



COLUMBIA BASIN WATER TRANSACTIONS PROGRAM

2019 ANNUAL REPORT

A PUBLIC-PRIVATE PARTNERSHIP
WITH BONNEVILLE POWER ADMINISTRATION,
NORTHWEST POWER AND CONSERVATION COUNCIL AND ALTRIA



Chinook salmon



The **Columbia Basin Water Transactions Program** (CBWTP) was developed in 2002 to address chronically diminished stream flows in tributaries of the Columbia River.

The native fish species of the Columbia River Basin rely on the healthy flow of rivers and streams for their survival, resilience and persistence. But stretches of many streams and rivers in the Basin run low — and sometimes dry — in summer and early fall because of legal water withdrawals. Inadequate stream flows, often the result of competing out-of-stream water uses like crop irrigation, are a key factor limiting the productivity of Pacific salmon, steelhead trout, and a host of resident fish species.

To enhance stream flow, the Columbia Basin Water Transactions Program (CBWTP) works through locally based entities to acquire water rights voluntarily from willing landowners. Using temporary and permanent water rights acquisitions and other incentive-based approaches, the CBWTP supports grantees in Oregon, Washington, Idaho, and Montana to assist landowners who wish to voluntarily restore flows to key fish habitat. Voluntary, market-based water transactions provide an effective and fair way to balance out-of-stream water uses with the need to maintain stream flow for imperiled fish.

From 2002 to 2019, the CBWTP has completed over 610 water right transactions, which have restored more than 1.96 million acre-feet of water to key tributary streams in the Columbia Basin.

Funding for this program is provided by the Bonneville Power Administration in cooperation with the Northwest Power and Conservation Council and with support from Altria.





Steelhead trout

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THE COLUMBIA BASIN

Conserving fresh water for people *and* fish

The Pacific Northwest is abundant with streams feeding the region's major rivers, which ultimately join to create the great Columbia River.

Waterways arc across the Columbia Basin's 250,000 square miles, from the west slope of the Rocky Mountains to the eastern slopes of the Cascades, through wilderness, forests and mountain valleys to arid agricultural landscapes predominately found in Idaho, Montana, Oregon and Washington. Most of the Columbia's tributaries are typically fed by mountain snowpack, now on a diminishing trajectory.

Legal water rights dating to the 19th century provide that landowners may divert the waters of these streams for agricultural production. A long list of commodities are supported by irrigation, from cattle to carrot seed, alfalfa to

apples. However, water demand from farms and fish often exceeds what nature can supply during the growing season, especially in dry years.

Under these conditions, flows are greatly diminished in sections of many streams. Water temperatures increase, compromising habitats and aquatic life. Some tributaries run dry. As a result, salmon, trout and other fish may be unable to complete their lifecycles, impacting tribes and other fishing interests that count on fish for their cultures and economies.

In 2002, the Bonneville Power Administration (BPA) established a partnership with the National Fish and Wildlife Foundation, in cooperation with the Northwest Power and Conservation Council, to launch the Columbia Basin Water Transactions Program.



A landowner with instream water rights in the Clark Fork River in Montana



Chinook salmon

2019 HIGHLIGHTS

Working with landowners who volunteer to help salmon



494

Stream miles of habitat benefited by **new** streamflows

CBWTP focuses on enhancing streamflows to benefit the fish, wildlife and communities that depend on them. Tributary streams are targeted where flow is a “limiting factor” for the health of fish populations and where small streams are sometimes disconnected from larger tributaries. This competitive grant program provides financial and technical support for local nonprofit organizations, state water agencies and tribes to develop water transactions across the basin.

CBWTP works with ranchers, farmers, municipalities and irrigation districts on voluntary, market-based approaches to bring more water use into balance, so streams have sufficient water and working landscapes remain productive.



17,803

Acre-feet of **new** protected water instream

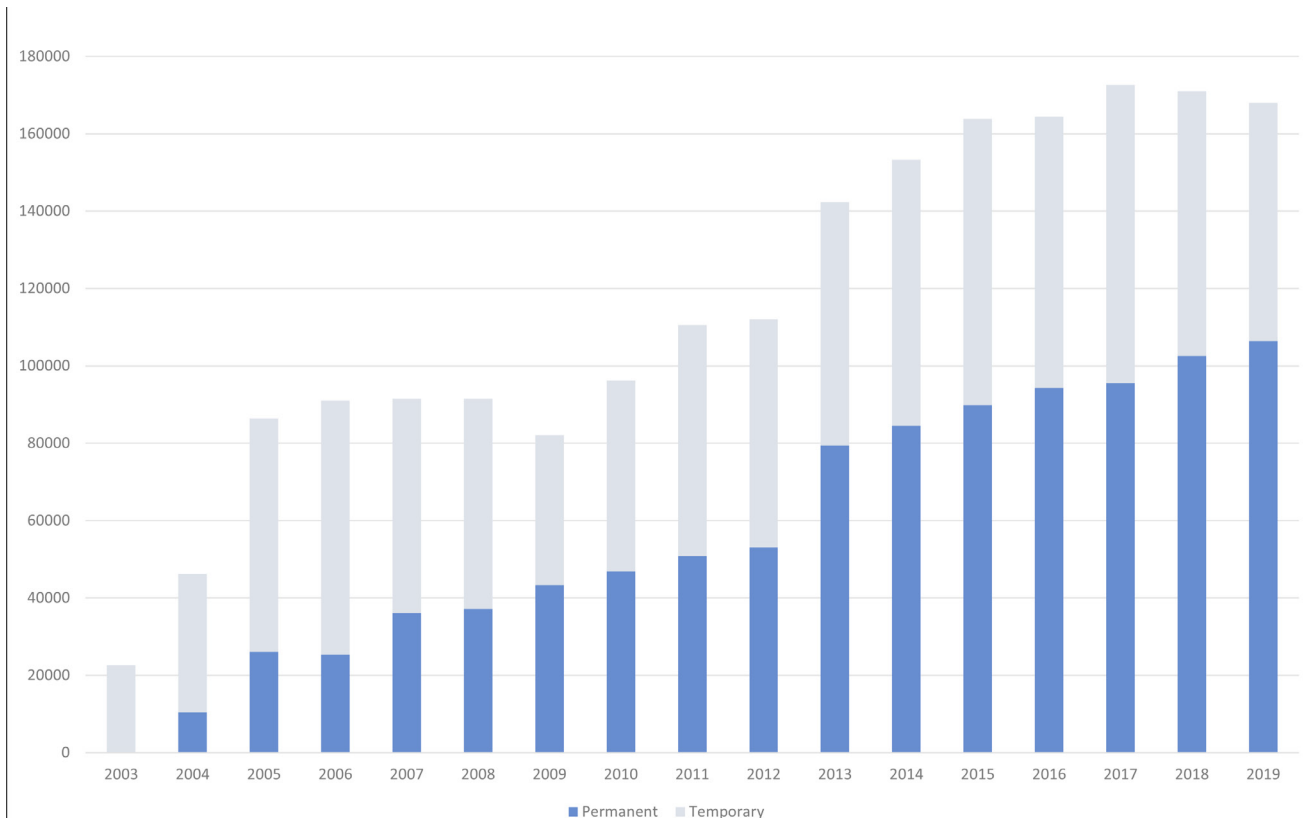
Restoring instream flows requires taking small, incremental steps toward a longer-term vision. It’s in these small steps that critical relationships are established and trust is built. It is also how project managers and stakeholders develop an understanding of the complex interplay of hydrology, fish life-history and historical water management practices that, over time, result in meaningful habitat gains for fish.

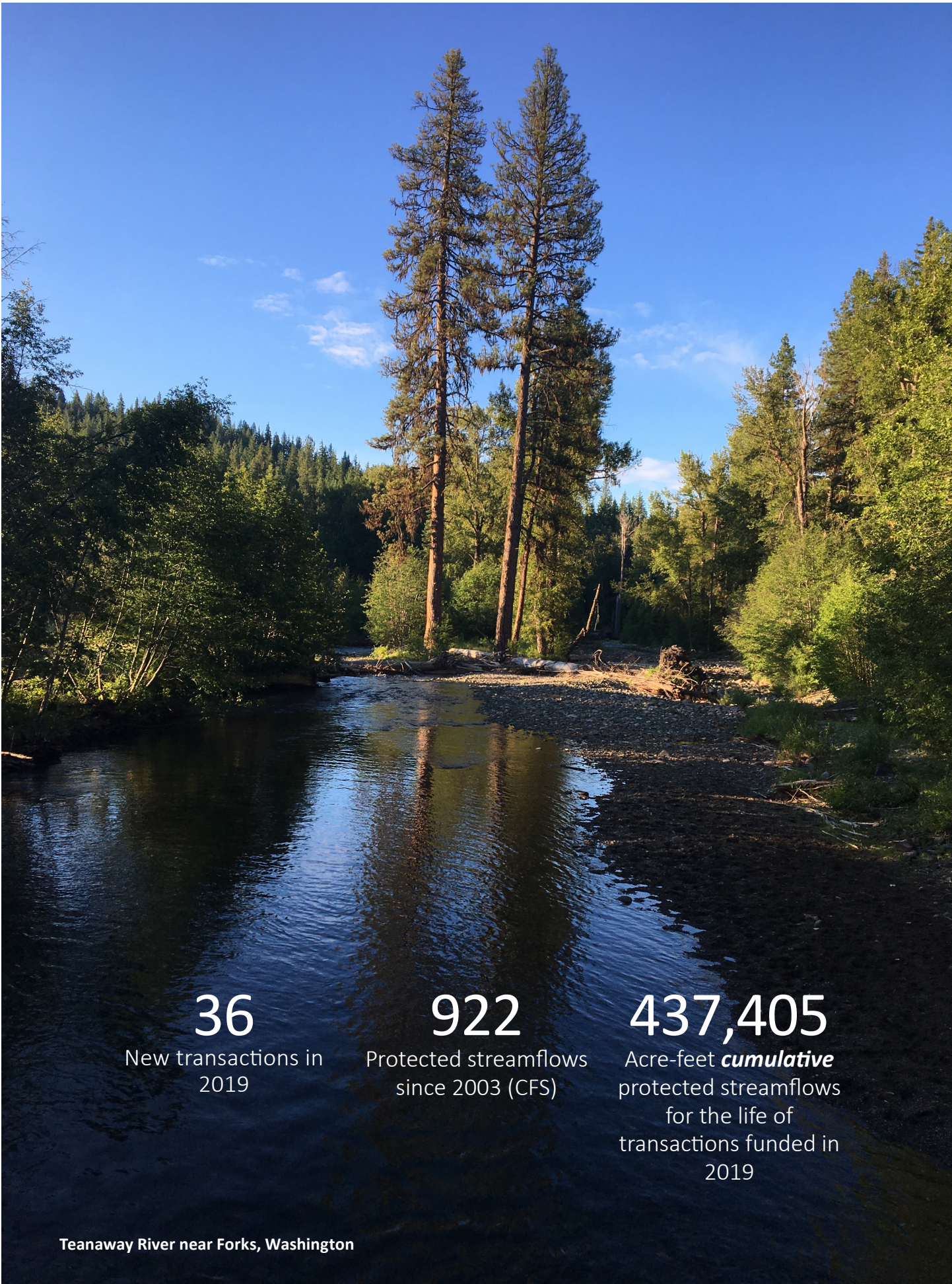
In 2019, CBWTP grantees made steady progress restoring instream flows in several locations around the basin. In Idaho, The Idaho Water Resources Department converted a temporary transaction to permanent, ensuring two-thirds of needed water instream on the Lemhi is permanent and the remaining third is covered through leasing agreements. In Washington State, flows were added to prior instream flows in streams in the Yakima through a flexible agreement with the Kittitas Reclamation District, Trout Unlimited and the Washington Department of Ecology. Catherine Creek saw flows increased and projects developed to work towards the interim instream flow target in that waterway in Northeast Oregon. Streams in Montana saw flows added to priority tributaries of the Black Foot River. All of these and other similar accomplishments help to meet the needs of fish and people in the Columbia Basin.

2019 INVESTMENTS THROUGH THE CBWTP

CLARK FORK COALITION	\$159,426
CONFEDERATED TRIBES OF THE UMATILLA INDIAN RESERVATION	\$158,789
MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION	\$42,124
DESCHUTES RIVER CONSERVANCY	\$224,258
IDAHO DEPARTMENT OF WATER RESOURCES	\$367,046
OREGON WATER RESOURCES DEPARTMENT	\$87,352
NATIONAL FISH AND WILDLIFE FOUNDATION	\$687,039
THE FRESHWATER TRUST	\$265,084
TROUT UNLIMITED - WASHINGTON WATER PROJECT.....	\$282,900
TROUT UNLIMITED - MONTANA WATER PROJECT.....	\$109,539
WASHINGTON DEPARTMENT OF ECOLOGY.....	\$95,262
WASHINGTON WATER TRUST	\$241,832
WATER TRANSACTIONS	\$2,142,015
TOTAL	\$4,862,666

PROJECTED FRESHWATER FLOW





36

New transactions in
2019

922

Protected streamflows
since 2003 (CFS)

437,405

Acre-feet ***cumulative***
protected streamflows
for the life of
transactions funded in
2019

Teanaway River near Forks, Washington



Irrigation headgate on Sauerkraut Creek

IDAHO

Flow Restoration to benefit Chinook salmon, steelhead, and native trout (ID)

Idaho Department of Water Resources

Total payment:\$399,148

Work with water users in the Upper Salmon River Basin and the Teton River Basin to improve tributary flows for the benefit of Chinook salmon, steelhead and native trout populations. Project will identify, assess, prioritize and implement new water transactions.

MONTANA

Water Transaction Development in the Upper Clark Fork, Blackfoot, and Bitterroot Rivers (MT)

Clark Fork Coalition

Total payment\$454,569

Prioritize, develop and implement water transactions to increase streamflows for the benefit of native bull trout and westslope cutthroat trout in the Clark Fork basin of Montana, focusing primarily on the Upper Clark fork, Bitterroot and Blackfoot subbasins. Project will coordinate with project partners to develop incentive based transactions that restore and protect flows in biologically significant tributaries.

Support for Water Transfers to Instream Flows FY19 (MT)

Montana Department of Natural Resources and Conservation

Total payment: \$42,124

Assist organizations developing water transactions with review and coordination of project proposals. Project will efficiently process instream flow applications to legally protect water from transactions for instream purposes.

Restoring, Reconnecting and Protecting Instream Flow in the Upper Clark Fork, Blackfoot Basins (MT)

Trout Unlimited

Total payment:\$113,539

Develop water right leases and water management agreements that work to augment stream flow and critical habitat for native trout species throughout the Upper Clark Fork River basin and Blackfoot River sub-basin. Project will reconnect key tributaries to their main stems and restore chronically dewatered stream reaches where the likelihood of significant fisheries benefits have been identified.

OREGON

Flow Restoration Program Support (OR)

Oregon Water Resources Department

Total payment: \$15,353

Provide support for water transactions, including allocations of conserved water, instream leases, and instream transfers to protect water instream, and/or projects to mitigate impacts of groundwater pumping on surface water in Northeast Oregon. Project will process applications, track water rights data, and coordinate with flow restoration staff.

Water Transaction Coordination and Monitoring (OR)

Oregon Water Resources Department

Total payment: \$71,998

Assist Oregon qualified local entities on water transactions, including instream transfers, instream leases, and allocations of conserved water, in addition to providing continued monitoring of an ongoing transaction on the Lostine River. Project will result in efficient processing of applications to facilitate restoration projects that improve streamflow, fish habitat, and/or water quality.



Knapp Creek | Credit: Idaho Dept. of Water Resources

Stream Flow Restoration in the Deschutes Basin Through Collaborative Water Management (OR)

Deschutes River Conservancy

Total payment:\$489,778.86

Restore streamflow in Oregon’s Deschutes Basin through water transactions. Project will improve habitat and water quality for native fish, including salmon and federally listed steelhead trout.

Innovative Transactions to Restore Flow in the Umatilla Accord Areas (OR)

The Freshwater Trust

Total payment:\$293,818.60

Implement voluntary, cooperative, and market-based instream flow transactions throughout the Confederated Tribes of the Umatilla Indian Reservation Accord areas within the Columbia River Basin in Oregon. Project will continue to implement existing instream flow agreements and work collaboratively with landowners to develop new instream flow transactions in critically de-watered streams with high habitat potential for salmonid species listed under the Endangered Species Act.

Innovative Transactions to Restore Flow (OR)

The Freshwater Trust

Total payment:\$603,284.77

Implement voluntary, cooperative, market-based instream flow transactions through the Columbia River basin in Oregon. Project will continue to implement existing instream flow agreements and work collaboratively with landowners to develop new instream flow transactions in critically de-watered streams with high habitat potential for salmonid species listed under the Endangered Species Act in an effort to meet instream flow targets.

Flow Restoration Development in the Umatilla, Walla Walla, Grande Ronde, and John Day (OR, WA)

Confederated Tribes of the Umatilla Indian Reservation

Total payment: \$158788.77

Work with The Freshwater Trust, Trout Unlimited, and Washington Water Trust to support and develop innovative voluntary water transactions in the Umatilla, Walla Walla, Grande Ronde, and John Day sub-basins.

Umatilla and Walla Walla Basin Water Transactions Development (WA,OR)

Trout Unlimited

Total payment: \$25,196.10

Implement water transactions, primarily in the Umatilla Basin. Project leaders will work closely with the Confederated Tribes of the Umatilla Indian Reservation to prioritize reaches for project implementation to ensure best benefits for instream flow, including analyzing data and pre and post monitoring.

WASHINGTON

Okanogan Basin Water Transactions Development in Partnership with the Colville Tribe (WA)

Trout Unlimited

Total payment: \$65,623.37

Identify, prioritize and develop water transactions in the Methow and Okanogan sub-basins of Washington working in collaboration with the Colville Tribe. Project will increase habitat and in stream flow in priority Colville tributaries and will build capacity for working with agricultural landowners on conservation projects that will benefit Pacific salmon, steelhead and their habitat.



Verifying instream water rights on the Walla Walla River | Credit: Confederated Tribes of the Umatilla Indian Reservation

Columbia Cascade Water Transaction Development and Implementation (WA)

Trout Unlimited
 Total payment: \$1,116,699
 Identify, prioritize and develop water transactions with willing landowners in the Methow, Entiat, Yakima, Wenatchee sub-basins of Washington, with a focus on completing significant instream flow enhancements to priority streams and tributaries. Project will improve tributary instream habitat to benefit listed salmon and other fish species

Support for Development and Monitoring of Washington State Water Right Acquisitions (WA)

Washington Department of Ecology
 Total payment: \$95,262
 Assist in the selection, assessment, coordination, and management of water right acquisitions in Washington State as well as manage monitoring of flow restoration transactions. Project will benefit flow restoration, fish and instream habitats.

Water Acquisition for Stream Flow Restoration to Benefit Fish in the Okanogan Basin, WA

Washington Water Trust
 Total payment: \$13,741
 Identify, develop and implement strategic water transactions focused on salmon and habitat recovery in the Okanogan Basin of Washington. Project leaders will work with the Confederated Tribes of the Colville Reservation, landowners, irrigation districts, conservation districts, municipalities, counties and community groups to facilitate water

management solutions and stream and habitat restoration to directly leverage optimal conditions for stream flows and fish.

Stream Flow Restoration to Benefit Salmon, Steelhead and Trout in the Walla Walla, Touchet and Tucannon Basins (WA)

Washington Water Trust
 Total payment: \$67,869
 Identify, develop and implement strategic water transactions focused on salmon and habitat recovery in the Walla Walla, Touchet and Tucannon basins of Washington. Project leaders will work with the Confederated Tribes of the Umatilla Reservation, landowners, irrigation districts, conservation districts, municipalities, QLEs and community groups to facilitate water management solutions, stream and habitat restoration to directly leverage optimal conditions for stream flows and fish.

Stream Flow Restoration to Benefit Salmon, Steelhead and Trout in the Columbia Basin (WA)

Washington Water Trust
 Total payment: \$160,222
 Identify, develop and implement strategic water transactions focused on salmon and habitat recovery in the Wenatchee, Methow, Yakima and White Salmon basins of Washington. Project will work collaboratively with landowners, irrigation districts, tribes conservation districts, municipalities, counties and community groups to facilitate water management solutions, stream and habitat restoration that improves stream flows for fish in targeted watersheds.

CBWTP FUNDING PARTNERS

Bonneville
POWER ADMINISTRATION



In partnership with the **Bonneville Power Administration** and the **Northwest Power and Conservation Council**, NFWF has supported an innovative, grassroots, incentive-based program to improve stream flows for at-risk fish throughout Oregon, Washington, Idaho and Montana. The Columbia Basin Water Transactions Program, founded in 2002, is the first regional effort of its kind in the United States to enhance flows in tributaries through cooperative partnerships between flow restoration practitioners and farmers and ranchers. The program supports a combination of practices to restore instream flows to key Columbia Basin tributaries that support important anadromous and resident fish populations. NFWF is working to better align flow improvement investments with other priority habitat restoration efforts supported by private and public entities in the region.

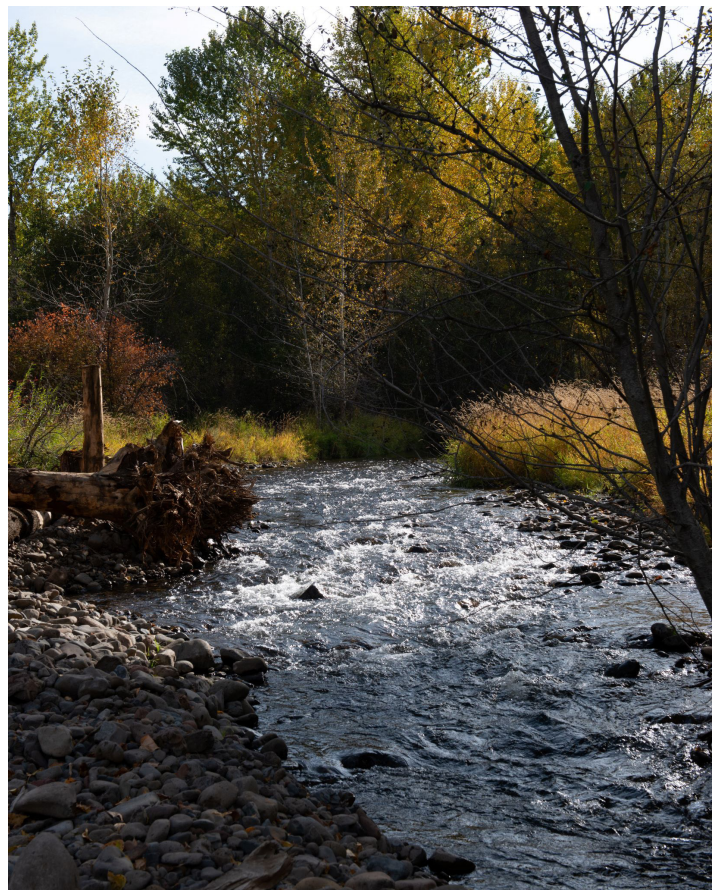


Altria

Altria and NFWF began working together to restore some of the nation's most iconic bodies of water in 2009. The partnership began as an effort to address the impact of Altria's supply chain on local water quality in Kentucky, Tennessee, and Pennsylvania and has since blossomed into a model of nationally focused collaboration at the intersection of corporate responsibility and conservation need. Working now to restore the Chesapeake Bay, Columbia and Cumberland Rivers, and aquatic ecosystems across the southeastern United States, the partnership has leveraged nearly \$14 million in Altria funding into more than \$124 million in total conservation impact and water conservation outcomes measured in billions of gallons annually.



Bull trout and cutthroat trout



Umatilla River | Credit: WWT



Bull trout

ABOUT NFWF

The **National Fish and Wildlife Foundation** is dedicated to sustaining, restoring and enhancing the nation's fish, wildlife, plants and habitats for current and future generations. NFWF will advance its mission through innovative public and private partnerships, and by investing financial resources and intellectual capital into science-based programs designed to address conservation priorities and achieve measurable outcomes.

In 35 years, NFWF has awarded more than 18,600 projects to more than 5,000 organizations in the United States and abroad.

In fiscal year 2019, the Foundation invested more than \$507 million – over half a billion dollars – to support more than 930 conservation projects across the nation. This investment leveraged more than \$245 million in matching support from grantees to generate a total conservation impact of more than \$752 million.

This strong performance in fiscal year 2019 pushed the Foundation's cumulative conservation impact since its founding to \$6.1 billion.

PROGRAM CONTACTS

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Reynolds Creek, John Day Basin, Oregon | Credit: TFT



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Juvenile salmon