



## Restoration Final Report

**Project Name:** Abell - Barnaby Creek

**IAC Project Number:** 04-1056

**Sponsor Name:** Colville Confederated Tribes

**IAC Project Manager:** Brian Abbott

**Sponsor Contact:** Eric Kruasz (509) 722-7681

**Project Goal and Objective:**

The goal of the project is to connect isolated habitat to increase the range and distribution of salmon.

The objective of the project is to increase access to areas blocked by human-caused impediments.

**Project Description:**

The Abell culvert replacement project will eliminate a fish passage barrier on Barnaby Creek which lies on in the north eastern portion of the Colville Reservation. This action will provide approximately 17.5 miles of additional stream for fish

access with 4.3 miles on the Reservation and the remainder on National Forest lands. Fish species that will benefit include rainbow, (redband and coastal) and eastern brook trout. The project will increase access for all life stages of these species.

The project will replace a round 28 foot long by 90 inch diameter culvert with an appropriately sized bridge. At present the culvert has a two foot out fall drop which prevents passage. Because of topography only two alternative were feasible; bottomless culvert or bridge. Preliminary cost estimates indicated that bridging would result in achieving the projects goals for less money.

The Fish and Wildlife Department of the Confederated Tribes of the Colville Reservation will be the lead entity for the project.

**Project Funding:** SRFB: \$124,956.00

Match: \$5,000.00

Total: \$129,956.00

**Please describe other funding used for this project, if any:**

N/A

**Project Scope:**

Element	Item	Unit	Quantity
In-Stream Passage	Bridge	Each	1.00

**Project Amendments**

#	Type	Date	Amount
1	Cost Change	6/17/2005	\$61,396.00
2	Time Extension	6/20/2005	\$0.00
3	Time Extension	10/18/2005	\$0.00

**Please complete the Measurement information:**

Measurement	Unit	Proposed Quantity	Closure Quantity
Length of stream section treated. (One side only)	Miles	0.01	same
<b>Note</b>			

Number of fish passage blockages removed or improved.	Number	1.00	same
<b>Note</b>			
Length of stream made accessible by the removal of barriers other than cul	Miles	0.00	same
<b>Note</b>			
Length of stream made accessible by the improvement or removal of culve	Miles	0.56	same
<b>Note</b>			
Average stream width, in feet, upstream of barrier.	Feet	8.75	same
<b>Note</b>			
Percent spawning habitat opened up.	Percent	50.00	same
<b>Note</b>			
Percent rearing habitat opened up.	Percent	50.00	same
<b>Note</b>			

**Please describe project history:**

Prior to July of 2006 the project was primarily in the design, engineering, permit and planning stages. Kris Ray was the lead representative or COTR from the Colville Confederated Tribes F&W Dept. throughout this time. Unfortunately Kris Ray left the CCT F&W Dept. in July of 2006, at which time myself, Eric Krausz, became the lead representative or COTR for the CCT F&W Dept. throughout the completion of the project.

On July 1<sup>st</sup>, 2006 we issued a "Notice to Proceed" to Colville Tribal Service Corporation (CTSC) the contractor selected to perform work elements 1 and 2 of the implementation process. After completion of the work elements 1 and 2 by CTSC and subcontractor Whitelaw Construction, Central Premix pre-stress (bridge manufacturer) and subcontractor Spokane Crane transported and placed the bridge. CTSC finished the project by back filling the approaches by Oct.31,06.

**Please describe Partner contributions:**

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**Please list Engineer/Project Designer(s) name, address, phone:**

1. Engineers Inc. 11680 Slater Ave. NE Kirkland, WA 98034 (425) 823-9903

**Please list General Contractor name, address, phone:**

Central Pre-mix 922 N. Carnahan Spokane, WA 99212 (509) 533-0262

a. Spokane Crane Service 1800 E. Trent Ave. Spokane, WA 99202 (509) 533-6692

**Please list Landowner(s) name, address, phone:**

Larry and Lacie Abell, Barnaby Creek Rd., Inchelium, WA. 99138 509-738-6245, nlabell@theofficenet.com

**Please list other Contractors' name, address, phone:**

1. CTSC PO Box 184 Coulee Dam, WA 99116 (509) 634-2537

a. Whitelaw Const. 807 Spruce St. Coulee Dam, WA 99116 (509) 633-0499

2. Mid Mt. Surveyors 669 W. Curlew Lake Rd. Republic, WA 99166 (509) 775-3563

3. Water Natural Resources Group PO Box 28755 Spokane, WA 99228 (509) 468-4876



**Please give an implementation summary:**

The Project Implementation process began in mid- July of 2006. Colville Tribal Service Corporation (CTSC) was the selected contractor to carry out "Work Elements 1 and 2". Work Element 1 was the removal of the existing 90 inch diameter culvert and contouring of the stream channel back to a natural state. This also included LWD placement at two locations which included the culvert removal area and downstream of the bridge replacement area. The LWD placement strategy was designed by Larry Domiguez WADNR and implementation was reviewed by myself and Steve DeCook WADNR. Work Element 2 included appropriate excavation and onsite construction of bridge piers and footings to bridge specifications. The excavation portion, large rock armoring of the piers, and rock mat placement was performed by CTSC, while the footing and pier construction was sub-contracted by CTSC to Whitelaw Construction. Bridge piers and footings were completed, including the appropriate curing time for the cement, by approximately the first week of October.

Placement of the bridge structure proved to be a challenge due to weight load restrictions for the appropriate size cranes needed to complete the task. Central Pre-mix Pre-stress Co. was the company contracted to construct the bridge, transport the bridge structures to the site and final placement of the bridge structures, including appropriate welding, bolt placement and patching of the bridge surface after placement. Spokane Crane was sub-contracted by Central Pre-mix Pre-stress Co. for the structure placement. Originally a crane had been selected to do the work but was unable to reach the site due to the weight load restrictions on a Ferry County bridge located on the Inchelium Hwy crossing over Sherman Cr. At this time CTSC had completed their contracted LWD placement located in the side channel downstream of the proposed bridge location. Through coordination with Central Pre-mix Pre-stress Co. and Spokane Crane the decision was made to use two smaller 50 ton cranes, including a 50 ton Hydro and a 50 ton all-terrain crane. At the request of Central Pre-mix Pre-stress Co. we made an amendment to the CTSC Contract, adding approximately \$4,426 for an excavator to prepare the site for the all-terrain crane to cross Barnaby CR. and gain access to the south side of the bridge placement location. In addition, some of the LWD previously placed within a side channel had to be temporarily removed to allow the all-terrain crane access to the south side of the creek. During the bridge installation the CTSC excavator remained onsite to assist Spokane Crane and to replace the LWD that had been removed for the crane access to the south side of the Creek after installation was completed. The placement of the Bridge structures was completed by approximately the second week in October. Whitelaw Construction, sub-contracted under CTSC, then returned to the site the third week in October to form up the final top portion of the piers. At this time Central Pre-mix Pre-stress Co. returned to the site to finish bolting and patching of the bridge surface. CTSC then back-filled the approaches and seeded all disturbed areas.

**Project Billing Summary:**

Summary Category	Expended	Donated	Total
Development:			
Construction:	\$100,437.00	\$102,800.00	
A & E:	\$22,786.69	\$27,156.00	
Development Total:	\$123,223.69	\$129,956.00	\$6,732.31

**Please give a budget summary:**

	<u>Fish Passage Project</u>	
<b>For example:</b>	Bridge	amount
	Construction Contract	amount
	Engineering Contract	amount
	Site Restoration	amount
	Admin/Project Management	amount
	Total	amount

**Abell Bridge Project Budget Summary:**

Bridge Construction and Placement Contract (Central premix /prestress co.)	\$41,011.00
Site Assessment and Bridge Engineering Contract (Water and Natural Resource Group)	\$22,786.69
Pier and Footing Construction and Site Prep.including(culvert removal, LWD placement) and Seeding Contract (Colville Tribes Service Corporation –CTSC)	\$59,426.00
Sponsor Miscellaneous handling / office supplies etc. costs	\$???????

**Total Project Cost \$???????**

***Please describe long-term stewardship plans:***

After peak run-off during spring of 07 myself and Steve DeCook will visit the site to inspect any changes in channel habitat or movement of LWD within or adjacent to the stream. In addition, we will be inspecting the site for regeneration of the seed planted at the site to ensure elimination of any possible sediment delivery from areas disturbed during the project.

Larry Abell, landowner, intends to continue actively managing his forest including appropriate timber harvest necessary to maintain the health of this land. The culvert removed from Barnaby Creek is intended to be placed on Cedar Cr., a tributary of Barnaby Cr., located just south of the new bridge location. This culvert placement will act as a new stream crossing gaining further access to his property by road. I believe Larry is currently working with Steve DeCook WADNR and Tribal Biologists to ensure the proper permitting is in place for any further in-stream work, road construction / abandonment, or LWD placement.

***Please feel free to make additional comments about this project:***

Mr. Gene St. Goddard with the Water and Natural Resource Group sent us (CCT F&W) invoice #95, dated October 19<sup>th</sup>, 2006 in the amount of \$410.50. Upon review of our records and contract information we found the contract with the Water and Natural Resource Group to be expired as of December 31<sup>st</sup>, 2005. Further research indicated that this invoice was for services rendered from June 1 through September 30, 2006 which was outside of the contract dates. Payment for this invoice was denied. A memo was sent from the CCT F&W (dated Oct. 24, 2006) explaining this to Mr. St. Goddard.

***Provide as-built drawings of the restoration project [one copy, no larger than 11" x 17" size]. Please date the plan.***

**I hereby certify that this project has been completed in accordance with the Project Agreement. Further, I certify the completed project is consistent with both the scope of the project approved (as amended) by the Salmon Recovery Funding Board (SRFB) and with the project application.**

	12 /18/2006
Sponsor Signature	Date

CCT F&W Biologist	509-722-7681
Title	Telephone