

22330-2009-061 Renovation of Barrier to Protect Rio Grande cutthroat trout in Tio Grande Creek, New Mexico

State(s): New Mexico

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

Type of Organization: Other

Project Status: Completed

Project type: WNTI Project

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

Trout species benefitted: Rio Grande Cutthroat

Population: Rio Grande Basin

Secure a population of Rio Grande cutthroat trout in 4 stream miles of occupied stream habitat.

The importance to the Resource: Without continued efforts to conserve Rio Grande cutthroat trout, threats posed by nonnative species and habitat degradation may place this species in jeopardy; Rio Grande cutthroat trout is a candidate species under ESA.

The problem: Historical fisheries management programs have emphasized use of nonnative salmonids to the detriment of natives through hybridization, predation, and competition impacts. In addition, land use practices by public agency and private landowners have contributed to habitat degradation.

The method: The existing barrier will be removed and a permanent structure installed. If existing barrier is not replaced, non-native trout will obtain access to currently occupied habitat. This barrier will help to protect a core conservation population of Rio Grande cutthroat trout to be used as a donor population for population expansion projects.

Further description: The Tio Grande Creek watershed is predominantly owned by Carson National Forest. Tio Grande contains a small, isolated population of Rio Grande cutthroat trout that is vital to range-wide recovery efforts. Protection of this habitat from non-native trout encroachment has been identified as a priority by project partners. All environmental compliance to construct the original barrier is complete. Additional environmental compliance and archaeological permits are expected to be obtained in 2009. Additional support to cooperators is required to ensure timely completion of the project which satisfies WNTI's goal of supporting collaborative conservation efforts.

FY 2012 Update: Barrier reconstruction design was completed by R2 Engineering. Field visits to discuss access with the private landowner were completed with USFS and NMDGF personnel. Concern arose by the landowner over access of equipment to do the work and flood frequency and extent were reassessed to ensure adequate barrier design. At this time, efforts continue with data collection and analyses of hydrology to ensure adequacy of barrier design.

Objectives:

- This project would replace a dilapidated barrier in Tio Grande Creek with a permanent structure and increase security of a core conservation population of Rio Grande cutthroat trout.

Partners:

- New Mexico Department of Game and Fish - Matching \$0 - In Kind \$12,000
- Trout Unlimited - Matching \$0 - In Kind \$7,500
- U.S. Forest Service - Matching \$0 - In Kind \$5,000

Measures:

- Number of habitat assessments completed (not acres) - 1.0
- Total number of population assessments completed - 1.0
- Total number of in-stream/shoreline miles restored - 4.0

Funding Source(s):

- National Fish and Wildlife Foundation

Project cost: \$102,580.00

Start Date: 01/01/2009 **Completion Date:** 01/01/2010