#### Grants Awarded in Asotin County

#### 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 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 steelhead trout, which is a species listed as threatened with extinction under the federal Endangered Species Act, and by Chinook salmon, which has been reintroduced to the creek. 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)

#### 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

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Grant Awarded: \$84,000

Grant Awarded: \$225,000



# Grant Awarded: \$96,000

\$683,100



Grant Awarded: \$164,500

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

#### 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)

#### Asotin County Conservation District Grant Awarded: \$70,000 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

3

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)

#### 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)

#### Grants Awarded in Chelan County

#### Cascade Columbia Fisheries Enhancement Group Restoring Lower Peshastin Creek

The Cascade Columbia Fisheries Enhancement Group will use this grant to increase habitat quality and quantity in the lower 0.3 mile of Peshastin Creek, to its confluence with the Wenatchee River. Cascade Fisheries will increase stream complexity by creating a 1,200-foot side channel and numerous pools, which will improve spawning and rearing habitat for juvenile fish. Cascade Fisheries also will place 100 large pieces of wood, including tree root wads and logs, and replant the restoration site with native vegetation. Adding wood 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 fish to spawn. Finally, the wood changes the flow of the water, creating riffles and pools, which give fish more varied habitat. Planting trees and bushes along the creek banks helps shade the water, keeping it cool for fish. The plants also drop branches and leaves into the water, which provide food for the insects that fish eat. Finally, the roots of the plants help keep soil from entering the water, where it can smother fish spawning gravel. This work will ensure Peshastin Creek remains a cold-water refugia for fish. The work also will increase the length of the creek's primary channel 200 feet, reduce its slope, and expand the floodplain by 3.4 acres. Peshastin Creek averages 2 degrees Celsius cooler than the Wenatchee River, making it one of only a few cold-water tributaries in the lower Wenatchee River and providing important cool water for migrating salmonids. The creek is used by upper Columbia River spring Chinook salmon, which is a species listed as

#### Grant Awarded: \$43,600

\$2,389,987

Grant Awarded: \$750,000





Grant Awarded: \$150,122

endangered under the federal Endangered Species Act, and by steelhead trout, which is a species listed as threatened with extinction under the Act. Cascade Fisheries will contribute \$350,000 in a local grant from the Bonneville Power Administration Programmatic. <u>Visit RCO's online Project Snapshot for more information and photographs of this project</u>. (22-1508)

#### 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 identify priority stream reaches and restoration concepts that will have the greatest biological benefit. These reaches include spawning and rearing habitat for upper Columbia River spring 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 from the Rock Island HCP Plan Species Account Fund. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1509)

#### Cascadia Conservation District Grant Awarded: \$198,230 Increasing Flow and Cooling Water in Entiat River Tributaries

The Cascadia Conservation District will use this grant to install 190 small wood structures that mimic beaver dams along 4 miles of Potato, Mud, and Stormy Creeks, which are tributaries to the Entiat River. The wood structures will slow the water during spring peak flows and create pools in the small tributaries, allowing a steady release of water throughout the year. The dams create small reservoirs and increase the availability of water on the floodplain, which supports growth of trees and shrubs, which later shade the water, cooling it for fish. The project is part of a larger project to increase the amount of water flowing in the creeks in the summer and to cool the water. The creeks are used by upper Columbia River spring 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 Cascadia Conservation District will contribute \$212,535 in a local grant from the Rocky Reach HCP Plan Species Account Fund, a federal grant, and donated equipment. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1512)

#### Chelan County Designing Restoration of Peshastin Creek

#### Grant Awarded: \$135,000

The Chelan County Natural Resources Department will use this grant to evaluate a half-mile of the Peshastin Creek and its floodplain wetland complexes to develop a restoration plan about 3.5 miles upstream of its confluence with the Wenatchee River. The restoration will target



improving in-stream conditions and reconnecting the floodplain by creating side-channel inlets to the existing, low elevation, off-channel floodplain. These actions will create places for juvenile fish to rest during high water flows in the spring and rearing habitat in the winter. Work will include talking with landowners, 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 upper Columbia River spring Chinook salmon, which is a species listed as endangered under the federal Endangered Species Act, and by steelhead and bull trout, both of which are 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)

#### Chelan County Designing Restoration of the Entiat River

The Chelan County Natural Resources Department will use this grant to design a restoration project in the Entiat River, about 4.5 miles upstream of its confluence with the Columbia River. This section of the river is suffering from rising water temperatures and too much sediment, which decrease the survival rate of salmon eggs. The restoration project will include planting the riverbanks to shade the water, keeping it cool for fish, and placing logjams in the river to slow the water and reduce erosion. The river is used by upper Columbia River spring Chinook salmon, which is a species listed as endangered under the federal Endangered Species Act, and by steelhead, which is a species listed as threatened with extinction under the Act. Chelan County will contribute \$22,750 in another state grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1502)

#### Chelan County Designing Restoration of the Lower Chiwawa River

#### Grant Awarded: \$136,107

Grant Awarded: \$128,500

The Chelan County Natural Resources Department will use this grant to design restoration projects in 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 boulders and logjams in the river to increase the types of habitat in the river, build side-channel habitat, consolidate streamside dispersed camping sites, and decommission about 1,000 feet of forest roads, all intended to stabilize the riverbanks, reduce erosion, and encourage growth of riverbank plants and trees. The river is used by upper Columbia River spring Chinook salmon, which is a species listed as endangered under the federal Endangered Species Act, and by steelhead and bull trout, both of which are species listed as threatened with extinction under the Act. Chelan County will contribute \$24,725 in a federal grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1499)



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

The Chelan County Natural Resources Department will use this grant to design treatments to reduce the impact of dirt roads in the upper Peshastin Creek watershed and develop conceptual designs for 3.6 miles of Middle and North Shaser Creeks, Scotty Creek, and upper Peshastin Creek. Peshastin Creek provides important habitat for wild steelhead and often has the most steelhead returning to spawn of any stream in the Wenatchee River watershed. This design effort will address the severe degradation to spawning and rearing habitat caused by logging, roads, and mining. Designs will promote increasing habitat complexity, connecting floodplains, supporting growth of trees and plants along the banks, and retaining the trees and logs that fall into the creek. Work will include reviewing road and creek habitat data, conducting field surveys, modeling, analyzing alternatives, developing conceptual designs, and reaching out to stakeholders. The creeks are used by upper Columbia River spring Chinook salmon, which is a species listed as endangered under the federal Endangered Species Act, and by steelhead and bull trout, which are 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 during 2 years to evaluate a mile of the upper Wenatchee River and its floodplain wetland complexes to develop a restoration plan. The restoration will target increasing the quantity and quality of off-channel rearing habitat and places where fish can rest during high flows. Work will include engaging with landowners, developing and analyzing restoration strategies, preparing conceptual designs, collecting and compiling site data, and completing hydraulic modeling and an opportunities and constraints analysis. The river is used by upper Columbia River spring Chinook salmon, which is a species listed as endangered under the federal Endangered Species Act, and by steelhead, which is a species listed as threatened with extinction under the Act. Chelan County will contribute \$11,250 via a local grant from the Rock Island HCP Plan Species Account Fund. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1495)

#### Chelan County Restoring Side-Channel Habitat in Peshastin Creek

The Chelan County Natural Resources Department will use this grant to improve the Peshastin River's off-channel habitat by creating multiple side channels that will be accessible to fish at various water levels. The County will build a half-mile of side-channel habitats and place large woody materials there. In addition, the County will add boulders to the river and plant about

#### Grant Awarded: \$99,021

Grant Awarded: \$63,750

Grant Awarded: \$661,757



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, and helps slow the river, creating areas for salmon to spawn. Planting trees and bushes along the creekbank helps shade the water, keeping it cool for fish and other organisms. 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 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 upper Columbia River 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)

#### 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 of wetland and forest at the outlet of the largest oxbow in the upper Wenatchee River, which has the potential to provide key rearing habitat for juvenile fish. The land is next to property owned by the Yakama Nation and U.S. Forest Service. Future restoration proposals will restore floodplain connectivity and increase off-channel habitat to improve spawning and rearing habitat. The river is used by upper Columbia River spring Chinook salmon, which is a species listed as endangered under the federal Endangered Species Act, and by steelhead and bull trout, both of which are 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)

#### Grants Awarded in Clallam County

#### Grant Awarded: \$43,983

\$1,257,022

Grant Awarded: \$67,500

#### 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



Grant Awarded: \$25,935

Abbott Fish Barrier Removal Board. Visit RCO's online Project Snapshot for <u>more information</u> <u>and photographs of this project.</u> (22-1083)

#### 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, keeping it cool 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. The coalition is requesting an additional \$92,625 from the Puget Sound Acquisition and Restoration 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. (21-1101)

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

#### Grant Awarded: \$1,015,889

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. The coalition is requesting an additional \$440,663 from the Puget Sound Acquisition and Restoration 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. (22-1084)

#### 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 and by coho salmon. Visit RCO's online Project Snapshot for <u>more information and photographs of this project.</u> (22-1334)

#### Grants Awarded in Clark County

#### Lower Columbia Estuary Partnership Grant Awarded: \$299,731 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 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 reestablish 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. <u>Visit RCO's online Project Snapshot for more information and photographs of this project.</u> (22-1214)



#### \$7,735,106

#### Grant Awarded: \$182,109

### Grant Awarded: \$171,215



Grant Awarded: \$7,053,969

#### Lower Columbia Estuary Partnership Grant Awarded: \$199,297 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 Estuary Partnership Restoring the Ridgefield Pits Floodplain Restoration

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 fish that prey on salmon. This project will increase habitat capacity and diversity, reduce river temperatures, and remove a thermal barrier that blocks access for fish 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)

#### Grants Awarded in Columbia County

#### Grant Awarded: \$545,500

\$1,046,849

#### 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)



#### Confederated Tribes of the Umatilla Indian Reservation Grant Awarded: \$150,001 Designing Tucannon River Floodplain Restoration

The Confederated Tribes of the Umatilla Indian Reservation, in partnership with the Washington Department of Fish and Wildlife and the Nez Perce Tribe, will use this grant to study the effect of infrastructure, such as buildings, roads, campgrounds, and powerlines, on the Tucannon River floodplain. The results of this study will be used to create conceptual designs for the area that will create varied habitat for fish and reduce maintenance and flood risk. The study will determine if infrastructure can be modified or removed to benefit fish. 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)

#### 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)

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

#### Grant Awarded: \$123,131

Grant Awarded: \$121,986

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 more information and photographs of this project. (22-1024)

#### 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)

#### Grants Awarded in Cowlitz County

#### 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)

#### 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

# \$5,705,003

# Grant Awarded: \$249,146

### Grant Awarded: \$199,826

#### WASHINGTON STATE RECREATION AND CONSERVATION OFFICE Salmon Recovery Funding Board

Grant Awarded: \$106,231



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)

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

Grant Awarded: \$5,000,000

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)

#### Wahkiakum Conservation District Maintaining Riverbank and Floodplain Plantings

#### Grant Awarded: \$256,031

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)

Grants Awarded in Garfield County

**Installing Logjams in Tumalum Creek** 

**Pomeroy Conservation District** 

Salmon Recovery

Grants Awarded 2022

#### 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)

#### 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

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Grant Awarded: \$116,325

washington state recreation and conservation office Salmon Recovery Funding Board

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) **Grants Awarded in Grays Harbor County Sp76,820 Chehalis Basin Fisheries Task Force** 

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

Grant Awarded: \$401,767

\$116,325





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 <u>more information and</u> <u>photographs of this project.</u> (22-1040)

#### Quinault Indian Nation Identifying Fish Passage Barriers

The Quinault Indian Nation will use this grant to identify 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 and coho salmon and steelhead trout. 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 Grant Aw 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 grass 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 coho salmon and steelhead trout. 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)

#### **Grants Awarded in Island County**

#### 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

# Grant Awarded: \$300,000

Grant Awarded: \$200,000

# Grant Awarded: \$149,468

\$506,002



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

# Grant Awarded: \$356,534

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. The land trust is requesting an additional \$1.5 million from the Puget Sound Acquisition and Restoration 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. (22-1085)

#### **Grants Awarded in Jefferson County**

# \$20,057,474

#### Hood Canal Salmon Enhancement Group Restoring the Duckabush Estuary

Grant Awarded: \$19,174,000

The Hood Canal Salmon Enhancement Group will use this grant to restore the Duckabush estuary, located primarily on Washington Department of Fish and Wildlife-managed lands in the Duckabush Unit of the North Olympia Wildlife Area. The estuary has been degraded for almost 100 years by a wall of highway fill that nearly severs the estuary from tidelands. The project would reconnect the river to its floodplain and wetlands by removing highway fill across the estuary, modifying local roads, elevating U.S. Route 101 onto an estuary-spanning bridge, and reconnecting historical channels. In addition, four undersized culverts will be addressed to improve connectivity and 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. Construction will bring to fruition 20 years of collaboration and investment by a consortium of partners that formed the Puget Sound Nearshore Ecosystem Restoration Project to identify opportunities for shoreline habitat restoration. The project is a partnership between the enhancement group, Washington Department of Fish and Wildlife, Washington Department of Transportation, and the U.S. Army Corps of Engineers. The estuary 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. Visit RCO's online Project Snapshot for <u>more information and</u> <u>photographs of this project.</u> (22-1091)

#### Jefferson County Grant Awarded: \$217,945 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 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 reach for future restoration. The County will acquire access agreements or easements. The river is used by chum salmon, which is a species listed as threatened with extinction under the federal Endangered Species Act. The restoration work will aim to protect core habitats and restore normal river systems. <u>Visit</u><u>RCO's online Project Snapshot for more information and photographs of this project. (18-1228)</u>

#### 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. <u>Visit RCO's online Project Snapshot for more information and photographs of this project.</u> (20-1119)

#### 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

#### Grant Awarded: \$468,065

#### Grant Awarded: \$167,923



processes of the river. The work will provide fish passage and improve the habitat for young salmon. The creek is used by steelhead trout and coho salmon. 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. Removing the Derelict Cassel Creek Culvert

#### Grant Awarded: \$29,541

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 and coho salmon. 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)

#### **Grants Awarded in King County**

#### Grant Awarded: \$160,373

\$2,815,750

#### 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. The City acquired the land several years ago. 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 for salmon. 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 city funds and staff labor. <u>Visit RCO's online Project Snapshot for more information and photographs of this project.</u> (20-1061)

#### Enumclaw

Bothell

#### **Grant Awarded: \$1,153,480**

#### 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



Grant Awarded: \$132,877

shade the water, keeping it cool 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 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. Enumclaw will contribute \$783,849 in another grant. Enumclaw is requesting an additional \$590,171 from the Puget Sound Acquisition and Restoration 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. (22-1165)

#### 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 remove the relic revetment and create a setback revetment using logiams to enhance river edge habitat while protecting homes and roads. This will allow the river to reclaim its historic floodplain and create more spawning and rearing habitat for fish. 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, keeping it cool 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)

# King CountyGrant Awarded: \$163,018Planting 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



Grant Awarded: \$69,424

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. 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 Restoring the Green River in Flaming Geyer State Park

The King County Water and Land Resources Division will use this grant to partially restore wetland and tributary habitat in the western bank of Flaming Geyser State Park, place logs in the side channel, and plant creek banks and wetland with native trees and shrubs. Adding logs 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, keeping it cool 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. King County will contribute \$90,000 in a local grant. King County is requesting an additional \$300,000 from the Puget Sound Acquisition and Restoration grant program that will be considered by the Legislature in 2023. Visit RCO's online Project Snapshot for <u>more information and photographs of this project.</u> (22-1044)

#### King County Restoring the Middle Bear Creek Natural Area

#### Grant Awarded: \$100,000

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 shades the water, helping keep it cool 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 county funds. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1190)



#### Seattle Public Utilities Grant Awarded: \$686,578 Restoring the Floodplain of 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, keeping it cool 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, as well as sockeye salmon, which are locally important species. Seattle will contribute \$1.8 million in a local grant and city funds. Seattle is requesting an additional \$1.4 million from the Puget Sound Acquisition and Restoration 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. (22-1191)

#### Tukwila Designing Gilliam Creek Fish Passage

# The City of Tukwila will use this grant to continue designing improved fish passage on Gilliam Creek and determine whether to remove or upgrade an underperforming tide gate that is blocking fish passage. Tide gates are structures that restrict water in the river to prevent flooding in the surrounding area. Often, tide gates limit or block fish access when they malfunction or are designed poorly. Lack of habitat where salmon can rest in the lower Green River limits the survival of Chinook salmon. The Green/Duwamish 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 \$50,000 in a local grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1049)

#### Tukwila

#### Grant Awarded: \$100,000

Grant Awarded: \$250,000

#### 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 a historic channel in the lower Green River, improve habitat in the river, and create 1 acre of off-channel habitat. Off channel habitat is critical for young fish so they rest, especially during high water flows where the water can push them into the marine environment too quickly. 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, keeping it cool for fish. The plants also drop branches and leaves into the water, which provide food for the insects that salmon eat. 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. Tukwilla is requesting an additional \$200,000 from the Puget Sound Acquisition and Restoration 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. (22-1047)

#### Grants Awarded in Kitsap County

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

The Mid Sound Fisheries Enhancement Group will use this grant to restore a historic barrier estuary connected to a stream across two private properties at Rose Point near Eglon to improve habitat for juvenile salmon. The enhancement group will restore salmon access and natural coastal processes to the estuary by removing a creosote timber bulkhead, restoring the wetland, planting native shrubs and trees, and rebuilding a more natural estuary outlet for the stream. The future condition will be a fully reconnected and fish-accessible coastal watershed, ending in an estuary with a natural outlet, and a natural shoreline. The restored area will provide habitat for juvenile Chinook to grow before they travel to the ocean. The Mid Sound Fisheries Enhancement Group will contribute \$161,001 in a federal grant, a grant from the state Estuary and Salmon Restoration Program, a Suguamish Tribe grant, and donated labor. The enhancement group is requesting an additional \$453,730 from the Puget Sound Acquisition and Restoration 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. (22-1100)

#### Wild Fish Conservancy **Restoring Finn Creek**

The Wild Fish Conservancy will this grant to design and permit a restoration project that will recover estuarine habitat in Finn Creek, near Hansville. The conservancy plans to restore the natural processes of this small watershed's estuary in Norwegian Point County Park by removing a 300-foot-long culvert and tide gate, creating a tidal embayment, and naturalizing the estuary and stream channel by adding large wood and a native riparian/saltmarsh corridor. Culverts are

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#### Grant Awarded: \$455,868

#### Grant Awarded: \$188,000

\$643,868



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 large wood, such as 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, large wood changes the flow of the creek, creating riffles and pools, which give salmon more varied habitat. To prevent flooding outside of the park, the design will include a low berm around the park perimeter that also will function as an interpretive trail. The design includes measures to restore salmon access from Puget Sound to spawning and rearing habitat in the watershed. Once constructed, this restoration project will benefit juvenile salmon, including Chinook that forage along the Kitsap Peninsula shorelines. Chinook salmon is a 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. (22-1098)

#### **Grants Awarded in Kittitas County**

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

The Kittitas Conservation Trust will use this grant to buy 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 bull and steelhead trout, both of which are species listed as threatened with extinction under the federal Endangered Species Act, as well as for Chinook and coho salmon, and rainbow and cutthroat trout. After the purchase of the land, the Kittitas Conservation T rust will consider restoration projects that will reverse some of the human-built changes that disconnected the river from its historic floodplain. The Kittitas Conservation Trust will contribute \$175,000 in another state grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1246)

#### **Kittitas Conservation Trust** Grant Awarded: \$147,009 **Designing a Levee Setback and Habitat Restoration at Hanson Ponds**

The Kittitas Conservation Trust will use this grant to develop conceptual designs for a project to improve the quantity and quality of off-channel rearing and spawning habitat at the Cle Elumowned gravel pits now called Hanson Ponds, and move levees separating them 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 channels, restore floodplain function, protect a regional sewer outfall and Interstate 90 infrastructure, and increase recreational



#### \$1,452,801

# Grant Awarded: \$940,178



opportunities by expanding hiking, nature viewing, and fishing opportunities. The river is used by steelhead and bull trout, both of which are species listed as threatened with extinction under the federal Endangered Species Act, and by Chinook and coho salmon and cutthroat 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)

#### Mid-Columbia Fisheries Enhancement Group Assessing Cabin Creek

#### Grant Awarded: \$31,304

The Mid-Columbia Fisheries Enhancement Group, in partnership with the Kittitas Conservation Trust, will use this grant to complete an assessment to identify potential restoration opportunities in the Cabin Creek watershed. They will develop a full understanding of impacts of past human activities, historic and existing geomorphic and hydrologic conditions, the landslide risk and activity, and the historical channel migration, bank erosion, channel incision, and floodplain connectivity. They also will identify how the drainage and degraded channel conditions impact water flows. They will focus on areas identified as having high restoration potential and known fish passage impediments. The creek is used by steelhead trout, which is a species listed as threatened with extinction under the federal Endangered Species Act, and by Chinook salmon. The 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)

#### Mid-Columbia Fisheries Enhancement Group Designing Fish Passage in Whiskey Creek

#### Grant Awarded: \$98,800

The Mid-Columbia Fisheries Enhancement Group will use this grant to complete final designs to improve fish passage in the Whiskey Creek sub-basin of Mercer Creek. Whiskey Creek is managed as a distributary of Wilson/Naneum Creeks. Wilson and Naneum Creeks are bifurcated about a mile downstream of their confluence, with half of the irrigation-season flow turned down each channel. Whiskey Creek lacks flow late in the irrigation season but may provide one of the best upstream migration corridors for steelhead through the Ellensburg Reach and on up into the forested Naneum Creek watershed. Restoring passage to the Naneum headwaters is a priority for steelhead recovery in the Yakima River basin The creek is used by steelhead trout, which is a species listed as threatened with extinction under the federal Endangered Species Act, and by Chinook salmon. Visit RCO's online Project Snapshot for <u>more information and</u> photographs of this project. (22-1631)

#### 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 <u>more information and photographs of this project.</u> (22-1614)

#### 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 and bull trout, both of which are species listed as threatened with extinction under the federal Endangered Species Act, and by Chinook and coho salmon. 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)

#### Grants Awarded in Klickitat County

#### 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

# Grant Awarded: \$36,212

#### Grant Awarded: \$199,298

Grant Awarded: \$725,367

\$725,367





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)

#### Grants Awarded in Lewis County

#### \$1,261,347

Grant Awarded: \$315,076

#### 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, keeping it cool 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)

#### Lewis Conservation District Grant Awarded: \$52,000 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)

**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)

#### **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)

#### **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 guality 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.

# Grant Awarded: \$387,006

#### Grant Awarded: \$257,955

#### Grant Awarded: \$249,310





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)

#### Grants Awarded in Mason County

#### 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)

#### 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)

#### 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

# Grant Awarded: \$112,336

Grant Awarded: \$205,800

Grant Awarded: \$57,479

\$2,082,781



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)

# Mason Conservation DistrictGrant Awarded: \$126,500Designing 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. The designs will target opening fish passage through boulders that prevent fish from getting beyond the canyon reach of the river. Work will include hosting stakeholder meetings, meeting with rock removal contractors to review safety and design criteria, securing access points for helicopter transport of equipment, developing a plan for protecting wildlife from 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)

# Mason Conservation DistrictGrant Awarded: \$199,650Designing 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)

#### Mason Conservation District Designing Restoration of Gosnell Creek

#### Grant Awarded: \$199,100

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)

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

#### Grant Awarded: \$1,100,000

The Mason Conservation District will use this grant to restore a 41.6-mile reach of the Skokomish River. Part of the work will include placing logjams in the river to create places for fish to rest, feed, and hide from predators. The logjams also will slow the river, which reduces erosion and allows small rocks to settle to the riverbed, creating areas for salmon to spawn. Finally, the logjams will 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 1.4 miles of side channel habitat. The Mason Conservation District will contribute \$493,493 in another grant. <u>Visit RCO's online Project Snapshot for more information and photographs of this project</u>. (20-1105)

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

Grant Awarded: \$81,916

The South Puget Sound Salmon Enhancement Group will use this grant to complete a preliminary design for a project that will replace an impassable wooden fish ladder with a fish-passable structure and reconnect the stream channel at a private road crossing on a tributary to Mill Creek, in Shelton. 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 coho salmon, which is a federal species of concern, and by chum salmon and cutthroat trout. The enhancement group is requesting an additional \$18,084 from the Puget Sound Acquisition and Restoration 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. (22-1178)



Grant Awarded: \$402,376

#### Grants Awarded in Okanogan County

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

The Yakima Nation will use this grant to reconnect a 1,000-foot-long relict side channel of the Twisp River with an oxbow channel, create a 2,400-foot perennial side channel. The Yakama Nation also will adding large woody materials, such as logs, root wads, and logjams to the river. Adding woody materials 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 important side channel habitat as well as 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 with increased food resources. The river is used by upper Columbia River spring 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 \$207,284 in a local grant from the Wells HCP Plan Species Account Fund. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1514)

#### Methow Salmon Recovery Foundation Reassessing the Lower Chewuch River

#### Grant Awarded: \$149,878

The Methow Salmon Recovery Foundation will use this grant to assess the lower 20 miles of the Chewuch River, a major tributary to the Methow River. The Chewuch River is a major spawning area for upper Columbia River 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 recent 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 upper Columbia River spring Chinook salmon, which is a species listed as endangered under the federal Endangered Species Act. The lower Chewuch River is used by steelhead and bull trout, both of which are species listed as threatened with extinction under the federal Endangered Species Act. The Nethow Salmon Recovery Foundation will contribute \$30,000 in a federal grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1506)

\$552,254



#### Grants Awarded in Pacific County

#### **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 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 more information and photographs of this project. (22-1219)

#### Grant Awarded: \$636,502

Grant Awarded: \$169,444

\$2,583,077



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

#### Grant Awarded: \$820,381

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)

#### Pacific Conservation District Designing Restoration of the Middle Nemah River

The Pacific Conservation District will use this grant to complete designs for the third phase of restation 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)

#### Pacific Conservation District G 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

#### Grant Awarded: \$168,300

#### Grant Awarded: \$200,000



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)

#### Pacific Conservation District Removing a Fish Passage Barrier in Howard Creek

The Pacific Conservation District will use this grant to replace a driveway culvert that is blocking fish migration with a 60-foot-long bridge. Culverts are pipes or other structures that carry water under roads or driveways and often block fish migration because they are too steep, too tall, or too small to allow fish to pass through easily. Removing the culvert will allow fish access to 2 miles habitat in the North River watershed headwaters and will allow the creek channel to migrate in the floodplain. The creek is used by coho salmon and steelhead trout. The 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)

#### 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 coho salmon and steelhead trout. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1064)

# Willapa Bay Regional Fisheries Enhancement GroupGrant Awarded: \$144,500Restoring Armstrong CreekGrant Awarded: \$144,500

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

#### Grant Awarded: \$243,950

Grant Awarded: \$200,000

Salmon Recovery

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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 replacing the blocking culvert, resting the incised creek bed, developing spawning gravels, planting the creek banks, and restoring creek-side 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)

#### **Grants Awarded in Pend Oreille County**

#### 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 cold-water 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)



#### Grant Awarded: \$197,500

#### Grant Awarded: \$156,500

# \$354,000

#### Grants Awarded in Pierce County

#### Forterra Northwest Conserving South Prairie Creek

Forterra will use this grant to buy critical salmon habitat in the South Prairie Creek watershed, expanding the mosaic of adjacent protected and restored floodplain properties. Purchase of the land 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. Forterra will work with the partners listed above to determine the best long-term owner of the land. The land then will be incorporated into long-term restoration planning to enhance habitat and restore floodplain function. 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. Forterra Northwest will contribute \$179,991 in another grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1171)

#### 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. The land trust is requesting an additional \$1.1 million from the Puget Sound Acquisition and Restoration 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. (22-1057)

#### Grants Awarded in San Juan County

#### 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

36

#### Grant Awarded: \$223,786

\$671,434

#### Grant Awarded: \$910,781

Grant Awarded: \$74,614

\$985,395



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)

## Northwest Straits Marine Conservation FoundationGrant Awarded: \$170,000Removing 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)

#### San Juan County Studying the Feasibility of Moving Backshore Roads

#### Grant Awarded: \$170,000

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 <u>more information and</u> <u>photographs of this project.</u> (22-1428)

#### San Juan Preservation Trust Conserving McArdle Bay Shoreline

The San Juan Preservation Trust will use this grant to buy a voluntary land preservation<sup>1</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)

#### Grants Awarded in Skagit County

#### Seattle City Light Conserving Skagit River Floodplain

Seattle City Light will continue its collaborative work with Skagit Land Trust and use this grant to buy 18 acres of Skagit River floodplain near South Lyman Ferry Road as well as other highquality floodplain habitat that might become available. The work will include reaching out to landowners and evaluating sites. 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. Seattle will contribute \$150,000 in donated cash. Seattle is requesting an additional \$62,120 from the Puget Sound Acquisition and Restoration grant program that will be considered by the Legislature in 2023. Visit RCO's online Project Snapshot for <u>more information and photographs</u> <u>of this project.</u> (22-1595)

#### Grant Awarded: \$107,648

#### \$2,491,016

#### Grant Awarded: \$787,880

<sup>&</sup>lt;sup>1</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.

## Salmon Recovery Grants Awarded 2022



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

#### Grant Awarded: \$108,246

The Skagit Fisheries Enhancement Group will use this grant to plan a project to open fish passage in Kennedy Creek and plant vegetation on 5 acres along a quarter-mile of the creek at its confluence with East Fork Nookachamps 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 Grant Awarded: \$150,000 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 publicly 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, keeping it cool for fish. The plants also drop branches and leaves into the water, which provide food for the insects that salmon eat. When trees fall into the river they provide more complex habitat for juvenile fish rearing in the river. 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 Land Trust Conserving Habitat in the Skagit River Watershed

#### Grant Awarded: \$850,000

The Skagit Land Trust will continue its collaborative work with Seattle City Light and will use this grant to buy 15 acres of floodplain along the Skagit River on Cape Horn Road as well as other high-quality floodplain habitat that becomes available. The work will include reaching out to landowners and evaluating sites. The river system 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 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)



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

#### Grant Awarded: \$545,000

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 restore a pocket estuary 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 beach, 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 other than State Route 20 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 River System Cooperative Tidal Network Structure and Chinook salmon Use

#### Grant Awarded: \$27,492

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 in the Skagit delta. The estuary 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 of this project. (22-1494)

# Skagit River System Cooperative Using a Fish Modeling Tool

#### Grant Awarded: \$22,398

The Skagit River System Cooperative will use this grant to test a quantitative tool for predicting fish abundance based on habitat types in the Skagit River. After the tool is tested, it will be applied in designing restoration projects. This project is part of a larger effort to understand how juvenile salmon respond to riverine habitats. 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 Skagit River System Cooperative will contribute \$6,314 in another grant. Visit RCO's online Project Snapshot for more information of this project. (22-1493)

#### Grants Awarded in Skamania County

#### 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)

#### 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 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)

# \$1,555,778

Grant Awarded: \$136,269

#### Grant Awarded: \$1,000,000

Grant Awarded: \$162,859



Grant Awarded: \$256,650

#### 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)

#### Grants Awarded in Snohomish County

Grant Awarded: \$227,800

\$7,368,896

#### 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, a side channel of the lower Skykomish River. The project design will include excavation of about a three-quarter mile filled and cut-off side-channel, reconnection and enhancement of a remnant side-channel, placement of logiams, 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, logiams 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, keeping it cool 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)



Grant Awarded: \$504,975

#### Snohomish County Grant Awarded: \$500,000 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, keeping it cool 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, 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)

#### 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, keeping it cool 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 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. <u>Visit RCO's online</u> <u>Project Snapshot for more information and photographs of this project</u>. (22-1031)

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

Grant Awarded: \$4,977,891

The Stillaguamish Tribe of Indians will use this grant 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 estuarine marsh rearing habit for salmon, especially Chinook salmon, which are a critical source of food for endangered Southern Resident killer whales. Estuarine marshes are rich in food allowing young salmon to find refuge and grow before they migrate to the ocean. The bigger fish can grow before heading to the ocean, the better chance they have of surviving in the ocean. 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. <u>Visit RCO's online Project Snapshot for more information and photographs of this project</u>. (22-1068)

## Tulalip TribesGrant Awarded: \$622,319Conserving and Designing Restoration Projects in the Tualco Valley

The Tulalip Tribes will use this grant to buy 20 acres along Haskel and Riley Sloughs, which flow through the Tualco Valley and have the potential to provide critical spawning and rearing habitat. The Tribes 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 Conserving Snohomish River Floodplain

#### Grant Awarded: \$253,325

Grant Awarded: \$282,586

The Tulalip Tribes will use this grant to buy 30 acres in the Skykomish and Pilchuck River watersheds. Conserving these lands will allow natural habitat-forming processes to act on the floodplain. These purchases will contribute to the long-term goal of conserving a corridor along the Snohomish River 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)

#### 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 Tribes' design also will include habitat enhancements, such as installation of 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)

#### Grants Awarded in Thurston County

#### 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)

#### 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 Schneider Creek basin. The creek is used 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)

### 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,

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## Grant Awarded: \$228,000

#### Grant Awarded: \$50,000

washington state recreation and conservation office Salmon Recovery Funding Board

\$553,599

## Grant Awarded: \$80,000



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)

#### Thurston County Grant Awarded: \$50,000 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, keeping it cool 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 searun cutthroat trout. Thurston County will contribute \$874,941. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1053)

#### Wild Fish Conservancy Designing and Restoring a Deschutes River Tributary

#### Grant Awarded: \$145,599

The Wild Fish Conservancy and the Thurston Conservation District 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 provides spawning and rearing habitat in the upper Deschutes River. Restoration actions will include removing three failing culverts, installing livestock fencing to protect streams and wetlands, placing log and root wads in the creek, removing invasive plants, and planting native vegetation in the wetlands and along the banks. Culverts are pipes or other structures that carry water under roads and often block fish migration when they are undersized. Adding woody materials to a creek creates habitat for fish to rest, feed, and hide from predators. It also slows the creek, which reduces erosion and traps sediment, 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, keeping it cool for fish. The plants also drop branches and leaves into the water, providing food for the insects that salmon eat. Finally, the roots of the plants help stabilize banks and 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)

#### Grants Awarded in Wahkiakum County

#### 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 Fish Enhancement Group Grant Awarded: \$67,313 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



## \$1,118,645

Grant Awarded: \$452,397



labor and materials. Visit RCO's online Project Snapshot for <u>more information and photographs</u> of this project. (22-1073)

# Washington Department of Fish and WildlifeGrant Awarded: \$598,935Removing 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)

#### Grants Awarded in Walla Walla County

#### \$729,504

#### Confederated Tribes of the Umatilla Indian Reservation Grant Awarded: \$150,000 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 and bull trout, both of which are species listed as threatened with extinction under the federal Endangered Species Act, and by Chinook salmon, which have been reintroduced to the river. 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 more information and photographs of this project. (22-1018)



#### Confederated Tribes of the Umatilla Indian Reservation Grant Awarded: \$65,000 Design Restoration of the 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 logjams to the river, plant its banks, and reconnect the river to the floodplain to create habitat diversity. The river is used by steelhead and bull trout, both of which are species listed as threatened with extinction under the federal Endangered Species Act, 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 Grant Awarded: \$165,000 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)

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

#### Grant Awarded: \$349,504

The Walla Walla County Conservation District will use this grant to add woody materials in the Touchet River and plant its banks along a half-mile, downstream of Waitsburg and about 0.75 mile below its confluence with Coppei Creek. Adding woody materials, such as logs and tree root wads, 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, keeping it cool 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 steelhead and bull trout, both of which are species listed as threatened with extinction under the federal Endangered Species Act. 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)

#### Grants Awarded in Whatcom County

#### 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 recently removed 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 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)

#### Lummi Nation Grant Awarded: \$46,900 **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. Logiams and post arrays will deflect high-flow energy away from critical spawning and rearing habitat and improve channel stability. Logjams also create places for fish to rest, feed, and hide from predators. They slow the water, 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 river helps shade the water, keeping it cool 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 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, and by chum, sockeye, and pink salmon. The project also will benefit Southern Resident orca by increasing their prey. 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 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, low river flows,

51

#### \$817,895

#### Grant Awarded: \$297,700

WASHINGTON STATE RECREATION AND CONSERVATION OFFICE

Salmon Recovery

Funding Board

Grant Awarded: \$60,000



and degraded habitat. Pools in this reach are spaced further apart than any other reach in the lower South Fork. The reach is heavily used by Chinook for spawning and rearing, as well as holding for those spawning upstream and those returning to the Skookum hatchery as part of the South Fork Nooksack Chinook population-rebuilding program. The project will reduce the risk that Chinook will die before they can spawn by designing restoration actions that will promote formation of deep, cool, complex pools. The river is used by Chinook 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 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)

#### Nooksack Indian Tribe Grant Awarded: \$413,295 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 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. 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, low river flows, and 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 for spawning and rearing; as well as holding for those Chinook returning to the Skookum hatchery and spawning grounds upstream. The project will reduce risk that Chinook will die before they can spawn by creating deep, cold pools. The river is used by Chinook 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)

#### Grants Awarded in Whitman County

#### \$294,000

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

## Grant Awarded: \$249,000

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



Grant Awarded: \$45,000

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 <u>more information and</u> <u>photographs of this project.</u> (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)

#### Grants Awarded in Yakima County

#### **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)

#### Confederated Bands and Tribes of the Yakama Nation Replacing the 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

#### Grant Awarded: \$245,000

#### Grant Awarded: \$285,000

\$6,446,340



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, and by Pacific lamprey. The Yakama Nation will contribute \$50,798 in another grant. Visit RCO's online Project Snapshot for <u>more</u> <u>information and photographs of this project.</u> (22-1576)

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

#### Grant Awarded: \$960,000

The Yakama Nation, in partnership with the Mid-Columbia Fisheries Enhancement Group, will use this grant to restore natural floodplain processes on 946 acres of habitat by reconnecting about 10 miles of side channels along the Yakima River. The Tribe will connect two inlet structures, excavate sections of side channel, remove blockages in the channels, install two logjams, enhance a beaver dam, and plant the riverbanks. Reconnecting side channels will provide access to critical off-channel habitat and reduce the likelihood of fish being stranded during lower river flows. If the side channels contain water for more time, the groundwater table will rise, cottonwood forests would be encouraged to grow, and beaver habitat should increase. Logiams and beaver dams change the flow of the river, creating riffles and pools, which give salmon more varied habitat. Slower flows reduce erosion and allow small rocks to settle to the riverbed, creating areas for salmon to spawn. Logjams also create places for fish to feed, rest, and hide from predators. Beaver dams block water, creating consistent water levels, which are helpful to salmon in drier months. Planting trees and bushes on the banks provides shade, keeping the water cool 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, coho, and sockeye salmon, steelhead trout, and Pacific lamprey. 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)

#### Mid-Columbia Fisheries Enhancement Group Restoring Cowiche Creek

#### Grant Awarded: \$72,000

The Mid-Columbia Fisheries Enhancement Group will use this grant to design, secure permits, and implement a small restoration project to improve habitat and floodplain function in lower Cowiche Creek. This section of Cowiche Creek is incised and disconnected from its floodplain by concrete slabs, bank armor, a railroad berm, and fill material. The berm and fill are inhibiting the establishment of plants along the creek banks. The enhancement group will remove the concrete slabs, fill, and 65 feet of the railroad berm. In addition, it will place a wood structure in the creek. The wood structure 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. Finally, the structure will change the flow of the water,



creating riffles and pools, which give salmon more varied habitat. The enhancement group also will remove non-native weeds and plant native trees and shrubs. Planting trees and shrubs along the water shades the water, keeping it cool 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 spawning gravel. 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 \$14,650 in another grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1573)

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

#### Grant Awarded: \$87,366

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, keeping it cool 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 enhancement group will improve a landowner's irrigation diversion that would otherwise be rendered inoperable by the project. The creek is used by steelhead and bull trout, both of which are species listed as threatened with extinction under the federal Endangered Species Act, and by Chinook and coho salmon. The Mid-Columbia Fisheries Enhancement Group will contribute \$15,802 in a federal grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (22-1527)

#### 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 Drainage Improvement District #1 levee, and regrade the majority of the Newland Pits as floodplain. This 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 and bull trout, both of which are species listed as threatened with extinction under the federal Endangered Species Act, and by Chinook and coho salmon. Chinook

#### Grant Awarded: \$4,796,974

## Salmon Recovery Grants Awarded 2022



salmon are a key food source for endangered Southern Resident orcas. <u>Visit RCO's online</u> <u>Project Snapshot for more information and photographs of this project</u>. (22-1579)