LOWER FLY CREEK RESTORATION PROJECT

Project No. 1992-026-01

Contract No. 84573

Completion Report

3/1/20 - 12/31/21

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United States Forest Service
Wallowa-Whitman National Forest

LaGrande Ranger District
LaGrande, OR

April 18, 2022

LOWER FLY RESTORATION PROJECT

Location

This project involves implementing restoration in Lower Fly Creek to improve habitat for listed spring/summer chinook and summer steelhead. The project is located in T 4S, 35E, S 23, 27 & 34 and T 4S, R 35E, S 1, 12 & 13. It is located in the Lower Fly Creek Subwatershed (170601040108).

Introduction

Historic management that included beaver trapping, roading, timber harvest (including splash dams), livestock grazing and an altered fire regime have degraded the Lower Fly Creek watershed's ecological form and function. The loss of functional stream habitat adversely effects the survival and rearing of native salmonids, other fish, and wildlife species

Lower Fly Creek is currently apart of the McCarty Sheep Allotment. Fly Creek is only used for watering and not used for any significant grazing. In the late 1980s/early 1990s, sill logs were added into the stream at specific locations. In 2009, large wood was added to the stream to enhance pool development and was effective in many parts of the project area. However, the 2019 peak flow event reduced their effectiveness. A streambottom road was recontoured and planted. the stream channel is simplified with low levels of large wood, course substrate, and lack of quality pool habitat. Floodplain inundation and function is limited.

Objectives

To achieve proper ecological form and function of the Lower Fly Creek Reach and thereby restore habitat for the imperiled Snake River Basin Spring/Summer Chinook, Snake River Basin Steelhead, and bull trout. Objectives are as follows.

1: Activate Side Channel Scrolls

Encourage and create perennial side channels through channel spanning log jam construction.

2: Restore Hydrologic Function

Increase hydration of a laterally confined channel to improve groundwater retention through channel spanning log jam construction.

3: Improve Fish Habitat

Restore habitat complexity. Existing LWD structures will be modified and additional whole trees will be placed. These structures will encourage scour pool habitat, spawning gravel recruitment and fish cover.

Project Accomplishments

Structure Construction

The project constructed debris jams and habitat structures at 80 sites within the lower 3.5 miles of Fly Creek (RM .5 – RM 4.0). This included approximately 1200 pieces of large wood and 2,140 yards of racking material. An additional 150 whole trees were placed within the stream and 200 pieces of wood were placed on the floodplain. Boulders were placed into the stream to provide ballast and logs were pinned. All of the wood and boulders were placed with excavators/log loaders. There were 1-3 pieces of large wood dug into the stream bank at each structure site. These structures immediately created backwater pools, side channels and flooded floodplains. Habitat complexity and fish cover were greatly enhanced.

Road Recontour

There were 2 miles of stream bottom road and 1.5 miles of access roads (total of 3.5 miles) that were completely recontoured. These roads were previously closed, but still had a functional road prism. This will restore hydrologic function to the watershed.

Planting

All of the disturbed areas were be seeded with native grass seed mix. There were 23,000 deciduous and conifer seedlings planted in the project area.

Tipping trees with shovel loader

Placing Boulders on Structures

BEFORE AFTER

BEFORE AFTER

Fly structure 52

Recontouring Road

Completed Road Recontour

Planted Seedlings