

**EXP South Fork Catherine Creek  
Floodplain Restoration Project  
Project No.1992-026-01  
Contract: 52985**

**Completion Report  
Period Covered: June 1, 2011-February 28, 2013  
Completed by: Joe Platz**

**United States Forest Service  
Wallowa-Whitman National Forest  
La Grande Ranger District  
La Grande, OR  
March 13, 2013**



Pre-project draw bottom road condition

# South Fork Catherine Creek Floodplain Restoration Project

The South Fork Catherine Creek Floodplain Restoration Project took place in the field seasons of 2011 and 2012 on 4.3 stream miles beginning near the mouth of South Fork Catherine Creek. The goal of the project was to rehabilitate habitat for native Chinook salmon, steelhead, redband and bull trout. The project objectives included obliteration of a draw bottom road, restoration of natural floodplain dynamics, placement of large woody structures, restoration of a disconnected side channel, construction of livestock drift fences, construction of a livestock trail, and planting riparian trees, shrubs, grass, and sedges. Ongoing commitments involve monitoring of stream morphology, plant survival, photo points, invasive plants, and wood structure longevity.



Deciduous shrub protected with Vexar tube



Conifer seedling planted in micro-site

## Project Objectives

- Improve floodplain connectivity
- Improve water capture, storage, and safe release within the floodplain
- Increase quantity and quality of pools
- Increase fish cover and spawning gravel recruitment
- Improve habitat complexity, forage availability, and stream shading
- Increase the number of large and medium pieces of large woody structure in streams

## Restoration Treatments

- Obliterated 4.3 miles of draw bottom road
- Restored 2.2 total miles of floodplain
- Reconnected and restored a 0.25 mile disconnected side channel
- Placed 19 large wood structures consisting of 156 logs/root wads and approximately 76 large boulders
- Built three drift fences totaling 0.75 miles
- Planted 4000 deciduous, 6500 conifer seedlings, and 800 sedge plugs
- Planted grass/forb seed mix along 4.5 miles of project area
- Constructed 212 single exclosure fences

- **Total Cost: \$253,888** (BPA \$156,393; USFS \$60,000; ODOT \$25,000; NFWF – Bring Back the Natives \$12,495)

## Stocking Survey Results



Deciduous Shrub protected by single enclosure and shade card



Example of grass seed survival along new trail

Seedling Type	Initial Survival Rate after one summer
Deciduous	87.5%
Conifer	94.2%

## Stream Survey Results

DATE_OF_SURVEY	REACH_NUMBER	MAP_MILES	Pool Count	Average Residual Pool Depth	Medium Wood Count	Large Wood Count	Medium Wood Per Mile	Large Wood Per Mile	Average Bankfull Width	Average Floodprone Width
<b>Pre-Project Data</b>										
Sep-08	R1	2.282	20	1.29	24	17	9.96	7.05	28.33	52.67
Sep-08	R2	2.777	37	1.657	99	40	33.22	13.42	27.33	45.33
<b>Total /Average</b>		<b>5.059</b>	<b>57</b>	<b>2.947</b>	<b>123</b>	<b>57</b>	<b>21.59</b>	<b>10.235</b>	<b>27.83</b>	<b>49</b>
<b>Post-Project Data</b>										
Aug-12	R1	2.282	94	1.343	101	75	41.22	30.61	34.56	137.67
Aug-12	R2	2.777	94	1.573	124	81	41.47	27.09	28.3	80.8
<b>Total /Average</b>		<b>5.059</b>	<b>188</b>	<b>2.916</b>	<b>225</b>	<b>156</b>	<b>41.35</b>	<b>28.85</b>	<b>31.43</b>	<b>109.235</b>



Pre-Project (2011)

Photo point 1 monitors the development and change of a 0.25 mile side channel that was restored.



Post-Project (2011)



Post-Project (2012)



## Photo Point Number 11 Comparison



Pre-Project 2012



Initial Post-Project 2012



Most recent: Fall 2012

## Structure Number 16 Comparison



Pre-Project 2011



Initial Post-Project 2012



Most recent: Fall 2012