

## Project Descriptions - Salmon Recovery Grants Awarded January 2018 Kittitas, Skamania and Yakima Counties

### Repairing a Yakima River Side Channel

Grant Awarded: \$164,018

Grant monies will be used to rehabilitate a side channel and tributary to the Yakima River, in Kittitas County. In 1998, the Department of Fish and Wildlife installed a channel-spanning weir to direct water into a side channel of the Yakima River, near Irene Rinehart Park in Ellensburg. In the spring and summer, the Bull Canal Company pulls irrigation water from the side channel. Because of damage to the channel-spanning weir and changes in the river, the side channel is regularly dry in late August and September, leaving fish stranded. When there is not enough water in the side channel, the irrigation company must draw water from Wilson Creek, exacerbating high water temperatures and poor habitat conditions there. To reduce fish mortality in the side channel and improve the water temperature and habitat in Wilson Creek, the project will modify the channel inlet to improve water flow and reduce fish stranding. The project will also regrade 200 feet at the side channel outlet where a steep drop partially blocks juvenile fish and build wood structures on the left bank of the Yakima River. The river is used by steelhead, which is a species listed as threatened with extinction under the federal Endangered Species Act, and by Chinook and coho salmon.

### Reconnecting a ½-mile reach of Swauk Creek's Floodplain

Grant Awarded: \$85,000

With the assistance of this funding, a half-mile reach of Swauk Creek's floodplain will be reconnected to improve fish habitat. A tributary to the upper Yakima River in Kittitas County, Swauk Creek offers spawning and rearing habitat for steelhead, Chinook salmon, and resident trout. Historical land use and proximity to U.S. Highway 97 have damaged the creek's floodplain function and habitat. Our team, working with the state Department of Transportation and the USDA Forest Service, will place large wood in the creek to slow the water and allow sediment and rocks to settle to the bottom, raising the streambed to allow more frequent connection with the historic floodplain. Crews also will place individual large logs and root wads in the creek and on the floodplain. The wood creates places for fish to rest and hide from predators. It also changes the flow of the creek, creating riffles and deep cold pools, giving fish more varied habitat. Crews will also plant trees and other native plants along the creek banks to help shade the water, cooling it for fish. The plants also drop branches and leaves into the water, which provide food for the insects salmon eat and places for salmon to rest and hide from predators. The roots of the plants help keep the soil from entering the water and burying spawning gravel.

Finally, crews will change the inlet elevation of culverts in a meadow to trap water on the historic floodplain. The project is expected to result in improved spawning and rearing habitat for fish. The creek is used by steelhead, which is a species listed as threatened with extinction under the federal Endangered Species Act, and by resident rainbow and cutthroat trout. In addition to the Salmon Recovery Funding Board grant, the work is partially supported by grants from the Western Native Trout Initiative, the Bureau of Land Management, and the USDA Forest Service.

#### [Taking Care of Restored Yakima River Basin Areas](#)

[Grant Awarded: \\$219,101](#)

This grant will support stewardship at seven existing restoration sites for the next three years. Our seasonal restoration staff will control weeds, plant, and fence 67.5 acres along four miles of Reecer, Cowiche, Wilson, and Oak Creeks and the Cle Elum and Yakima Rivers, in Kittitas and Yakima Counties. These areas were originally planted or seeded in 2016 and 2017 and need additional care to become fully established. In addition, our staff will maintain 3.5 miles of cattle exclusion fencing along two miles of Jack Creek, a tributary to the North Fork Teanaway River, to protect the creek from sediment, plant damage, soil compaction, and cow manure. The creeks and rivers are used by steelhead and provide critical habitat for bull trout, both of which are species listed as threatened with extinction under the federal Endangered Species Act. As a part of our commitment to the success of these projects, we will contribute an additional \$38,940 from various sources, including donations of cash and labor.

## Trapping Large Wood in the North Fork Teanaway River

Grant Awarded: \$394,000

This project will be a first step in restoring ecosystem function and resiliency in the North Fork Teanaway River. The project will directly benefit Chinook salmon and steelhead, which is a species listed as threatened with extinction under the federal Endangered Species Act. The grant will support the design and construction of wood structures which will capture and retain additional large wood in three miles of the North Fork Teanaway River, north of Cle Elum. The structures will allow water to more frequently move onto the river's floodplain, storing cool water to enhance streamflow in late summer. Wood will create places for fish to rest and hide from predators. The wood placement will also slow flow allowing small gravels to settle to the river bottom, covering exposed bedrock and creating spawning areas. Finally, wood structures create riffles and deep cold pools, giving fish more varied habitat. In addition to building the structures, our team will grade remnants of an abandoned splash dam to reduce constraints on the river and to reconnect a side channel. The Teanaway River forks have legacies of splash damming, logging, grazing, and large wood removal. Each fork displays exposed bedrock, too few pools, water that gets too warm, and there is not enough large wood. Our organization and our partner, the Yakima-Klickitat Fisheries Program of the Yakama Nation, will additionally contribute \$73,450 in donations of labor and materials.

## Placing Trees in Crow and Quartz Creeks

Grant Awarded: \$96,694

In partnership with the USDA Forest Service's Naches Ranger District, we will place approximately 300 trees in tributary streams of the Little Naches River to improve habitat for steelhead, bull trout, and Chinook salmon. The work will be done in the lower 1.3 miles of Crow Creek and the lower 0.9 mile of Quartz Creek, in Yakima County. Crews will cut smaller trees within 300 feet of the streams, and then move them into stream channels and floodplains. The trees will help the stream to move onto its floodplain, and will create places for fish to rest and hide from predators. They will also slow streamflow, which reduces erosion and the amount of sediment in the river. A slower creek allows small gravels to settle to the bottom for spawning areas. Finally, the trees create riffles and deep cold pools, giving fish more varied habitat. The creeks are used by steelhead and bull trout, which are both species listed as threatened with extinction under the federal Endangered Species Act.

## Beaver Reach Restoration, Wind River

Grant Awarded: \$93,323

This grant supports Mid-Columbia Fisheries and the USDA Forest Service in looking at restoration alternatives, feasibility, and preliminary design for restoration of a stretch of the Wind River near Beaver Campground, on the Gifford Pinchot National Forest, in Skamania County. The project will evaluate and begin planning for: opening and reactivating relict side channels, placing large wood structures in the side channels and in the Wind River to create more varied habitat, removing an abandoned road and riprap, treating invasive plants, planting trees along the shoreline, and removing concrete slabs and a portion of an earthen levee. The river is used by steelhead, which is a species listed as threatened with extinction under the federal Endangered Species Act. Mid-Columbia Fisheries Enhancement Group and the USDA Forest Service will contribute an additional \$16,492 to the project.