

2008 Final Report Template

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| FSWP File Number* | 08 HRP LR 65 |
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Please use the FSWP File Number provided in previous FSWP 2008 project correspondence

| Contact Information | | | | | | | | |
|---|--------------------------|---------|--------------------------|--------------------------------------|-----------------------------|-------------------------|--------------------------|----------|
| Sponsoring Organization's Legal Name | | | | | | | | |
| Xeni Gwet'in First Nations Government | | | | | | | | |
| Are you a federally registered Charity, Non-profit organization or Business (Yes /No)? | | | | | Yes--FN org | | | |
| If yes, please indicate which. | <input type="checkbox"/> | Charity | <input type="checkbox"/> | FN | <input type="checkbox"/> | Non-profit organization | <input type="checkbox"/> | Business |
| Registration number | Band # 714 | | | GST number | | | | |
| Are you a registered Society (Yes / No)? | | | <input type="checkbox"/> | Federal | Society Registration number | | | |
| Mailing Address | | | | | | | | |
| General Delivery Nemiah Valley, BC V0L 1X0 | | | | | | | | |
| Street Address (if different from above) | | | | | | | | |
| n/a | | | | | | | | |
| Project Manager¹ | | | | | | | | |
| Name: Nancy Oppermann | | | | Title: Project Manager | | | | |
| Affiliation: Project Management Services | | | | Phone: (250) 398 2646 | | | | |
| Fax: (250) 394 7043 | | | | E-mail: nancyo@shaw.ca | | | | |
| ¹ All correspondence will be directed to the Project Manager. | | | | | | | | |
| Alternate Project Contact | | | | | | | | |
| Name: Rick Holmes, RPBio | | | | Title: Project Biologist | | | | |
| Affiliation: Cariboo Envirotech Ltd | | | | Phone: (250) 790 2456 | | | | |
| Fax: (250) 790 2456 | | | | E-mail: carenvir@wlake.com | | | | |
| Partners / Subcontractors | | | | | | | | |
| Name: Rick Holmes, RPBio | | | | Affiliation: Cariboo Envirotech Ltd. | | | | |
| Phone: (250) 790 2456 | | | | E-mail: carenvir@wlake.com | | | | |

Project Information

Project Title

Xeni Gwet'in Caretaker Area – Habitat Restoration & Enhancement

Project Location

Xeni Gwet'in Caretaker Area

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|-------------------------|-----------------|----------------------------|-----------------|-----------------------------------|-----------------|
| Amount Requested | \$70,000 | Total Project Value | \$80,000 | Non-FSWP funds² | \$10,000 |
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² Non-FSWP funds include both cash and in-kind funding. In-kind funding refers to all non-cash contributions such as equipment, supplies, labour, etc. Please refer to Budget Section for further details.

Project Summary

Please provide a single paragraph describing your project, its objective, and the results. As this summary will be used in program communications, clearly state the issue addressed and avoid overly technical descriptions. Do not use more than 300 words.

The 2008 project represents a substantial step forward for the crew by implementing interventions that were identified over the previous two seasons of extensive assessment and documentation (Holmes 2006, 2007). Xeni Gwet'in is mindful of the positive influence their pristine watersheds have on the Fraser River drainage as a whole.

During the course of this project stream enhancement work was carried out to remove log jams to allow adult salmonid access to spawning areas and scouring of the stream bed for spawning opportunities. Restoration work was conducted in three key lake areas: Choelquoit, Tommy's Meadow and Abelachez. Field crew restored water delivery to drainages to restore habitat for both kokanee and rainbow trout stocks which have historically provided a food fishery for the Xeni Gwet'in. Off channel habitat restoration was completed at Taseko River and at the Onion Lake road crossing.

The 2008 field season allowed the Xeni Gwet'in field crew through the guidance of Cariboo Envirotech Ltd. an opportunity to further develop their knowledge and skills in managing the fisheries resources in the Xeni Gwet'in Caretaker area.

Final report was prepared and project outcomes were presented to the community on January 21, 2009 and at the Xeni Chilko meeting on Friday, March 6, 2009. The report will be distributed to Xeni's tribal council, Department of Fisheries and Oceans and Ministry of Environment.

OPTIONAL If your project lends itself to sparking interest through a compelling sound bite (for potential use in FSWP media communications), please tell us what that sound bite would be. Do not use more than 150 words.

| Species and life stage(s) the project targets: please list |
|---|
| Sockeye salmon Chinook salmon Coho Salmon Bull Trout Kokanee Rainbow Trout (all life stages for all species above) |
| Watershed(s) the project targets: please list |
| <p>Two major watersheds falling within the Xenigwet'in Caretaker Area were involved in the project. Firstly the Chilko River drainage with its associated sub-basins of Nemaia, Abelach'ez Lake its connective creeks and Choelquot Lake and associated streams (though this drainage now has only subterranean connection to the Chilko River).</p> <p>Secondly, the Taseko River where one project was directly connected to the mainstream and another involved the Onion Lake sub-basins.</p> |

Project Deliverables and Results

- Paste in the deliverables outlined in your Detailed Proposal (question #3 under project 'relevance and significance' heading) into the table below. Then, please list the results associated with each deliverable.
- Please include copies of any relevant communications products (brochures, posters, videos, website addresses etc.) resulting from this project.

| Deliverable | Result |
|--|---|
| Deliverable #1 – Stream enhancement through beaver and log jam removal that allows adult salmonid access to spawning areas and scouring of the stream bed for spawning opportunities | Field crew dismantled both beaver dams and log jams at strategic sites in the Caretaker area to enable fish passage during adult spawning migration. This undertaking has proven to be very beneficial during both the 2006 and 2007 field season allowing migrating species access to upstream spawning grounds and we expect more positive outcomes as a result of our 2008 enhancement efforts. |
| Deliverable #2 – Key lakes restoration – Choelquot, Tommy's Meadow, Abelachez | <p>An unauthorized water diversion identified by several community members was confirmed during the 2007 field season. This diversion has caused a drop in contributing water to Tommy's Meadow and Choelquot Lakes and a subsequent drop in lake levels resulting in a collapse of both kokanee and rainbow trout stocks which historically have provided a food fishery to the Xenigwet'in. The restoration of the water delivery to the above mentioned drainage was undertaken by the field crew through the use of hand tools and power saws.</p> <p>Abelachez Lake which drains into Chilko Lake was found to have a lack of connectivity at the shoreline of Chilko Lake due to a wave created berm. The field crew undertook the construction (by hand with locally accessed materials) of a protected intake to allow year round access to Abelachez Lake to provide additional habitat for resident fish species.</p> |
| Deliverable #3 - Off-Channel Habitat Restoration at Taseko River | The potential to create much needed off channel habitat was identified in 2007 at a site along the shoreline of the Taseko River. Small machinery and hand tools were utilized to provide year round access to this habitat. The opening of access to the off |

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| | channel pond (site 5 per map in appendice) would appear, from the information gathered in the summer of 2008, to be a success in terms of offering an extensive area of warmer and sheltered off channel habitat to Taseko River Chinook, rainbow trout and bull trout fry. Rearing habitat appears in short supply in the system. |
| Deliverable #4 - Onion Lake Road Crossing and Habitat Restoration | In 2007 the field assessment identified a destroyed road crossing of an important spawning stream connected to Onion Lake which provides a food fishery to the Xeni Gwet'in. Small machinery and hand tools were used to rebuild this spawning stream to its full potential and provide much needed access to upstream habitat. |
| Deliverable #5 – Final Report Summarizing Project results | Final report was written during the fall and winter months summarizing the project results of the above deliverables and will be distributed to DFO, MoE and TNG. |

Project Effectiveness

Please evaluate the effectiveness of the project, using the objective standards, quantifiable criteria and/or quality control measures identified in your Detailed Proposal (under question #1 in the 'performance expectations' heading).

- Two Xeni Gwet'in community members were trained in habitat restoration techniques
- Access for salmon to reach additional spawning areas upstream was improved
- Drainage reversal into Tommy's Meadow and Choelquoit Lakes and the rejuvenation of kokanee and rainbow trout in the system completed
- Year round access for fish from Chilko Lake to Abelachez Lake established
- Off channel habitat created for fry and juvenile utilization assessment

What are the top three lessons learned from this project that would be important to communicate to others doing similar work throughout the Basin?

1. **Community based initiatives create opportunities for community-based learning and raises public awareness regarding fish habitat and enhancement opportunities**
2. **FSWP great opportunity for capacity building at community level/watershed level**
3. **Finding the right technical expertise to share and transfer knowledge in the community and with trainees**

Project Effectiveness

Please describe how your project has addressed each Priority Activity identified in your Detailed Proposal.

| Priority Activity ¹ | How the Priority Activity has been Addressed |
|--|--|
| a) emphasizes collaboration with First Nations | Xeni Gwet'in First Nations Government is the lead and consultation included working with the Tsilhqot'in National Government's Stewardship Council. |
| b) involves community members | Xeni Gwet'in community members were hired for Field crew Community was updated on project outcomes during community |

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| | <p>presentations</p> <p>Project crew shared info with community members</p> <p>Biologists were available in community to answer community members questions</p> |
| c) coordinates and integrates with other organizations and/or activities | The project complimented the work and mandate of both the Department of Fisheries and Oceans and the BC Ministry of Environment. Additionally, this project will provide an opportunity to reach out in the region and province with other organizations and/or activities. Information gained was shared at Chilko Roundtable process as well. |
| d) is innovative / creative | This is an innovative/creative approach by virtue of the Protocol agreements in place between First Nations and non-First Nations with local communities working together and involved in key projects for a number of years. |
| e) is transferable (potential to transfer products/ tools/ knowledge to other areas within the Basin that are experiencing similar issues/ problems) | Our work to date and willingness to share information is a way to transfer knowledge to other areas within the Basin that are experiencing similar issues and problems to complete planning processes that will guide efforts towards sustainable watershed management. We are willing to share what we have learned with others in the Province. We presented 2007/2008 project results at the Fraser Basin Forum June 25, 2008 in Prince George. |
| f) supports community awareness and education | Strengthened and increased effective communication approaches within the community to raise the level of public interest, knowledge and engagement. |
| g) employs risk management approaches | The planning process involved Xeni Gwet'in and the authoritative agencies responsible to achieve an inclusive plan. Thereby managing end result "risks" by encountering and solving each one by one. |

¹Please paste each priority activity identified in your Detailed Proposal in the space provided.

Further Comments

Please provide any further comments including recommendations for future conservation efforts and suggestions for helping partners to meet the goals of the Fraser Salmon and Watersheds Program. If your project produced a narrative or scientific report or additional project products (e.g. maps, photos), attach them as an appendix.

The Xeni Gwet'in fisheries crew has now operated seasonally for three years. In 2006 training was primarily based on gaining an intimate knowledge of the Nemaia drainage. In 2007, the crew sought to and succeeded in expanding fisheries knowledge beyond the boundaries of the Nemaia Valley to much of the northern area of the territorial claim. Additionally, a survey of road crossings throughout most of the claim was completed and the relevant authorities informed, where fish access problems exist.

In 2008, the crew effectively moved on from data gathering to implementation and fisheries management. This report details a series of interventions undertaken with a view to either fisheries restoration or enhancement.

It is felt that the crew, already blessed with enormous "big fish" knowledge, has learned its trade from a fry first perspective up and recognise the importance of even the smallest streams and pond areas and their connectivity. The program has substantially increased knowledge within the band members and contributed to many areas of the provincial and federal fisheries databases. Hopefully by the interventions and the reporting of fish barriers the program has been able to enhance fisheries values within the Caretaker Area.

With fish at the heart of Xeni Gwet'in culture and food supply (Holmes 2006) it is hoped that funding will continue in 2009 and that the crew can expand and embark on a series of new projects.

Firstly, this report details under the individual sites, the required work to maintain and monitor the works completed in 2008. Several of these tasks have a spring component that needs to be completed and it is hoped that an early start in the 2009 season can be achieved.

There remains much to be done, as large areas of the Xeni Gwet'in Caretaker Area remain uncharted in regards to knowledge of fish species present, critical habitats and potential enhancement. Of particular importance in this regard are all the streams entering Chilko Lake south of Nemaia Creek on both the east and west shores. Where money is available, an expanded survey should be undertaken to add both local knowledge to fisheries databases.

Monitoring of the health, productivity and any changes in the two mainstreams (Elkin Creek and Nemaia Creek) draining the heartland of the Xeni Gwet'in Caretaker Area is essential. To this end, there is a proposal that the crew set up a downstream trapping program on each of these creeks that would quantify outputs of salmonids from these system into the larger Fraser drainage.

The Department of Fisheries and Oceans has also been approached with a view to the Xeni Gwet'in First Nation developing a limited commercial in stream fishery in the Chilko River to add to their annual food fishery. The development of terminal fisheries is a favoured tool in fisheries management, where specified stocks of known volume and species can be harvested. This has a very substantial advantage over estuarine and ocean fisheries where large numbers of brood stocks and species, often from streams with small or seasonally impacted runs can be devastated.

The Chilko River site offers the ideal opportunity for a truly terminal fishery with a D.F.O. presence giving accurate daily run estimates. The Xeni Gwet'in maintains their traditional knowledge of the site, fisheries techniques and processing which develops a unique wind dried product. With the development of their Traditional Village site in 2008, the Information Center completed January 2009 and a desire to expand a guided tourism economy, they will develop a ready market for traditional product lines, both fish and forest based. It is hoped D.F.O. will sanction the development of a trial fishery, which would initially allow the capture of sufficient fish to research product development and appropriate marketing opportunities.

Submission Instructions

Please send your Final Report electronically to your designated FSWP Staff Contact. If you are uncertain who this person is or how to contact them, please contact Tiffany Pither, FSWP Administrator.

Email: tpither@psf.ca

Phone: (604) 664-7664 Ext 119