WASHINGTON STATE Recreation and Conservation Office

Final Report

Project #07-1722, Simmons Creek Restoration

Submitted by Tova Tillinghast on 08/30/2012 Accepted by David Caudill on 11/02/2012

CONTACTS

Primary Sponsor: Underwood Conservation Dist

Lead Entity: Klickitat County LE

Managing Agency: Rec. and Conserv. Office

Project Contact: Tova Tillinghast
tovatillinghast@gorge.net

Billing Contact: Ann Gross
ucd@gorge.net

RCO Grant Manager: David Caudill
Dave.Caudill@rco.wa.gov

DESCRIPTION OF THE COMPLETED PROJECT

Project Start Date: 01/02/2008 **FundingEnd Date:** 06/01/2012 **RCO Closure Date:**

This project is located on Simmons Creek. The upper reaches of Simmons Creek are located on a relatively flat plateau with deep, fine-grained soils. At least a 6,600 linear foot length of the stream was identified by UCD staff and partners as moderately to deeply incised. The condition was probably due to a combination of historic agricultural clearing and ditching and past intensive grazing. Erosion and downcutting occurs in these streams during high flows, as water is unable to spread onto the floodplain. Rapid runoff results in poor groundwater recharge, exacerbating low, warm summer flows in downstream reaches of Snyder Creek, which contains spawning and rearing habitat for ESA-listed Middle Columbia steelhead.
The project was designed to build and install channel roughness/sediment capture structures within the 6,600 linear foot stream segment of Simmons Creek. Riparian plantings of willow, black cottonwood, and other species will be included. The objective was to use wood, vegetation, and small rock to add channel roughness, stabilize eroding banks, increase groundwater recharge, reduce downstream sedimentation, and increase summer flows in downstream salmonid habitat.

A rapid assessment was conducted to evaluate sediment budget in the area which will lead to future projects in the basin.

SITE LOCATION

General Area of Project: This project is located on Simmons Creek, which feeds Snyder Creek, a tributary of the Klickitat River

Waterbodies: Simmons Creek

Cong District:	04
County:	Klickitat
HUC:	Klickitat
Leg District:	15
Salmon Recov Reg 05:	Mid Columbia
Section:	01
Township/Range:	T04NR12E
WAU:	Appleton
WRIA:	Klickitat

Sponsor Clarifications:

Sponsor verified the above information is correct and complete.

Location is the same as proposed.

PROJECT NARRATIVE

Please see attached Final Completion Report and Appendices in Attachments section of PRISM.

The project construction had to be spread over 2 summers due to the labor-intensive nature of the work. The structures may have been designed differently to be less labor-intensive. We learned some important lessons about the watering options at the site (see Final Completion Report Appendices C and D).

Contractors included: Aquatic Contracting, Summit Excavation, DNR WCC Crew, Wings Crew, The Fence Guys, and CRS Fencing. Engineering was provided by UCD's cluster engineers based out of the Central Klickitat Conservation District.

The following tasks would help ensure the success of this project, but would need to be taken on by the landowner or lessee:

§ Continue to plant wetland meadow and riparian plants along the entire reach of the project;
§ Plant area near Brewer Rd Culvert and area upstream of first livestock crossing;
§ Evaluate 2009, 2010, and 2012 plantings and fill in as needed;
§ Monitor weed infestations (especially houndstongue) and control as needed;
§ Repair breaks in fence exclosure to ensure instream structures and plantings are not compromised by cattle hoof traffic and grazing;
§ Additional monitoring and maintenance as needed.

Again, please see attached Final Completion Report for more detail.

AMENDMENTS

#	Type	Applied Date	Description
1	Cost Change	12/09/2009	Increase the grant amount by $30,000. The match will remain at 20.8% or increase to $31,800. The total project cost will be $152,991. The scope of the project remains unchanged.

OVERALL PROJECT COSTS

Funding Formula:	Requested		Original		Final	
Salmon Federal Projects:	$0.00	(0%)	$91,191.00	(79%)	$121,190.60	(78%)
Salmon State Projects:	$91,191.00	(79%)	$0.00	(0%)	$0.00	(0%)
Sponsor Match:	$23,950.00	(21%)	$23,950.00	(21%)	$34,033.49	(22%)
Total:	$115,141.00	(100%)	$115,141.00	(100%)	$155,224.09	(100%)

Paid To Date:	$121,190.60			**Last Released Billing:**	11/02/2012
Remaining RCO Funds:	$0.00			**Pending Billing:**	No
Advance Balance:	$0.00	**Match Bank:**	$0.51	**Number of Billings:**	10
Admin Limit:	$0.00	**Admin Spent:**	$0.00		
A&E Limit:	$35,820.94 (30.00%)	**A&E Spent:**	$35,305.47 (22.74%)		

Billed Cost Summary:	Original Agreement	Expended	Non-Reimbursable	Total Billed
Restoration				
Construction	$117,685.38	$86,197.89	$33,720.73	$119,918.62
A&E	$35,305.62	$34,992.71	$312.76	$35,305.47
Restoration Total	$152,991.00	$121,190.60	$34,033.49	$155,224.09
Total	$152,991.00	$121,190.60	$34,033.49	$155,224.09

Project Cost Metrics:	Original Agreement	Final
PCSRF Federal Funds:		$121,190.60 *Final Voucher results in this being $121,190.60.*
State Funds:		
Pending Billing - RCO Share Approved:		
Retainage - RCO amount retained:		$0.00
Amount of other monetary funding:		$3,294.00
Value of Donated Unpaid Labor (Volunteers):		$0.00
Value of Donated Paid Labor:		$14,259.00
Value of Other In-Kind Contributions:		$16,480.00
Project identifier for the other monetary funding:		Mid-Columbia Fisheries Enhancement Group, Simmons Creek Project.
Source of In-Kind contributions:		WA State Conservation Commission Cluster Engineer funding via Central Klickitat Conservation District engineers = $5331 ; Hancock Forest Management = $10,440; WA Conservation Corps DNR Crew = $14,656
Source of other monetary funding:		Mid-Columbia Fisheries Enhancement Group, Simmons Creek Project.
Number of hours volunteers contributed to the project:		0
Describe how the value of the volunteers was determined:		n/a
Description of other In-Kind contributions:		Cluster engineers provided engineering, project oversight, and construction assistance throughout the project. Hancock provided logs, rock, and access improvement work for the project. WA Conservation Corps DNR crew provided equipment and materials

PROJECT METRICS

	Original Agreement	Final
Completion Date		
Projected date of completion:		06/01/2012
Project Goals		
Goals, purpose, and expected benefits:		The goal of the project was to stabilize the stream channel, halting active incision and erosion, provide channel roughness for future channal aggradation, restore native riparian vegetation to contribute toward channel roughness and riparian shading, and restore historic hydrologic processes in the upper headwaters of a salmon bearing stream. The objectives of the project were to restore natural streamside vegetation, improve stream flow and temperature, reduce erosion, increase filtration, and recruit large woody debris.

WORKSITE #1: Simmons Creek

Worksite Description: This project is located on Simmons Creek, which feeds Snyder Creek, a tributary of the Klickitat River, where a 6,600 linear foot length of the stream has been identified as needing repair. The upper reaches of Simmons Creek are located on a relatively flat plateau with deep, fine-grained soils. At least a 6,600 linear foot length of the stream is moderately to deeply incised. The condition is probably due to a combination of historic agricultural clearing and ditching and past intensive grazing. Erosion and downcutting occurs in these streams during high flows, as water is unable to spread onto the floodplain. Rapid runoff results in poor groundwater recharge, exacerbating low, warm summer flows in downstream reaches of Snyder Creek, which contains spawning and rearing habitat for ESA-listed Middle Columbia steelhead.

To meet the condition, we will likely conduct a "rapid assessment" of the sediment budget for the Snyder Creek basin, showing what proportion of that budget has been addressed by our past work and what proportion will be addressed through the Simmons Creek project. Sources not addressed by past and current work will lead to further project development in the basin.

Driving Directions: From Highway 14, just West of Lyle, WA, turn North on Old Hwy. 8. Turn North again on Canyon Rd. and stay on this road for approx. 20 miles. Pass Appleton and Bill Monroe Rd. on the left. Turn Right on Fisher Hill Rd. Turn Left on Brewer Rd. Park in pullout on Left 1/4 mile past water tank on Right.

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
A&E	$26,571.00	$34,992.71	$312.76	$35,305.47
Construction	$88,570.00	$86,197.89	$33,720.73	$119,918.62
Worksite Total	$115,141.00	$121,190.60	$34,033.49	$155,224.09

Worksite Costs by Category:	Original Agreement	Final
Instream Habitat Funding:		$15,139.00
Riparian Habitat Funding:		$18,582.00
General Restoration Activity Funding:		$86,198.00
		Not sure which category this belongs in. Amount reflects Construction funding vouchered as of Aug. 15, 2012.
Architectural & Engineering Funding:		$35,305.47
		As of Aug. 15, 2012, we vouchered $34,993 as A&E.

WORKSITE #1 METRICS

	Original Agreement	Final
Targeted salmonid ESU/DPS:		Chinook Salmon-Middle Columbia River spring-run ESU, Steelhead-Middle Columbia River DPS
Targeted species (non-ESU species):		Bull Trout
Miles Of Stream Treated/Protected:		1.25
Project Identified In a Plan or Watershed Assessment:		Klickitat Lead Entity Region Salmon Recovery Strategy, May 2012, page 89 (http://www.klickitatcounty.org/NaturalR/FilesHtml/SalmonHabitatRecovery/Klickitat%20LE%20Strategy%205-22-12%20Draft%20for%202012%20Grant%20Round.pdf)
Type Of Monitoring:		Implementation Monitoring
Monitoring Location:		Onsite

Instream Habitat Project

Total Miles Of Instream Habitat Treated:		0.65

Channel structure placement

Material Used For Channel Structure:	Logs Fastened Together (Logjam), Other Engineered Structures
Miles of Stream Treated for channel structure placement:	0.65
Acres Of Streambed Treated for channel structure placement:	2.4
Pools Created through channel structure placement:	20
Yards Of Average Stream-Width At Mid-Point Of Worksite:	7
Number of structures placed in channel:	20

Riparian Habitat Project

Total Riparian Miles Streambank Treated:	0.75
Total Riparian Acres Treated:	3.0

Plant removal / control

Species of Plants Treated/Removed in riparian:	Houndstongue
Acres of riparian treated for plant removal/control:	0.1

Planting

Species Of Plants planted in riparian:	Salix sp., Pseudotsuga menziesii, Pinus ponderosa, Populus balsamifera, Populus tremuloides,
Acres Planted in riparian:	3.0

Water gap development

Number of water gap installations:	1

General restoration activities

Other restoration activities

Describe the other restoration activities:	700 linear feet of cattle exclusion fencing was built around the new watering gap that was installed. An additional 13, 470 linear feet of fence was repaired and closed up to reduce cattle intrusion in the riparian area.

Architectural & Engineering

Architectural & Engineering (A&E)

Did A&E costs exceed billed amount (Yes/No):	No

PROPERTY DESCRIPTION (Hancock Forest Mgt - Simmons Creek)

Activity: Restoration

Control & Tenure:

Instrument Type: Landowner Agreement

Timing: Existing

Term Length: Fixed # of years **# yrs:** 10

Expiration Date:

Landowner Type: Private **Note:**

Sponsor Clarifications:

Sponsor verified the above information is correct and complete.

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.