

65310-2010-870 Chalk Creek Fish Passage and canal screening Utah

State(s): Utah

Managing Agency/Organization: U.S. Fish and Wildlife Service

Type of Organization: Federal Government

Project Status: Completed

Project type: Community Project

Project action(s): Fish passage, Watershed, In-stream and riparian habitat

Trout species benefitted: Bonneville Cutthroat

The importance to the Resource: Chalk Creek and its major tributaries represent one of the largest pieces of native fish habitat in the historic range of BCT. Recent fish sampling conducted by the Utah DWR suggests that a portion of the BCT population in the drainage may display a fluvial life history, which has been greatly depressed by stochastic events, e.g. flood and fire.

The problem: The Richens irrigation diversion occupies a key location within the Chalk Creek system. This diversion blocks upstream fish migration for fluvial BCT and other species habitat refugia. Additionally, out migrating fish face a high likelihood of entrainment at the Ricans ditch. Mr. Richens will provide \$10,000 in kind for the project.

The objective: This project seeks to improve habitat connectivity for BCT and other native fishes in the Chalk Creek Drainage. This effort will increase access to spawning habitat for migratory BCT and will reduce mortality rates associated with canal entrainment. Further, the work will improve access to cold water habitat refugia during hot summer months.

The method: Project partners will replace the outmoded diversion (see pictures below) with a new rock and concrete structure that will facilitate upstream fish passage using a series of rip-rap step pools located on the downstream side of the diversion sill. A rotating drum fish screen will be installed in the irrigation ditch to eliminate fish entrainment.

2012 Update: Engineering plans have been made for irrigation structure (reimbursed by another partner), and match funding has been solidified by NRCS and a private land owner. The screen was installed but to better improve passage, the diversion structure is being taken out.

Objectives:

- The goals are to improve fish passage and eliminate fish entrainment from the lowest irrigation diversion on the South Fork of Chalk Creek.
- A rotary drum fish screen will also be installed in the canal to eliminate fish entrainment.

Partners:

- NRCS, TU, FWS Partners for Fish and Wildlife

Project cost: \$82,006.00

Start Date: 07/01/2011 **Completion Date:** 10/30/2012

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