

Fraser Salmon & Watersheds Program



Fraser Basin Council



2011/12 FINAL REPORT

FSWP File Number*

FSWP 11 54 XX HWRS

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

1. Project Information

1.1 Project Title

Sekw'el'was Seton River Corridor - Habitat Enhancement & Restoration - Phase One

1.2 Proponent's Legal Name

Cayoose Creek Indian Band

1.3 Project Location

Seton River Corridor

1.4 Contact for this report

Name: Kim North

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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:
\$22,000.00	\$22,000.00	\$6,600.00	160,040.00

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.

This project was undertaken to design a process and plan for conserving and restoring a significant riparian wildlife ecosystem within the Seton River watershed, for the benefit of salmon, and other species-at-risk. By bringing the many diverse stakeholders into planning for the long-term ecological health of the corridor, and engaging our community in stewardship, we were able to create an atmosphere where we could all learn about the intricate dynamics of landscape and people, as well as the importance of healthy watersheds to fish and wildlife. Training and stewardship activities provided the opportunity to generate an understanding of ecosystem health, an appreciation for our local natural assets, while increasing community capacity in ecological land resource management.

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

The most important outcome from our project in this initial year of planning was the support and commitment of over thirty different stakeholders: including aboriginal governments and groups, all levels of government, industry representatives and non-profit groups. By creatively engaging stakeholders and ensuring everyone had a voice at the table, we were able to move forward with planning actions needed to reach a goal of mitigating further environmental damage within the corridor. All parties overwhelmingly agreed to work towards mapping and designating areas where both conservation and restoration could be implemented, and rethinking operational methods to decrease the risk of further degradation.

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
<p>1. On half hectare of the Lower Spawning Channel:</p> <ul style="list-style-type: none"> • Remove invasive weed species. • Replant with native plant trees and shrubs. • Complete fish, gravel and aquatic invertebrate baseline sampling. 	<p>On half hectare of the Lower Spawning Channel:</p> <ul style="list-style-type: none"> • Pre-work baseline survey of area and establishment of photopoint stations for future monitoring. • Removed invasive weed species. • Replanted with native plant trees and shrubs. <p>Over entire Lower Spawning Channel:</p> <ul style="list-style-type: none"> • Undertook fish walk surveys for spawning activity • Completed initial gravel survey • Completed in-stream habitat identification • Completed year-long temperature logging • Completed aquatic invertebrate sampling with three different student groups.

<p>2. In one identified area along the Seton River:</p> <ul style="list-style-type: none"> • Remove invasive weeds • Plant large diameter stakes into toe of slope to mitigate erosion 	<p>Along the Lower Seton River Corridor:</p> <ul style="list-style-type: none"> • Set up erosion monitoring stations • Established Photopoint stations <p>At one identified area along the Seton River:</p> <ul style="list-style-type: none"> • Baseline Survey, map, photopoint station • Removal of invasive weeds • Planted out stakes of cottonwood, willow, red-osier dogwood, alder into toe of slope to mitigate erosion.
<p>3. Begin networking with stakeholder groups:</p> <ul style="list-style-type: none"> • Implement a survey to initiate discussion on management priorities for the corridor • Contact stakeholders • Set up meeting with possible stakeholder to initiate planning process 	<p>Networking with stakeholder groups:</p> <ul style="list-style-type: none"> • Contact list – confidential • Minutes of Planning Meetings • Initial draft ideas • Letters of support from stakeholders
<p>4. Four people will be employed on project and will receive training & on-the-job mentoring in:</p> <ul style="list-style-type: none"> • Plant ID (exotic/native) • Ethnobotany • Vegetation/soil/impact survey techniques • In-stream survey techniques • Collection/Propagation • Restoration work • Outreach work 	<p>Training and mentoring in natural resource management:</p> <ul style="list-style-type: none"> • Course outlines • Photo evidence • Crew satisfaction surveys and interviews
<p>5. Volunteers and participants will benefit from:</p> <ul style="list-style-type: none"> • Two seasonal field walks and educational events • Two volunteer planting days • Signage 	<p>Outreach Work:</p> <ul style="list-style-type: none"> • Six seasonal field walks/educational events: Walking with Smolts, Native Plant Demonstration Garden Plant, Nature Days at two local elementary schools, Summer Camp, Salmon in Canyon Festival • Four volunteer plant days with community volunteers, UBC Forestry students, elementary and high school students • Event schedules, photo evidence and/or satisfaction surveys/artwork. • Signage at nursery. Signage design for trail system and demo garden – in development.
<p>3.2 Please evaluate the EFFECTIVENESS of your project in achieving Project Objectives. Identify the indicators you have used to measure the effectiveness of your project. Please include any notable successes or challenges.</p>	

We have been effective and successful in meeting our five identified Project Objectives in the following ways:

1. Lower Spawning Channels: We have successfully removed invasive weeds and replanted native trees and shrubs into over .5 hectares at the Lower Spawning Channels, while engaging volunteers in the process. This planting is being done to mitigate diel water temperature fluctuations and provide additional fish rearing habitat over the long-term. To monitor the success of our restoration works into the future, we undertook baseline surveying and set up photopoint count stations. We also implemented fish spawning and gravel surveys. We had planned a survey of resident fish through an electrofishing survey, but due to the earlier return of spawners this was not possible.
2. Seton River: We have begun the process of providing shelter to salmon and mitigating slope erosion by setting up a slope erosion monitoring program, and by removing invasive weeds and replanting with native riparian plants in one pilot project site on the Seton River.
3. Seton River Corridor Networking: Over thirty stakeholders have attended two meetings to discuss the partnerships and commitment of working together to increase ecological values on the land. Stakeholders have noted their support and willingness to engage in further planning sessions and in changes to their own individual operational practices. These meetings have been very successful in breaking down barriers and opening doors to increased discussion in regards to developing a plan for a wildlife corridor in the area.
4. Community Capacity Building: Through leverage of FSWP funds we were able to employ five full-time seasonal employees from the surrounding aboriginal communities, and seven summer students. These crew technicians were provided training and mentoring in the field of ecological restoration, fish and wildlife survey techniques, plant identification/propagation and outreach works. They have increased their knowledge of our local ecology, shared it with volunteers and participants in outreach activities, and have developed an interest in this field, with many returning to work for us in 2012-13.
5. Outreach Work: We have had over 600 participants in our outreach programs – from pre-schoolers to adults. Approximately 58 people volunteered to create the unique Walking with the Smolts Celebration, where art, dance, theatre, music and science showcased the journey of young smolts to the ocean, and where 250 elementary, high school students and community members took part. Over 300 people attended the annual Salmon in the Canyon Festival where local sustainable lifestyle booths, restoration and wildlife researchers share their knowledge with the community. Volunteer planting fall days are very popular, and over 300 plants were planted by volunteers into restoration areas. We have erected signage at the Native Plant Nursery, created design for trail signage, prepared logs for use on the signs, and gathered photographs for the signs. We are now in the process of developing the content for the trail signs.

3.4 IF applicable, please describe how your project has achieved one or more of the following supported processes (Section 2.1 of RFP; section 8 of detailed proposal template). If results differ from those originally anticipated, please describe.

<p>Engagement of First Nations. Please specify who, and in what capacity.</p>	<p>This is a First Nations project spearheaded by the Cayoose Creek Indian Band in partnership with the Lillooet Naturalist Society. Representatives from Cayoose St'at'imc, Lillooet Naturalist Society, DFO, MOE, District of Lillooet, Upper St'at'imc Culture, Language, Education Society, and two community members-at-large sit on our Restoration Advisory Board which meets monthly. Chief Michelle Edwards of Cayoose Creek St'at'imc, along with an aboriginal youth, sits on the Advisory. Of the twelve crew technicians employed on the project nine were First Nation.</p>
<p>Active partnerships with one or more organizations.</p>	<p>Networking and partnership development has been implemented and continues to be a high priority for us. It is essential that the diverse number of stakeholders are given a voice in the planning and implementation stages of a long-term plan. Representatives from three aboriginal communities, all levels of government, industry, local businesses and non-profit groups have been involved in on-going discussions, and have lent their expertise to the table. Many have committed to exploring operational changes in their individual workplaces to meet the needs of fish/wildlife. 26 participants attended the 15th August 2011 meeting and 33 participants attended the 25 October 2011 meeting. Please see attached list.</p>
<p>Engagement and participation of diverse and under-represented groups.</p>	<p>Aboriginal youth and underemployed community members are trained and provided on-the-job work experience. Both aboriginal and non-aboriginal people are employed to ensure bridges are built between our communities.</p>
<p>Relationship building, as a foundation for sustainable, enduring activities.</p>	<p>As noted above we have developed working partnerships with many organizations. As well we have established networks with various organizations out of our community that assist us in meeting our goals – BC Wildlife Federation, Native Plant Society of BC, Investment Agriculture Foundation of BC, various fish & wildlife biologists, Forrex, Cropland Inc, FWCP. Many local organizations and businesses provide in-kind support and expertise to our projects.</p>
<p>Capacity building, including mentorship models, leadership training and skills development.</p>	<p>We have provided community capacity building through two avenues:</p> <ul style="list-style-type: none"> • Workshops, on-the-job training and mentoring of hired crew technicians. Some examples include plant identification workshop and field work, training and mentoring in use of GPS and other survey tools, plant propagation and planting experience, outreach training. • Outreach activities create a sense of wonder for our natural world, generate an understanding of the importance of our watersheds and the wildlife that depend on healthy ecosystems. We then provide the knowledge and tools, through stewardship events, so participants can carry that knowledge into their own lives.

Recognition and support of champions and their initiatives.	We recognize the hard work of our crew technicians by holding a year-end staff “party”. These people work very hard to implement the plan. Thank you notes are sent out to field and event volunteers. We have also received awards for our restoration work as an organization from the local ELKs and BC Landscape & Nursery Association. We have also been honoured by invitations to do presentations or workshops for BCIT, UBC, BCWF, and Interior Stewardship Meetings.
Opportunities to influence policy and decision making,	Through our engagement with stakeholders in the Seton River Corridor, we now have the opportunity to work with our partners to develop a cohesive and sequential ecological plan. This plan will be developed to assist in effective decision making at the local and regional level.
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?	
We now have stakeholder commitments to engage in planning, survey and conservation/ restoration works. Based on successful funding for the 2012–13 year we will be mapping the entire Seton River Corridor and Seton River, and carrying out baseline fish and wildlife surveys. With this information we will be able to move confidently forward to implement a plan that meets the needs of fish and wildlife, but also the stakeholders identified.	
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?	
<ol style="list-style-type: none"> 1. It is important to engage organizations and individuals who live within the area and surrounding areas of any proposed project, so that their voices can be heard. By doing this, you will mitigate any future problems due to lack of communication and planning. It is important to ensure you have a good understanding of the historical and current land uses so that you can move forward with confidence. 2. Engaging volunteers and participants in outreach activities is improved when you hold quality education events that involve a wholistic approach. By incorporating culture, science, art, theatre, dance and music in your events you are more likely to create an atmosphere of learning that does not seem like learning. 3. Be ready to adapt to changing environmental conditions. We were surprised by the early return of spawners this year, and therefore were unable to carry out the electrofishing work we had planned for the following week. 	
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.

We are good at communicating our project activities. We will continue to promote restoration and conservation, with government agencies, local politicians, and various organizations in the following ways:

- Local newspaper articles in the Bridge River Lillooet News and on the local Radio Lillooet
- Articles in peer reviewed publications – Forrex ‘BC Journal of Ecosystems and Management’ and BC Landscape and Nursery Associations magazine.
- Field walks, workshops and presentations all transfer knowledge
- Salmon in the Canyon Festival invites various organizations working within the basin to provide an information booth/activity/presentation. This event attracts over 300 people and is a great venue for increasing an understanding of our watersheds.
- Volunteer opportunities and stewardship days where community members, local schools, youth groups and other organizations take part in hands-on learning.
- The Restoration Advisory Committee is made up of representatives from Cayoose, LNS, DFO, MOE, District of Lillooet, Upper St’at’imc Language Culture and Education Society, and community members. The Advisory increases coordination across organizations and impacts on decision-making.
- Networking between other aboriginal communities and local organizations has resulted in sharing of work.
- Participation in local community events – Seedy Saturday, Apricot Festival, May Day Parade, local Farmers’ Market, Christmas Craft Fair – increases our exposure in the community and assists in communicating project activities.
- Reports to BC Hydro, BC Nature, Rivershed Society of BC, Lillooet Naturalist members and sponsor partners.
- Slide presentations to various organizations
- Events and reports posted on Lillooet Naturalist website.

We would like to thank the Fraser Salmon and Watershed Program for the great work they do and for supporting small organizations like ours to do environmental education and stewardship in our communities. We also felt it was important that our funders visited our site and actually saw the work we were doing – these connections are very important for small communities in particular as they ensure we are not working in isolation from other stewardship groups.

Thanks again and we are sorry your role will be changing. We wish your staff the best.
