

Western Native Trout Initiative
Transtrum Diversion Fish Passage Restoration for
Bonneville Cutthroat Trout in St. Charles Creek
Project Update, 11-25-08



Transtrum Irrigation Diversion before fish passage restoration, as viewed from downstream (left) and upstream (right).



Transtrum Irrigation Diversion during construction. The new fish ladder (right) sits inside the existing diversion abutment (left). This configuration allows for upstream fish passage without significantly increasing the footprint of the existing structure.

Background

- Project was funded in 2007 through the Western Native Trout Initiative (Trout Unlimited received \$75,000 from the USFWS).
- St. Charles Creek has been identified by IDFG as “the most important natural spawning location for Bear Lake cutthroat trout,” but cutthroat spawning numbers have declined from the thousands of fish observed in the creek in the 1950’s, 60’s and 70’s to fewer than 100 fish in 2003 (IDFG).

- Researchers at Utah State University documented adfluvial Bonneville cutthroat trout from Bear Lake attempting (unsuccessfully) to move upstream past this diversion to spawn in St. Charles Creek.

Purpose

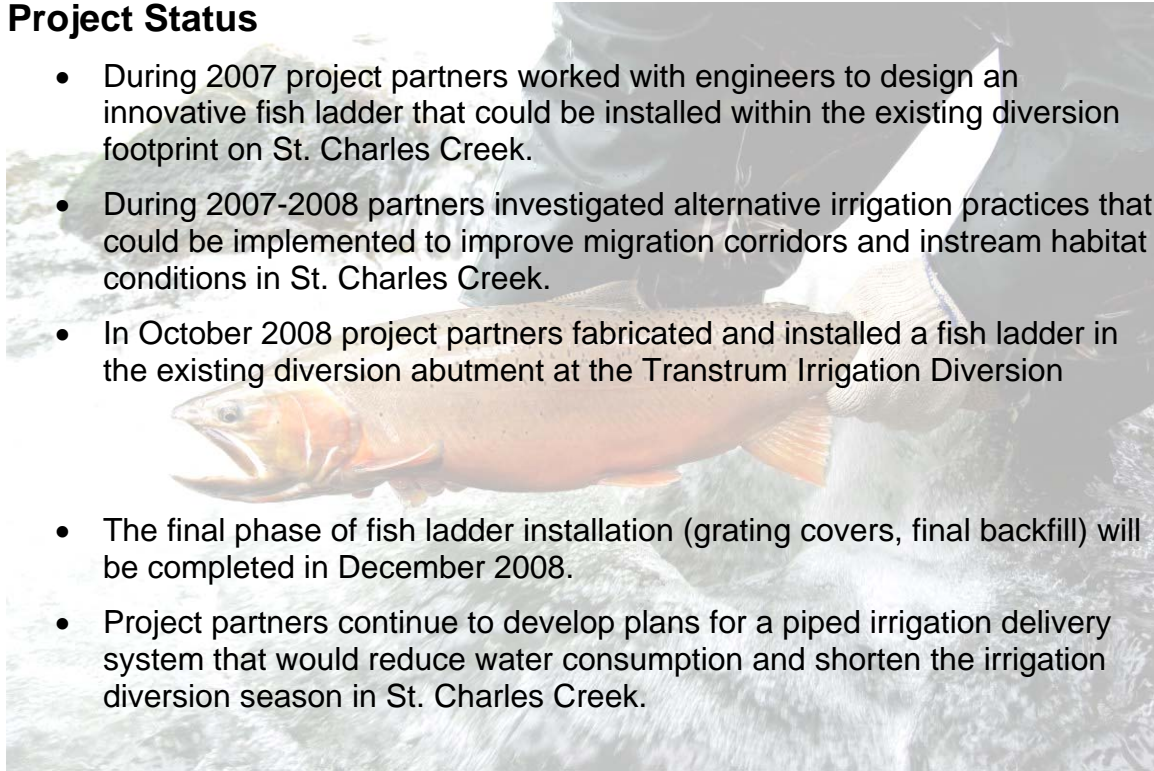
- Provide upstream fish passage for adfluvial Bear Lake Bonneville cutthroat trout at the Transtrum Irrigation Diversion (lowest diversion on St. Charles Creek). This project will restore access to historic spawning and rearing habitats in upstream reaches of St. Charles Creek and help to reestablish a self-sustaining spawning run of adfluvial BCT in Bear Lake.

Cooperators

- Bear Lake County Commission
- Bear Lake National Wildlife Refuge
- Bear Lake Regional Commission
- Idaho Dept. of Environmental Quality
- Idaho Dept. of Fish and Game
- Trout Unlimited
- Transtrum family
- St. Charles Creek Working Group
- Rhodia Mines
- National Fish and Wildlife Foundation

Project Status

- During 2007 project partners worked with engineers to design an innovative fish ladder that could be installed within the existing diversion footprint on St. Charles Creek.
- During 2007-2008 partners investigated alternative irrigation practices that could be implemented to improve migration corridors and instream habitat conditions in St. Charles Creek.
- In October 2008 project partners fabricated and installed a fish ladder in the existing diversion abutment at the Transtrum Irrigation Diversion
- The final phase of fish ladder installation (grating covers, final backfill) will be completed in December 2008.
- Project partners continue to develop plans for a piped irrigation delivery system that would reduce water consumption and shorten the irrigation diversion season in St. Charles Creek.



Adfluvial Bear Lake BCT captured in UDWR spawning trap on nearby Swan Creek, UT.