

2008-035 McDermitt Creek, Nevada, Fish Migration Barrier to Protect a Lahontan cutthroat trout population

State(s): Nevada

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

Type of Organization: Federal Government

Project Status: Completed

Project type: WNTI Project

Trout species benefitted: Lahontan Cutthroat

Efforts to prevent nonnative trout present in the Quinn River from accessing roughly 54 miles of connected LCT habitat in the McDermitt Creek subbasin, the largest metapopulation within the Northwest DPS are needed. A barrier is critical to the success of the efforts to remove nonnative trout. WNTI funds have been obtained to complete barrier design work to construct a barrier that passes high-volume flood flows and provides a water velocity barrier as well. Construction funds are needed.

The importance to the Resource: The McDermitt Creek watershed metapopulation will provide approximately 54 miles of interconnected stream habitat without nonnative trout species. Research shows that metapopulations are necessary to LCT persistence and recovery.

The problem: Nonnative trout negatively impact LCT through competition, predation and hybridization. Without the permanent, long-term barrier nonnative trout would be able to access this metapopulation which would severely affect recovery of LCT in the Northwest DPS.

The method: The long-term, permanent barrier will be designed and constructed as a velocity barrier which will provide average water velocities over the structure greater than the target nonnative trout's burst swimming speed. The barrier will also pass the high-volume flood flows.

Objectives:

- The long-term barrier is critical to the long-term success of the restoration and recovery efforts ongoing in the McDermitt watershed. Without the long-term, permanent barrier nonnative trout from the Quinn River will reinvade the watershed and seriously impacting LCT recovery efforts.

Partners:

- Bureau of Land Management
- Bureau of Land Management, Vale District
- Bureau of Land Management, Winnemucca District
- Nevada Department Of Wildlife
- Oregon Department of Fish and Wildlife
- U. S. Forest Service
- Western Native Trout Initiative

Funding Source(s):

- U.S. Fish & Wildlife Service

Project cost: \$116,600.00

Start Date: 06/01/2009 **Completion Date:** 06/30/2009