Washington State
Conservation Commission

Conservation in Washington: Powered by People

Making an Impact:

- ***Adult spring Chinook salmon returns increased from about 50 in 1995 to about 2,500 in the year 2010.***
- ***Young salmon use 20 miles of river that were previously too warm to use.***
- ***Tucannon River summer water temperatures dropped more than 10 degrees F following restoration actions.***

TUCANNON RIVER RESTORATION IMPROVES SALMON RUNS

The Tucannon River system in southeast Washington supports federally listed species, including steelhead, bull trout, and Chinook salmon. In the late 1990s, local salmon recovery and natural resource groups, including the Columbia Conservation District (CCD), developed a watershed habitat restoration plan for this Snake River tributary. The plan and associated watershed assessment revealed several threats to salmon habitat, including high water temperatures (sometimes exceeding 80 degrees F), stream bank instability, lack of cover for rearing pools, and high levels of bacteria.

FINDING A COMMON PATH The CCD has partnered with private landowners, Bonneville Power Administration, the Snake River Salmon Recovery Board, tribes, and several state and federal agencies on Tucannon restoration projects. In the late 1990s, the CCD began to enroll Tucannon landowners in the state's Conservation Reserve Enhancement Program (CREP). Administered by the Washington State Conservation Commission (WSCC), CREP offers landowners financial incentives for restoring and protecting riparian habitat (areas in and around rivers and streams) on their property.

RESULTS ON THE GROUND The CCD worked with landowners to restore 1,100 acres of Tucannon riparian habitat using CREP. This meets 79 percent of the recovery goal for riparian restoration in that stream. The District also worked with landowners on cost-share projects that benefit the Tucannon, such as installing off-site livestock watering systems and upgrading irrigation systems to save water and enhance in-stream flow.

These efforts yielded significant results. As riparian buffers (vegetated borders along streams) increased in age and number, summer water temperatures in the Tucannon River dropped more than 10 degrees F! Spring Chinook salmon responded to this change. Prior to the year 2000, young salmon were not seen in the lower 20 miles of the Tucannon due to the warm water temperatures. In recent years, young salmon have been seen using that reach of the river, sometimes in high numbers. In addition, adult salmon returns increased from about 50 in 1995 to about 2,500 in the year 2010.

"Riparian restoration has been of significant importance in the Tucannon Basin along with improved fish passage, reduced sediment loads due to conservation tillage, and increased water flow," said Dr. Carol Smith, Habitat and Monitoring Coordinator at the WSCC. "Together these priority habitat actions are attributed with contributing to the improved salmon runs in this stream."