14330-2010-902 - WNTI Crow Creek Restoration and Yellowstone Cutthroat Trout Habitat Improvement Phase 2, SE Idaho

State(s): Idaho
Managing Agency/Organization: U.S. Fish and Wildlife Service
Type of Organization: Federal Government
Project Status: Completed
Project type: WNTI Project
Project action(s): In-stream and riparian habitat
Trout species benefitted: Yellowstone Cutthroat
Population: Palisades, Salt River
Proposed Accomplishment Summary

Phase 2 is channel stabilization work above and below phase 1 (reconstructed historic channel), augmenting riparian planting throughout phase 1 reach, treat noxious weeds in both phase 1 and 2 areas, and design/install a visitors interpretive sign at the project area. The channel stabilization work above the reconstructed historic channels involves: 1) reshaping and planting approximately 1000 ft of stream bank with heavy equipment to reshape and transplant whole willow clumps and hand crews planting willow cuttings and sedge plugs 2) planting over 1400 ft bank using hand crews planting willow cutting and sedge plugs. To ensure native vegetation recovery of over 6,000 feet of stream banks and throughout the 35 acres of riparian habitat re-established in phase 1 (2009) a crew or contract would be established to augment additional planting to maximize vegetation recovery and the success of channel stability. The treatment of noxious would occur on over 35 acres covering phase 1 & 2 areas. This would promote the recovery of native riparian species providing quality riparian habitat and healthier stream banks.

The importance to the Resource:

Crow Creek is an important YCT stronghold stream providing critical cold-water spawning habitat and the project would increase both quality and quantity of this habitat. The stream system also contains riparian/wetland habitat and high water quality which are valued resources on the Caribou-Targhee National Forest and the surrounding area.

The problem:

The project area has been ditched and moved in the floodplain, and channel straightening has caused loss of 800 ft of channel length. The channel is incised, disconnected from the floodplain and streambanks are unstable. These conditions threaten loss of land, riparian and wetland vegetation, fisheries and wildlife habitats, and water quality.

The method:

Natural channel design methods utilizing nearby stream reference reaches will be used to obtain stable channel dimensions. Excavate the historic channel, slope banks, and transplant whole willow and sedge mats. NRCS and FS will hold a bio-engineering training in 2009 implementing various bank stabilization techniques within the project reach.

2012 Update: Phase 2 was completed Fall 2011. 3000 ft of old ditched channel was filled with a pond and plug technique, creating nearly 5 acres of prime wetland habitat. The lower 1000 ft of ditched channel was converted to a 1 foot wide spring fed channel connected to the historic reconstructed channel creating excellent rearing habitat. 2,400 ft of stream banks were reshaped and stabilized using whole willow clump and sedge sod transplants. Volunteers planted willows on an additional 2000 ft of bank.

Objectives:

 Restore hydrologic function and stability to over 1 mile of Crow Creek. Increase the quality and quantity of YCT habitat and improve water quality by reducing stream temperature and decreasing sediment loading. Increase channel stability and re-connect the channel to its floodplain to improve nearly 35 acres of riparian and wetland conditions.

Partners:

- Caribou Targhee National Forest Matching \$23,000 In Kind \$5,000
- Greater Yellowstone Coordinating Committee Matching \$5,000 In Kind \$0
- Idaho Department of Environmental Quality Matching \$5,000 In Kind \$0
- National Fish and Wildlife Foundation Matching \$50,000 In Kind \$0
- Natural Resources Conservation Service Matching \$0 In Kind \$12,000
- Private Landowners Matching \$0 In Kind \$2,000
- Trout Unlimited Matching \$0 In Kind \$5,000

Measures: Total number of in-stream/shoreline miles restored - 1.5 Funding Source(s): National Fish and Wildlife Foundation Project cost: \$138,500.00 Start Date: 01/01/2011 Completion Date: 11/01/2011 Project Contact: Louis Wasniewski, Forest Hydrologist 1405 Hollipark Dr. Idaho Falls, ID 83401 Iwasniewski@fs.fed.us