Salmon Recovery Grants 2021
Project Summaries

WASHINGTON STATE RECREATION AND CONSERVATION OFFICE
Salmon Recovery Funding Board

Grant Awarded in Asotin County $200,000

Asotin County Conservation District — Grant Awarded: $200,000
Restoring Fish Passage in Cougar Creek

The Asotin County Conservation District will use this grant to fix a barrier to steelhead migration in Cougar Creek where the creek flows under Grande Ronde River Road, about 4.5 miles west of State Route 129. The culvert is preventing some steelhead from reaching 2.25 miles of rearing and spawning habitat upstream. 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. Cougar Creek flows directly into the Grande Ronde River about 140 feet below the culvert. The creek is used by summer steelhead trout, which is a species listed as threatened with extinction under the federal Endangered Species Act. The Asotin County Conservation District will contribute $50,000 in state and federal grants. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1005)

Grants Awarded in Chelan County $813,982

Cascade Columbia Fisheries Enhancement Group — Grant Awarded: $127,273
Designing Restoration of Lower Peshastin Creek

The Cascade Columbia Fisheries Enhancement Group will use this grant to design a restoration project that will create spawning habitat for steelhead in Peshastin Creek, high-quality rearing habitat for both steelhead and Chinook salmon in lower Peshastin Creek, and cool, off-channel habitat for fish using the Wenatchee River. Lower Peshastin Creek is an important migration corridor, linking the Wenatchee River to the cooler waters of the upper Peshastin watershed and its tributaries, which serve as important spawning and early rearing areas for salmon species. The design of the project is intended to increase the frequency and extent of floodplain inundation during higher flows and increase the quality and density of native plants along the banks. Peshastin Creek and the Wenatchee River are used by spring-run Chinook salmon, which is a species listed as endangered under the federal Endangered Species Act, and by steelhead trout, which is listed as threatened under the Act. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1179)

Chelan County — Grant Awarded: $94,152
Designing Restoration of the Nason Creek Near the Butcher Creek Confluence

The Chelan County Natural Resources Department will use this grant to develop preliminary designs for a project to improve conditions in Nason Creek, just below the confluence with Butcher Creek. This section of Nason Creek contains well-used spawning habitat for spring-run Chinook salmon and is an important cool-water area for fish during summer when warm water temperatures can kill the fish. The department will identify actions to improve the cold-water

feature and to remove creosote-treated wood abutments, which are contaminating the water, of a defunct bridge. The department will evaluate the site, develop a restoration strategy and preliminary designs, and prepare permit applications. Nason Creek is used by spring-run Chinook salmon, which is a species listed as endangered under the federal Endangered Species Act, by steelhead and bull trout, both of which are species listed as threatened under the Act. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1169)

Chelan County — Grant Awarded: $95,200
Evaluating Reconnection of the Nason Creek Floodplain

The Chelan County Natural Resources Department will use this grant to evaluate Nason Creek and the adjacent floodplain wetlands to develop restoration actions that will improve conditions in the creek and reconnect the floodplain. The department will evaluate the site, develop and analyze alternative restoration strategies, and prepare conceptual and preliminary designs for a preferred alternative. The creek is important spawning and rearing habitat for spring-run 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 listed as threatened under the Act. Chelan County will contribute $16,800 in a local grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1171)

Chelan County — Grant Awarded: $45,380
Monitoring Entiat River Fish Movement

The Chelan County Natural Resources Department will use this regional monitoring grant to evaluate which habitats fish are more likely to select in the middle Entiat River. The department will conduct surveys to see if more fish are using habitat where restoration has occurred compared with nearby unrestored sites. The department also will use mark-recapture methods (where individual fish are marked and their movement tracked) to compare the rates of fish movement in and out of high-quality pool habitats of different sizes and with distances separating them. The goal of this study is to provide information about the size and placement of pool-forming logjams for future restoration work. The river is used by spring-run Chinook salmon, which is a species listed as endangered under the federal Endangered Species Act, and by steelhead trout, a species listed as threatened under the Act. Chelan County will contribute $128,613 in a local grant and donations of equipment and labor. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1184)

Chelan County — Grant Awarded: $421,370
Restoring a Nason Creek Reach

The Chelan County Natural Resources Department will use this grant to place logs and tree root wads in the Kahler reach of Nason Creek, a tributary to the Wenatchee River. The creek has been severely altered from its historic condition by wood removal, highway construction, and construction and maintenance of transmission lines. 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 creek, and promote the development of pool-riffle sequences, which create resting places for salmon. The addition of strategically placed wood also will increase access to off-channel habitat, which provides slow-moving water that is important rearing habitat for young salmon. It also helps reduce summer stream temperatures by allowing connectivity with cooler groundwater. The county also will plant the creekbanks to replace native plants that were cleared for powerline construction. Planting trees and bushes along a creek helps shade the water, cooling it for fish. The plants also drop branches and leaves into the water, which provide food for the insects salmon eat. Finally, the roots of the plants help keep soil from entering the water, where it can smother fish spawning gravel. Nason Creek supports major spawning areas for salmon and steelhead, and is a core area for bull trout. The work will increase the types of habitat in the creek and improve access to off-channel habitat, giving adult fish a place to rest before spawning and young fish a place to grow. Nason Creek is used by spring-run 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 listed as threatened under the Act. Chelan County will contribute $163,924 in a local grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1180)

Trout Unlimited Inc. — Grant Awarded: $30,607
Using Beavers to Restore the Wenatchee and Columbia Rivers

Trout Unlimited will use this grant to help 10-20 landowners, relocate 20-30 beavers, and install up to 100 beaver dam analogs in the Entiat River, Mad River, Chiwawa River, Peshastin Creek, and other sites in the upper Wenatchee subbasin. The analogs mimic beaver dams, which slow the water and create pools, giving salmon places to rest and feed. The dams also block water, enhancing the connection between the river and the floodplain. This connection helps increase water storage so there is more water available in drier months, and maintains cooler summer water temperatures, thereby increasing the quality and quantity of summer stream habitat for salmon. These streams and rivers are used by spring-run 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 under the Act. Trout Unlimited Inc. will contribute $103,982 in a local grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1182)

Grants Awarded in Clallam County — $1,181,390

Jamestown S'Klallam Tribe — Grant Awarded: $318,020
Placing Logjams in the Upper Dungeness River

The Jamestown S'Klallam Tribe will use this grant to place logjams in the Dungeness River to improve spawning and rearing habitat for salmon species. This is the third phase of the project. In 2016 and 2020, the Tribe placed 24 logjams in the Gray Wolf and Dungeness Rivers in

Olympic National Forest. This project treats reaches downstream of the national forest on federal, state, and private timberlands. This project benefits Chinook and chum salmon and steelhead trout, all of which are species listed as threatened with extinction under the federal Endangered Species Act. Also benefitting are coho and pink salmon. The Jamestown S'Klallam Tribe will contribute $1 million in a federal grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1062)

Lower Elwha Klallam Tribe — Grant Awarded: $185,000
Designing Restoration of the Little Hoko River

The Lower Elwha Klallam Tribe will use this grant to conduct geomorphic, hydrologic, and hydraulic analyses of the Little Hoko River watershed, and then develop an engineering design of restoration treatments. The Little Hoko River is the largest tributary to the Hoko River, which supports populations of salmon, trout, and lamprey. The lower portions of the Little Hoko River were conserved in the early 1990s and a large restoration project was implemented by the Tribe between 1994-1998. However, additional restoration work using logjams is necessary to improve rearing habitat. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1054)

Lower Elwha Klallam Tribe — Grant Awarded: $264,107
Planting Former Reservoirs in the Elwha River

The Lower Elwha Klallam Tribe will use this grant to plant trees and shrubs on 500 acres in the former Mills and Aldwell reservoirs of the Elwha River. The work will focus on planting trees in young hardwood forests and along shorelines dominated by plants. The goal is to help rebuild Pacific salmon populations by nurturing, protecting, and enhancing degraded and developing salmon habitat on the Elwha River. Planting trees and bushes along the water helps shade the water, cooling it for fish. The plants also drop 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 and bull trout, all of which are species listed as threatened with extinction under the federal Endangered Species Act. The river also is used by coho salmon, which is a federal species of concern, by Pacific lamprey, which is a candidate for listing, and by chum, pink, and sockeye salmon. The Lower Elwha Klallam Tribe will contribute $81,133 in equipment, a federal grant, and donated labor. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1094)

North Olympic Salmon Coalition — Grant Awarded: $41,457
Restoring Dungeness Shoreline

The North Olympic Salmon Coalition will use this grant to remove invasive plants on 36 acres along the Dungeness River near Sequim. The coalition also will plant and seed 14 acres with native shrubs and trees, and maintain the plantings for 3 years to improve plant survival. About 20 percent of historic riverbank plants and trees have been removed in the lower Dungeness

River corridor. Planting trees and bushes along a river helps shade the water, cooling it for fish. As the plants mature, they drop leaves into the river, providing food for insects that young salmon eat. Mature trees that fall into the river provide habitat and refuge from swift currents and predators. Finally, roots of the plants prevent soil from entering the water and smothering fish spawning gravel. The river is used by Chinook and chum salmon and steelhead and bull trout, all of which are species listed as threatened with extinction under the federal Endangered Species Act. Coho salmon, a federal species of concern, also inhabit the Dungeness. The North Olympic Salmon Coalition will contribute $39,000 in a federal grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1101)

Pacific Coast Salmon Coalition — Grant Awarded: $206,000
Replacing the Fish-Blocking Kugel Creek Culvert

The Pacific Coast Salmon Coalition will use this grant to remove a failing, undersized, and partial fish barrier culvert on Kugel Creek and replace it with a larger culvert that provides full access to 7.4 miles of habitat. Culverts are pipes or other structures that carry water under roads and often block fish migration because they are too steep, too tall, or too small to allow fish to pass through easily. The failing culvert will be replaced with an arch culvert that is needed because the Olympic Discovery Trail passes through this location. The creek is used by coho salmon and steelhead trout. The Pacific Coast Salmon Coalition will contribute $795,656 in a grant from the Washington Coastal Restoration and Resiliency Initiative and donated labor. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1159)

Trout Unlimited Inc. — Grant Awarded: $137,625
Designing Corrections to Fish Passage Barriers in Anton and Cedar Creeks

Trout Unlimited will use this grant to develop designs to correct barriers to fish passage in Anton and Cedar Creeks, two tributaries in the Sol Duc watershed that travel under Bear Creek Road near Forks. The goal of the project is to restore fish access to their historic range of habitat. These tributaries provide valuable spawning and rearing habitat for coho and Chinook salmon and steelhead, cutthroat, and rainbow trout. Implementing the designs from this project would result in restored fish passage to 5.4 miles of upstream habitat. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1144)

Wild Salmon Center — Grant Awarded: $29,181
Restoring Off-Channel Habitat in the Dickey River Watershed

The Wild Salmon Center will use this grant to remove artificial structures and restore natural processes to two off-channel areas in the Dickey River watershed, a tributary in the Quillayute River basin. More than 30 years ago, the Washington Department of Fish and Wildlife's Salmon Screening Habitat Enhancement and Restoration (SSHEAR) Program developed more than 50 off-channel habitat sites to benefit coho salmon during winter's high-water flows. Today, many of the structures and methods that were used are deteriorating, outdated, or preventing migration of fish. The Wild Salmon Center will remove some of the artificial structures, such as

plank weirs, and restore natural processes. The Wild Salmon Center will contribute $5,836 in staff labor. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1137)

For more grants awarded in Clallam County, see the section "Grants Awarded in Multiple Counties" that begin on page 38.

Grant Awarded in Clark County $295,796

Lower Columbia Estuary Partnership — Grant Awarded: $295,796
Designing Restoration of the Ridgefield Pits Area

The Lower Columbia Estuary Partnership will use this grant to complete designs and secure permits for a project to realign and regrade the Ridgefield Pits area on the East Fork Lewis River. In a large flood in 1996, the river shifted course into nine abandoned gravel pits in the floodplain, causing widespread habitat degradation and the creation of areas of slow, warm water that benefit predatory fish. The partnership will target improving the habitat in the Ridgefield Pits area and in an upstream side-channel. 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 Estuary Partnership will contribute $52,636 in donated labor. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1127)

For more grants awarded in Clark County, see the section "Grants Awarded in Multiple Counties" that begin on page 38.

Grants Awarded in Columbia County $437,575

Columbia Conservation District — Grant Awarded: $304,964
Designing Restoration of the Touchet River

The Columbia Conservation District will use two grants to develop preliminary designs to restore 1.75 miles of the Touchet River between Dayton and Waitsburg. The first grant will design the restoration of 1.5 miles north of U.S. Route 12 and the second grant will design the restoration of 0.25 mile south of U.S. Route 12 between Gallaher and Lower Hogeye Roads. The river suffers from disconnected floodplains, simplistic channels, too much sediment, water that is too warm, and too few cold, deep ponds. The conservation district will explore options to remove or modify encroaching features, such as levees; place large woody material in the river and floodplain; enhance the gravel bars to promote channel complexity; modify a county bridge; and replant the area. The goal is to restore and protect spawning, migrating, and overwintering habitat. The river used by steelhead and bull trout, both of which are species listed as threatened with extinction under the federal Endangered Species Act, and by reintroduced Chinook salmon. The Columbia Conservation District will contribute $86,000 in federal grants.

Visit RCO's online Project Snapshot for more information and photographs of the north project and the south project. (21-1011 and 21-1012)

Confederated Tribes of the Umatilla Indian Reservation — Grant Awarded: $101,000
Improving and Expanding Habitat in the North Fork Touchet River

The Confederated Tribes of the Umatilla Indian Reservation will use this grant to set back a levee more than three-quarter mile on the North Fork Touchet River to improve and expand habitat for fish. This will require the landowner, Empey Holdings, LLC., to give up at least 8 acres of apple orchard with a total of 15 acres incorporated into the surrounding floodplain. The Tribe also will place large logs 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 Tribe also will replace an 80-foot bridge with a larger bridge to give the channel room to migrate naturally. This is the third and final phase of a larger project to improve North Fork Touchet River habitat. 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 reintroduced spring Chinook salmon. The Tribe will contribute $304,833 in state and federal grants. This is a cost increase for a previously funded project. Visit RCO's online Project Snapshot for more information and photographs of this project. (20-1050)

Nez Perce Tribe — Grant Awarded: $31,611
Replacing a Tumalum Creek Barrier

The Nez Perce Tribe will use this grant to replace a culvert on Tumalum Creek, expanding access to 6.5 miles of habitat. Culverts are large 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. The creek is used by steelhead trout, which is a species listed as threatened with extinction under the federal Endangered Species Act. The Tribe will contribute $67,861 in a federal grant. This is a cost increase for a previously funded project. Visit RCO's online Project Snapshot for more information and photographs of this project. (20-1053)

Grants Awarded in Cowlitz County — $990,342

Cowlitz Conservation District — Grant Awarded: $219,000
Restoring Upper Germany Creek

The Cowlitz Conservation District will use this grant to place trees and root wads in Germany Creek. Placing logs in a creek 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 creek bed, creating areas for salmon to spawn. Finally, logs change the flow of the creek, creating riffles and pools, which give salmon more varied habitat. The creek is used by coho and Chinook salmon, both of which are species listed as threatened with extinction under the federal Endangered Species Act,

and by steelhead trout. The Cowlitz Conservation District will contribute $39,000 in state grant and donations of labor and materials. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1078)

Lower Columbia Fish Enhancement Group — Grant Awarded: $771,342
Expanding Restoration of the South Fork Toutle River

The Lower Columbia Fish Enhancement Group will use this grant to begin restoring the Brownell reach of the South Fork Toutle River. The enhancement group will finalize the project design, install tree root wads and logs in the river and its floodplain, and plant the area. 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 provide salmon more varied habitat. The goal is to jumpstart the establishment of mature floodplain forests. The Toutle River was cleared in 1980 by a violent mudflow caused by the eruption of Mount Saint Helens, and the river still is struggling to recover. Plants for the project will be grown by Toutle Lake High School students and enhancement group staff. 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, as well as lamprey, trout, and a dozen other coldwater fish species. The Lower Columbia Fisheries Enhancement Group will contribute $140,539 in donations of labor and materials. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1061)

For more grants awarded in Cowlitz County, see the section "Grants Awarded in Multiple Counties" that begin on page 38.

Grant Awarded in Garfield County — $145,500

Pomeroy Conservation District — Grant Awarded: $145,500
Restoring Tumalum Creek

The Pomeroy Conservation District will use this grant to restore Tumalum Creek, a tributary of the Tucannon River. The conservation district will install at least 60 structures, such as beaver dam analogs and logjams, in 1 mile of the creek, and enhance previously built structures in a quarter-mile of the creek. In addition, the conservation district will trap and relocate beavers to the creek. 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 when creeks have less water. Wildfires, logging, grazing, flooding, and the removal of large wood and beavers from the creek has resulted in disconnected floodplains, bare creekbanks, and a simplified and incised stream channel with limited habitat complexity, and water that is too warm. The lower 5 miles either run dry most of the year or have low flows. The goals of this project are to promote self-sustaining processes that improve and maintain spawning and rearing habitat for steelhead and help increase the potential for beaver survival. The creek is

used by summer steelhead trout, which is a species listed as threatened with extinction under the federal Endangered Species Act. The Pomeroy Conservation District will contribute $25,700 in donations of equipment, labor, and materials. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1007)

Grants Awarded in Grays Harbor County $481,837

Chehalis Basin Fisheries Task Force — Grant Awarded: $306,410
Opening Fish Passage in Geissler Creek

The Chehalis Basin Fisheries Task Force will use this grant to remove a barrier to fish passage on Geissler Creek where it passes under Geissler Road, opening access to 2 miles of spawning and rearing habitat. The barrier is a culvert that has been smashed and prevents some of the fish from passing through year-round. 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 will be replaced with a 44-foot-long bridge. The creek is used by coho, chum, and Chinook salmon as well as steelhead and resident trout. The Chehalis Basin Fisheries Task Force will contribute $54,074 in cash and a federal grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1081)

Chehalis River Basin Land Trust — Grant Awarded: $84,427
Conserving Land along the West and East Hoquiam Rivers

The Chehalis River Basin Land Trust will use this grant to buy 122.7 acres on separate parcels on both the West and East Hoquiam Rivers. The lands include 51 acres of wetlands, about 0.3 mile of fish bearing streams on the East Hoquiam River, and 0.75 mile of shoreline on the West Hoquiam River. The lands are next to more than 1,300 acres already conserved. The purchase will protect high-quality surge plain and riverbank habitats critical to rearing depressed stocks of Chinook salmon and steelhead, as well as coho and chum salmon and coastal cutthroat trout. The Chehalis River Basin Land Trust will contribute $14,998 in donations of cash, labor, and land or property interest. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1074)

Quinault Indian Nation — Grant Awarded: $91,000
Designing Fish Passage in a Raft River Tributary

The Quinault Indian Nation will use this grant to produce final engineered designs to remove two fish passage barriers in a tributary of the Raft River on the Quinault Indian Reservation. The Raft River basin is the second largest basin on the reservation. The tributary contains habitat for coho salmon and steelhead, searun cutthroat, bull, and resident trout. Removing the barriers would give salmon species access to 1.25 miles of habitat. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1116)

Grants Awarded in Island County $271,828

Northwest Straits Marine Conservation Foundation — Grant Awarded: $66,524
Removing Armor at Polnell Point

The Northwest Straits Marine Conservation Foundation will use this grant to remove about 2,000 tons of armor rock and debris along a quarter-mile of shoreline at Polnell Point, near Oak Harbor. The foundation also will remove fill, decommission part of a road prism, and plant native dune grass along the shoreline. The area is used by Chinook salmon, 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 and pink salmon. The Northwest Straits Marine Conservation Foundation will contribute $428,033 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. (21-1067)

Northwest Straits Marine Conservation Foundation — Grant Awarded: $155,058
Restoring Hoypus Point Shoreline

The Northwest Straits Marine Conservation Foundation will use this grant to remove about 350 feet of shoreline armor and up to one-third acre of fill at Hoypus Point in Deception Pass State Park on Whidbey Island. The foundation also will convert a portion of the road to a gravel trail and replant the shoreline with native trees and plants. The work will restore a bluff-backed beach and the marine shoreline connection. The area is used by Chinook salmon, 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 and pink salmon as well as surf smelt and Pacific sand lance. The Northwest Straits Marine Conservation Foundation will contribute $150,000 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. (21-1066)

Whidbey Camano Land Trust — Grant Awarded: $50,246
Conserving Camano Island Shoreline

The Whidbey Camano Land Trust will add this grant to the larger project funded in 2020 that will conserve 35 acres of potential tidal marsh embayment habitat and 20 acres of intertidal flats in Port Susan. The area is used by Chinook salmon, a 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, surf smelt, and Pacific sand lance. The land trust will contribute $145,000 in a private grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (20-1134)

Grants Awarded in Jefferson County $887,750

10,000 Years Institute — Grant Awarded: $80,000
Controlling Invasive Weeds Along the Snahapish River

The 10,000 Years Institute will use this grant to remove reed canarygrass and other non-native plants introduced from nearby roads and logging into the state Department of Natural Resources' Clearwater Corridor Natural Resources Conservation Area in the lower 14 miles of the Snahapish River on Washington's coast. Reed canarygrass has been found and treated in all reaches and the institute continues to circle back to maintenance the areas. The institute focuses on spawning and rearing habitats, floodplains, and riverbanks. The river is used by Chinook and coho salmon and steelhead. The 10,000 Years Institute will contribute $14,426 in a grant from the state Estuary and Salmon Restoration Program, and donation of materials. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1117)

Hood Canal Salmon Enhancement Group — Grant Awarded: $414,891
Conserving Land in the Big Quilcene Moon Valley

The Hood Canal Salmon Enhancement Group will use this grant to buy 30 acres of historic floodplain in the Moon Valley Reach downstream of the State Route 101 bridge. This project will allow for future restoration work to re-connect floodplain habitat with the Big Quilcene River and improve both water quality and habitat. The river is used by chum salmon and steelhead trout, both species listed as threatened with extinction under the federal Endangered Species Act, and by coho salmon, which is a federal species of concern. The enhancement group will contribute $66,872 in a federal grant. This is a cost increase from a previously approved project. Visit RCO's online Project Snapshot for more information and photographs of this project. (19-1285)

Hood Canal Salmon Enhancement Group — Grant Awarded: $50,868
Designing a Duckabush Oxbow Connection

The Hood Canal Salmon Enhancement Group will use this grant to complete a groundwater assessment and develop a preliminary design of a channel connection in an oxbow of the Duckabush River, about 1 mile upstream of the State Route 101 causeway. The design will be for a proposed upstream channel connection of the oxbow aimed at restoring floodplain connection in the lower Duckabush River. The project site is known as the Duckabush Oxbow and Wetlands Preserve and is owned by the Jefferson Land Trust. The river is used by chum salmon, which 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. (21-1038)

Jefferson County — Grant Awarded: $163,625
Developing Restoration Plans along the Dosewallips River

Jefferson County will use this grant to produce plans to restore habitat at the confluence reach of Wolcott Flats and Rocky Brook of the Dosewallips River. The County will identify ecological corridors, both for typical flows and for full re-engagement of the floodplain. The County also will survey landowners and develop conceptual designs for all participating landowners to improve habitats for spawning, rearing, and migrating fish. Proposed conditions will be identified, modeled, analyzed, and refined in partnership with landowners leading to an action plan for next steps. 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. Jefferson County will contribute $28,875 from federal and local grants. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1024)

Quinault Indian Nation — Grant Awarded: $76,000
Designing Fish Passage in a South Fork Salmon River Tributary

The Quinault Indian Nation will use this grant to produce final engineered designs to remove one barrier to fish passage in a tributary of the South Fork Salmon River on the Quinault Indian Reservation. Removing the barrier would give salmon access to a half-mile of habitat. This tributary contains habitat for coho salmon and steelhead, cutthroat, and resident trout. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1115)

Trout Unlimited Inc. — Grant Awarded: $102,366
Designing Fish Passage in Donkey Creek

Trout Unlimited will use this grant to complete a preliminary design to replace a culvert on Clearwater Road where Donkey Creek runs under the road, about 1 mile upstream from where the Clearwater River joins the Queets River. 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 goal of the project is to restore access for native salmon species to their historic range of habitat use. The creek is used by coho salmon and steelhead and cutthroat trout. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1122)

For more grants awarded in Jefferson County, see the section "Grants Awarded in Multiple Counties" that begin on page 38.

Grants Awarded in King County $855,764

Kent — Grant Awarded: $195,895
Restoring Green River Habitat

The City of Kent will use this grant to build side channel habitat and reconnect floodplain on the left bank of the Green River. The project will create additional storage for water during storms and flooding and will help reduce flood risk in nearby urban and agricultural areas. The Green River is used by Chinook salmon and steelhead trout, both 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 salmon. The City will contribute $873,545 in a local grant and donated labor and materials. Visit RCO's online Project Snapshot for more information and photographs of this project. (20-1067)

Issaquah — Grant Awarded: $435,234
Restoring Lower Issaquah Creek Habitat

The City of Issaquah will use this grant to restore habitat in and along about a quarter-mile of Issaquah Creek. The City will excavate several east bank backwater and side channels and place woody materials and plants there to create quiet-water areas for salmon to rest and hide from predators. The City also will remove most of the armoring along the east bank and place clustered logs with root wads extending part way into the channel to create pools and slow the water. Finally, the City will remove invasive plants and plant native trees and shrubs. Planting trees and bushes along a creek shades 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 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. Kokanee salmon also use Issaquah Creek, and while not listed, their number is severely depressed. The City of Issaquah will contribute $80,000. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1208)

King County — Grant Awarded: $132,877
Planting the Banks of the Green River in Flaming Geyser State Park

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

Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1002)

Wild Fish Conservancy — Grant Awarded: $91,758
Assessing Log Placement in the Snoqualmie River

The Wild Fish Conservancy will use this grant to assess the feasibility of placing large woody materials such as tree root wads and logs in the Snoqualmie River at its confluence with the Tolt River, downstream of Harris Creek near the Chinook Bend Natural Area. The assessment will lay the foundation for conceptual designs that will detail placement of the logs. The Chinook Bend-Tolt reach of the river is an important area for both spawning and rearing for Chinook salmon. Despite past restoration efforts, the number of woody materials in the reach is low relative to historic levels. Adding logs to the river changes the flow of the river, creating riffles and pools, and gives salmon more varied habitat 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. The river is used by Chinook salmon and steelhead trout, both species listed as threatened with extinction under the federal Endangered Species Act, by coho salmon, a federal species of concern, and by chum and pink salmon. The Wild Fish Conservancy will contribute $25,000 in a local grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1070)

Grants Awarded in Kitsap County — $449,985

Bainbridge Island Land Trust — Grant Awarded: $303,648
Conserving and Restoring Springbrook Creek

The Bainbridge Island Land Trust will use this grant to buy 22.8 acres of forested wetland, stream, and bank on Springbrook Creek on Bainbridge Island and make improvements on the land. The land trust will remove a blocking culvert, opening nearly a quarter-mile of fish rearing 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. In addition, the land trust will remove invasive plants and replant with native plants. Planting trees and bushes along a creek helps shade the water, cooling it for fish. The plants also drop branches and leaves into the water, which provide food for the insects salmon eat. Finally, the roots of the plants help keep soil from entering the water, where it can smother fish spawning gravel. The Springbrook Creek Preserve hosts some of the highest quality stream and wetland habitat in the entire watershed. Springbrook Creek flows cold and clear in the preserve and is the only area in the watershed to be cool enough for salmon year-round. 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 and cutthroat trout. The Bainbridge Island Land Trust will contribute $494,564 in cash, staff labor, and donated labor. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1052)

Mid-Puget Sound Fisheries Enhancement Group — Grant Awarded: $85,000
Designing a Correction to the Fletcher Bay Road Culvert

The Mid-Puget Sound Fisheries Enhancement Group, in partnership with the City of Bainbridge Island, will use this grant to develop final designs for replacement of the Fletcher Bay Road Northeast culvert in Springbrook Creek on Bainbridge Island, and restoration of about 400 feet of stream channel. 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 crossing under Fletcher Bay Road is a series of concrete weirs, bank armoring, and an undersized culvert. The goal of the project is to restore fish passage and stream habitat conditions low in the Springbrook Creek watershed to benefit salmon species and improve the ability of the creek to accommodate changes associated with climate change. 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 and cutthroat trout. The Mid-Puget Sound Fisheries Enhancement Group will contribute $50,000 in cash and donated cash. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1058)

Mid-Puget Sound Fisheries Enhancement Group — Grant Awarded: $61,337
Designing Restoration of the Point No Point Estuary

The Mid-Puget Sound Fisheries Enhancement Group will use this grant to develop a preliminary design for restoration of the Point No Point estuary. The enhancement group will build upon the recently completed feasibility study and complete additional partner and landowner outreach; collect additional hydrology, groundwater, and geotechnical data; complete wetland and habitat surveys and a cultural resources assessment; and create a preliminary design and alternatives analysis. The design alternatives will explore options to restore tidal flow and fish access to up to 32 acres of wetlands that were historically salt marsh and have been cut off from saltwater for the past century by dikes and a tide gate. The goal of this project is to improve near-shore habitat for young salmon heading out to the ocean and other fish and wildlife species. The restored estuary will benefit 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 salmon. The Mid-Puget Sound Fisheries Enhancement Group will contribute $203,836 in a grant from the state Estuary and Salmon Restoration Program, $61,800 in a federal grant, and donated labor. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1053)

For more grants awarded in Kitsap County, see the section "Grants Awarded in Multiple Counties" that begin on page 38.

Grants Awarded in Kittitas County $970,044

Confederated Tribes and Bands of the Yakama Nation — Grant Awarded: $229,381
Placing Logjams Along Taneum Creek

The Yakama Nation will use this grant to install logjams along 1.5 miles of Taneum Creek to restore habitat for salmon and trout. Adding logs to a creek creates places for fish to rest, feed, and hide from predators. It also slows the creek, which reduces erosion and allows small rocks to settle to the bottom, creating areas for salmon to spawn. Finally, logs change the flow of the creek, creating riffles and pools, which give salmon more varied habitat. The creek is used by steelhead trout, which is a species listed as threatened with extinction under the federal Endangered Species Act, and by Chinook and coho salmon and rainbow trout and cutthroat trout. The Yakama Nation will contribute $41,826 in a federal grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1196)

Kittitas Conservation Trust — Grant Awarded: $65,662
Conserving Land in the Upper Yakima River Floodplain

The Kittitas Conservation Trust will use this grant to buy 15 acres along the Yakima River to support habitat for salmon. The land includes wetlands, old-growth cottonwood and aspen stands, about 700 feet of Yakima River riverbank, and more than a quarter-mile of side channels. This reach of the river is used by mid-Columbia steelhead trout, which is a species listed as threatened with extinction under the federal Endangered Species Act, and by Chinook, coho, and sockeye salmon. The Kittitas Conservation Trust will contribute $51,641 in a state grant. This is a cost increase for a previously funded project. Visit RCO's online Project Snapshot for more information and photographs of this project. (20-1203)

Kittitas Conservation Trust — Grant Awarded: $492,145
Restoring the Kachess River

The Kittitas Conservation Trust will use this grant to install large wood structures that act like logjams in the upper Kachess River and will reconnect portions of the floodplain to improve spawning, rearing, and migratory conditions for bull trout. 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 bottom, 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 bull trout, a species listed as threatened with extinction under the federal Endangered Species Act. The Kittitas Conservation Trust will contribute $86,850 in a federal grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1077)

Mid-Columbia Fisheries Enhancement Group — Grant Awarded: $182,856
Caring for the Yakima River Basin

The Mid-Columbia Fisheries Enhancement Group will use this grant to perform stewardship at six Yakima River basin restoration sites. Work will include weed control, replanting, and irrigation and fence maintenance. This project is a multi-partner collaboration. Stewardship of these sites ensures that previous projects are maintained in a way that achieves the greatest habitat value. The river is used by steelhead trout, which is a species listed as threatened with extinction under the federal Endangered Species Act, and by Chinook, coho, and sockeye salmon. The Mid-Columbia Fisheries Enhancement Group will contribute $50,094 in a state grant and donated labor. Visit RCO's online Project Snapshot for more information and photographs of this project. (20-1391)

Grants Awarded in Klickitat County — $602,859

Columbia Land Trust — Grant Awarded: $167,134
Conserving Upper Rattlesnake Creek

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

Eastern Klickitat Conservation District — Grant Awarded: $165,000
Designing Fish Access to Pine Creek

The Eastern Klickitat Conservation District will use this grant to develop a conceptual design to restore fish access to Pine Creek. Fish passage into the Pine Creek watershed is blocked at the confluence with the Columbia River by State Route 14 and a railroad. Restoring fish passage would open 4.5 miles of federally designated critical habitat for steelhead and potentially allow access to additional habitat upstream. With fish passage restored, Pine Creek would provide 11 percent of the spawning area in Water Resource Inventory Area 31. The creek was used historically by mid-Columbia steelhead, which is a species listed as threatened with extinction under the federal Endangered Species Act, and is used by Chinook salmon. The Eastern Klickitat Conservation District will contribute $30,000 in donated labor. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1248)

Mid-Columbia Fisheries Enhancement Group — Grant Awarded: $160,000
Designing Restoration of Lower Snyder Creek

The Mid-Columbia Fisheries Enhancement Group will use this grant to complete a conceptual design to improve habitat in the lower 1.3 miles of Snyder Creek and in a side channel of the Klickitat River where it meets Snyder Creek. Snyder Creek is one of only a few perennial tributaries in the lowest 40 miles of the Klickitat River. The enhancement group will develop alternatives to improve habitat and work with stakeholders to select one alternative for a final design. The project area includes a cement-lined stream channel that runs through the former Klickitat Mill and the former log sorting yard. Landowners are interested in planning for habitat improvements concurrent with planning for revitalization of portions of the old mill site to benefit the local community and economy. The creek is used by mid-Columbia steelhead, which is a species listed as threatened with extinction under the federal Endangered Species Act. The Mid-Columbia Fisheries Enhancement Group will contribute $28,300 in state and federal grants. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1202)

Mid-Columbia Fisheries Enhancement Group — Grant Awarded: $110,725
Improving Fish Passage and Habitat in Rattlesnake Gulch Creek

The Mid-Columbia Fisheries Enhancement Group will use this grant to improve fish habitat and make it easier for fish to access Rattlesnake Gulch Creek, which feeds Swale Creek, an important tributary to the Klickitat River. To improve fish access to the Rattlesnake Gulch Creek, the enhancement group will remove a small concrete dam and replace two road culverts with bridges. The existing road culverts, which are pipes and other structures that allow streams to pass under roads, partially block passage to the east and west forks of the creek. The work will open 3.5 miles of habitat to fish use. To improve fish habitat, the enhancement group will remove a berm and railroad ties next to the creek, and place logs and other woody materials in the creek to create more complex habitat features. The enhancement group also will plant trees and shrubs along the creekbanks. Planting trees and bushes shades the water, cooling it for fish. Plant roots also keep soil from entering the water, where it can smother fish spawning gravel. The creek is used by mid-Columbia steelhead, which is a species listed as threatened with extinction under the federal Endangered Species Act. The Mid-Columbia Fisheries Enhancement Group will contribute $19,700 in a federal grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1203)

Grant Awarded in Lewis County — $177,734

Lewis County — Grant Awarded: $177,734
Fixing Fish Passage Barrier on the Middle Fork Newaukum River

The Lewis County Public Works Department will use this grant to replace a culvert under Centralia Alpha Road, about 3 miles northeast of Onalaska. The culvert carries the Middle Fork

Newaukum River under the road but is too small and is preventing some of the fish from passing through year-round. 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 will replace the 7-foot-wide pipe with a 22-foot-wide concrete box culvert. Replacement of the culvert will restore unimpeded access to 3.5 miles of potential habitat for coho salmon and 2.6 miles for steelhead trout. Lewis County will contribute $710,938 in a state grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1035)

For more grants awarded in Lewis County, see the section "Grants Awarded in Multiple Counties" that begin on page 38.

Grants Awarded in Mason County $907,485

Mason Conservation District — Grant Awarded: $302,790
Restoring Side Channels to the Skokomish River

The Mason Conservation District will use this grant to buy 46 acres near the Skokomish River and restore habitat within 1.6 miles of the river. Crews will add 22 structures made of tree root wads and logs. Adding 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 river, creating riffles and pools, which give salmon more varied habitat. The work will create nearly 1 mile of side channel and improve the connection of the river to 2.26 miles of existing side channel. This project is the final component of channel enhancement work that connects multiple habitat restoration projects. The grant is a cost increase from a previously approved project and only partially funds the remainder of the project. The river is used by Chinook and chum salmon and steelhead trout, all of which are species listed as threatened with extinction under the federal Endangered Species Act, and by coho salmon, which is a federal species of concern. The conservation district will contribute $100,589 in a state grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (20-1105)

South Puget Sound Salmon Enhancement Group — Grant Awarded: $120,245
Restoring West Oakland Bay

The South Puget Sound Salmon Enhancement Group, in partnership with the Squaxin Island Tribe, will use this grant to improve habitat in West Oakland Bay. Crews will restore 17 acres of saltmarsh, remove one-quarter mile of bulkhead, and stabilize 4 acres at the mouth of Shelton Creek. The bay 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 are a federal species of concern, and by chum salmon. The Squaxin Island Tribe will contribute $1 million in federal and private grants. Visit RCO's online Project Snapshot for more information and photographs of this project. (20-1086)

Washington Department of Natural Resources — Grant Awarded: $484,450
Conserving Kennedy Creek

The Department of Natural Resources will use this grant to buy about 10 acres, including a quarter-mile of Kennedy Creek. The purchase will conserve creek banks, seasonal channels, and forests. The owner is a willing seller. This property includes the most sensitive and unprotected ecosystems in the Kennedy Creek Natural Area Preserve and connects other conserved land in the 1,600-acre Kennedy Creek Natural Area. The Natural Area protects roughly 9 miles of Kennedy Creek and is home to the Kennedy Creek Salmon Trail. The trail offers one of the best outdoor salmon education opportunities in southern Puget Sound and hosts more than 5,000 visitors annually, who come to see salmon spawning in their natal creek. 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 salmon. The Department of Natural Resources will contribute $429,494 in a state grant, a grant from RCO's Washington Wildlife and Recreation Program, and donated labor. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1123)

For more grants awarded in Mason County, see the section "Grants Awarded in Multiple Counties" that begin on page 38.

Grants Awarded in Okanogan County — $1,248,018

Confederated Tribes and Bands of the Yakama Nation — Grant Awarded: $122,500
Placing Logs in Little Bridge Creek

The Yakama Nation will use this grant to place 175 logs with root wads via helicopter in about 2 miles of Little Bridge 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 creek, 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 under the federal Endangered Species Act. The Yakama Nation will contribute $237,675. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1176)

Confederated Tribes and Bands of the Yakama Nation — Grant Awarded: $366,770
Placing Wood in Mystery and War Creek Reaches

The Yakama Nation will use this grant to improve salmon and steelhead habitat in 3.9 miles of the Twisp River. The Tribe will place tree root wads and logs in the river to mimic historic conditions. The logs will be placed in two reaches: the Mystery Reach, which runs from the Mystery Campground to the Twisp River Canyon; and the War Creek Reach, which runs from the bridge on U.S. Forest Service Road 4430 downstream to Forest Service Road 44015. 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 bottom, creating areas for salmon to spawn. Finally, logs change the flow of the river, and promote the development of pool-riffle sequences, which create resting places for salmon. The river is used by spring-run Chinook salmon, which is a species listed as endangered under the federal Endangered Species Act, and by steelhead trout, which is listed as threatened under the Act. The Yakama Nation will contribute $984,970. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1175)

Confederated Tribes and Bands of the Yakama Nation — Grant Awarded: $199,500
Restoring the Twisp River Floodplain

The Yakama Nation will use this grant to place large wood structures in nearly three-quarter mile of the lower Twisp 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 bottom, creating areas for salmon to spawn. Finally, logs change the flow of the river, creating riffles and pools, which give salmon more varied habitat. These large wood structures also will increase floodplain inundation of an area with relict oxbows and meanders, which will give young salmon access to high-quality, year-round rearing habitat. The river is used by spring-run 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 under the Act. The Yakama Nation will contribute $164,470 in cash and a federal grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1174)

Methow Salmon Recovery Foundation — Grant Awarded: $401,148
Developing Preliminary Design for Sugar Reach Restoration

The Methow Salmon Recovery Foundation will use this grant to develop preliminary designs for projects to change the Sugar Levee on the Methow River and restore the area. The levee was built in 1973 and has contributed to significant erosion on both banks of the river. The project to be designed will modify the levee to increase floodplain connection and enhance side channels to provide rearing habitat for young salmon and holding habitat for adults. Other aspects of the project include removing fill, placing logjams in the water to increase habitat complexity, and planting the shorelines to increase riverbank buffers in cleared areas. 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 bottom, creating areas for salmon to spawn. Finally, logs change the flow of the river, and promote the development of pool-riffle sequences, which create resting places for salmon. Planting trees and bushes along a river helps shade the water, cooling it for fish. The plants also drop branches and leaves into the water, which provide food for the insects salmon eat. Finally, the roots of the plants help keep soil from entering the water, where it can smother fish spawning gravel. The Methow River is used by spring-run 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 under the Act. The Methow Salmon Recovery Foundation will contribute $76,319 in a

federal grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1173)

Okanogan County — Grant Awarded: $158,100
Conserving Mazama Bridge Habitat

Okanogan County will use this grant to buy a half-acre along the Methow River near Mazama, conserving it for fish habitat. The land is for sale by the State and if not bought by the County, would be sold through public auction, likely resulting in development and negative impacts to the mature riverbank vegetation. The adjacent section of river is used for spawning by both spring-run 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 under the Act. The Methow River also is an important migration corridor for bull trout, a species listed as threatened under the Act Okanogan County will contribute $27,900 in donated cash. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1183)

Grants Awarded in Pacific County — $1,940,420

Cowlitz Indian Tribe — Grant Awarded: $810,099
Reconnecting the Mitchell Creek Floodplain

The Cowlitz Indian Tribe will use this grant to place logs in 1 mile of Mitchell Creek, a tributary to the East Fork Grays River, to restore and reconnect the surrounding floodplains The placement of engineered log structures 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 provide salmon more varied habitat. This project is another step in a multi-phased effort to increase sediments in the upper watershed and restore in-stream habitat. The project will benefit coho, chum, and Chinook 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 $162,750 in a grant from RCO's Washington Wildlife and Recreation Program. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1104)

Cowlitz Indian Tribe — Grant Awarded: $684,899
Restoring the Grays River

The Cowlitz Indian Tribe will use this grant to correct three barriers to fish passage, opening 5.4 miles of habitat in the headwaters of the Grays River. The Tribe will remove debris flow jams and redistribute the sediment captured behind the jams to restore more natural channel conditions. The Tribe also will place engineered log structures in 1.2 miles of 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 project will benefit coho, chum, and Chinook 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 $601,700 in a state grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1103)

Pacific Conservation District — Grant Awarded: $124,887
Correcting a Fish Barrier and Re-meandering a Creek on Letsinger Farm

The Pacific Conservation District will use this grant to help remove a barrier to fish passage in Howard Creek and to reestablish the creek to its historical channel. The creek channel was shortened and straightened and two barriers occur under a farm road crossing at Letsinger farm and under the driveway crossing just upstream. The conservation district will remove the farm crossing barrier, which will restore access to Howard Creek and its tributary, Grief Creek. The conservation district also will reestablish Howard Creek in its former channel, which still is apparent in the field, by adding 600 feet of stream length and improving floodplain connection. The conservation district will replant the area to reestablish healthy plants along the creek. The creek is used by Chinook and coho salmon and steelhead trout. The Pacific Conservation District will contribute $56,250 in a state grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1164)

Pacific Conservation District — Grant Awarded: $320,535
Placing Wood in Lower Forks Creek

The Pacific Conservation District will use this grant to place wood in lower Forks Creek. Adding wood, such as tree root wads and 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 bottom, creating areas for salmon to spawn. Finally, logs change the flow of the creek, creating riffles and pools, which give salmon more varied habitat. In Forks Creek, the wood will help the stream react to the increased sediment that will occur after an upstream weir is removed. The creek is used by Chinook, coho, and chum salmon and steelhead. The Pacific Conservation District will contribute $56,565 in a state grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1162)

For more grants awarded in Pacific County, see the section "Grants Awarded in Multiple Counties" that begin on page 38.

Grants Awarded in Pend Oreille County — $483,250

Pend Oreille Salmonid Recovery Team — Grant Awarded: $326,000
Improving Cold-Water Refuge for Salmon Species

The Pend Oreille Salmonid Recovery Team will use this grant to increase the area and volume of a cold-water refuge for native salmon species by pooling together cold water from several springs and seeps along the bank of the Pend Oreille River. In addition, the team will establish a

connection between the cold-water refuge and an adjacent cold-water impoundment. The work ultimately will improve cold-water resting spots for salmon species. The Pend Oreille Salmonid Recovery Team will contribute $78,548 in a federal grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1205)

Pend Oreille Salmonid Recovery Team — Grant Awarded: $157,250
Designing the Restoration of Harvey Creek

The Pend Oreille Salmonid Recovery Team will use this grant to develop and analyze restoration approaches for Harvey Creek, a main tributary to Sullivan Lake. More than half a mile of the lower reach of the creek dries up in most years, preventing fish migration and limiting the spawning area. The Kalispel Tribe of Indians will partner with Natural Systems Design to identify hydrogeologic and geomorphic conditions in the creek and use that information to develop conceptual design alternatives. The project team also will engage local landowners as part of site analysis and alternatives development. Lower Harvey Creek is used by kokanee salmon and westslope cutthroat trout. The Pend Oreille Salmonid Recovery Team will contribute $27,750 in a federal grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1204)

Grants Awarded in Pierce County — $983,062

Nisqually Land Trust — Grant Awarded: $44,136
Buying Land to Conserve Nisqually River Floodplain

The Nisqually Land Trust will use this grant to conserve a group of 12 platted lots totaling 36 acres along the middle reach of the Nisqually River. The land is a quarter-mile upstream of the river's confluence with Tanwax Creek and contains 36 acres in the floodplain, 0.4 mile of shoreline, and 0.3 mile of side-channel shoreline. 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 Nisqually Land Trust will contribute $7,800 in a local grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1031)

Nisqually Land Trust — Grant Awarded: $130,000
Conserving Lower Ohop Creek

The Nisqually Land Trust will use this grant to buy up to 120 acres in the lower Ohop Valley as part of a larger effort to restore lower Ohop Creek. The land includes 0.3 mile of the banks of Ohop Creek and 11.5 acres of floodplain. The creek is used by Chinook salmon and steelhead trout, both 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 $22,950 in a local grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1029)

Nisqually Land Trust — Grant Awarded: $74,642
Conserving the Nisqually River at McKenna Reach

The Nisqually Land Trust will use this grant to conserve 12 acres along the Nisqually River. The land includes a quarter-mile along the Pierce County side of the McKenna reach, a forested bluff with old-growth Douglas-fir and western red cedar, and a side-channel that runs along the toe of the slope. The river is used by Chinook salmon and steelhead trout, both 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 $13,200 in a local grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1030)

Puyallup Tribe of Indians — Grant Awarded: $50,192
Tracking Migrating Puyallup River Salmon

The Puyallup Tribe of Indians will use this regional monitoring grant to track young salmon leaving the Puyallup River in order to estimate their numbers, the timing of their migration, and other physical characteristics. These data are critical to monitoring the health and recovery of salmon in the Puyallup River watershed. The river is used by Chinook salmon and steelhead and bull trout, all species listed as threatened with extinction under the federal Endangered Species Act. The Puyallup Tribe of Indians will contribute $14,668 in a federal grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1041)

South Puget Sound Salmon Enhancement Group — Grant Awarded: $169,832
Designing Restoration of the Mashel River

The South Puget Sound Salmon Enhancement Group will use this grant to design two restoration projects near the mouth of the Mashel River. Restoration activities will include removing bridge abutments, bank armoring, and fill to restore floodplain and side-channel connections and salmon habitat. The enhancement group also will place logs 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. In addition, the enhancement group will conduct map and field assessments of habitat in the lower 3 miles of the river to provide information for future projects to place more wood in the river. The river is used by Chinook salmon and steelhead trout, both 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. (21-1032)

South Puget Sound Salmon Enhancement Group — Grant Awarded: $204,010
Restoring Greenwater River

The South Puget Sound Salmon Enhancement Group will use this grant to remove up to 3,000 cubic yards of floodplain fill, large riprap armoring, failing weirs, and fill from former roads and bridge crossings at the mouth of Midnight Creek, which are limiting fish migration. Midnight Creek, near Mount Rainier National Park, is a tributary to the Green River. The enhancement group also will place 10 logjams in the Greenwater River. Adding logs to a river creates places for fish to rest, feed, and hide from predators. It also slows the river, which reduces erosion and allows small rocks to settle to the riverbed, creating areas for salmon to spawn. Finally, logs change the flow of the river, creating riffles and pools, which give salmon more varied habitat. The river is used by Chinook salmon and steelhead trout, both of which are species listed as threatened with extinction under the federal Endangered Species Act, by coho salmon, which is a federal species of concern, and by pink salmon. The South Puget Sound Salmon Enhancement Group will contribute $80,649 in a local grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1040)

Sumner — Grant Awarded: $310,250
Buying Land for the Pacific Pointbar Levee Setback Project

The City of Sumner will use this grant to buy a half-acre, which is necessary for a future project to move a levee on the right bank of the White River. The setback levee will create important rearing habitat, which is almost nonexistent in the lower White River. The river is used by Chinook salmon and steelhead and bull trout, all 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. Sumner will contribute $54,750. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1028)

Grant Awarded in San Juan County — $308,602

San Juan Preservation Trust — Grant Awarded: $308,602
Conserving McArdle Bay Shoreline

The San Juan Preservation Trust will use this grant to buy a voluntary land preservation[1] agreement on 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

[1]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.

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. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1148)

Grants Awarded in Skagit County $1,263,141

Skagit Land Trust — Grant Awarded: $391,000
Conserving Skagit Watershed Habitat

The Skagit Land Trust and Seattle City Light will use this grant conserve 90 acres of high-quality Chinook habitat in the Skagit River system. Acquisition will focus on the Debays Slough first, then floodplains of the Skagit, Sauk, and Cascade Rivers as well as habitat areas along major tributaries and creeks, and finally on large river floodplain and major tributaries used by a single stock of fish, and steelhead target areas. The grant also will fund outreach, evaluation, site visits, and other paperwork for each potential acquisition. This allows for multiple purchases to be analyzed at the same time to ensure the highest priority parcels are pursued and that the grant is used successfully. The river is used by Chinook salmon, which is a species listed as threatened with extinction under the federal Endangered Species Act. The Skagit Land Trust will contribute $69,000. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1188)

Skagit River System Cooperative — Grant Awarded: $108,515
Evaluating Changes to the McGlinn Island Jetty

The Skagit River System Cooperative will use this grant to evaluate potential changes to the McGlinn Island Jetty that would allow fish to travel more easily between the Skagit River and the Swinomish Channel, without creating unacceptable changes to sedimentation rates. Historically, the Swinomish Slough provided abundant tidal marsh rearing habitat for young Chinook salmon making their way from the Skagit River to Padilla Bay. Today, what now is called the Swinomish Channel is regularly dredged to keep the channel deep enough for boats. In addition, four structures near McGlinn and Goat Islands limit salmon access to tidal marsh habitat and habitat planned for restoration in Swinomish Channel. A new evaluation of restoration concepts is warranted at this time. The area is used by Chinook salmon, 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 and pink salmon. The Skagit River System Cooperative will contribute $20,000 in a federal grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1190)

Skagit River System Cooperative — Grant Awarded: $100,000
Maintaining Restored Land in the Skagit River Area

The Skagit River System Cooperative and Skagit Fisheries Enhancement Group will use this grant to maintain restored banks along nearly 9 miles of rivers and streams throughout the Skagit

River basin. Crews will remove unwanted plants and control invasive species to ensure the success of the areas that were previously replanted. This multi-agency partnership, which provides stewardship of conserved lands, has been successful for many years. The Skagit 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 $17,648 in a local grant and donated labor. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1189)

Skagit River System Cooperative — Grant Awarded: $50,000
Monitoring Estuary Restoration

The Skagit River System Cooperative will use this regional monitoring grant to evaluate fish and habitat response to different types of restoration in Britt Slough and the South Fork Skagit River The monitoring hopes to answer the question, "Is improving habitat waterward of estuary dikes worth the effort or should work focus only on dike setback?" The results should fill data gaps for understanding response of juvenile Chinook salmon to Skagit estuary restoration and provide planners with guidance on designing restoration projects. The monitoring will include 1 year of post-restoration monitoring at each site, development of monitoring plans for each site, and development of diagnostic tools to evaluate the sustainability of restored habitat in estuaries. The Skagit 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. The Skagit River System Cooperative will contribute $9,803 in donated cash. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1191)

Washington Department of Fish and Wildlife — Grant Awarded: $613,626
Designing the Restoration of the South Fork Skagit River Estuary

The Department of Fish and Wildlife will use this grant to design a project to restore 270 acres at the Island Unit in the South Fork Skagit River. The land is diked and drained, and will be restored to an estuary accessible to young salmon, the main bottleneck in Chinook salmon recovery. Once restored, the estuary will provide emergent marsh, scrub-shrub, and floodplain habitat and 10.3 acres of channel, making room for 72,820 additional Chinook smolts a year. The estuary is used by Chinook salmon, which 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. (21-1187)

Grants Awarded in Skamania County $442,114

Cowlitz Indian Tribe — Grant Awarded: $366,868
Restoring Yeon Springs in the Columbia River Gorge

The Cowlitz Indian Tribe will use this grant to restore fish passage to 1 mile of Yeon Springs, a cold-water tributary to the Columbia River, in the Columbia River Gorge. The Tribe will restore fish passage by reestablishing a more natural channel with gravel and wood, and will place tree root wads and logs in the area. Adding logs 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. In addition, the Tribe will treat 4.5 acres of shoreline and wetland infested with a dense layer of reed-canary grass, and then plant native shrubs and trees. Planting trees and bushes along a shoreline helps shade the water, cooling it for fish. The plants also drop branches and leaves into the water, which provide food for the insects salmon eat. Finally, the roots of the plants help keep soil from entering the water, where it can smother fish spawning gravel. The area 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 Cowlitz Indian Tribe will contribute $72,596 in a federal grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1107)

Underwood Conservation District — Grant Awarded: $75,246
Developing a Conservation Plan for the White Salmon River

The Underwood Conservation District will use this grant to develop a conservation strategy for buying land and pursuing conservation easements[2] along the former Northwestern Lake Reservoir reach of the White Salmon River above the site of the former Condit Dam. The conservation district will evaluate conservation options across 200 acres along 5 miles of White Salmon River and tributary shorelines and work to recruit a long-term conservation owner. This section of the White Salmon River and its tributaries, Mill Creek and Buck Creek, provide habitat for spawning, rearing, and migrating fish. The river is used by Chinook and coho salmon and steelhead, all of which are species listed as threatened with extinction under the federal Endangered Species Act. The Underwood Conservation District will contribute $13,280 in a local grant and donated labor. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1244)

[2]Conservation easements allow landowners to voluntarily sell their right to develop the land and add a permanent restriction on future development and subdivision to the property title.

For more grants awarded in Skamania County, see the section "Grants Awarded in Multiple Counties" that begin on page 38.

Grants Awarded in Snohomish County $1,318,813

Adopt-a-Stream Foundation — Grant Awarded: $87,120
Designing Habitat Improvements for Catherine Creek

The Adopt-a-Stream Foundation will use this grant to produce preliminary designs to improve habitat in Catherine Creek, a tributary to the Pilchuck River. The project targets the lower Catherine Creek reach, an area with a narrow floodplain devoid of large woody materials. The design will detail placement of at least 10 structures containing large woody material such as tree root wads and logs on public land, extending to nearby private land with willing landowners. 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 creek, creating riffles and deep pools, which give salmon more varied habitat. The partners also will prepare planting plans to restore 2 acres of creekbank. Planting trees and bushes along a creek helps shade the water, cooling it for fish. The plants drop branches and leaves into the water, providing 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 goal is to improve the quality and quantity of spawning and rearing habitat. Catherine Creek supports Pilchuck River steelhead and bull trout, 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. (21-1210)

Snohomish Conservation District — Grant Awarded: $255,143
Correcting a Barrier to Fish Passage in Sister of Friar Creek

The Snohomish Conservation District will use this grant to replace a barrier to fish passage in Sister of Friar Creek near Monroe, where an undersized culvert is partially blocking passage for coho salmon, a federal species of concern, and coastal cutthroat trout. 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 culvert will open access to 1.26 miles of habitat. This project is part of the Woods Creek Culvert Cooperative, a partnership between the Snohomish Conservation District, Wild Fish Conservancy, Snohomish County, and other organizations focused on correcting passage barriers and other salmon habitat restoration projects in the Woods Creek subbasin, a high-priority stream of the lower Skykomish River. The Snohomish Conservation District will contribute $45,100. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1072)

Snohomish Conservation District — Grant Awarded: $153,000
Reforesting Stillaguamish River Watershed Shorelines

The Snohomish Conservation District will use this grant to plant trees on at least 10 acres in the Stillaguamish River watershed to improve habitat for salmon. Planting trees and bushes along a shoreline helps shade the water, cooling it for fish. The plants also drop branches and leaves into the water, which provide food for the insects salmon eat. Finally, the roots of the plants help keep soil from entering the water, where it can smother fish spawning gravel. The conservation district also will maintain 14.8 acres that previously were restored. Summer water temperatures in the North Fork Stillaguamish River, Stillaguamish River, and Pilchuck Creek are too warm for salmon. The reforested shorelines, which range in size from 100 feet to more than 300 feet from the water, will shade and cool the water. The area 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 Snohomish Conservation District will contribute $27,000 in a state grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1084)

Stillaguamish Tribe of Indians — Grant Awarded: $783,550
Conserving the Cicero Floodplain

The Stillaguamish Tribe of Indians will use this grant to buy about 143 acres, called the Cicero floodplain, on the North Fork Stillaguamish River and protect the land forever. The land borders more than 1.2 miles of the north fork and includes slopes of second-growth trees and a relic side channel. After restoration, the floodplain will slow down and spread the river out, creating places for young fish to rest during high flows. 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, and by coho salmon, which is a federal species of concern. The Stillaguamish Tribe of Indians will contribute $155,000 in donated cash. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1051)

Stillaguamish Tribe of Indians — Grant Awarded: $40,000
Monitoring Stillaguamish River Chinook

The Stillaguamish Tribe of Indians will use this regional monitoring grant to install and operate a rotary screw trap on the lower Stillaguamish River to count hatchery and wild Chinook salmon smolts heading to the ocean. The information collected enables managers to draw correlations between freshwater habitat restoration projects and the number of salmon produced. The Tribe also will estimate the contribution, size, and timing of Chinook runs. Understanding the variation in run size of wild Chinook is critical for managing fishing limits. Chinook is a species listed as threatened with extinction under the federal Endangered Species Act. The Stillaguamish Tribe of Indians will contribute $7,059 in a private grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1019)

Grants Awarded in Thurston County $373,434

South Puget Sound Salmon Enhancement Group — Grant Awarded: $19,560
Improving Butler Cove

The South Puget Sound Salmon Enhancement Group will use this grant to remove a series of derelict fish rearing ponds on the west side of Budd Inlet. The salmon enhancement group also will develop preliminary designs to replace a culvert under Windolph Loop Road at the mouth of the estuary that is preventing fish from swimming upstream. Culverts are large pipes or structures that carry streams under roads. The goals of this project are to restore the ability of the estuary to serve as a place where salmon can seek refuge and find food, and to restore the ability of the current to transport sediment into and out of the estuary. Pocket estuaries like Butler Cove are important nurseries for rearing Chinook salmon, which is a species listed as threatened with extinction under the federal Endangered Species Act. The South Puget Sound Salmon Enhancement Group will contribute $35,000 in another grant. This is a cost increase from a previously approved project. Visit RCO's online Project Snapshot for more information and photographs of this project. (16-1399)

South Puget Sound Salmon Enhancement Group — Grant Awarded: $145,117
Preparing a Conceptual Design for Restoration of the Upper Deschutes River

The South Puget Sound Salmon Enhancement Group will use this grant to create a conceptual design for restoration of the upper Deschutes River. Building upon recent scientific reports and assessments, the design will focus on a high-priority reach, including the lower 2 miles of the major spawning tributaries of Huckleberry, Johnson, Mitchell, and Thurston Creeks. The enhancement group will complete an in-depth survey of habitat by raft and on-foot in the tributaries to verify conditions. This work will be coupled with a review of existing data and extensive stakeholder coordination to identify projects. The enhancement group will work with an engineer to produce the conceptual design for the entire upper watershed. The river and its tributaries 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 salmon. The South Puget Sound Salmon Enhancement Group will $25,750 in a local grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1138)

Thurston Conservation District — Grant Awarded: $30,922
Removing a Zangle Cove Bulkhead

The Thurston Conservation District will use this grant to remove a bulkhead and invasive weeds and replant the shoreline of a waterfront home at the mouth of Zangle Cove in Dana Passage. Removing the bulkhead will allow natural shoreline erosion processes to continue, which will help build a natural beach. The conservation district will remove about 195 feet of the bulkhead, which is made of gabion, concrete, and tires. The conservation district also will replace a failed stairway and debris with a low-impact stairway to preserve beach access for the landowners, for

project tours, and for volunteers who will help restore the land by planting native plants. The cove 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 salmon, surf smelt, and sand lance. The Thurston Conservation District will contribute $82,150 in staff labor, equipment, 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. (21-1135)

Thurston Conservation District — Grant Awarded: $132,778
Designing Restoration of Scatter Creek Tributaries

The Thurston Conservation District will use this grant to develop a conceptual restoration plan and a preliminary design for up to 80 acres of Creekside Conservancy-owned lands in the Cozy Valley area, southeast of Tenino. The planning process will assess feasibility of restoration options and identify priority actions and the best sequence for projects. The goals are to increase the quantity and quality of off-channel habitat used for rearing and over-wintering, to increase water retention in this headwaters valley to provide more cool water to Scatter Creek in the summer, and to improve the creekbank with plants. Cozy Valley hosts the southern headwater tributaries to Scatter Creek, and is used by coho salmon; steelhead, cutthroat, and rainbow trout; amphibians; and beaver. The Thurston Conservation District will contribute $23,500 in staff labor and donations of equipment and labor. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1089)

Thurston County — Grant Awarded: $45,057
Improving Fish Passage in a Black River Tributary

The Thurston County Public Works Department will remove a barrier to fish passage in an unnamed Black River tributary under Littlerock Road Southwest near Rochester. The County also will restore an upstream reach to a more natural alignment. The project will open more than 1.6 miles of spawning and rearing habitat for coho salmon and steelhead, searun cutthroat, and rainbow trout. The County will remove a 36-inch culvert and replace it with a 16-foot-wide structure. 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. In addition, the County will restore about 50 feet of upstream channel to a more natural alignment and place streambed material, trees, and root wads in the tributary. Adding logs to a stream creates places for fish to rest, feed, and hide from predators. It also slows the water, which reduces erosion and allows small rocks to settle to the bottom, creating areas for salmon to spawn. Finally, the County will plant native trees and plants on the bank of the tributary. Planting the banks shades the water, cooling it for fish. Thurston County will contribute $1.4 million collected through its real estate tax program. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1042)

Grant Awarded in Wahkiakum County $79,000

Wahkiakum Conservation District — Grant Awarded: $79,000
Designing Oneida Road Tide Gate Improvements

The Wahkiakum Conservation District will use this grant to design improvements to fish passage at the location of a tide gate under Oneida Road in Deep River. The goal of the project is to improve fish passage and flow in an estuary and forested wetland. The tidally influenced section of the river is used by chum, coho, and Chinook 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 $16,000 in staff labor and a state grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1139)

For more grants awarded in Wahkiakum County, see the section "Grants Awarded in Multiple Counties" that begin on page 38.

Grants Awarded in Walla Walla County $862,616

Tri-State Steelheaders Inc. — Grant Awarded: $182,112
Designing a Fix to a Fish Passage Barrier in Mill Creek

The Tri-State Steelheaders will use this grant to design a correction to a new barrier to migrating steelhead at the downstream end of the Mill Creek flood control channel. A 2020 flood scoured the channel bed downstream of the fishway, and resulted in a 5-foot-tall jump for fish to enter the fishway. The goals of the project are to collect technical data, analyze alternatives, and select a preferred fix at the conceptual level. The creek is used by summer steelhead and bull trout, both of which are species listed as threatened with extinction under the federal Endangered Species Act, and by reintroduced spring Chinook salmon. The Tri-State Steelheaders will contribute $32,138 in donated cash. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1010)

Walla Walla County Conservation District — Grant Awarded: $59,328
Designing Restoration of Coppei Creek

The Walla Walla County Conservation District will use this grant to complete a preliminary engineered design for a restoration project on Coppei Creek, a tributary of the Touchet River. The project would place logjams in the creek and move up to 1 mile of levee to restore natural river processes. When constructed, the project will provide resting areas for adult steelhead and growing areas for young steelhead. The creek is used by summer steelhead trout, which is a species listed as threatened with extinction under the federal Endangered Species Act. The Walla Walla County Conservation District will contribute $12,000 in a state grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1016)

Walla Walla County Conservation District — Grant Awarded: $110,488
Designing Restoration of Mill Creek

The Walla Walla County Conservation District will use this grant to develop a preliminary engineered design to restore portions of Mill Creek, downstream of College Place and Walla Walla. The site has experienced significant erosion and loss of creekbank vegetation from high-flow events. The design will include a series of engineered log structures, floodplain reconnections, and creekbank plantings. 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 creek, creating riffles and pools, which give salmon more varied habitat. Planting trees and bushes along a creek helps shade the water, cooling it for fish. The plants also drop branches and leaves into the water, which provide food for the insects salmon eat. Finally, the roots of the plants help keep soil from entering the water, where it can smother fish spawning gravel. The creek is used by summer steelhead and bull trout, both of which are species listed as threatened with extinction under the federal Endangered Species Act, and by reintroduced spring Chinook salmon. The Walla Walla County Conservation District will contribute $23,000 in a state grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1013)

Walla Walla County Conservation District — Grant Awarded: $108,768
Designing Restoration of the Touchet River Near Prescott

The Walla Walla County Conservation District will use this grant to complete a preliminary engineered design for restoration of the Touchet River, west of Prescott. The design will incorporate a series of log structures along 1 mile of 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 river is used by steelhead trout, which 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. (21-1015)

Walla Walla County Conservation District — Grant Awarded: $249,999
Restoring the Walla Walla River

The Walla Walla County Conservation District will use this grant to restore a half-mile of the Walla Walla River. The conservation district will place logjams to help encourage the river to reconnect with its floodplain and side channels. 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 conservation district also will plant the riverbanks. Planting trees and bushes along a riverbank shades the water, cooling it for fish. The plants also drop branches and leaves into the water,

which provide food for the insects salmon eat. Finally, the roots of the plants help keep soil from entering the water, where it can smother fish spawning gravel. When completed, the work will improve habitat for steelhead and increase the area's resiliency to floods and the effects of climate change. The river is used by summer steelhead and bull trout, both of which are species listed as threatened with extinction under the federal Endangered Species Act, and by reintroduced Chinook salmon. The Walla Walla County Conservation District will contribute $51,000 in state and federal grants. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1004)

Washington Department of Fish and Wildlife — Grant Awarded: $151,921
Monitoring Touchet River Steelhead

The Washington Department of Fish and Wildlife will use this regional monitoring grant to continue monitoring Touchet River summer steelhead using a smolt trap immediately below where Harvey-Shaw Road crosses the Touchet River. The grant will cover normal trap operations and replace other funding, which no longer exists. The data helps scientist understand how many steelhead there are, when they migrate, and how many survive to adulthood. Removing mid-Columbia River steelhead from the federal list of endangered species has been discussed for years, but the lack of high-quality data has limited the ability of the federal agencies to change the fish's status. Operation of the Touchet River smolt trap and the resulting data play a critical role in this evaluation. Steelhead is a species listed as threatened with extinction under the federal Endangered Species Act. The Department of Fish and Wildlife will contribute $26,810 in a state grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1017)

Grants Awarded in Whatcom County — $743,103

Lummi Nation — Grant Awarded: $100,000
Designing a Project in the South Fork Nooksack River

The Lummi Nation will use this grant to study the feasibility and develop conceptual designs for a restoration project on the South Fork Nooksack River, southeast of Saxon. The Tribe will hire an engineering firm to hydraulically model design alternatives, which may include logjams, a road set back, removal or covering of riprap, raising a bridge to remove a pinch point, excavation of side channels, and riverbank plantings. Alternatives will be evaluated on how they benefit Chinook salmon. Stakeholders will help select a preferred alternative to be developed into a conceptual design. The goal is to restore spawning, rearing, and holding habitat. The project will benefit Chinook salmon and steelhead trout, both listed as threatened with extinction under the federal Endangered Species Act, in addition to coho salmon, a federal species of concern, and chum salmon. The Lummi Nation will contribute $17,651 in grants. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1153)

Nooksack Indian Tribe — Grant Awarded: $643,103
Restoring Habitat in the South Fork Nooksack River

The Nooksack Indian Tribe will use this grant to restore 0.4 mile of the South Fork Nooksack River, north of Acme. The Tribe will place 14 logjams in the river and remove at least 125 feet of riprap from the historic channel migration zone. 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 logjams and disturbed areas will be planted with native vegetation. Planting trees and bushes along a shoreline helps shade the water, cooling it for fish. The plants also drop branches and leaves into the water, which provide food for the insects salmon eat. Finally, the roots of the plants help keep soil from entering the water, where it can smother fish spawning gravel. This is the first phase of the larger South Fork Nooksack Homesteader Reach Restoration Project, which will place 24 logjams in the river and enhance existing logjams to restore migration, holding, spawning, and rearing habitat for early Chinook salmon. The project will benefit Chinook salmon and steelhead and bull trout, all of which are species listed as threatened with extinction under the federal Endangered Species Act, as well as coho salmon, a federal species of concern, and chum. pink, and sockeye salmon. The Nooksack Indian Tribe will contribute $113,489 in a grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1132)

Grants Awarded in Yakima County — $343,156

Confederated Tribes and Bands of the Yakama Nation — Grant Awarded: $104,050
Assessing Fish Passage Barriers in Toppenish and Simcoe Creeks

The Yakama Nation will use this grant to inventory and assess fish passage barriers in 76 miles of lower Toppenish Creek, Simcoe Creek, and tributaries including lower Agency Creek. The goal is to compile a comprehensive database of all passage barriers in the project stream reaches. The Tribe will review, organize, and map existing data, then crews will visit identified sites. The data will be entered into a database format and will used to create a prioritized action plan leading to removal or mitigation of the barriers. The creeks are used by steelhead trout, which is a species listed as threatened with extinction under the federal Endangered Species Act. The Yakama Nation will contribute $36,670 in a federal grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1195)

North Yakima Conservation District — Grant Awarded: $80,000
Designing Fish Passage in Wenas Creek

The North Yakima Conservation District will use this grant to develop design alternatives to three existing diversions on Wenas Creek. The designs are aimed to improve fish passage for mid-Columbia steelhead trout and other native fish, as well as improve flow monitoring

capabilities. A preferred alternative then will be chosen and developed into a more detailed preliminary design. The river is used by steelhead trout, which is a species listed as threatened with extinction under the federal Endangered Species Act. The North Yakima Conservation District will contribute $15,000 in staff labor. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1209)

Mid-Columbia Fisheries Enhancement Group — Grant Awarded: $159,106
Restoring the Lower Cowiche Floodplain

The Mid-Columbia Fisheries Enhancement Group will use this grant to remove bank armoring, concrete, and about 5,000 cubic yards of fill along 830 feet of an old railroad berm on lower Cowiche Creek to allow the creek to access its floodplain. The enhancement group will plant the creek banks with native plants. Planting trees and bushes along a creek helps shade the water, cooling it for fish. The plants also drop branches and leaves into the water, which provide food for the insects salmon eat. Finally, the roots of the plants help keep soil from entering the water, where it can smother fish spawning gravel. The enhancement group also will move a pump and build weirs or a roughened channel to preserve function of a landowner's irrigation outtake that will otherwise be rendered inoperable by the project. The creek is used by steelhead trout, which is a species listed as threatened with extinction under the federal Endangered Species Act, and by Chinook salmon. The Mid-Columbia Fisheries Enhancement Group will contribute $61,100 in state and federal grants. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1197)

Grants Awarded in Multiple Counties — $1,023,338

Clallam and Jefferson Counties

North Olympic Salmon Coalition — Grant Awarded: $113,799
Improving Salmon Habitat along the Eastern Straits Creekbanks

The North Olympic Salmon Coalition will use this grant to control weeds, replant, thin, install beaver fence, and bolster creekbank restoration sites along Chimacum, Jimmycomelately, Salmon, and Snow Creeks. Sustaining restoration sites ensures the creekbanks and floodplains offer high-quality salmon habitat and watershed function throughout these watersheds. This multi-partner project will run for 2 years. The creeks are used by chum salmon and steelhead trout, both of which are species listed as threatened with extinction under the federal Endangered Species Act, and by coho salmon, which is a federal species of concern. The North Olympic Salmon Coalition will contribute $22,501 in a federal grant. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1033)

Clark, Cowlitz, Lewis, Skamania, and Wahkiakum Counties

Washington Department of Fish and Wildlife — Grant Awarded: $100,000
Improving Estimates of Steelhead Abundance

The Department of Fish and Wildlife will use this regional monitoring grant to improve statistical analysis methods for estimating the number of natural origin steelhead in southwest Washington. Analytical improvements will eliminate bias present in the current count of steelhead nests and provide statistical levels of confidence. The department will develop a method customized for estimating the number of salmon spawning from non-randomized stream survey counts. Then, the department will re-analyze winter steelhead data to provide an updated, unbiased estimate with measurable precision. The overall goal is to produce estimates that enable more accurate evaluation of historical and future statuses of Endangered Species Act-listed steelhead populations. The Department of Fish and Wildlife will contribute $17,700. Visit RCO's online Project Snapshot for more information and photographs of this project.
(21-1126)

Jefferson, Kitsap, and Mason Counties

Hood Canal Salmon Enhancement Group — Grant Awarded: $209,539
Planting Trees and Removing Knotweed in Hood Canal Streams

The Hood Canal Salmon Enhancement Group will use this grant to plant 15 acres of streamside habitat with native trees and shrubs, and survey and control invasive knotweed along 40 miles of stream each year for 2 years. The work will focus on eight Hood Canal streams used by summer chum, with the goal of restoring the structure and function of native plant communities. The work will improve degraded habitat along the streams, especially where the water is too warm, there is low or no tree cover, there are invasive knotweeds, and there are few trees and bushes on the banks. Planting trees and bushes along a stream helps shade the water, cooling it for fish. The plants also drop branches and leaves into the water, which provide food for the insects salmon eat. Finally, the roots of the plants help keep soil from entering the water, where it can smother fish spawning gravel. The streams are 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 $41,573 in state, federal, and private grants, and donated labor. Visit RCO's online Project Snapshot for more information and photographs of this project.
(21-1034)

Pacific and Wahkiakum Counties

Columbia Land Trust — Grant Awarded: $600,000
Conserving the Grays River Area Watershed

The Columbia Land Trust will use this grant to buy and permanently conserve 536 acres in the Grays River watershed in Pacific and Wahkiakum Counties in southwest Washington. The land contains forest and productive river shoreline habitat, including the headwaters of Crazy Johnson Creek, a half-mile of the Grays River, and a number of unnamed tributaries. Purchase of the land will enable the land trust to sustainably manage the forest to improve shoreline conditions and reduce erosion and sedimentation. The land trust will open the property to public access, and will continue to pay taxes to support the local community. The area 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 Columbia Land Trust will contribute $2.4 million in a grant from RCO's Washington Wildlife and Recreation Program and donated cash. Visit RCO's online Project Snapshot for more information and photographs of this project. (21-1130)