

Federal Grant Number: F19AP00325

Recipient Organization: Yaak Valley Forest Council

DUNS Number: 140-703-492

EIN: 81-0517993

Period Covered by Report: June 1, 2019 - December 31, 2020

### **Project Description**

THE SOUTH FORK OF MEADOW CREEK, located in the Yaak River watershed in the Kootenai National Forest of far Northwest Montana, is identified as a priority stream for restoration in the Kootenai River Basin Watershed Restoration Plan (WRP) and is a priority project identified by the U.S. Forest Service hydrologists who work on the Three Rivers Ranger District. The South Fork of Meadow Creek houses a genetically pure population of westslope cutthroat trout. A natural fish barrier in the lower portion of the main stem of Meadow Creek helps to keep this genetically pure population separate from the non-native and hybridized trout species. Restoration needed in this key tributary of the Yaak River included 1.2 miles of road re-contouring, including stream channel restructuring, bank stabilization, and natural native plant revegetation. In addition, the project called for 3.9 miles of active decommissioning, where culverts were to be removed and the roadbed stabilized to reduce sediment deposition into the South Fork of Meadow Creek.

### **Project Accomplishments**

The 2019 South Fork Meadow Creek road storage and decommissioning project accomplished stream crossing removal and fish passage restoration work at a total of three major stream crossing sites, as well as work at several smaller stream sites, along with other stabilization work. This was an “equipment rental by the hour” contract accomplished through a partnership watershed restoration project between the U.S. Forest Service (USFS) and the Yaak Headwaters Restoration Partnership, with the Yaak Valley Forest Council (YVFC) acting as project coordinator.

Segments of Forest Service Roads 524/524C/524D/5971/5971A/5977 were affected, with road 524D being decommissioned, and the rest being placed into intermittent stored service for future use by the USFS.

The major work involved for each road is summarized below by road number:

- 524:
  - Removal of failing 48” diameter culvert on Forest Creek (fish bearing, lower crossing)
  - Removal of culverts and/or excavation of stream channel road fills at multiple small stream crossings, including one failing culvert

December 20, 2019

- 524C:
  - Stabilization of past road fill slide and unstable road fill, including work at affected draw
- 524D:
  - Removal of undersized 48" diameter culvert on Forest Creek (fish bearing, upper crossing)
  - Removal of culverts and/or excavation of stream channel road fills at multiple small stream crossings
- 5971/5971A:
  - Removal of 9.5' wide squash culvert on South Fork Meadow Creek (fish bearing) and construction of overflow flood plain across nearby road fill in flood plain
  - Removal of culverts and/or excavation of stream channel road fills at multiple small stream crossings
- 5977:
  - Removal of culverts and/or excavation of stream channel road fills at multiple small stream crossings, including one failing culvert
- Additionally, all roads included standard stabilization work, such as cleaning of ditch lines and construction of numerous waterbars to frequently drain the ditches and road surface.

The Yaak Valley Forest Council (YVFC) field crew installed three photo point sites where culverts were removed in order to document the progress of native revegetation over time. We also installed a stream thermograph to monitor stream temperatures in the main stem of Meadow Creek as a part of our ongoing stream temperature monitoring program in the Yaak River watershed. This data collection is part of a long-term monitoring effort to track temperatures over time and assess the effectiveness of our restoration efforts in reducing and stabilizing stream temperatures in key habitats.

This project was accomplished considerably under the original budget. The U.S. Fish & Wildlife Service has graciously allowed the YVFC to use the remaining funding to complete a major private land bank restoration project on the main stem of the Yaak River.