

FINAL REPORT FOR WNTI 2012 SG-3

PROJECT TITLE: Canyon Creek Fish Movement Study and Fish Ladder Construction

PERIOD OF PERFORMANCE: October 1, 2012 through November 30, 2014

Project Summary:

The goals of this project were to 1) study the movement of Yellowstone cutthroat trout in the Canyon Creek drainage to help evaluate and measure the success of recently completed fish passage projects; 2) Increase the knowledge and understanding of local anglers about local fishery issues such as habitat loss, illegal take, and cutthroat trout conservation by installing an informative kiosk on Canyon Creek; and 3) install a step-pool fish ladder and screen a diversion canal to prevent loss of native fish.

Goals 1 and 2 (PIT tags and interpretive kiosk) were funded with \$2,000 from WNTI. FTR purchased PIT tags using funds from the WNTI 2012 Small Grants Program in April 2013. During the summer of 2013, FTR with help from Idaho Fish and Game, the US Forest Service, and volunteers, spent several days in Canyon Creek and the Teton River below the Canyon Creek confluence, PIT tagging native and non-native trout to study how fluvial trout utilize this drainage.



Volunteer helping to set up a block net during Canyon Creek electro-fishing in July 2013.



An Idaho Fish and Game employee helps collect and tag YCT in Canyon Creek.



A Yellowstone cutthroat trout from Canyon Creek.



Installed Interrogation site on Canyon Creek.

FTR installed the interrogation site 8/5/14, due to some delays in permitting. The station is up-and-running. We haven't seen any PIT tagged trout move past the site yet since we missed the spawning run. The interrogation site will continue to collect data about trout movement in Canyon Creek for at least the next ten years and will help to inform FTR and the agencies about the extent on non-native invasion, life-cycles of native YCT and it will help FTR to monitor the efficacy of our fish passage projects on this tributary.

The informational kiosk signs were designed in September-October of 2013 by the FTR Education Coordinator, and installed with the help of volunteers in late October adjacent to the Green Canyon Hot Springs Campground. The kiosk has a central location within the campground and should have good exposure for visitors to the area to learn more about the importance of Canyon Creek, the restoration work there, impacts to the native trout fishery, and fishing regulations for the creek.



The interpretive kiosk features trout identification materials (top left), fishing regulations (top right), and information regarding the importance of Canyon Creek and the restoration work to YCT (bottom right). Contributions of the Western Native Trout Initiative and other project partners are acknowledged in the lower left-hand corner, by name and logo.

WNTI granted \$5,000 toward Goal 3, to help build the fish ladder at the main diversion structure. FTR completed design plans for the step pools in 2013 and was granted an extension to complete this portion of the project in 2014. Prior to construction of the ladder, cutthroat had to jump over a 3 foot dam in order to migrate upstream to spawn and to move upstream to cold water refugia in the summer. This project provided passage for cutthroat over the dam by installing 5 step pools below the dam reducing the amount the cutthroat have to jump to approximately 8 inches. Due to insufficient funding and irrigator support, the canal will not be screened at this time. Thus, the step-pools were designed to deter trout from swimming into the canal. With passage past the canal headgate restored, it is anticipated that trout will utilize the main stream channel and more desirable stream habitat when moving up and downstream. FTR will continue monitoring trout entrainment in the canal, and is working with the irrigators to reduce entrainment risk and impacts.

BEFORE construction:



Looking upstream



Looking downstream

DURING construction:



AFTER construction:



Looking upstream



Looking downstream

Canyon Creek Projects/Monitoring Locator Map:

Canyon Creek Fisheries Projects

