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 if 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

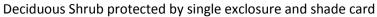
- > Improve floodplain connectivity
- > Improve water capture, storage, and safe release within the floodplain
- > Increase quantity and quality of pools
- ➤ Increase fish cover and spawning gravel recruitment
- > Improve habitat complexity, forage availability, and stream shading
- > Increase the number 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







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

	DEACH			0 -	Medium Wood		Medium Wood Per			Average
	REACH_					8				Floodprone
DATE_OF_SURVEY	NUMBER	MAP_MILES	Pool Count	Pool Depth	Count	Count	Mile	Per Mile	Width	Width
Pre-Project Data										
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
Total /Average		5.059	57	2.947	123	57	21.59	10.235	27.83	49
Post-Project										
<u>Data</u>										
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
Total /Average		5.059	188	2.916	225	156	41.35	28.85	31.43	109.235

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



Pre-Project (2011)



Photo Point Number 11 Comparison



Pre-Project 2011





Most recent: Fall 2012