

## WESTERN NATIVE TROUT INITIATIVE

# Hangman Creek Channel Restoration Status Report, July 2017

### **Applicant Information**

Lead Applicant Organization or Entity: Coeur d'Alene Tribe

Contact Person Name: Angelo Vitale Address: 850 "A" Street

City, State, Zip: Plummer ID, 83851 Email: avitale@cdatribe-nsn.gov

Telephone: (208) 686-6903 Website Address: www.cdatribe-nsn.gov

#### **Project Information**

Project Title: "k'wne' 'ulchiyark'wmntsut" (Hangman Creek Relict Channel and Floodplain

Reconnection)

Project Location State: Idaho County: Benewah Nearest Town: Tensed

Watershed/Stream/Lake: Spokane River Basin/Hangman Creek

Native Trout Species Benefitted by Project: Redband Trout

Total Project Budget: \$204,526 Total Amount Awarded: \$38,447

**Total Matching Funds or In-Kind Support Secured:** \$166,079

**Project Map Coordinates** (decimal degrees) Lat: 47.1201 Long: -116.8268

Project Start Date: June 1, 2016 Project Completion Date: December 31,

2017

#### Project Status through July, 2017

#### Element 1: Relief Channel Construction, 100% completed

The relief channel was constructed as of August, 2016. This channel is designed to capture run-off water above and beyond 400cfs in order to protect infrastructure downstream. Approximately 1200 cubic yards of rip-rap and boulders were incorporated into the relief channel to ensure grade is maintained at the inlet and outlet. This channel proved to be functioning properly during the run-off periods of 2017.

#### Element 2: Reestablishment of native vegetation, 80% completed

Native upland and wetland grasses/rushes/sedges have been planted throughout the project area where disturbances due to construction have occurred. Lodgepole and ponderosa pine (1300) and black hawthorn (200) have been planted in the upland areas adjacent to the relief channel and a portion of the relict stream channel corridor. Thinleaf alder (600) and various willow species (250) have been planted within the stream corridor of the relict channel. All pines have been protected with mesh tubes.

Additional planting of native deciduous trees and shrubs will occur within the stream corridor and along the relief channel during the fall of 2017. Fencing will also be installed to protect these trees from ungulate browsing. Students from the local school are scheduled to assist at this time, while being educated on the restoration process and the importance of a functioning floodplain/stream ecosystem.

#### Element 3: Earthen Plug Construction, 90% completed

520 meters (1700 feet) of earthen plug has been constructed as of August, 2016. Upon completion of the earthen plug, the 1.5 mile reach of relict channel was reactivated and the 1 mile reach of incised and degraded channel was abandoned. The construction of the earthen plug also provided for the reactivation of a number of floodplain channels during runoff events. Furthermore, over 140 acres of floodplain and wetland habitat are now reconnected to the stream through frequent overbank flows.

Due to the prolonged runoff season this winter and spring, portions of the earthen plug have eroded. Minor repair and additions to the earthen plug are planned for the summer of 2017 to ensure the plug will maintain well into the future. Additions to the earthen plug will incorporate berms and floodplain logs to disrupt overland flow, and additional upland grass seed to provide soil stability.

#### Monitoring: Ongoing

Effectiveness monitoring continues throughout and adjacent to the project reach. Preliminary data is available for rearing habits of marked redband trout, continuous stream temperature, stream turbidity, and ground water elevations.

## **Timeline Specifics**

Year	Month	Task
2016	June-July	Relief Channel Construction
	July-Aug	Earthen Plug Construction
		Activation of relict channel
		Floodplain reconnection
		Wetland creation/reconnection
	October	Riparian Enhancement of Relief Channel
		Upland grass seed
		Wetland seed mix
		20 Upland Shrubs
	October	Riparian Enhancement of Relict Channel
		500 Upland trees
		180 Upland shrubs
		600 Thinleaf Alder
		250 Wetland shrubs
2017	May	Riparian Enhancement of Relict Channel
		800 Upland trees
	July-Aug, October	Earthen Plug Maintanence
		Floodplain logs
		Earthen berms
		Upland grass seed
	October	Riparian Enhancement of Relief Channel
		180 Upland Shrubs
		300 Thinleaf Alder
	October	Riparian Enhancement of Relict Channel
		300+ Wetland trees/shrubs
		Plant protection
		Outreach and Education