

Clark Fork Coalition - Granite Creek Fish Passage Project

Final Report – Fall 2023

Purpose and goals

The purpose of this project was to increase the native fish populations in the Upper Lolo watershed, specifically on the Granite Creek sub-watershed. Granite Creek is an important tributary of Lolo Creek which includes designated Bull Trout Critical Habitat. These streams support high densities of westslope cutthroat trout and remnant bull trout populations, providing important spawning and rearing habitat for these and other salmonid species.

Project summary

The Granite Creek Road (FS 9942) disconnected several fish-bearing tributaries and chronically delivered sediment to the stream. We worked with the Forest Service and Timberland Excavating, Inc. to replace 8 undersized culverts and install larger culverts designed to allow year-round fish passage and withstand a 100-year flood. Specifically, we upsized seven, 24-in. corrugated culverts with 72-in. culverts with streambed simulation material. One additional culvert was upsized to a 60-in. culvert on a smaller, spring-fed tributary. This work increased the amount of available year-round fish habitat by approximately 4 miles, greatly reduced the risk of catastrophic culvert failure, and reduced the amount of road sediment chronically delivered into streams along 6 miles of road.

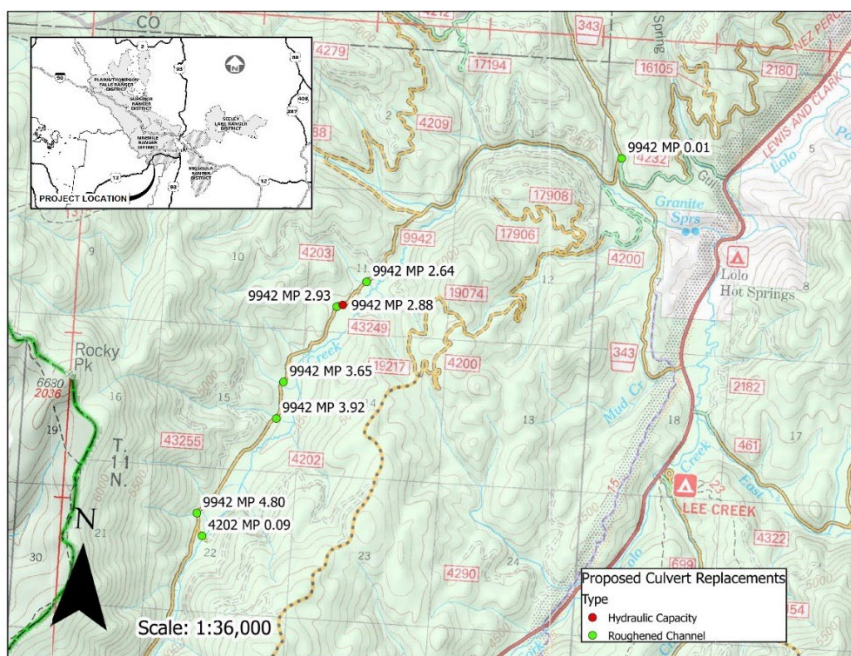


Figure 1: Location of upsized culverts.



Figure 2: An example of a 2-foot culvert replaced with a half-buried 6-foot diameter culvert. The high velocity of water in undersized culverts restricted fish passage and increased the chance of a catastrophic failure. The new culvert allows for higher stream flows and improved fish passage.



Figure 3: The installation of a culvert includes removing the old culvert, setting the pipe at grade, and placing streambed material in culvert to allow for easier fish passage. Finally, the entrance and outlet are armored and revegetated with transplants and native seed.

Outreach and Education

We also had several education and outreach opportunities this summer to highlight this project. First, we informed our membership about benefits to water quality and fisheries through our CFC e-newsletter.

We developed an interpretive sign that was displayed at the beginning of the road where the restoration treatments were occurring. The sign helped the public understand why the road was closed, and the importance of the restoration work.

In August, we worked with the Forest Service to highlight our restoration in the watershed including the culvert upgrades. We had several hydrologists from 3 national forests as well as a Project Manager from Trout Unlimited to see the restoration work we have completed including tours of the wood jams, road decommissioning, and culvert upgrades. They were all very excited about the scale and scope of all the restoration work.



Figure 4: Field tour with the Forest Service and Trout Unlimited to learn about culvert upgrade and other restoration work in the watershed.

As part of our FishAmerica Foundation grant, we worked with an advertising firm to produce a short video showing the installation of the culverts and the environmental benefits of the project. Accordingly, we worked with their video production team to develop an interpretive video. Will McDowell, our Stream Restoration Director, was interviewed and gave a field tour of the project. They are currently working on the production of the video.

Next steps

This fall we are going to lay native seed mix on areas that were disturbed during the culvert installation.