PRITCHARD CREEK YELLOWSTONE CUTTHROAT TROUT RESTORATION PROJECT
Before and After Earthmoving Photos

Background

In 1999, the Caribou-Targhee National Forest Fisheries Crew performed a fish distribution survey on Pritchard Creek, a tributary to the South Fork Snake River in Conant Valley. Pritchard Creek was identified as a C-T Forest Yellowstone cutthroat trout stronghold stream. In addition to fish distribution and population density estimates, the surveyors identified opportunities for Yellowstone cutthroat trout habitat restoration.

Lower Pritchard Creek has been affected by a dam and its associated 7-acre irrigation pond. The dam failed in 1984, affecting habitat quality downstream. In the pond bed, the stream cut through at least 6 feet of sediments, creating steep, eroding stream banks and simplified habitat. Annual cattle grazing in the pond bed helped maintain these conditions. In the Summer of 2003, the Pritchard Creek Yellowstone Cutthroat Trout Restoration Project addressed these impacts by removing the dam, recontouring the pond bed and stream banks, revegetating with native plants, and providing off-site water to cattle in order to exclude them from the stream. A solar-powered pump was installed to deliver water to cattle uphill. In addition, a segment of the Pritchard Creek Trail was closed to ATVs to reduce sedimentation and direct stream channel and riparian area erosion. Also, a trail ford was replaced with a bridge. The goal of the project was to reduce sediment delivery to the stream and facilitate the recovery of stream structure and function. Baseline monitoring data has been collected and effectiveness monitoring will continue.

This project is a partnership between the Caribou-Targhee National Forest and Trout Unlimited through the South Fork Home Rivers Initiative. Several sources of funding supported the project, including the SE Idaho Resource Advisory Committee and Jackson Hole One Fly.

The following collection of photos were taken for comparison of conditions within the old irrigation pond bed before and after earth-moving occurred in August 2003. During earth-moving, whole clumps of shrubs and trees were transplanted in the newly recontoured pond bed. A sediment barrier was also placed to decrease upland sediment delivery to the stream. The site was planted with native grass seeds and shrub cuttings from local sources. Hydromulch was also used to stabilize higher gradient areas and accelerate their revegetation. The first photos of each pair were taken during the Fall of 2002 and the second photos of each pair were taken near the end of August 2003, at the end of the earth-moving phase of the project.

Before: 22 October 2002, on dam looking upstream.

After: 28 August 2003.

Before: 22 October 2002, looking downstream at dam.

After: 28 August 2003.

Before: 22 October 2002, eroding stream banks.

After: 28 August 2003.

Before: 22 October 2002, on dam looking upstream.

After: 28 August 2003.