

CARIBOU-TARGHEE NATIONAL FOREST FISHERIES PROGRAM 2005 ANNUAL REPORT

C-T Forest Fish Bios



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Featured External Partners



Trout Unlimited



US Bureau of Reclamation



US Fish and Wildlife Service



Idaho Dept Fish & Game



Idaho Transportation Dept.



US Nat. Res. Cons. Service



Friends of the Teton River



Henry's Fork Foundation

Safe Fish Passage Returns to Thomas Fork

After more than a century of irrigation in the Thomas Fork of the Bear River, Bonneville cutthroat trout can once again migrate freely up and down the river, without suffering high mortalities in the large irrigation ditches. This is the result of a grassroots effort that started in 2002 when Caribou-Targhee National Forest, US Fish and Wildlife Service, and NRCS organized a public meeting in Geneva, ID. All of the irrigators of the valley were invited to a program by researchers from Utah State University and University of Wyoming, Bear Lake Regional Commission, and USFS that described the impacts of their irrigation operations to migratory Bonneville cutthroat trout. There, it was obvious the water users were as concerned about the annual fish kills as the agencies that organized the meeting. The collective group set out to correct the problem.

Over the last three years, plans were developed and implemented to screen the three largest water diversions in the system and create bypass channels around their irrigation dams. Under the leadership of TU and USFS, the Taylor

Diversion was screened and bypassed in 2004 (tested and improved in 2005), the Thomas Fork Diversion in 2004-5, and the Peterson Diversion was bypassed in 2005 and will be screened in the Spring of 2006.

In addition to a fisheries restoration project, this effort benefited the rural communities in SE Idaho economically. Most funds for the project were spent locally, with a local contractor work force and locally purchased materials and supplies.

The native BCT that now safely migrate past these irrigation structures spawn in headwater streams, benefiting Forest populations.



Newly constructed Fish screen and bypass channel at the Thomas Fork Diversion.



The fish screen and bypass at the Taylor Diversion constructed in 2004 and 2005.



A bypass channel is excavated around the Peterson Diversion during fall 2005.

Buffalo River Dam Gets Fish Passage

Fish can now effectively migrate past the Buffalo River hydroelectric dam on the Henry's Fork, thanks to the efforts of Lee Mabey and his partners in the hydropower dam relicensing effort.

The dam was built in 1936 to provide electricity to construct Island Park Dam. When it was originally constructed, no environmental reviews were required. Today, fisheries biologists on the Forest participate in hydroelectric relicensing processes because it is an excellent way of accomplishing meaningful fisheries conservation. Lee Mabey participated in the Buffalo River hydro negotiations with Fall River Rural Electric and several C-T Fisheries Program partners, including Henry's Fork Foundation and Idaho Department of Fish and Game.

The resulting settlement agreement included a fish ladder and fish screens on the turbine intake system. The new ladder is designed to allow migrating adult fish to spawn in the Buffalo River and allow young trout migrating from the Henry's Fork to find more favorable over-wintering areas above the dam.



The fish ladder around the Buffalo River Dam was constructed during the summer and fall of 2005 as a result of the relicensing period.

The weirs in the ladder allow fish to swim through or jump over each weir. A layer of river rocks was provided for resting areas at the bottom of the fishway. The screening of the water intake to the powerhouse will exclude all but the smallest of fish. This project will benefit the Buffalo River and Henry's Fork fisheries.

Garden Creek Reconnected to the South Fork

The Forest Fisheries Program has been working cooperatively with Trout Unlimited, Natural Resources Conservation Service, Idaho Transportation Department, Bureau of Land Management, Conant Valley Ranch, and others to reconnect Garden Creek to the South Fork of the Snake River, through the Conant



A large, bottomless culvert is placed under Highway 26 by the Idaho Department of Transportation.

Valley Ranch. Past irrigation and grazing practices on the ranch all but eliminated the stream channel. Garden Creek harbors an isolated population of Yellowstone cutthroat trout on the Forest. This project is designed to increase the long term viability of the population by allowing interaction with the Yellowstone cutthroat trout from the river.

During the summer of 2005, Idaho Transportation Department installed a fish passage culvert under State Highway 26, replacing the old, under-capacity culvert. The new culvert is an archway, providing a natural stream bottom for the migrating fish. This compliments last year's efforts to re-establish the stream channel through the ranch and protect it from livestock with riparian fencing. Water, conserved on the Conant Valley Ranch through conversion to sprinkler irrigation (through a partnership with NRCS), will be returned to the restored Garden Creek channel in time for the spring migration of Yellowstone cutthroat trout.

No More Fish Traffic Jams for Henry's Lake YCT at Highway 20

This fall, Howard and Targhee Creeks were reconnected to Henry's Lake as the Idaho Transportation Department (ITD) replaced the existing culverts that have been in place since the 1970's with full span bridges. For the last 35 years, Yellowstone cutthroat trout migrating upstream from Henry's Lake, met barriers at these highway crossings.

The speed at which this project came together is a testament of how important everyone involved felt this project was. This project went from hope and desire to completion in one year, and emphasizes the importance of partnerships.

The Transportation Department provided the funding and design, and the other partners (Idaho Department of Fish and Game, Greater Yellowstone Coalition, Henry's Fork Foundation, Henry's Lake Foundation, and Senator Crapo's office) provided the motivation and environmental work. The Forest provided the biological assessment, cultural resource report and clearance, and wetland delineation. Most importantly Yellowstone cutthroat trout, native to Henry's Lake, are once again able to access the largest and most important spawning tributaries to Henry's Lake.



Targhee Creek Culvert under Highway 20 in 2004, before replacement. The culvert was a barrier to upstream-migrating Yellowstone cutthroat trout.



The Targhee Creek crossing at Highway 20 in 2005. The impassable culvert has been replaced by a fish-friendly bridge.

Forest and Partners Survey More Than 150 Stream Miles

The Forest partnered with Friends of the Teton River, the Henry's Fork Foundation, Idaho Department of Fish and Game, and Wyoming Department of Game and Fish to gather baseline information on species distribution and abundance in several drainages. The survey teams also re-visited some streams surveyed by the Forest Fish Crew in 1998. Some rugged country was tackled this year with the survey of streams within the Jedediah Smith Wilderness area for the first time.

Of most interest were the streams that were re-visited since Ted Kellogg's 1998 distribution surveys.

In most streams that contained both brook trout and cutthroat the relative numbers of cutthroat have declined. In two streams (Teton Creek and Trail Creek) the numbers have remained constant.

Small sections of streams in Mahogany and Horseshoe creeks have been identified as having isolated populations of only cutthroat which may provide for future restoration opportunities. The three stronghold streams identified in 1998 remain cutthroat only streams, with healthy populations.

Backing off Skinner Creek

In cooperation with the Bear River Environmental Coordinating Committee, the Caribou-Targhee National Forest Fisheries Program is assisting a private landowner to move his cattle feedlot away from Skinner Creek. Skinner Creek was identified as a Bonneville cutthroat trout stronghold stream during a 2001 Forest fish distribution survey. The private landowner applied for and received funding from the PacifiCorp Bear River hydroelectric settlement agreement funds. Project plans include moving the feedlot away from the stream (completed), creating a well to provide livestock water (completed), fencing Skinner Creek to exclude cattle, and restoring the stream channel and riparian area (to be completed May 2006). The Natural Resources Conservation Service and Idaho Department of Agriculture are assisting with the implementation of this project.



The new feedlot located away from Skinner Creek and equipped with a well-water trough, negating the need for the cattle to return to Skinner Creek.



Pre-project (spring 2005) Skinner Creek downstream of the Forest boundary, as it flows through the project area. Cattle spent all winter in this riparian area.

The Bear River Environmental Coordinating Committee is currently accepting applications for 2006 settlement agreement restoration funding. Funding applications are due January 6, 2006. Call Environmental Coordinator Mark Stenberg (208-547-7305) if you have questions.

To learn more about the ECC, visit <http://www.pacificorp.com/File/File49327.pdf>
For a project proposal form, visit <http://www.pacificorp.com/File/File49034.pdf>

Pritchard Creek Continues to Rebound

Last summer, Forest fish personnel and Trout Unlimited performed effectiveness monitoring on the Pritchard Creek restoration project and liked what they saw. Over the last couple of years, the Forest and Trout Unlimited removed an old irrigation dam, converted the pond bed to a meadow and restored the stream channel. Cattle were excluded from the project area and water was provided upslope with a solar pump and trough system. Native vegetation is quickly re-establishing and the stream channel is improving with new floodplains and less fine sediment. Monitoring will continue.



During effectiveness monitoring, Matt Woodard (TU) is chest-deep in native grasses planted in the old pond bed during the 2004 Pritchard Creek restoration project, where we removed a dam and restored the stream channel.

More Great Strides in Native Cutthroat Trout Conservation

Native cutthroat trout conservation is a priority of the C-T Forest Fisheries Program. The C-T National Forest and their partners work cooperatively to improve Yellowstone (YCT) and Bonneville (BCT) cutthroat trout habitat and populations.

Within the Snake River system, YCT were benefited by restoration actions in Sawtell Creek at Ashton/Island Park RD (right, below), Trout (right, above) and Burns creeks at Palisades Ranger District, and Willow and Goodheart creeks at Soda Springs Ranger District. Sawtell Creek was prepared for next year's reintroduction of YCT with habitat improvements to the pond and stream and the construction of a fence to protect the investment. A fish passage culvert replaced an impassable culvert under McCoy Creek Road at Trout Creek to allow YCT from Palisades Reservoir to spawn on the Forest. In Burns Creek, the Palisades RD Trail Crew blocked illegally created trails that were impacting this important YCT spawning stream and replaced some trail fords with bridges in the legal trail system. In Willow Creek, a tributary to Grays Lake, a 0.3 mile road segment was relocated away from the stream, decreasing sedimentation, and a culvert was replaced to improve fish passage. A livestock exclosure fence was improved along one mile of Goodheart Creek, in the Blackfoot River drainage, to stop riparian damage. Willows were planted within the exclosure to accelerate riparian recovery.

In the Bear River Drainage within the southern part of the Forest (at the Montpelier Ranger District), BCT benefited from restoration projects in Emigration, Sugar, and Maple creeks with trail improvements, and the fencing of 0.3 mile of Giraffe Creek to exclude cattle.



In August 2005, the Trout Creek Fish Passage Culvert was placed under the McCoy Ck Road.



Aquatic habitat was improved in Sawtell Creek and protected with fences prior to next year's reintroduction of YCT.

Culverts Studied Throughout the Forest for Fish Passage

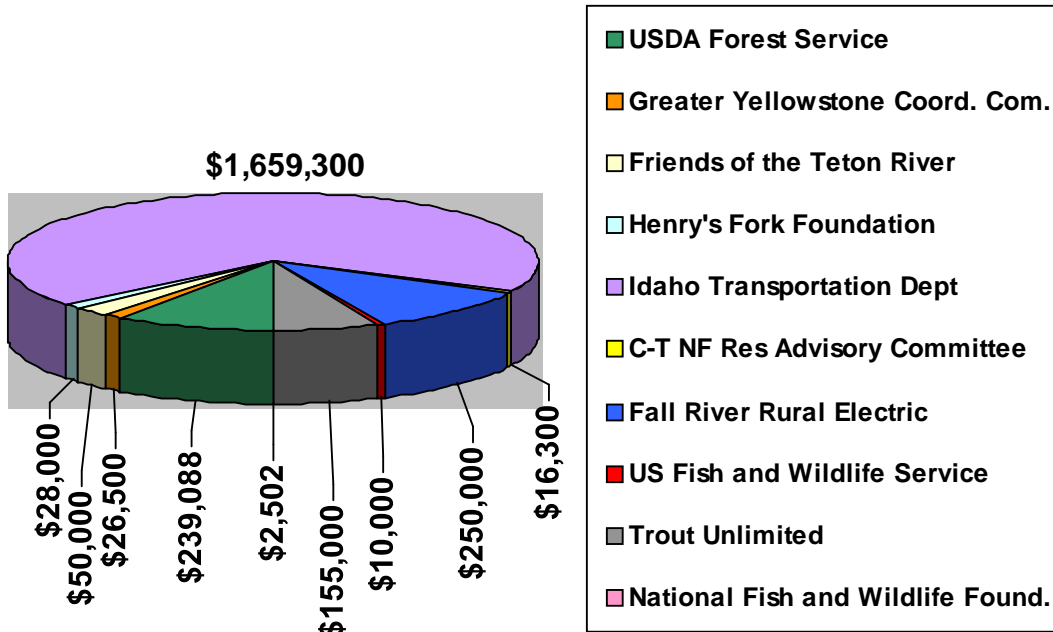
The Caribou-Targhee National Forest performed fish passage surveys at 327 crossings throughout the Forest, using the San Dimas inventory protocol. Of the crossings inventoried, 240 partial assessments and 87 full assessments were made.

Crossings were prioritized based upon cutthroat trout strongholds and 303(d) listed streams. All crossings within stronghold and 303(d) streams were surveyed. A final report was written and a culvert inventory layer has been prepared for the corporate GIS system. These new tools will be used to prioritize, plan, and design future fish passage projects. The inventory was led by Fisheries Biologist Corey Lyman.



A fish barrier culvert inventoried on Deep Creek in the Soda Springs Ranger District.

2005 Caribou-Targhee Forest Fisheries Program Funding



Not Enough Room in One Annual Report

It's getting harder and harder to fit in all of the fisheries conservation work the Caribou-Targhee National Forest accomplished in one year into a reasonably sized annual report. I find myself cramming awesome stand-alone fisheries conservation projects together under a unifying title such as "More Great Strides in Native Cutthroat Trout Conservation", for want of more space.

There are several reasons for our ever-increasing accomplishments in the name of fisheries conservation. I want to focus on two; internal and external partners. Many of our achievements were not solely accomplished by Lee, Louis, Corey, and me. Significant fisheries conservation work on this Forest is accomplished by other Forest personnel such as Dave Woodcock and Brent Porter of the Palisades Ranger District, Darren Olsen of the Soda Springs Ranger District, Maury Young, Ken Klingenberg, Jim Laprevote, and Heidi Heyrend of the Montpelier Ranger District, Bob Boyack of the Forest Road Crew, and many others. While performing their regular duties

on the job, they embrace opportunities to make things better for fish. We thank them for that.

In addition, we could not accomplish all we do in a year if it were not for our extraordinary external partners. We particularly thank folks from Trout Unlimited, Natural Resources Conservation Service, Idaho Department of Fish and Game, Henry's Fork Foundation, Friends of the Teton River, US Bureau of Reclamation, USFWS, the irrigators of the Thomas Fork Valley, the ECC, and all the other agencies and NGOs we work so well with. Many of these partnerships extend beyond the paperwork, fund-sharing, and sweat that gets work done on the ground. Many of these folks are our friends. Thanks for your help! I will always welcome the challenge of annual report cramming if it is because we as partners have achieved much.

James Capurso
C-T NF Fisheries Biologist



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