

Fraser Salmon & Watersheds Program



2011/12 FINAL REPORT

FSWP File Number* FSWP 11 24 HWRS LR

* Please use the FSWP File Number provided in previous FSWP project correspondence.

1. Project Information

1.1. Project Title

Coldwater River Restoration of Structures to Protect Investments in Habitat

1.2. Proponent's Legal Name

Nicola Tribal Association

1.3. Project Location

Coldwater River, approximately 12km south of Merritt, BC (Coldwater Indian Band Reserve)

1.4. Contact for this report

Name: Jessica Urquhart

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1.5 Funding Amount

Original Approved Grant Amount:	Total FSWP Expenditures:	Final Invoice Amount:	Final Non-FSWP leveraging, including cash and in-kind:
\$ 10,992	\$ 9,263.30	\$ 1,569.30	\$ 7,739.28

2. Project Summary

Please provide a single paragraph describing your project, its objectives, and the results. As this summary may be used in program communications, clearly state the issue(s) that were addressed and avoid overly technical descriptions. Maximum 300 words.

The Nicola Tribal Association (NTA) has carried out a number of instream habitat restoration projects on the Coldwater River under the auspices of the Coldwater River Watershed Recovery Plan (CRWRP). From time to time low cost maintenance is required in order to protect the effectiveness of work previously completed. The objective of this project was to maintain and protect in excess of \$150,000 of investment in restored habitat in the Coldwater River, and ensure the effectiveness of the restoration structures is sustained over the long term. One site (work originally completed in 2005) was chosen where the last of 10 large woody debris (LWD) structures had become compromised after ice jams and a severe flood had caused redirection of the river. Results were construction and installation of one new LWD structure to replace the damaged structure. Grass seeding of disturbed areas, installation of livestock exclusion fencing and re-vegetation of riparian area (110 stems of indigenous rootstock) were all completed post construction.

OPTIONAL: Please give a short statement (up to 100 words) of the most compelling activity or outcome from your project.

3. Final Project Results and Effectiveness

3.1 Please copy THE EXPECTED DELIVERABLES from your detailed proposal and insert into this table. Add additional rows as needed. Then describe the FINAL DELIVERABLES (the tangible end products resulting from this work) associated with each expected Deliverable.

If FINAL DELIVERABLES differ from the original EXPECTED DELIVERABLES, please describe why, and the implications for the project.

EXPECTED DELIVERABLES	FINAL DELIVERABLES
1. Project implementation will protect the integrity of all attributes in objective	Installation of one LWD structure at site
2. As-built report of completed works	As-built report of completed works
3.	
4.	

3.2 Please evaluate the EFFECTIVENESS of your project in achieving Project Objectives, using the specific measures of success identified in your proposal. Please include any notable successes or challenges.

This project was very effective in achieving its objective. Immediately after construction and installation of the LWD structure, restoration of the appropriate radius of curvature of the thalweg was evident. The site will be assessed in 2012 after winter ice jamming and spring freshet to identify longer term effectiveness.

3.4 If applicable, please describe project outcomes that relate to one or more of the following strategic approaches (Section 2.1 of RFP; section 8 of detailed proposal template), and include specific examples.

<p>Engagement of First Nations. Please specify who, and in what capacity.</p>	<p>Project carried out by a First Nation organization. Staffing for the project is drawn from the member NTA communities, based on experience and merit. We have two First Nations fisheries technicians who are very experienced in and involved on all of our habitat restoration projects.</p>
<p>Active partnerships with one or more organizations.</p>	<p>Landowner (ranching & First Nations), First Nations organization (NTA), consultants (Habitat Restoration biologist, LGL Ltd), and local contractor (LJP Construction) all participated in this project.</p>
<p>Engagement and participation of diverse and under-represented groups.</p>	<p>This project was proposed by, led by, and implemented by First Nations. Land where the project is being undertaken is on local First Nations reserve land.</p>
<p>Relationship building, as a foundation for sustainable, enduring activities.</p>	<p>First Nations organization and ranching community – encouraging stewardship on private land and the implementation of those agricultural methods that are coordinated as an example of best practices that integrate fish habitat values with sustainable ranching practices.</p> <p>Thank you to the landowner for allowing the installation of structures on his land (a working hay field) and providing a 5 meter set back from the bank to plant riparian vegetation to further stabilize bank as well as keep cattle from accessing the river.</p>
<p>Capacity building, including mentorship models, leadership training and skills development.</p>	<p>Recruiting new field staff into the project as appropriate will provide for skills and capacity building in habitat restoration techniques.</p> <p>As our technicians and the contractor become more experienced regarding the techniques to complete the construction of the structures, the biologist is required to spend less time on site.</p>
<p>Recognition and support of champions and their initiatives.</p>	
<p>Opportunities to influence policy and decision making,</p>	

3.5 Please describe how the benefits of this project will be sustained and/or be built upon into the future. What are the planned next steps, or recommendations for further work, if applicable?

The NTA, through its fisheries department the Nicola Watershed Stewardship and Fisheries Authority (NWSFA) is continuing to complete habitat restoration projects on the Coldwater River. As well, the NWSFA continues to conduct an annual monitoring program of previously constructed habitat restoration sites to monitor for effectiveness and make recommendations for mitigation efforts if a site (or structure at a site) has become ineffective.

3.6. What are the top three lessons learned from this project that could be useful to communicate to others doing similar work in the Basin?

1. Maintenance of habitat restoration sites/structures is occasionally necessary, and is critical for the long term stability of mainstem fish habitat through seasonal changes in flow regime.
2. Ranching practices and productive salmonid habitat can find balance with little disturbance to either.
3. It takes time to educate and convince ranchers that this balance can occur.

3.7 REQUIRED: Attach all DOCUMENTATION of Final Deliverables, and LIST attachments in Section 8. These may include technical reports, maps, photos, evidence of communications, lists of meeting participants, etc.

4. Outreach and Communications

Please describe how you have communicated project activities and results within local and basin-wide communities, across organizations and/or to decision makers.

Please list and attach copies of (or links to) any communications materials from these efforts that you have not previously submitted.

Project activities have been communicated through displays at multi-sector meetings and Band meetings. An article (attached) was provided in the NTA Newsletter – December 2011.

NTA Newsletter - December 2011

NWSFA Report

By NWSFA QC Technologist— Jess Urquhart



November 29, 2011

The NWSFA Department is still hard at work. We are currently walking the Coldwater River conducting live counts and a carcass recovery for Interior Fraser coho (listed as Endangered). This project began on October 21 and will go until December 17, dependant on weather and ice on the river. We are seeing fish, but this year's return looks like it will be small in comparison to the past few years. Coho returning this year are from parents that returned in 2008 (brood year); the total run size in 2008 was 1,754. We are hoping to see at least that many return this year.

Looking back the past couple months, crews have been busy. Our Nicola River chinook project wrapped up on October 14. Our crews recovered a total of 783 chinook carcasses. This was better than expected. The 2007 brood year for Nicola chinook was only 942 fish, so the preliminary return size of 2,800 fish for 2011 is great. Unfortunately, our other chinook stocks, Coldwater River and Spius Creek, did not fare so well. Coldwater River 2011 preliminary return size is 109, from a brood year of 107 in 2007. At least we made the brood year. Spius Creek preliminary return for 2011 is only 21 fish. The 2007 brood year was 60. Spius Creek chinook are not in good shape. Continued support to let these fish get back home is needed for the next number of years.

On-going during September and most of October was our upper Nicola River kokanee walks. Crews were out once per week counting live kokanee from the Quilchena foot bridge to just upstream of the Quilchena home ranch. Crews counted a lot of kokanee in that time, and early estimates look like approximately 20,000 kokanee returned to the upper Nicola River in 2011.

- Once the Nicola chinook project was completed crews spent a few days planting at two habitat restoration projects we completed in April and July, on the Coldwater River. These projects were funded by the Pacific Salmon Commission and the Fraser Salmon and Watersheds Program through proposal writing. A total of 197 native plants were planted at the two sites. All plants came from the Shackan Nursery. Crews also spent two days removing beaver dams from a number of locations on the Coldwater River, prior to the start up of our coho project.

We have had another successful and safe field season, with a great crew. If you happen to see them along the Coldwater River in the next couple of weeks, give them a wave!