

# **Final Report**

## **Project #11-1441, Upper Chumstick Barrier Removal**

Submitted by Mike Kane on 02/11/2014

Accepted by Marc Duboiski on 02/11/2014

#### CONTACTS

Primary Sponsor: Chelan Co Natural Resource Project Contact: Mike Kane

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RCO Grant Manager: Marc Duboiski

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#### **DESCRIPTION OF THE COMPLETED PROJECT**

Managing Agency: Rec. and Conserv. Office

Project Start Date: 12/08/2011 FundingEnd Date: 12/31/2014 RCO Closure Date:

The objective of the Upper Chumstick Barrier Removal project was to improve migration of salmonids to and from historical spawning and rearing habitat along the upper portion of Chumstick Creek (RM 7.3-9.8). This project corrected fish passage barriers at five worksites - Saliby, Ott/Johnson, Baumann, Cann and Scheibler. This will complete a 15 year effort to remove over 30 barriers within the first 9.8 miles of Chumstick Creek. This effort will increase spatial structure, abundance, and productivity of salmonids in the Wenatchee watershed. Due to development along the creek, a high concentration of stream crossings exist, some of which are barriers to salmonid migration. Barrier removal will address two habitat limiting factors including up and downstream passage and riparian habitat.

#### SITE LOCATION

General Area of Project: North of Leavenworth

Waterbodies:

Cong District:04Cong District 2012:08County:ChelanHUC:Wenatchee

Leg District: 12 Leg District 2012: 12

Salmon Recov Reg 05: Upper Columbia

**Section:** 06, 31

Township/Range: T25NR18E, T26NR18E

WAU: Chumstick

# Sponsor Clarifications:

Sponsor verified the above information is correct and complete.

Projects occured in Chumstick Creek a tributary of the Wenatchee River. See attached map of all barrier projects on Chumstick Creek, inlcuding 2001, 2009 and 2010 implementations.



#### PROJECT NARRATIVE

The overall project area is located in the Wenatchee sub-basin on Chumstick Creek near the city of Leavenworth, WA. There were twenty-six culvert barriers and four irrigation dams all barriers to fish passage. The US Fish and Wildlife Service (USFWS) and Natural Resources Conservation Service (NRCS) completed a passage barrier inventory and stream survey of Chumstick Creek in 1996. Numerous culverts were identified that were at least partial barriers from RM 0.28 to RM 8.5. The barrier at RM 0.28 (The North Road Culvert) was installed in 1957 and blocked access to the rest of the creek. In some years, favorable flows allowed a few steelhead to get past the outfall drop and high velocities, but for most species and most of the time, it was a complete barrier. In 2001, six fish passage barriers were removed from Chumstick Creek by the local Conservation District. In 2009, funding became available to remove an additional 18 culverts which were replaced with bridge crossings, including the North Road Culvert (see map of barriers). During the 2009 field construction season, USFWS and Chelan County were granted access to survey for potential fish passage barriers on properties where access had been denied during the 1996 surveys. During the 2009 survey, a complete fish passage barrier was identified on the Cahail property at RM 5.7, three complete fish passage barriers were found on the Scheibler property near RM 8 and a partial barrier culvert at RM 8.7 on the Baumann property. The barrier at the Cahail property was replaced with rock weirs in 2010.

This portion of the overall project encompasses the following: The three barriers located at the Sheibler property were replaced in 2011 with a series of rock weirs and a length of constructed channel. Just upstream of the Scheibler project, partial barriers located at the Ott/Johnson property, the Baumann property and the Cann property were replaced in 2012. The final partial barrier culvert at the Saliby property was replaced in 2013. A complete barrier exists at RM 9.8 at the confluence with Second Creek, but the landowner is not interested in working with any government agency and the habitat value above that point is relatively unknown.

#### Lessons learned:

The project sponsor had to be persistent with landowner efforts (some landowners were not open to working with agencies) and at the same time respectful of private property concerns. Sponsor had to be persistent with funding efforts. Numerous applications were submitted for funding but not successful inlouding ARRA, etc. Sponsor had to be persistent with securing design services. 2009 work designed by Skillings/Connelly, 2010 work designed by Reclamation, 2011 work designed by Reclamation and USFWS, 2012 work designed by Reclamation and ICF. 2013 work designed by NRCS and USFWS.

#### Contractors

Scheibler-Columbia Valley Excavation Ott- Rayfield Brothers Construction Baumann/Cann-Hurst Construction Saliby-Olin Construction

#### **Project Partners**

U.S. Fish & Wildlife Service (USFWS); Provided funding, permitting, de-fishing, design and technical expertise. Attended several on site meetings with Washington Department of Fish and Wildlife and Bureau of Reclamation to develop alternatives for the site. Provided design and construction inspection for the upper barrier on the Scheibler site. Design of the Saliby site was by "USFWS Design Team" which included NRCS engineer.

Bureau of Reclamation (BOR)- Provided funding, topographic survey and design/contract documents. Also provided construction observation. Scheibler, Ott, Baumann and Cann design was completed by Reclamation.

Bonneville Power Administration - Provided project funding for site survey, design, plans, contract documents and construction for 12 sites in 2009.

Chelan County Natural Resources Department (CCNRD) - Provided overall project management, funding coordination, project construction management and landowner coordination. CCNRD is responsible for monitoring and adaptive management.

Yakama Nation (YN) Provided funding for 5 bridge replacement structures in 2009.

Chumstick Property Owners. The Scheibler parcel represents one of the largest farming operations left in the Chumstick valley. The Ott/Johnson parcel and the Baumann parcels are also active small farms.

# **AMENDMENTS**

#	Туре	Applied Date	Description
1	Cost Change	04/15/2013	After completing four of the five barrier improvement sites, it was discovered the
			budget is short \$27,541 to complete the fifth barrier correction. The grant is
			amended to add \$23,409 in SRFB funds and \$4,132 in match.

OVERALL PROJECT COSTS								
Funding Formula:	Requested		Orig	ginal		Final		
Salmon State Projects:	\$332,713.00	(85%)	\$332,71	3.00 (85%	)	\$356,122.00	(85%)	
Sponsor Match:	\$58,714.00	(15%)	\$58,71	4.00 (15%	)	\$62,847.00	(15%)	
Total:	\$391,427.00	(100%)	\$391,42	7.00 (100%	)	\$418,969.00	(100%)	
Paid To Date:	\$356,122.00					Last Relea	sed Billing:	02/12/2014
Remaining RCO Funds:	\$0.00					Pend	ling Billing:	No
Advance Balance:	\$0.00		Match Bank:	\$0.00		Number	of Billings:	4
Admin Limit:	\$0.00	5.00%	Admin Spent:	\$0.00				
A&E Limit:	\$96,685.15	30.00%	A&E Spent:	\$54,255.89	12.94%			
Billed Cost Summary:	Original Agreement		Exper	nded	Non	-Reimbursable		Total Billed
Restoration								
Construction	\$322,283.85		\$362,09	3.99		\$100,683.09		\$462,777.08
A&E	\$96,685.15		\$26,95	5.15		\$27,300.74		\$54,255.89
Restoration Total	\$418,969.00		\$389,04	9.14		\$127,983.83		\$517,032.97
Total	\$418,969.00		\$389,04	9.14		\$127,983.83		\$517,032.97
Project Cost Metrics:			Original Agre	ement		Final		
PCSRF Federal Funds:								
State Funds:			\$356,122.00			\$356,122.0	0	
Other Federal Funding:								
Pending Billing - RCO Share Approved	d:							
Retainage - RCO amount retained:						\$0.00		
Amount of other monetary funding:			\$58,714.00			\$160,911.00	)	
Project identifier for the other monetar	y funding:		Match funds the following Committee, F Coordinating and/or USFW	sources: Trib riest Rapids Committee, U	outary	USFWS/\$3: BOR, BPA,	5,305 YN/\$125,606	6
Source of other monetary funding:			Match funds of the following Committee, Foundating and/or USFW	sources: Trib riest Rapids Committee, l	outary	USFWS		
Value of Donated Unpaid Labor (Volur	iteers):		\$0.00			\$0.00		
Source of Donated Un-paid labor cont	ributions:		N/A			NA		
Number of hours volunteers contribute	ed to the project:					0		
Describe how the value of the voluntee	ers was determine	d:				NA		
Value of Donated Paid Labor:			\$0.00			\$0.00		
Source of Donated Paid Contributions	:					NA		
Value of Other In-Kind Contributions:			\$0.00			\$0.00		
Source of Other In-Kind Contributions:						NA		
Description of other In-Kind contribution	ns:		N/A			NA		

ROJECT METRICS		
	Original Agreement	Final
ompletion Date		
Projected date of completion:	10/31/2015	02/28/2014
roject Goals		
Goals, purpose, and expected benefits:	Restore fish passage.	Isolated habitat was connected and access was increased.  3 complete barriers removed at Scheibler's: RM 7.8, 7.89 and 7.97 (2011).  3 partial barrier culverts replaced at Ott, RM 8.23, Baumann, RM 8.51 and Cann, RM 8.59 (2012).  1 partial barrier culvert replaced at Saliby, RM 7.09 (2013).

## WORKSITE #1: Saliby

Worksite Description: Chumstick Culvert # 18 is on Alex Saliby's p roperty

Driving Directions: This property is located at 15195 Chumstick Highway. From Leavenworth, drive north on Chumstick Highway.

Coordinates for Worksite Directions - Latitude: 47.41 Longitude: -120.38

## **Sponsor Clarifications:**

Sponsor verified the above information is correct and complete.

			STS

Worksite Billed Cost:	Estimated	Expended	Non-Reimbursable	Total Billed
A&E	\$8,288.00	\$8,110.57		\$8,110.57
Construction	\$92,094.00	\$83,683.94		\$83,683.94
Worksite Total	\$100,382.00	\$91,794.51		\$91,794.51
Worksite Costs by Category:		Original Agreement	Final	
Fish Passage Funding:		\$54,532.00	\$68,134.00	

\$960.00

\$1.00

\$1,618.00

\$2,999.00

\$19,890.00

\$5,000.00

\$5,000.00

\$5,000.00

\$8,110.57

\$550.00

# **WORKSITE #1 METRICS**

Permits Funding:

Riparian Habitat Funding:

Cultural resource funding:

General Restoration Activity Funding:

Architectural & Engineering Funding:

	Original Agreement	Final
Targeted salmonid ESU/DPS:	Chinook Salmon-Upper Columbia River Spring-run ESU, Steelhead-Upper Columbia River DPS	Chinook Salmon-Upper Columbia River Spring-run ESU, Steelhead-Upper Columbia River DPS
Targeted species (non-ESU species):	Bull Trout	Bull Trout
Miles Of Stream Treated/Protected:	0.01	0.01
Project Identified In a Plan or Watershed Assessment:	Upper Columbia Salmon Recovery plan (Upper Columbia Salmon Recovery Board 2007) and Wenatchee Subbasin Plan (Northwest Power and Conservation Council 2004)	Upper Columbia Salmon Recovery plan (Upper Columbia Salmon Recovery Board 2007) and Wenatchee Subbasin Plan (Northwest Power and Conservation Council 2004)
Type Of Monitoring:	Implementation Monitoring	Implementation Monitoring
Monitoring Location:	Onsite	No monitoring completed
Fish Passage Improvement		
Number of blockages / impediments / barriers impeding passage:		1
Type Of Barrier:		Culvert
Miles Of Stream Made Accessible:	1.10	1.10
Square Miles Of streambed made accessible:	0.0	0.0
Bridge installed or improved		
Miles of stream made accessible by bridge installation/repair:	1.10	1.10
Number of bridges:	1	1
Total cost for Bridge installed or improved:		
Riparian Habitat Project		
Total Riparian Miles Streambank Treated:	0.01	0.01
Total Riparian Acres Treated:	0.2	0.2
Planting		

Total cost for Planting:

Species Of Plants planted in riparian:

Cornus sericea, Salix spp., Crategus douglassii, Rosa spp., Symphoricarpus albus, Populus balsamifera, Spirea douglassi Cornus sericea, Salix spp., Crategus douglassii, Rosa spp., Symphoricarpus albus, Populus balsamifera, Spirea douglassi

Acres Planted in riparian:

0.2

0.2

4

1

General restoration activities

Traffic control

Total cost for Traffic control:

Number of days of traffic control: 4

Utility relocation / reconnection

Total cost for Utility relocation / reconnection:

Utilities relocated / reconnected: Communication, Power Communication, Power

**Cultural Resources** 

**Cultural resources** 

Cultural resource work completed : Hours of monitoring

required:

Total cost for Cultural resources:

Acres surveyed for cultural resources: 0.20 0.20

**Permits** 

Obtain permits

Total cost for Obtain permits:

Number of permits required for implementation of project: 4

**Architectural & Engineering** 

Architectural & Engineering (A&E)

Total cost for Architectural & Engineering (A&E):

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

PROPERTY DESCRIPTION (Saliby)

Activity: Restoration

Control & Tenure:

Instrument Type: Landowner Agreement

Timing: Proposed

Term Length: Perpetuity # yrs:

**Expiration Date:** 

Landowner Type: Private Note:

**Sponsor Clarifications:** 

Sponsor verified the above information is correct and complete.

**Sponsor Clarifications:** 

WORKSITE #2: Ott/Johnson

Worksite Description: Chumstick culvert #19 is located on the Johnson/Ott property

 $\textbf{Driving Directions:} \ \textbf{From Leavenworth, drive north on Chumstick Hwy until 15950 Chumstick Highway.}$ 

Coordinates for Worksite Directions - Latitude: 47.42 Longitude: -120.38

**Sponsor Clarifications:** 

Sponsor verified the above information is correct and complete.

# WORKSITE #2 COSTS

Traffic control

Worksite Billed Cost:		Estimated	Expended	Non-Reimbursable	Total Billed
Worksite Billed Cost:	A&E	\$6,428.00	\$12,423.38	Non-Reimbursable	\$12.423.38
	Construction	\$71,423.00	\$80,727.36		\$80,727.36
,	Worksite Total	\$77,851.00	\$93,150.74		\$93,150.74
Worksite Costs by Catego	ry:		Original Agreement	Final	
Fish Passage Funding	<b>j</b> :		\$39,609.00	\$70,728.00	
Riparian Habitat Fund	ing:		\$212.00	\$4,000.00	
General Restoration A	ctivity Funding:		\$1,149.00	\$4,000.00	
Cultural resource fund	ling:		\$1.00	\$500.00	
Permits Funding:			\$2,999.00	\$1,500.00	
Architectural & Engine	eering Funding:		\$18,030.00	\$12,423.00	
WORKSITE #2 METRI	cs				
			Original Agreement	Final	
Targeted salmonid ES	:U/DPS:		Chinook Salmon-Upper Colu River Spring-run ESU, Steelhead-Upper Columbia F DPS	River Spring-run ESU	,
Targeted species (nor	n-ESU species):		Bull Trout	Bull Trout	
Miles Of Stream Treat	ed/Protected:		0.01	0.01	
Project Identified In a	Plan or Watershe	d Assessment:	Improving fish passage in Chumstick Creek was identifi a high priority in the Wenatch Subbasin Plan (Northwest Pound Conservation Council, 20 and the Upper Columbia Sali Recovery plan (Upper Colum Salmon Recovery Board 200	nee a high priority in the Wower Subbasin Plan (North) 004) and Conservation Coumon and the Upper Columl bia Recovery plan (Upper	identified as /enatchee west Power uncil, 2004) bia Salmon Columbia
Type Of Monitoring:			Implementation Monitoring	Implementation Monit	oring
Monitoring Location:			Onsite	Onsite	
Fish Passage Improvement	t				
Number of blockages passage:	/ impediments / ba	arriers impeding		1	
Type Of Barrier:				Culvert	
Miles Of Stream Made	e Accessible:		0.30	0.30	
Square Miles Of strea	mbed made acce	ssible:	0.0	0.0	
Bridge installed or impre					
Miles of stream made installation/repair:	accessible by brid	dge	0.30	0.30	
Number of bridges:			1	1	
Total cost for Bridge in	nstalled or improve	ed:			
Riparian Habitat Project					
Total Riparian Miles S		d:	0.01	0.01	
Total Riparian Acres T	reated:		0.2	0.2	
Planting					
Total cost for Planting			0		
Species Of Plants pla	nted in riparian:		Cornus sericea, Salix spp., Crategus douglassii, Rosa sp Symphoricarpus albus, Popu balsamifera, Spirea douglass	llus Symphoricarpus albus	Rosa spp., s, Populus
Acres Planted in ripar	ian:		0.2	0.2	
General restoration activities	es				

Total cost for Traffic control:

Number of days of traffic control: 4 4

Utility relocation / reconnection

Total cost for Utility relocation / reconnection:

Utilities relocated / reconnected: Communication, Power Communication, Power

**Cultural Resources** 

**Cultural resources** 

Cultural resource work completed : Hours of monitoring 1

required:

Total cost for Cultural resources:

Acres surveyed for cultural resources: 0.20 0.20

**Permits** 

**Obtain permits** 

Total cost for Obtain permits:

Number of permits required for implementation of project: 4

**Architectural & Engineering** 

Architectural & Engineering (A&E)

Total cost for Architectural & Engineering (A&E):

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

PROPERTY DESCRIPTION (Johnson/Ott)

Activity: Restoration

Control & Tenure:

Instrument Type: Landowner Agreement

Timing: Proposed

Term Length: Perpetuity # yrs:

**Expiration Date:** 

Landowner Type: Private Note:

**Sponsor Clarifications:** 

Sponsor verified the above information is correct and complete.

**Sponsor Clarifications:** 

**WORKSITE #3: Baumann** 

Worksite Description: Chumstick Culvert #20 is located on Judith Baumann's property

Driving Directions: From Leavenworth, head north on Chumstick Hwy to 16238 Chumstick Hwy

Coordinates for Worksite Directions - Latitude: 47.42 Longitude: -120.38

**Sponsor Clarifications:** 

Sponsor verified the above information is correct and complete.

**WORKSITE #3 COSTS** 

Worksite Billed Cost:		Estimated	Expended	Non-Reimbursable	Total Billed
	A&E	\$8,861.00	\$2,793.61		\$2,793.61
	Construction	\$98,466.00	\$83,663.52		\$83,663.52
	Worksite Total	\$107,327.00	\$86,457.13		\$86,457.13

Workeito Costs by Catogory	Original Agraement	Final
Worksite Costs by Category:  Fish Passage Funding:	Original Agreement \$72,652.00	\$73,663.00
Riparian Habitat Funding:	\$212.00	\$4,000.00
General Restoration Activity Funding:	\$1,673.00	\$3,000.00
Cultural resource funding:	\$1.00	\$500.00
Permits Funding:	\$2,999.00	\$2,500.00
Architectural & Engineering Funding:	\$20,463.00	\$2,793.61
Architectural & Engineering Funding.	\$20,403.00	φ <b>∠</b> ,793.01
ORKSITE #3 METRICS		
	Original Agreement	Final
Targeted salmonid ESU/DPS:	Chinook Salmon-Upper Columbia River Spring-run ESU, Steelhead-Upper Columbia River DPS	Chinook Salmon-Upper Columbia River Spring-run ESU, Steelhead-Upper Columbia River DPS
Targeted species (non-ESU species):	Bull Trout	Bull Trout
Miles Of Stream Treated/Protected:	0.01	0.01
Project Identified In a Plan or Watershed Assessment:	Improving fish passage in Chumstick Creek was identified as a high priority in the Wenatchee Subbasin Plan (Northwest Power and Conservation Council, 2004) and the Upper Columbia Salmon Recovery plan (Upper Columbia Salmon Recovery Board 2007).	Improving fish passage in Chumstick Creek was identified as a high priority in the Wenatchee Subbasin Plan (Northwest Power and Conservation Council, 2004) and the Upper Columbia Salmon Recovery plan (Upper Columbia Salmon Recovery Board 2007).
Type Of Monitoring:	Implementation Monitoring	Implementation Monitoring
Monitoring Location:	Onsite	Onsite
sh Passage Improvement		
Number of blockages / impediments / barriers impeding passage:		1
Type Of Barrier:		Culvert
Miles Of Stream Made Accessible:	0.10	0.10
Square Miles Of streambed made accessible:	0.0	0.0
Bridge installed or improved		
Miles of stream made accessible by bridge installation/repair:	0.10	0.10
Number of bridges:	1	1
Total cost for Bridge installed or improved:		
parian Habitat Project		
Total Riparian Miles Streambank Treated:	0.01	0.01
Total Riparian Acres Treated:	0.2	0.2
Planting		
Total cost for Planting:		
Species Of Plants planted in riparian:	Cornus sericea, Salix spp., Crategus douglassii, Rosa spp., Symphoricarpus albus, Populus balsamifera, Spirea douglassi	Cornus sericea, Salix spp., Crategus douglassii, Rosa spp., Symphoricarpus albus, Populus balsamifera, Spirea douglassi
Acres Planted in riparian:	0.2	0.2
eneral restoration activities		
Traffic control		
Total cost for Traffic control:		
Number of days of traffic control:	4	4
Utility relocation / reconnection		
Total cost for Utility relocation / reconnection:		
Utilities relocated / reconnected:	Communication, Power	Communication, Power
ultural Resources		
Cultural resources		
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Cultural resource work completed : Hours of monitoring

required:

Total cost for Cultural resources:

Acres surveyed for cultural resources: 0.20 0.20

Permits

Obtain permits

Total cost for Obtain permits:

Number of permits required for implementation of project: 4

Architectural & Engineering

Architectural & Engineering (A&E)

Total cost for Architectural & Engineering (A&E):

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

PROPERTY DESCRIPTION (Baumann)

Activity: Restoration

Control & Tenure:

Instrument Type: Landowner Agreement

Timing: Proposed

Term Length: Perpetuity # yrs:

**Expiration Date:** 

Landowner Type: Private Note:

**Sponsor Clarifications:** 

Sponsor verified the above information is correct and complete.

**Sponsor Clarifications:** 

WORKSITE #4: Cann

Worksite Description: Chumstick Culvert # 21 is located on the Cann property

Driving Directions: From Leavenworth, drive north on Chumstick Hwy until 16350 Chumstick Hwy

Coordinates for Worksite Directions - Latitude: 47.42 Longitude: -120.38

**Sponsor Clarifications:** 

Sponsor verified the above information is correct and complete.

**WORKSITE #4 COSTS** 

Worksite Billed Cost:	Estimated	Expended	Non-Reimbursable	Total Billed
A&E	\$8,741.00	\$2,793.61		\$2,793.61
Construction	\$97,126.00	\$83,663.54		\$83,663.54
Worksite Tota	l \$105,867.00	\$86,457.15		\$86,457.15

Worksite Costs by Category:	Original Agreement	Final	
Fish Passage Funding:	\$74,312.00	\$73,663.00	
Riparian Habitat Funding:	\$212.00	\$3,500.00	
General Restoration Activity Funding:	\$1,133.00	\$3,500.00	
Cultural resource funding:	\$1.00	\$2,500.00	
Permits Funding:	\$2,999.00	\$500.00	
Architectural & Engineering Funding:	\$20,343.00	\$2,793.61	

#### WORKSITE #4 METRICS **Original Agreement** Final Targeted salmonid ESU/DPS: Chinook Salmon-Upper Columbia Chinook Salmon-Upper Columbia River Spring-run ESU, River Spring-run ESU, Steelhead-Upper Columbia River Steelhead-Upper Columbia River **DPS DPS** Targeted species (non-ESU species): **Bull Trout Bull Trout** Miles Of Stream Treated/Protected: 0.01 0.01 Project Identified In a Plan or Watershed Assessment: Improving fish passage in Improving fish passage in Chumstick Creek was identified as Chumstick Creek was identified as a high priority in the Wenatchee a high priority in the Wenatchee Subbasin Plan (Northwest Power Subbasin Plan (Northwest Power and Conservation Council, 2004) and Conservation Council, 2004) and the Upper Columbia Salmon and the Upper Columbia Salmon Recovery plan (Upper Columbia Recovery plan (Upper Columbia Salmon Recovery Board 2007). Salmon Recovery Board 2007). Type Of Monitoring: Implementation Monitoring Implementation Monitoring Monitoring Location: Onsite Onsite Fish Passage Improvement Number of blockages / impediments / barriers impeding 1 passage: Type Of Barrier: Culvert Miles Of Stream Made Accessible: 1.00 1.00 Square Miles Of streambed made accessible: 0.0 0.0 Bridge installed or improved Miles of stream made accessible by bridge 1.00 1.00 installation/repair: Number of bridges: 1 1 Total cost for Bridge installed or improved: Riparian Habitat Project Total Riparian Miles Streambank Treated: 0.01 0.01 Total Riparian Acres Treated: 0.2 0.2 Planting Total cost for Planting: Species Of Plants planted in riparian: Cornus sericea, Salix spp., Cornus sericea, Salix spp., Crategus douglassii, Rosa spp., Crategus douglassii, Rosa spp., Symphoricarpus albus, Populus Symphoricarpus albus, Populus balsamifera, Spirea douglassi balsamifera, Spirea douglassi Acres Planted in riparian: 0.2 0.2 General restoration activities Traffic control Total cost for Traffic control: Number of days of traffic control: 4 4 Utility relocation / reconnection Total cost for Utility relocation / reconnection: Utilities relocated / reconnected: Communication, Power Communication, Power **Cultural Resources Cultural resources** Cultural resource work completed: Hours of monitoring 1 required: Total cost for Cultural resources: 0.20 Acres surveyed for cultural resources: 0.20 **Permits** Obtain permits Total cost for Obtain permits: Number of permits required for implementation of project: 4

## **Architectural & Engineering**

#### Architectural & Engineering (A&E)

Total cost for Architectural & Engineering (A&E):

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

#### PROPERTY DESCRIPTION (Cann)

Activity: Restoration

Control & Tenure:

Instrument Type: Landowner Agreement

Timing: Proposed

Term Length: Perpetuity # yrs:

**Expiration Date:** 

Landowner Type: Private Note:

**Sponsor Clarifications:** 

Sponsor verified the above information is correct and complete.

**Sponsor Clarifications:** 

# WORKSITE #5: Scheibler

**Worksite Description:** 

Driving Directions: From Leavenworth, drive north on Chumstick Hwy until 15600 Chumstick Hwy

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

**Sponsor Clarifications:** 

Sponsor verified the above information is correct and complete.

#### **WORKSITE #5 COSTS**

Worksite Billed Cost:	Estimated	Expended	Non-Reimbursable	Total Billed
A&E		\$833.98	\$27,300.74	\$28,134.72
Construction		\$30,355.63	\$100,683.09	\$131,038.72
Worksite Total		\$31,189.61	\$127,983.83	\$159,173.44

Worksite Costs by Category:	Original Agreement	Final
Fish Passage Funding:	\$40,824.00	\$131,038.00
Architectural & Engineering Funding:	\$11,603.00	\$28,134.72

# **WORKSITE #5 METRICS**

Type Of Monitoring:

Targeted salmonid ESU/DPS:	Chinook Salmon-Upper Columbia	Chinook Salmon-Upper Columbia
	River Spring-run ESU	River Spring-run ESU,
		Steelhead-Linner Columbia River

**Original Agreement** 

Steelhead-Upper Columbia River

DPS

None

Final

Targeted species (non-ESU species): **Bull Trout Bull Trout** Miles Of Stream Treated/Protected: 0.10 0.01

Project Identified In a Plan or Watershed Assessment: Upper Columbia Salmon Recovery Upper Columbia Salmon Recovery

Plan

Monitoring Location: No monitoring completed No monitoring completed

Plan

None

Fish Passage Improvement

Number of blockages / impediments / barriers impeding

passage:

Type Of Barrier: Boulders or rock barriers, Culvert

3

Miles Of Stream Made Accessible:0.500.50Square Miles Of streambed made accessible:0.00.0

Fishway chutes or pools installed

Number Of Fishway Chutes/Pools Installed: 3

Architectural & Engineering

Architectural & Engineering (A&E)

Total cost for Architectural & Engineering (A&E):

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

PROPERTY DESCRIPTION (Scheibler)

Activity: Restoration

Control & Tenure:

Instrument Type: Landowner Agreement

Timing: Proposed

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.

Submitted by Mike Kane on 02/11/2014