WASHINGTON STATE Recreation and Conservation Office

Final Report

Project #09-1473, Peshastin Creek Reconnection Alternatives Analysis

Submitted by Mike Kane on 01/23/2013 Accepted by Marc Duboiski on 01/23/2013

CONTACTS

Primary Sponsor: Chelan Co Natural Resource

Lead Entity: Chelan County LE

Managing Agency: Rec. and Conserv. Office

Project Contact: Mike Kane
mike.kane@co.chelan.wa.us

Alt Project Contact: Joy Juelson
Joy.Juelson@ucsrb.com
John Soden
jsoden@jsanet.com

Billing Contact: Kathy Bangs
kathy.bangs@co.chelan.wa.us

RCO Grant Manager: Marc Duboiski
marc.duboiski@rco.wa.gov

DESCRIPTION OF THE COMPLETED PROJECT

Project Start Date: 12/10/2009 **FundingEnd Date:** 08/31/2012 **RCO Closure Date:** 01/24/2013

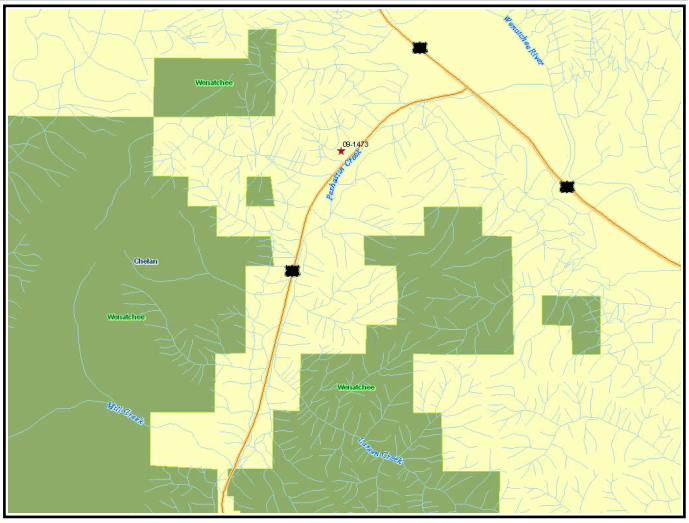
The CCNRD proposed the Peshastin Creek Reconnection Alternatives Analysis to complete Alternatives Analysis and stakeholder coordination to begin the largest channel reconnection project on Peshastin Creek. The US 97 highway grade has disconnected historic channel and floodplain habitat between RM 3.56 and RM 3.90. This project proposed the reconnection of 2,400 linear feet of creek channel effectively lengthening the channel by 600 feet. The reduction in length at this site accounts for 14% of the total reduction in channel length attributed to construction of US 97. Peshastin Creek is a Category 2 watershed and contains Major spawning area for steelhead and minor spawning area for spring Chinook, and is a bull trout core area (UCRTT 2008). The restoration of ecosystem function through channel reconnection is a priority in Peshastin Creek (UCRTT 2009), and the completion of reconnection would addresses Tier 1 habitat restoration as recommended in the Biological Strategy (UCRTT 2008), and Recovery Plan (UCSRB 2007) for Peshastin Creek.

The CCNRD has been working with WSDOT to provide a long-term fix at the project site that benefits ESA-listed salmonids through full channel reconnection. The CCNRD used data presented in the Yakama Nation Peshastin Creek Reach Assessment, LiDAR, and information collecte onsite to develop and analyze design alternatives and select the highest priority action.

SITE LOCATION

General Area of Project: 3.5 miles south from the intersection of hwy 97 and 20

Waterbodies: Peshastin Creek



Cong District:	04
Cong District 2012:	08
County:	Chelan
HUC:	Wenatchee
Leg District:	12
Leg District 2012:	12
Salmon Recov Reg 05:	Upper Columbia
Section:	29
Township/Range:	T24NR18E
WAU:	Mt Stuart

Sponsor Clarifications:

Sponsor verified the above information is correct and complete.

PROJECT NARRATIVE

Project History:
The site had seen repeated bank erosion along the SR 97 during flood events in January 2009 and during 1990's floods.
CCRND had applied for funding to do an alternatives analysis of the site and completed 30% designs for a preferred alternative.
The Yakama Nation hired Interfluve to do a reach assessment of Lower Peshastin Creek in 2010.
Draft alternatives were developed by the project team based on the Lower Peshastin Creek Tributary and Reach Assessment, input from RTT priority reaches and actions (restore natural processes), WSDOT standards and landowner input.
A debris flow orginating upslope entered the lower third of the historical channel, leaving a 500 foot long area of sediment 2' thick in the historical channel.
Alternatives were finalized and landowner coordination identified new issues regarding the mudslide, junk accumulations and changes in land use.

Project Changes:
The project was amended in the spring of 2012 to change the scope from including 30% designs to a feasibility study.
The debris flow introduced a whole new risk factor to reconnecting flows in the project area due to increased sedimentation risk.
One of the landowners had some piles of old vehicles when we had initiated the project, but the landfilling activity increased greatly afterwards creating risks of introducting hazardous materials if a surface flow is connected thru the property.

Lessons Learned:
Complex sites involving numerous landowners and even agencies can include changing attitudes and site conditions.

Engineering Contractor:
ICF International
1108 11th Street, Suite 301
Contact: John Soden
509.255.2920

Project Outcomes:
CCNRD is still working with WSDOT to address highway erosion issues, but this site is not a top priority at this time.
CCNRD will continue to work with landowners to address two clear issues prior to pursuing reconnection of salmon habitat (stabilizing the landslide and cleaning up the site that is turning into a garbage dump.
CCNRD will continue to work with that landonwer, Randy Betz, that was most interested in this project on another potential project on the opposite side of the river and upstream of the site on property wholly owned by his family.

AMENDMENTS

#	Type	Applied Date	Description
2	Cost Change	06/13/2012	The sponsor match share is reduced from 23% of the project to 15%, as they were unable to secure the additional funds to complete the 30% design element of the scope. Therefore, the scope is reduced to a conceptual design evaluation (feasibility study) only.
1	Time Extension	11/17/2011	The project period of 12/10/2009 to 12/31/2011 is extended to allow the contracting party until 08/31/2012 to complete the project.

OVERALL PROJECT COSTS

Funding Formula:	Requested		Original		Final	
Salmon Federal Projects:	$0.00	(0%)	$42,108.00	(77%)	$42,108.00	(85%)
Salmon State Projects:	$42,108.00	(50%)	$0.00	(0%)	$0.00	(0%)
Sponsor Match:	$42,498.00	(50%)	$12,690.00	(23%)	$7,500.00	(15%)
Total:	$84,606.00	(100%)	$54,798.00	(100%)	$49,608.00	(100%)

Paid To Date:	$42,108.00		**Last Released Billing:** 01/24/2013
Remaining RCO Funds:	$0.00		**Pending Billing:** No
Advance Balance:	$0.00	**Match Bank:** $0.00	**Number of Billings:** 5
Admin Limit:	$0.00	**Admin Spent:** $0.00	
A&E Limit:	$0.00	**A&E Spent:** $0.00	

Billed Cost Summary:	Original Agreement	Expended	Non-Reimbursable	Total Billed
Non-Capital				
Non-Capital Costs		$42,524.39	$7,623.76	$50,148.15
Equipment				
Non-Capital Total	$49,608.00	$42,524.39	$7,623.76	$50,148.15
Total	$49,608.00	$42,524.39	$7,623.76	$50,148.15

Project Cost Metrics:	Original Agreement	Final
PCSRF Federal Funds:		$42,108.00
State Funds:		
Pending Billing - RCO Share Approved:		
Retainage - RCO amount retained:		$0.00
Amount of other monetary funding:	$12,690.00	$8,040.00
Project identifier for the other monetary funding:	n/a	USBOR 09-FC-1C-1415 A030-1678-6813-120-04-0-0
Source of other monetary funding:	n/a	n/a
Value of Donated Unpaid Labor (Volunteers):	$0.00	$0.00
Source of Donated Un-paid labor contributions:	n/a	n/a
Number of hours volunteers contributed to the project:		0
Describe how the value of the volunteers was determined:		n/a
Value of Donated Paid Labor:	$0.00	$0.00
Source of Donated Paid Contributions:		n/a
Value of Other In-Kind Contributions:	$0.00	$0.00
Source of Other In-Kind Contributions:		n/a
Description of other In-Kind contributions:	n/a	n/a

PROJECT METRICS

	Original Agreement	Final
Completion Date		
Projected date of completion:	12/31/2011	12/31/2012
Project Goals		
Goals, purpose, and expected benefits:		The Peshastin RM 3.8 Channel Reconnection Project Feasibility Study provides information to aid in selecting projects that have a high certainty of success and significant biological benefit.

WORKSITE #1: Peshastin Creek Reconnection Alternative

Worksite Description: The worksite includes a portin of US 97 and the mainstem Peshastin Creek at RM 3.56 to 3.90 including the disconnected historic channel. Several houses are located within the historic floodplain of Peshastin Creek. There have been ongoing bank erosion problems at the upstream end of the channel relocation, at the point where the creek is forced to follow the new channel instead of the original meander. WSDOT has had to repair the roadway due to erosion multiple times after flooding events in recent history. The repairs have included replacing lost fill from the roadway embankment and adding riprap armoring at the point where the creek is eroding the bank. The CCNRD is working with WSDOT's Chronic Environmental Deficiencies Program to look at long-term fixes to this erosion problem in conjunction with reconnection of the disconnected channel. This project proposes to reconnect Peshastin Creek within the historic stream channel. This will result in the lengthening of stream channel, increased sinuosity and decreased channel slope, increased floodplain capacity, and increased habitat area. This will increase juvenile rearing habitat, increase adult spawning habitat, and allow the channel to dissipate energy and manage sediment loads.

Driving Directions: From the intersection of US 2 and US 97 head south on US 97 approximately 3.5 miles to the project site.

Coordinates for Worksite Directions - Latitude: 0.00 **Longitude:** 0.00

Sponsor Clarifications:

Sponsor verified the above information is correct and complete.

WORKSITE #1 COSTS

Worksite Billed Cost:	Estimated	Expended	Non-Reimbursable	Total Billed
Equipment				
Non-Capital Costs		$42,524.39	$7,623.76	$50,148.15
Worksite Total		$42,524.39	$7,623.76	$50,148.15

Worksite Costs by Category:	Original Agreement	Final
Planning/Coordination funding:	$54,798.00	$50,148.00

WORKSITE #1 METRICS

	Original Agreement	Final
Targeted salmonid ESU/DPS:	Chinook Salmon-Upper Columbia River Spring-run ESU, Chinook Salmon-Upper Columbia River summer/fall-run ESU, Steelhead-Upper Columbia River DPS	Chinook Salmon-Upper Columbia River Spring-run ESU, Chinook Salmon-Upper Columbia River summer/fall-run ESU, Steelhead-Upper Columbia River DPS
Targeted species (non-ESU species):	Bull Trout	Bull Trout
Area Encompassed (acres):	0.0	8.6
Miles of Stream Affected:		

Restoration Planning And Coordination Project

Conducting habitat restoration scoping and feasibility studies

Description of the Plan:	to be colected at closing	Peshastin Creek is located on the east slope of the Cascade Mountains in Central Washington, within the Wenatchee River Basin (WRIA 45). Peshastin Creek is a tributary to the Wenatchee River and flows into the river at RM 18. The creek supports populations of salmonids that are currently listed under the Endangered Species Act (ESA), including spring Chinook salmon, summer steelhead, and bull trout. Habitat for these species has been affected by anthropogenic activities throughout the basin. This feasibility study provides the supporting rationale associated with the selection of the preferred alternative for the Peshastin Creek RM 3.8 Channel Reconnection project between river mile (RM) 3.35 and RM 4.30 (Figure 1). The project is being proposed by the Chelan County Natural Resource Department (CCNRD), with engineering and technical assistance provided to CCNRD by ICF International (Project Team). In 2009 and through a state-awarded Salmon Recovery Funding Board grant, the CCNRD began assessing methods and landowner willingness for reconnecting 2,400 linear feet of historical channel and floodplain habitats between RM 3.35 and RM 4.30 on Peshastin Creek (Project Site). The historical channel and floodplain were disconnected from Peshastin Creek with the construction of State Route 97 (SR 97) in the 1950s. The purpose of the reconnection is to increase refuge and rearing habitat for listed salmonids, increase floodplain connectivity, and restore natural channel processes in
Name of the Plan:	to be colected at closing	ICF International. 2013. Peshastin Creek RM 3.8 Channel Reconnection Project Feasibility Study. January. (ICF 00428.11.) Bellingham, WA. Prepared for Chelan County Natural Resources Department, Wenatchee, WA.
Total cost for Conducting habitat restoration scoping and feasibility studies:		

PROPERTY DESCRIPTION (Misc. private property owners and WSDOT)

Activity: Planning

Control & Tenure:

Instrument Type:

Timing: Proposed

Term Length: Fixed # of years **# yrs:**

Expiration Date:

Landowner Type: Private **Note:**

Parcel Numbers:

County	Parcel Number	Note
Chelan		

Sponsor Clarifications:

Sponsor Clarifications:

SPONSOR CERTIFICATION

[X] I certify that this project has been completed in accordance with the project agreement.

[X] I certify that, to the best of my knowledge, the information in the Final Report is true and correct.

Submitted by Mike Kane on 01/23/2013