

## 2014 Waters to Watch – Bear Creek, Colorado



*Bear Creek*



*Greenback cutthroat trout*

The Western Native Trout Initiative (WNTI) funded Project Phases I and II that provided short-term immediate relief for sediment issue on Bear Creek in 2010 and 2011. These projects were meant to protect the Bear Creek cutthroat habitat until a broader sediment control plan was in place. In 2013 WNTI funded a portion of Phase III, which, coupled with a National Fish and Wildlife Foundation grant, will provide permanent sediment control for the Bear Creek Greenback cutthroat trout, which have been recently considered the only remaining population of true native Greenback Cutthroat trout.

This project will improve the aquatic habitat and resiliency of Bear Creek; reduce sediment delivery and restore the in-stream and riparian habitat of Bear Creek. The overall objectives are; protect the genetically pure greenback cutthroat population found in Bear Creek and provide a stable and sustainable habitat for this endangered species.

### Proposed project Activities include:

- 1) Restore .75 mile of in-stream habitat using proven design methods.
- 2) Restore pool habitat by creating or enhancing a minimum of 80 pools in this reach using native rock and large woody material.
- 3) Stabilize a minimum of 1200 feet of stream bank and re-vegetate with native material.
- 4) Restored channel to assist in the movement of future sediment loads through the system.
- 5) Stabilize an erosive ephemeral draw that has deposited an alluvial fan into Bear Creek. Using techniques implemented in the Trail Creek Watershed Restoration Project in the same soil type, we will use native material to stabilize the channel and reduce the inputs into Bear Creek.
- 6) Identify priority sites on High Drive and design sediment controlling measures. These measures may include altering the road geometrics, such as reversing the cross slope; improving water conveyance elements that route flow to cross culverts or to rundowns; increasing the number of cross drains; reducing the road prism width; designing sediment traps at culvert entrances or exits; stabilizing cut and/or fill slopes and more.

7) Implement sediment controlling measures on the highest priority sites. Following completion of the road assessment, we will be able to identify the location and number of these highest priority treatment sites.

The proposed activities will ensure the genetically pure greenback cutthroat population found in Bear Creek, Colorado, has a stable and sustainable habitat.

**Project Partners:**

Project Partners include:

- The Western Native Trout Initiative
- The Colorado Division of Parks and Wildlife
- The Cheyenne Mountain Chapter of Trout Unlimited
- The National Fish and Wildlife Foundation
- US Fish and Wildlife Service
- US Forest Service