and pink salmon; and cutthroat trout. The project builds on previous design work funded by the SRFB and represents an important opportunity to integrate habitat restoration and flood risk reduction. The river is used by Chinook, Steelhead, which are listed as threatened with extinction under the federal Endangered Species Act; and Coho, which are a federal species of concern; and Chum, Pink Nooksack Indian Tribe will contribute \$1,760,789 in a federal grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1360)

## **Lummi Nation South Fork Nooksack River Cavanaugh Island Phase 2 Restoration**

Lummi Nation will restore instream and side channel habitat in the South Fork (SF) Nooksack River, west of Hwy 9, in Skagit County (RM 17-16.5). The goal is to restore SF

Nooksack early Chinook spawning, rearing and holding habitat to recover selfsustaining runs to harvestable levels by addressing limiting factors of temperature, habitat diversity, and lack of key habitat. The project will use engineered log jams (ELJs) modeled after historical SF log jams to restore geomorphic and habitat-forming processes. Funding will be used to construct 13 ELJs, 1 channel-spanning ELJ, 4 habitat structures, and plant 7.3 riparian acres. Similar to other successful Upper SF projects completed by Lummi Nation, the project will combat incision, aggrade the channel, encourage split flows and anabranching channel form, increase side channel habitat and floodplain connectivity, enhance a cool water tributary channel, create thermal refugia and low flow pool habitat, and provide shade and wood recruitment. The WRIA 1 Recovery Plan identified SF early Chinook as one of the highest priority populations; it is essential for recovery of the threatened Puget Sound ESU. The project enhances benefits of the SF Chinook Rescue Program, a native broodstock hatchery program supporting recovery, and addresses a temperature TMDL on a river threatened by climate change. The project will also benefit ESA-listed steelhead and bull trout; coho, sockeye, and pink salmon; and the Southern Resident Killer Whale. The river is used by Chinook, Steelhead, which are listed as threatened with extinction under the federal Endangered Species Act; and Coho, which are a federal species of concern; and Chum, Pink. Lummi Nation will contribute \$167,800 in a federal grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1364)

#### Lummi Nation South Fork Nooksack Camp 18 Phase 2

Lummi Nation will restore instream and side channel habitat in the South Fork (SF) Nooksack River, north of Lyman, in Skagit County (RM 21.4-22.0). The goal is to restore SF Nooksack early Chinook spawning, rearing and holding habitat to recover self-sustaining runs to harvestable levels by addressing limiting factors of temperature, habitat diversity, and lack of key habitat. The project will use engineered log jams (ELJs) modeled after historical SF logjams to restore geomorphic and habitat-forming processes. Funding will be used to construct 15 ELJs, 2 channel-spanning ELJs, 37 ballasted snags and plant 22 riparian acres. Similar to other successful Upper SF projects, the project will increase key habitat quantity and quality through primary and secondary pool creation, create thermal refugia and low flow pool habitat, combat incision, aggrade the channel, encourage an anabranching channel form, increase side channel habitat and floodplain connectivity and provide shade and wood recruitment. The WRIA 1 Recovery Plan identified SF early Chinook as one of the highest priority populations essential for recovery of the threatened Puget Sound ESU. The project enhances benefits of the SF Chinook Rescue Program, a native broodstock hatchery

program supporting recovery, and addresses a temperature TMDL on a river threatened by climate change. The project will also benefit ESA-listed steelhead and bull trout; coho, sockeye, and pink salmon; and the Southern Resident Killer Whale. The river is used by Chinook, Steelhead, which are listed as threatened with extinction under the federal Endangered Species Act; and Coho, which are a federal species of concern; and Chum, Pink. Lummi Nation will contribute \$506,900 in another grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1365)

#### Nooksack Indian Tribe North Fork Nooksack (Xwgélém) Boyd Reach Restoration

The Nooksack Tribe will finalize and implement restoration design for up to 0.5 miles of mainstem riverine habitat in the North Fork (NF) Nooksack River (RM 62.2-62.7), near Boyd Creek east of Glacier, in Whatcom County. The project will implement the instream restoration component of a reach-scale design developed in partnership with the U.S. Forest Service that also included relocation of a forest road out of the channel migration zone. 31 structures will be constructed. The goal of the project is to restore upstream migration, spawning and rearing habitat to improve abundance, productivity, and diversity of North Fork/Middle Fork Nooksack Early Chinook, which is considered essential for recovery of the ESA-listed Puget Sound Chinook ESU. The project builds on previous design work funded by the SRFB. Restoration will also benefit ESA-listed steelhead and bull trout; coho, chum, riverine sockeye, and pink salmon; and cutthroat trout. The river is used by Chinook, Steelhead, which are listed as threatened with extinction under the federal Endangered Species Act; and Coho, which are a federal species of concern; and Chum, Pink Nooksack Indian Tribe will contribute \$661,566 in a federal grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1361)

# **Tulalip Tribes Conserving Snohomish River Floodplain**

The Tulalip Tribes will use this grant to 30 acres in the Skykomish and Pilchuck River watersheds. The long-term goal is to conserve a corridor along the Snohomish and its major tributaries where floodplain and riverine processes are allowed to function naturally. The rivers are used by Chinook salmon and steelhead trout, both of which are species listed as threatened with extinction under the federal Endangered Species Act, by coho salmon, which is a federal species of concern, and by chum and pink salmon. The Tulalip Tribes will contribute \$150,000 in another grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1140)

#### Whatcom County South Fork Nooksack River Integrated Floodplain Reconnection

The Whatcom County Public Works Department will use this grant to buy about 700 acres of floodplain, riparian forest, and steep slopes along 4 miles of South Fork Nooksack River shoreline. This project provides a unique opportunity to integrate forest management with adjacent floodplain ecosystems and ensure fully connected ecosystem and watershed function. The project will also facilitate removal of several hundred feet historic levee along the left bank of the SFNR and will reconnect more than 130 acres of floodplain habitat. This project will facilitate implementation of the lower portion of the Nooksack Indian Tribe's South Fork Nooksack River Fish Camp (Ts'eq) Reach Integrated Design Project allowing for significant instream restoration work. The river is used by Chinook, Steelhead, which are listed as threatened with extinction under the federal Endangered Species Act; and Coho, which are a federal species of concern; and Pink. Whatcom County of will contribute \$1,455,000. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1356)

#### **Lummi Nation Expanding Middle Fork Nooksack River Spawner Surveys**

The Lummi Nation will use this grant to expand surveys of spawning grounds in the Nooksack River, primarily aimed at counting how many Chinook salmon return to the river to spawn upstream of the previous Middle Fork diversion dam. The river is used by Chinook salmon and steelhead trout, both of which are species listed as threatened with extinction under the federal Endangered Species Act. The Pink Lummi Nation will contribute \$12,000 in donated services. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1367)

#### WRIA 13 Salmon Habitat Recovery Lead Entity

# Wild Fish Conservancy Designing and Restoring a Deschutes River Tributary

The Wild Fish Conservancy will use this grant to design and implement a suite of projects that will improve habitat in Meyer Creek, a unique, spring-fed wetland and stream complex that feds the Deschutes River. Restoration actions will include removing three failing culverts, installing livestock fencing to protect streams and wetlands, placing large woody materials in the creek, removing invasive plants, and planting the creek and wetland banks. Culverts are pipes or other structures that carry water under roads and often block fish migration because they are too steep, too tall, or too small to

allow fish to pass through easily. Adding woody materials to a creek creates places for fish to rest, feed, and hide from predators. It also slows the creek, which reduces erosion and allows small rocks to settle to the bottom, creating areas for salmon to spawn. Finally, logs change the flow of the water, creating riffles and pools, which give salmon more varied habitat. Planting trees and bushes along the banks of creek helps shade the water, cooling it for fish. The plants also drop branches and leaves into the water, which provide food for the insects salmon eat. Finally, the roots of the plants help keep soil from entering the water, where it can smother fish spawning gravel. The 22-acre tributary property belongs to the Meyer family, which is committed to implement protection and restoration actions that improve the environment. The Wild Fish Conservancy will contribute \$28,508 in a state grant. The conservancy is requesting an additional \$15,946 from the Puget Sound Acquisition and Requisition grant program that will be considered by the Legislature in 2023. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1162)

#### Tumwater Removing a Barrier to Fish Passage on Percival Creek

The City of Tumwater will use this grant to replace the only full fish passage barrier culvert on Percival Creek in Thurston County. Surveyed by WDFW in 2015, the culvert that conveys Percival Creek under Sapp Road is a full fish passage barrier due to slope. Removing and replacing the culvert with a 19-foot four sided box culvert will provide access to 2,225 meters of main stem habitat 841 square meters of spawning habitat, and 82,008 square meters of rearing habitat with cool water for Chinook, chum, coho, steelhead, sea run cutthroat, and resident trout. The City of Tumwater received a \$79,600 Salmon Recovery Funding Board grant in 2021. This grant is covering 55% of the cost to complete final PS&E for this project, with the City of Tumwater covering the other 45% needed to finish this work. The City has hired PBS to complete final designs and permitting for this project. The 60% Plans will be completed by April 29, 2022, with the 90% PS&E package being completed by June 23, 2022. During April of 2022, the City and PBS will also submit all environmental permit applications to ensure that this project is ready to construct in 2023. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1161)

#### South Puget Sound Salmon Enhancement Group Removing a Bulkhead for The Evergreen State College

The South Puget Sound Salmon Enhancement Group will use this grant to remove a bulkhead, concrete pad, and stairway, and plant 0.8 acre behind the structure at Bushoowah-Ahlee Point along Eld Inlet and Snyder Cove. The project would remove the

final piece in what is the longest un-armored section of shoreline on Eld Inlet. This section of beach is owned by the Evergreen State College and offers public access, making this a highly visible project with opportunities for continued monitoring as part of the college's environmental program. The area is used by Chinook salmon, which is a species listed as threatened with extinction under the federal Endangered Species Act, and by coho salmon, which is a federal species of concern. The South Puget Sound Salmon Enhancement Group will contribute \$32,400 in donated services. The enhancement group is requesting an additional \$133,382 from the Puget Sound Acquisition and Requisition grant program that will be considered by the Legislature in 2023. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1160)

#### **Snake River Salmon Recovery Region**

#### Snake River Salmon Recovery Board Lead Entity

# **Columbia Conservation District Placing Logjams in the Tucannon River**

The Columbia Conservation District will use this grant to place logjams along about 2 miles of the Tucannon River to improve spawning habitat for salmon and trout. Adding logjams to a river creates places for fish to rest, feed, and hide from predators. It also slows the river, which reduces erosion and allows small rocks to settle to the riverbed, creating areas for salmon to spawn. Finally, logjams change the flow of the river, creating riffles and pools, which give salmon more varied habitat. The river is used by Chinook salmon and steelhead and bull trout, all of which are listed as threatened with extinction under the federal Endangered Species Act. The Columbia Conservation District will contribute \$141,455 in a federal grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1015)

#### **Asotin County Conservation District Restoring Asotin Creek**

The Asotin County Conservation District will use this grant to restore about a half-mile of Asotin Creek, along Asotin Creek Road, southwest of Asotin. The work will restore natural channel processes and floodplain interaction. The conservation district will reconnect a side channel to increase regular floodplain inundation, slow the creek flow, and reduce erosion in the main creek channel. The conservation district also will install woody structures in the creek to increase the types of habitat. Adding wood, such as tree root wads and logs, to a stream creates places for fish to rest, feed, and hide from predators. It also slows the river, which reduces erosion and allows small rocks to settle to the riverbed, creating areas for salmon to spawn. Finally, the wood changes the flow of the river, creating riffles and pools, which give salmon more varied habitat. The conservation district will plant the creekbanks and install livestock fencing and a crossing to keep animals out of the creek. Planting trees and bushes along the creekbank helps shade the water, cooling it for fish. The plants also drop branches and leaves into the water, which provide food for the insects salmon eat. Finally, the roots of the plants help keep soil from entering the water, where it can smother fish spawning gravel. Asotin Creek is a major spawning area used by steelhead trout, which is a species listed as threatened with extinction under the federal Endangered Species Act. The Asotin County Conservation District will contribute \$80,000 in a federal grant. Visit

RCO's online Project Snapshot for <u>more information and photographs of this project.</u> (22-1006)

#### **Nez Perce Tribe Improving Cummings Creek Habitat**

The Nez Perce Tribe will use this grant to build up to 60 beaver dam analogs and up to 10 logjams in Cummings Creek to restore natural processes in the creek and improve spawning and rearing habitat for steelhead trout. The analogs mimic beaver dams and slow the water and create pools, giving steelhead places to rest and feed. The dams also block water, creating consistent water levels, which is helpful to fish in drier months. Adding logjams to a creek creates places for fish to rest, feed, and hide from predators. It also slows the water, which reduces erosion and allows small rocks to settle to the bottom, creating areas for steelhead to spawn. Finally, logjams change the flow of the water, creating riffles and pools, which give steelhead more varied habitat. The creek is used by steelhead trout, which is a species listed as threatened with extinction under the federal Endangered Species Act. The Nez Perce Tribe will contribute \$23,550 in a federal grant and donation of materials. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1013)

## Asotin County Conservation District Restoring Kelly Creek with Logs and Beaver Dam Replicas

The Asotin County Conservation District will use this grant to place large woody materials and beaver dam replicas in 1.4 miles of Kelly Creek to improve salmon habitat. Adding logs and dam replicas to a creek creates places for fish to rest, feed, and hide from predators. It also slows the creek, which reduces erosion and allows small rocks to settle to the creek bed, creating areas for salmon to spawn. Finally, they change the flow of the creek, creating riffles and pools, which give salmon more varied habitat. This portion of Kelly Creek is a tributary to Pintler Creek and part of an important spawning area. The creek is used by steelhead trout, which is a species listed as "threatened" with extinction under the federal Endangered Species Act. The Asotin County Conservation District will contribute \$30,500 in a federal grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1011)

#### Walla Walla County Conservation District Restoring a Portion of the Touchet River

The Walla Walla County Conservation District will use this grant to restore a half-mile of the Touchet River, downstream of Waitsburg and about 0.75 mile below its confluence with Coppei Creek. The work will increase channel roughness, promote sediment sorting and storage, and create a dynamic floodplain and in-stream environment with complex side channels and large wood features. The river is used by steelhead trout, which is a species listed as threatened with extinction under the federal Endangered Species Act, and by bull trout. The Walla Walla County Conservation District will contribute \$62,500 in another grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1019)

#### **Asotin County Conservation District Restoring Couse Creek**

The Asotin County Conservation District will use this grant to restore 1.3 miles of Couse Creek along Couse Creek Road, south of Asotin. The conservation district will install large woody materials, such as tree root wads and logs, in the creek and arrange boulders in clusters to create more varied habitat. Adding logs and boulders to a creek creates places for fish to rest, feed, and hide from predators. It also slows the water, which reduces erosion and allows small rocks to settle to the creek bed, creating areas for salmon to spawn. Finally, they change the flow of the river, creating riffles and pools, which give salmon more varied habitat. The conservation district also will remove invasive plants on the creekbank. The work will improve the creek's access to flood channels, control invasive vegetation encroachment, and provide better habitat. Couse Creek flows directly into the Snake River and is a spawning area for Snake River steelhead, which is a species listed as "threatened" with extinction under the federal Endangered Species Act. The Asotin County Conservation District will contribute \$70,500 in a federal grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1007)

#### **Trout Unlimited Inc. Installing Wood Structures in Panjab Creek**

Trout Unlimited will use this grant to build at least 60 structures, such as beaver dam analogs and log structures, to improve habitat, floodplain connectivity, and streambank function along 1 mile of lower Panjab Creek. Adding log structures to a creek creates places for fish to rest, feed, and hide from predators. It also slows the water, which reduces erosion and allows small rocks to settle to the bottom, creating areas for salmon to spawn. Finally, log structures change the flow of the water, creating riffles and pools, which give fish more varied habitat. Like the log structures, beaver dam analogs, which mimic beaver dams, slow the water and create pools, giving salmon places to rest and feed. The dams also block water, creating consistent water levels, which is helpful to salmon in drier months. The creek is used by Chinook salmon and steelhead and bull trout, all of which are listed as threatened with extinction under the federal Endangered

Species Act. Trout Unlimited will contribute \$22,000 in materials and staff labor. Visit RCO's online Project Snapshot for <u>more information and photographs of this project.</u> (22-1024)

#### **Confederated Tribes of the Umatilla Indian Reservation Designing Tucannon River Floodplain Restoration**

The Confederated Tribes of the Umatilla Indian Reservation will use this grant to study the effectiveness of floodplain infrastructure on the Tucannon River. The results of this study will be used to create conceptual designs for infrastructure that will create varied habitat for fish and reduce maintenance and flood risk. The floodplain is used by Chinook salmon and steelhead and bull trout, all of which are listed as threatened with extinction under the federal Endangered Species Act. The Confederated Tribes of the Umatilla Indian Reservation will contribute \$27,000 in another grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1021)

#### Asotin County Conservation District Designing Restoration of 1.4 Miles of Asotin Creek

The Asotin County Conservation District will use this grant to develop a full design report for restoration of 1.4 miles of Asotin Creek, along Asotin Creek Road, south of Asotin. The report will contain ready-to-construct engineering plans and complete environmental compliance including permit and cultural resource requirements. An earlier conceptual plan called for improving access to side channels, controlling invasive vegetation, and adding large woody materials to the creek. The creek is used by steelhead trout, which is a species listed as "threatened" with extinction under the federal Endangered Species Act. The Asotin County Conservation District will contribute \$24,000 in a federal grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1010)

#### **Asotin County Conservation District Restoring Tenmile Creek**

The Asotin County Conservation District will use this grant to install wood structures in more than a half-mile of Tenmile Creek, by Weissenfels Ridge Road, south of Asotin. Adding wood structures to a creek creates places for fish to rest, feed, and hide from predators. It also slows the creek, which reduces erosion and allows small rocks to settle to the creek bed, creating areas for salmon to spawn. Finally, they change the flow of the creek, creating riffles and pools, which give salmon more varied habitat. Tenmile Creek is a spawning area and flows directly into the Snake River. The creek is used by steelhead trout, which is a species listed as "threatened" with extinction under the

federal Endangered Species Act. The Asotin County Conservation District will contribute \$18,700 in a federal grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1012)

## **Asotin County Conservation District Designing Restoration of Asotin Creek**

The Asotin County Conservation District will use this grant to develop a full design report for restoration of 1.2 miles of Asotin Creek, along Asotin Creek Road, south of Asotin. The report will contain ready-to-construct engineering plans and complete environmental compliance including permit and cultural resource requirements. An earlier conceptual plan called for controlling invasive vegetation and adding large woody materials. The creek is used by Chinook salmon and steelhead trout, both of which are listed as "threatened" with extinction under the federal Endangered Species Act. The Asotin County Conservation District will contribute \$21,000 in a federal grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1009)

#### Trout Unlimited, Inc. Moving Beavers in the Snake River Region

Trout Unlimited will use this grant to move beavers in the Snake River Salmon Recovery Region during 3 years to create more diverse habitat and floodplain connection for Chinook salmon and steelhead trout. The work will create a framework for beaver management and relocation in the Region. Once relocated, beaver dam analogs will be built to mimic beaver dams. Beaver dams slow the water and create pools, giving fish places to rest and feed. The dams also block water, creating consistent water levels, which is helpful to fish in drier months. The area waters are used by Chinook salmon and steelhead trout, both of which are listed as threatened with extinction under the federal Endangered Species Act. Trout Unlimited will contribute \$28,000 in equipment, staff labor, and donation of supplies. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1023)

# **Confederated Tribes of the Umatilla Indian Reservation Designing Restoration of the Walla Walla River**

The Confederated Tribes of the Umatilla Indian Reservation will use this grant to complete final designs for a restoration project in the Walla Walla River near the Frenchtown historic site. The future project will remove confining features to encourage natural river processes, reconnect the floodplain, increase channel complexity, dispose

of bank armoring, and replant disturbed areas. The river is used by steelhead trout, which is a species listed as threatened with extinction under the federal Endangered Species Act. The Confederated Tribes of the Umatilla Indian Reservation will contribute \$60,000 in another grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1017)

#### Pomeroy Conservation District Installing Logjams in Tumalum Creek

The Pomeroy Conservation District will use this grant to install logjams and beaver dam replicas in about 3 miles of the Tumalum Creek to improve habitat. Adding logjams to a creek creates places for fish to rest, feed, and hide from predators. It also slows the water, which reduces erosion and allows small rocks to settle to the bottom, creating areas for salmon to spawn. Finally, logjams change the flow of the water, creating riffles and pools, which give salmon more varied habitat. Beaver dam replicas mimic beaver dams and slow the water and create pools, giving salmon places to rest and feed. The dams also block water, creating consistent water levels, which is helpful to salmon in drier months. The creek is used by steelhead trout, which is a species listed as threatened with extinction under the federal Endangered Species Act. The Pomeroy Conservation District will contribute \$20,999 in donations of equipment, materials, and services. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1026)

# Palouse Conservation District Replacing the Fish-Blocking Steptoe Creek Culvert

The Palouse Conservation District will use this grant to remove a fish-barrier culvert and design and install a replacement on Steptoe Creek to open access to about 4 miles of rearing and spawning habitat in the creek. Culverts are pipes or other structures that carry water under roads and often block fish migration because they are too steep, too tall, or too small to allow fish to pass through easily. The creek is used by steelhead trout, which is a species listed as threatened with extinction under the federal Endangered Species Act. The Palouse Conservation District will contribute \$44,000 in staff labor. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1003)

# **Palouse Conservation District Restoring Steptoe Creek Habitat**

The Palouse Conservation District will use this grant to restore fish habitat in Steptoe Creek by placing 40 log structures in about a quarter-mile of the creek. Adding log structures to a creek creates places for fish to rest, feed, and hide from predators. It also slows the creek, which reduces erosion and allows small rocks to settle to the bottom, creating areas for salmon to spawn. Finally, log structures change the flow of the water, creating riffles and pools, which give salmon more varied habitat. The creek is used by steelhead trout, which is a species lists as listed as threatened with extinction under the federal Endangered Species Act. The Palouse Conservation District will contribute \$7,942 in donated materials. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1004)

#### **Confederated Tribes of the Umatilla Indian Reservation Design Restoration of Touchet River**

The Confederated Tribes of the Umatilla Indian Reservation will use this grant to design a project to restore a 3-mile stretch of the Touchet River in Walla Walla County. The future project will add habitat diversity to the river. The river is used by steelhead trout, which is a species listed as threatened with extinction under the federal Endangered Species Act, and by bull trout and re-introduced Chinook salmon. The Confederated Tribes of the Umatilla Indian Reservation will contribute \$11,500 in another grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1016)

#### Confederated Tribes of the Umatilla Indian Reservation Designing a Restoration Project in the McNary National Wildlife Refuge

Partnering with the U.S. Fish and Wildlife Service, the Confederated Tribes of the Umatilla Indian Reservation will use this grant to develop conception designs for a project that will restore up to 5 miles of the Walla Walla River and 1,200 acres of floodplain in the McNary National Wildlife Refuge's Wallula Unit. This project will identify and develop opportunities to remove confining features to encourage natural river processes, reconnect floodplain, increase channel complexity, and replant disturbed areas. The river is used by steelhead trout, which is a species listed as threatened with extinction under the federal Endangered Species Act, and by Chinook salmon and bull trout. The project also will support migratory bird species and waterfowl. The Confederated Tribes of the Umatilla Indian Reservation will contribute \$15,000 in

donated services. Visit RCO's online Project Snapshot for <u>more information and photographs of this project.</u> (22-1018)

#### **Upper Columbia River Salmon Recovery Region**

#### Upper Columbia River Salmon Recovery Board Lead Entity

### **Cascade Columbia Fisheries Enhancement Group Surveying Upper Columbia River Basins**

The Cascade Columbia Fisheries Enhancement Group will use this grant to collect habitat data in the Methow, Entiat, and Wenatchee River basins. The data will enable grant applicants to identify problems and develop restoration concepts. These reaches include spawning and rearing habitat for Chinook salmon, which is a species listed as "endangered" under the federal Endangered Species Act, and for steelhead and bull trout, both of which are species listed as "threatened" with extinction under the Act. The Cascade Columbia Fisheries Enhancement Group will contribute \$53,840 in a local grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1509)

# Methow Salmon Recovery Foundation Reassessing the Lower Chewuch River

The Methow Salmon Recovery Foundation will use this grant to assess the lower 20 miles of the Chewuch River. The lower Chewuch River is a major spawning area for spring Chinook salmon and steelhead and provides migration and rearing habitat for bull trout. The project will update data from 2010 to incorporate significant changes in the river and riverbank conditions following wildfires, floods, and restoration projects. The assessment will include current habitat data, biological and physical modeling, and fish-use information. The data will be used to update the restoration strategy and develop a list of potential restoration and protection projects. The river is used by Chinook salmon, which is a species listed as endangered under the federal Endangered Species Act, and by steelhead trout, which is a species listed as threatened with extinction under the federal Endangered Species Act. The Methow Salmon Recovery Foundation will contribute \$30,000 in donated services. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1506)

#### **Cascade Columbia Fisheries Enhancement Group Restoring Lower Peshastin Creek and its Side Channel**

The Cascade Columbia Fisheries Enhancement Group will use this grant to reshape the lower Peshastin Creek and its side channel. The enhancement group will place large pieces of wood, such as tree root wads and logs, in the creek and plant the creek and side channel banks. The enhancement group also will increase the creek's length and bends and lower its slope, as well as increase the side channel length and width. The creek is used by Chinook salmon, which is a species listed as "endangered" under the federal Endangered Species Act, and by steelhead trout, which is a species listed as "threatened" with extinction under the Act. The Cascade Columbia Fisheries Enhancement Group will contribute \$350,000 in another grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1508)

#### **Confederated Tribes and Bands of the Yakama Nation Reconnecting Twisp River Floodplain**

The Yakima Nation will use this grant to excavate in a 1,000-foot-long relic side channel of the middle Twisp River to connect it to an oxbow and more than double the size of the side channel. The Tribe also will place large wood structures in the upper portion of the larger side channel. Adding wood structures to a stream creates places for fish to rest, feed, and hide from predators. It also slows the water, which reduces erosion and allows small rocks to settle to the bottom, creating areas for salmon to spawn. Finally, the structures change the flow of the water, creating riffles and pools, which give salmon more varied habitat. The work will not only reconnect side channels but will increase floodplain connectivity and restore habitat-forming processes that will benefit salmon. Giving young salmon access to the floodplains and wetlands will provide high-quality, year-round rearing habitat. The river is used by Chinook salmon, which is a species listed as endangered under the federal Endangered Species Act, and by steelhead trout, which is a species listed as threatened with extinction under the federal Endangered Species Act. The Yakama Nation will contribute \$207,284 in a local grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1514)

#### Cascadia Conservation District Increasing and Cooling Water in Entiat River Tributaries

The Cascadia Conservation District will use this grant to install 190 beaver dam replicas and wood structures along 4 miles of Potato, Mud, and Stormy Creek tributaries to the Entiat River. The beaver dam replicas and wood structures will slow the water and create pools, giving salmon places to rest and feed. The dams also block water, creating

consistent water levels, which is helpful to salmon in drier months. The work is part of a larger solution to increase the amount of water flowing in the creeks in the summer and to cool that water Chinook salmon, steelhead trout, and other salmon species. This proposal builds upon the previous 33 beaver dam replicas installed on Potato Creek in 2020. Cascadia Conservation District will contribute \$212,535 in local and other grants and a donation of equipment. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1512)

#### **Chelan County**

#### **Designing Restoration of the Lower Chiwawa River**

The Chelan County Natural Resources Department will use this grant to design restoration of 1.25 miles of the Lower Chiwawa River. The County will prepare conceptual and preliminary designs, conduct studies to support permit applications, and complete environmental compliance tasks. The future project will place logjams in the river to create up to a quarter-mile of off-channel habitat, improve resting areas at two tributary confluences, consolidate or reduce dispersed camping, decommission about 1,000 feet of forest roads, and enhance 15 acres of riverbank. The river is used by Chinook salmon, which is a species listed as "endangered" under the federal Endangered Species Act, and by steelhead trout, which is a species listed as "threatened" with extinction under the Act. Chelan County will contribute \$24,725 in a local grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1499)

#### Confederated Tribes and Bands of the Yakama Nation Conserving Land on the Upper Wenatchee River

The Yakama Nation will use this grant to buy and conserve nearly 5 acres at the outlet of the largest oxbow in the upper Wenatchee River. The river is used by Chinook salmon, which is a species listed as "endangered" under the federal Endangered Species Act, and by steelhead trout, which is a species listed as "threatened" with extinction under the Act. The Yakama Nation will contribute \$13,000 in and staff labor and donations of services. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1513)

#### **Chelan County**

#### **Reconnecting the Peshastin River with its Floodplain**

The Chelan County Natural Resources Department will use this grant to improve the Peshastin River's connection to its floodplain. The County will build a half-mile of side

channel habitats, add large woody materials and boulders to the river, and plant about 3,000 native shrubs and trees. Adding boulders and woody materials, such as tree root wads and logs, to a river creates places for fish to rest, feed, and hide from predators. It also slows the river, which reduces erosion and allows small rocks to settle to the riverbed, creating areas for salmon to spawn. Finally, they change the flow of the river, creating riffles and pools, which give salmon more varied habitat. Planting trees and bushes along a riverbank helps shade the water, cooling it for fish. The plants also drop branches and leaves into the water, which provide food for the insects salmon eat. Finally, the roots of the plants help keep soil from entering the water, where it can smother fish spawning gravel. The work will include preparing permit applications and construction-ready designs. The project will better connect about 9 acres of floodplain. The river is used by Chinook salmon, which is a species listed as "endangered" under the federal Endangered Species Act, and by steelhead trout, which is a species listed as "threatened" with extinction under the Act. Chelan County will contribute \$146,000 in a federal grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1497)

#### Chelan County Designing Restoration of an Entiat River Reach

The Chelan County Natural Resources Department will use this grant to design restoration of the Mills 05 Reach of the Entiat River. The reach is suffering from rising water temperatures and too much sediment. The County will design a restoration project that plants the riverbank to create shade to cool the water, and places engineered logjams in the river to slow the water and reduce erosion. The river is used by Chinook salmon, which is a species listed as "endangered" under the federal Endangered Species Act, and by steelhead trout, which is a species listed as "threatened" with extinction under the Act. Chelan County will contribute \$22,750 in another grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1502)

#### **Chelan County**

#### **Designing the Restoration of the Upper Peshastin Creek**

The Chelan County Natural Resources Department will use this grant to design treatments for all roads in the upper Peshastin Creek watershed and develop conceptual designs for 3.6 miles of Middle and North Shaser Creeks, Peshastin Creek, and Scotty Creek. Peshastin Creek is an important creek for wild steelhead and often has the most steelhead returning to spawn of any Wenatchee watershed tributary. This design effort would address the severe degradation to spawning and rearing habitat caused by

logging, roads, and mining. Designs would promote habitat complexity, floodplain connectivity, creekbank plants, and wood retention. Work will include reviewing existing road and creek habitat data, field surveys, modeling, alternatives analysis, conceptual designs, and stakeholder outreach. The creek is used by Chinook salmon, which is a species listed as "endangered" under the federal Endangered Species Act, and by steelhead trout, which is a species listed as "threatened" with extinction under the Act. Chelan County will contribute \$17,475. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1501)

#### **Chelan County Designing Restoration of the Upper Wenatchee River**

The Chelan County Natural Resources Department will use this grant to evaluate a mile of the upper Wenatchee River and its floodplain wetland complexes to develop a restoration plan. The restoration will target improving in-stream conditions, reducing erosion, and reconnecting the floodplain. Work will include engaging the landowners to opportunities, evaluating the site, developing and analyzing restoration strategies, preparing conceptual designs, collecting site data, compiling existing data, and completing hydraulic modeling and an opportunities and constraints analysis. The river is used by Chinook salmon, which is a species listed as "endangered" under the federal Endangered Species Act, and by steelhead trout, which is a species listed as "threatened" with extinction under the Act. Chelan County will contribute \$11,250 in another grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1495)

#### **Chelan County Designing Restoration of the Peshastin River**

The Chelan County Natural Resources Department will use this grant to evaluate a half-mile of the Peshastin River and its floodplain wetland complexes to develop a restoration plan. The restoration will target improving in-stream conditions and reconnecting the floodplain. Work will include engaging private and state landowners to find opportunities, evaluating the site, developing and analyzing restoration strategies, preparing conceptual and preliminary designs, collecting onsite data, compiling existing data, and completing hydraulic modeling and an opportunities and constraints analysis. The river is used by Chinook salmon, which is a species listed as "endangered" under the federal Endangered Species Act, and by steelhead trout, which is a species listed as "threatened" with extinction under the Act. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1492)

#### **Washington Coast Salmon Recovery Region**

#### Chehalis Basin Lead Entity

### **Chehalis Basin Fisheries Task Force Removing Barriers to Fish Passage in Camp Creek**

The Chehalis Basin Fisheries Task Force will use this grant to correct a barrier to fish passage and design another in Camp Creek, near Montesano. The barriers are two undersized culverts under Schafer Boom Road. Culverts are pipes or other structures that carry water under roads and often block fish migration because they are too steep, too tall, or too small to allow fish to pass through easily. Because these are the lowest fish passage barriers in the creek, replacement of both culverts with larger ones will open access to habitat–1.2 miles immediately and another

9 miles once all upstream barriers are corrected. The lower part of the creek is used by Chinook and chum salmon. Coho salmon and steelhead and cutthroat trout need full access to the upper forested reaches. The Chehalis Basin Fisheries Task Force will contribute \$195,316 in a federal grant and donated cash. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1040)

# Thurston County Removing the Thompson Creek Culvert

The Thurston County Public Works Department will use this grant to remove the last barrier to fish passage on Thompson Creek, opening access to more than 10 miles of spawning and rearing habitat. Thompson Creek is a major tributary of the Skookumchuck River near Tenino. The County will remove a culvert and install a bridge. Culverts are pipes or other structures that carry water under roads and often block fish migration because they are too steep, too tall, or too small to allow fish to pass through easily. The County also will place large woody materials, such as logs and tree root wads, in the creek and replant its banks. Adding logs to a creek creates places for fish to rest, feed, and hide from predators. It also slows the water, which reduces erosion and allows small rocks to settle to the bottom, creating areas for salmon to spawn. The work will expand the area where the creek can flow at this junction from 8 feet wide to about 25 feet wide. The creek is used by Chinook and coho salmon, and sea-run cutthroat, steelhead, and rainbow trout. Thurston County will contribute more than \$1.1 million. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1052)

### **Chehalis Basin Fisheries Task Force Opening Fish Passage in a Newskah Creek Tributary**

The Chehalis Basin Fisheries Task Force will use this grant to replace an undersized culvert under Newskah Road that is completely blocking fish passage in a tributary to Newskah Creek, near Aberdeen. Culverts are pipes or other structures that carry water under roads and often block fish migration because they are too steep, too tall, or too small to allow fish to pass through easily. Replacement of this culvert with a larger one will open access to more than 1 mile of spawning and rearing habitat. The creek is used by chum and coho salmon and by steelhead and cutthroat trout. The Chehalis Basin Fisheries Task Force will contribute \$675,482 in a grant from the Brian Abbott Fish Barrier Removal Board and donated cash. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1042)

#### Trout Unlimited, Inc. Restoring Fish Passage in Coal Creek

Trout Unlimited will use this grant to correct a culvert that is blocking fish migration under a private driveway near Coal Creek Road in Chehalis. Culverts are pipes or other structures that carry water under roads and often block fish migration because they are too steep, too tall, or too small to allow fish to pass through easily. Correcting this barrier will open 1.78 miles of quality habitat upstream for coho salmon, steelhead and sea-run cutthroat trout, and resident fish. Coal Creek is a tributary to Salzer Creek, which flows into the Chehalis River near Chehalis. Trout Unlimited will contribute \$44,300 in another grant and donated services. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1132)

#### **Lewis County Opening Fish Passage in Berwick Creek**

The Lewis County Public Works Department will use this grant to replace a bridge on Logan Hill Road that is blocking fish passage in Berwick Creek. Replacing the bridge with a concrete floor will open 5.5 miles of habitat for winter steelhead trout and 6.7 miles of habitat for coho salmon once downstream barriers are corrected. The County also will buy adjacent land so it can realign and regrade a portion of the creek bed to improve fish passage when the water level is low and place large woody materials in the creek to improve habitat. Adding woody materials, such as logs and tree root wads, will help maintain the creek's structure and improve fish passage when the water flow is low. The realignment will create more riffles and pools, which give fish more varied habitat. Lewis County will contribute more than \$1.3 million in a grant from the Brian Abbott Fish

Barrier Removal Board grant program and staff labor. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1133)

#### Lewis Conservation District Correcting Fish Passage Barriers on a Middle Fork Newaukum River Tributary

The Lewis Conservation District will use this grant to replace two culverts on private land that are blocking fish passage in an unnamed tributary to the Middle Fork Newaukum River, near Onalaska. Culverts are pipes or other structures that carry water under roads and often block fish migration because they are too steep, too tall, or too small to allow fish to pass through easily. Removing one of the culverts would open access to 1 mile of unimpeded habitat upstream and would reconnect an overflow channel to the river. Removing the second culvert, which is a mile upstream, would open access to an additional 1.7 miles of habitat. Both of these barrier culverts will be replaced with bridges. The tributary is used by coho salmon and steelhead and sea-run cutthroat trout. The Lewis Conservation District will contribute \$292,528. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1054)

### Thurston County Removing a Fish Passage Barrier in a Dempsey Creek Tributary

The Thurston County Public Works Department will use this grant to remove a barrier to fish passage in an unnamed tributary to Dempsey Creek under Shawn Drive Southwest, in Olympia. The work will open access to about 0.75 mile of spawning and rearing habitat for salmon and trout. The County will remove a culvert and install a bridge. Culverts are pipes or other structures that carry water under roads and often block fish migration because they are too steep, too tall, or too small to allow fish to pass through easily. Removing the barrier also will improve stream conditions during the summer, when water flow is low, and allow wood and sediment to flow naturally downstream. The County will place large woody materials, such as logs and tree root wads, in the creek and replant its banks. Adding logs to a creek creates places for fish to rest, feed, and hide from predators. Planting trees and bushes along the creek helps shade the water, cooling it for fish. The plants also drop branches and leaves into the water, which provide food for the insects that salmon eat. The creek is used by coho salmon and steelhead and sea-run cutthroat trout. Thurston County will contribute \$874,941. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1053)

#### Lewis County Opening Access to Berwick Creek at Labree Road

The Lewis County Public Works Department will use this grant to replace a culvert under Labree Road with a larger one. Culverts are pipes or other structures that carry water under roads and often block fish migration because they are too steep, too tall, or too small to allow fish to pass through easily. Replacement of the culvert in Berwick Creek will restore access to 1.3 miles of habitat for coho salmon and 1 mile of habitat for steelhead trout once a downstream barrier is replaced. The County also will realign and regrade part of the creek bed to allow fish passage when water levels are low and place large woody materials in the creek to improve habitat. Adding woody materials, such as logs and tree root wads, to a stream creates places for fish to rest, feed, and hide from predators. It also slows the water, which reduces erosion, and changes the flow of the water, creating riffles and pools, which give fish more varied habitat. Lewis County will contribute more than \$1 million. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1134)

#### Willapa Bay Regional Fisheries Enhancement Group Restoring Armstrong Creek

The Willapa Bay Regional Fisheries Enhancement Group will use this grant to design the replacement of a culvert blocking fish passage and restoration of a section of Armstrong Creek. Armstrong Creek is a small creek that flows into the Willapa River. A culvert blocks the creek where it meets Riddell Street in Raymond. Culverts are pipes or other structures that carry water under roads and often block fish migration because they are too steep, too tall, or too small to allow fish to pass through easily. Due to its poor design and size, the culvert has caused significant channel incision and blocks salmon from passing. In addition, the creek suffers from a lack of large woody materials, such as tree root wads and logs, which create varied habitat for fish. The project being designed would include the replacing the blocking culvert, resting the incised creekbed, developing spawning gravels, planting the creek banks, and restoring creekside elements to allow floodplain activation during high flows. The creek is used by chum and coho salmon and steelhead and cutthroat trout. Willapa Bay Regional Fisheries Enhancement Group will contribute \$25,500 in another grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1332)

#### North Pacific Coast Lead Entity

## Pacific Coast Salmon Coalition Restoring Fish Passage in Morganroth Springs

The Pacific Coast Salmon Coalition, in partnership with the U.S. Forest Service, will use this grant to remove a deteriorated water control structure in the Bogachiel River and restore the natural processes of the river. The work will provide fish passage and improve the habitat for young salmon. The creek is used by steelhead trout, which is a species listed as threatened with extinction under the federal Endangered Species Act, and by coho salmon, which is a federal species of concern. The Pacific Coast Salmon Coalition will contribute \$30,187 in donations of labor, materials, and services. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1343)

#### Trout Unlimited Inc. Designing Fish Passage in Upper Wisen Creek

Trout Unlimited will use this grant to develop preliminary designs to correct two salmon and steelhead barriers on Wisen Creek in the Sol Duc watershed. The creek is used by steelhead trout, which is listed as threatened with extinction under the federal Endangered Species Act, and by coho salmon, which is a federal species of concern. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1334)

# Trout Unlimited Inc. Removing the Derelict Cassel Creek Culvert

Trout Unlimited will use this grant to remove two culverts on Cassel Creek in the Hoh River watershed to improve fish migration and habitat in the creek. Culverts are pipes or other structures that carry water under roads and often block fish migration because they are too steep, too tall, or too small to allow fish to pass through easily. The creek is used by steelhead trout, which is listed as threatened with extinction under the federal Endangered Species Act, and by coho salmon, which is a federal species of concern. Trout Unlimited will contribute \$5,300 in a private grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1336)

### Willapa Bay Regional Fisheries Enhancement Group Restoring Armstrong Creek

The Willapa Bay Regional Fisheries Enhancement Group will use this grant to design the replacement of a culvert blocking fish passage and restoration of a section of Armstrong Creek. Armstrong Creek is a small creek that flows into the Willapa River. A culvert blocks the creek where it meets Riddell Street in Raymond. Culverts are pipes or other structures that carry water under roads and often block fish migration because they are too steep, too tall, or too small to allow fish to pass through easily. Due to its poor design and size, the culvert has caused significant channel incision and blocks salmon from passing. In addition, the creek suffers from a lack of large woody materials, such as tree root wads and logs, which create varied habitat for fish. The project being designed would include the replacing the blocking culvert, resting the incised creekbed, developing spawning gravels, planting the creek banks, and restoring creekside elements to allow floodplain activation during high flows. The creek is used by chum and coho salmon and steelhead and cutthroat trout. Willapa Bay Regional Fisheries Enhancement Group will contribute \$25,500 in another grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1332)

#### Quinault Indian Nation Lead Entity

# **Quinault Indian Nation Identifying Fish Passage Barriers**

The Quinault Indian Nation will use this grant to identify all fish passage barriers in tributaries of the lower Quinault and Raft River watersheds. The updated inventory will identify which barriers need replacing and help prioritize those needing replacement first. Culverts and other structures that carry water under roads are common barriers to fish passage. They often block fish migration because they are too steep, too tall, or too small to allow fish to pass through easily. The rivers are used by chum salmon and steelhead trout, both of which are species listed as threatened with extinction under the federal Endangered Species Act, and by coho salmon, which is a federal species of concern. The Quinault Indian Nation will contribute \$35,295 in donation of services. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1227)

# **Quinault Indian Nation Mapping and Removing Knotweed along the Lower Quinault River**

The Quinault Indian Nation will use this grant to map the extent of the knotweed infestation and reduce and control patches of the weed along the lower Quinault River. Knotweed is a shrubby perennial that grows very aggressively along roadways, neglected gardens, streambeds, and in moist, wet places. Its vigorous growth creates dense colonies that choke out native plants. Once established, it is very difficult to get rid of. The river is used by Chinook and chum salmon and steelhead trout, all of which are species listed as threatened with extinction under the federal Endangered Species Act, and by coho salmon, which is a federal species of concern. The Quinault Indian Nation will contribute \$52,942 in staff labor. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1048)

#### Willapa Bay Lead Entity

# Pacific Conservation District Designing Restoration of the Middle Nemah River

The Pacific Conservation District will use this grant to complete restoration designs for several projects in the middle Nemah River. An earlier habitat assessment recommended adding large woody materials, such as logs and tree root wads, to the river. Adding logs to a river creates places for fish to rest, feed, and hide from predators. It also slows the river, which reduces erosion and allows small rocks to settle to the riverbed, creating areas for salmon to spawn. Finally, logs change the flow of the river, creating riffles and pools, which give salmon more varied habitat. The assessment also recommended improving floodplain connection by removing of portions of an abandoned road prism. The river is used by Chinook, chum, and coho salmon and steelhead trout. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1570)

#### **Sea Resources Planning Removal of Fish Barriers in Clearwater Creek**

Sea Resources will use this grant to a produce permit-ready design for a project that will remove two, 70-year-old, undersized culverts and replace them with a bridge. Culverts are pipes or other structures that carry water under roads and often block fish migration because they are too steep, too tall, or too small to allow fish to pass through easily. Removing the culverts will give fish access to 5.1 miles of habitat and will restore full tidal influence to the 10-acre wetland. The project will evaluate two options for the location of the new bridge—its current location or south at the 1952 historical mouth of

Clearwater Creek. The bridge will have a single-lane and run 80 feet long with turnouts at either end. The creek is used by Chinook salmon and steelhead trout. Visit RCO's online Project Snapshot for <u>more information and photographs of this project.</u> (22-1064)

### Pacific Conservation District Howard Cr Barrier Replacement – Letsinger Phase II

Part of a multi-phase, reach-level restoration project, the Howard creek 'sixty-one' barrier replacement project or Letsinger Phase II aims to remove and replace a tier one ranked fish barrier, making available 2.1 miles of Chinook, Coho, Chum, and Winter Steelhead habitat in the North River Watershed headwaters. The existing driveway culvert which is only 33% passable will be replaced with a 60-foot bridge to allow for channel migration within the floodplain while maintaining landowners access. The river is used by Chinook, Chum, Steelhead Pacific Conservation District will contribute \$43,050 in a state grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1582)

# Pacific Conservation District Designing Restoration of the Willapa River and its Banks

The Pacific Conservation District will use this grant to develop preliminary designs for a project to improve habitat in the Willapa River at the reach owned by the Seiler Family. The designs will detail locations for placing large wood materials, such as tree root wads and logs, that will improve habitat conditions for salmon and steelhead. Adding logs to a river creates places for fish to rest, feed, and hide from predators. It also slows the river, which reduces erosion and allows small rocks to settle to the riverbed, creating areas for salmon to spawn. Finally, logs change the flow of the river, creating riffles and pools, which give salmon more varied habitat. The designs also will include specifications for removing invasive plants and replanting the riverbanks. The river is used by Chinook, chum, and coho salmon and steelhead trout. The Pacific Conservation District will contribute \$29,700 in a state grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1581)

## Willapa Bay Regional Fisheries Enhancement Group Restoring Armstrong Creek

The Willapa Bay Regional Fisheries Enhancement Group will use this grant to design the replacement of a culvert blocking fish passage and restoration of a section of Armstrong Creek. Armstrong Creek is a small creek that flows into the Willapa River. A culvert blocks the creek where it meets Riddell Street in Raymond. Culverts are pipes or other

structures that carry water under roads and often block fish migration because they are too steep, too tall, or too small to allow fish to pass through easily. Due to its poor design and size, the culvert has caused significant channel incision and blocks salmon from passing. In addition, the creek suffers from a lack of large woody materials, such as tree root wads and logs, which create varied habitat for fish. The project being designed would include the replacing the blocking culvert, resting the incised creekbed, developing spawning gravels, planting the creek banks, and restoring creekside elements to allow floodplain activation during high flows. The creek is used by chum and coho salmon and steelhead and cutthroat trout. Willapa Bay Regional Fisheries Enhancement Group will contribute \$25,500 in another grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1332)

#### **Columbia River Estuary Study Taskforce South-Greenhead-Bear Confluence Preliminary Design**

The construction of U.S. 101 through Willapa Bay in the 1930s cut off several salmonbearing streams from their natural mouths in Willapa Bay and restricted tidal flows to hundreds of acres of tidal wetland on the Bay's shore, an area now called Greenhead Slough. The terminus of South Creek, located at the southern end of Greenhead Slough, has been shifted from a probable historical location along Bear River to its current location at the northern end of Greenhead Slough. The southern end of Greenhead Slough is separated from Bear River by a dike used as a driveway running from Hwy 101 to a house now owned by Willapa National Wildlife Refuge. Tidal flows to the southern end of Greenhead Slough are restricted by the dike and an undersized culvert on a BPA access road near the southern end of Greenhead Slough. This project will evaluate and design actions to restore 43 acres of estuarine habitat and increase connectivity between water bodies. Possible actions include: add a connection (bridge or culvert) in the dike between Greenhead Slough and Bear River; replace the undersized BPA culvert with a larger culvert that does not restrict fish access; excavate additional channels and lower select areas of marshplain in southern Greenhead Slough, including channels to bypass the BPA culvert and connect the new bridge/culvert and South Creek; and add large wood to South Creek. The project will increase area and function of estuarine habitat and improve riparian habitat. The river is used by Chinook, Chum, Steelhead. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1062)