

Fraser Salmon & Watersheds Program



Fraser Basin Council



2010/11 FINAL REPORT

FSWP File Number* 10 XX 33 PG

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

1. Project Information

1.1. Project Title

Fraser Lake Indigenous Solutions

1.2. Proponent's Legal Name

Dr. Darlene Sanderson

1.3. Project Location

Stellat'en First Nation

1.4. Contact for this report

Name: Dr. Darlene Sanderson

Phone: 250.598.0032

Email: darlenesanderson@shaw.ca

1.5 Funding Amount

Original Approved Grant Amount:	Total FSWP Expenditures:	Final Invoice Amount:	Final Non-FSWP leveraging, including cash and in-kind:
\$35,000	\$25,000	\$10,000	

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 work endeavored to identify and address climate change issues in Stellat'en First Nation. A collaborative action – oriented participatory research approach and Indigenous research methodologies were used. We developed a survey with community members that quantitatively identified community actions on climate change issues, as well as open-ended questions that revealed community perceptions about what climate change is, how it has impacted them, and what they see as strategies for solutions. The first workshop happened concurrently with the global meeting in Copenhagen, addressing climate change at the local level. In both workshops, traditional knowledge keepers (Elders) and western scientists shared their knowledge. In addition, the second workshop was followed by a workshop focused on water issues (July 30) that was sponsored by the University of Victoria, and in partnership with Nadleh Whut'en First Nation.

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

The most compelling moment for me was after we had discussions about traditional meanings about water, one young man shared with us that his traditional name is the same as the Lake's name where he lives. I enjoyed bringing together western scientists with traditional knowledge keepers, and providing opportunities for community members to talk about the significance of traditional teachings in today's world, building awareness of the important role that traditional ecological knowledge (TEK) has in shaping climate change strategies, local water policies, thereby protecting salmon habitat.

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
<ul style="list-style-type: none"> 2 Regional Training workshops with Stellat'en First Nation on water protection and the effects of climate change 	<p>2 regional workshops were delivered, one on December 11, 2009, and the other on July 29, 2010. The first workshop provided the opportunity for community members to participate in a survey, hear presentations on climate change, listen to Elders speak to the issue and contribute to discussions about possible community-based solutions to climate change. These responses were collated and reviewed by the youth in the community and put into a power point presentation, so that the community could review the findings in a visual and interactive format; the second workshop provided the opportunity to share the findings</p>
<ul style="list-style-type: none"> Produce a culturally specific children's book/curriculum on traditional voices on water, salmonid habitat with respect to climate change. 	<p>The draft children's book (see attached) has been presented to community members, and they are discussing whether they will develop one of their own</p>
<ul style="list-style-type: none"> Produce a community-based policy brief that can be shared with academics from UNBC, UVic, U of A, and SFU, and UBC. 	<p>A collaborative paper with Dr. Stephen Dery (UNBC), Eddison Lee-Johnson (Environmental director, Stellat'en First Nation), Elinor Lowe (Nadleh Whut'en First Nation) and Sharolise Baker (Fisheries, Stellat'en First Nation) are collectively co-authoring a scholarly paper with the facilitator</p>
<ul style="list-style-type: none"> Possibly contribute to the production of a collective publication that gives a space to Indigenous voices speaking to the issues of water and climate change from across Canada. 	<p>Dr. Sanderson is collaborating with a number of Indigenous communities, both locally and internationally to create a publication on water by May 2011, for the UN Permanent Forum on Indigenous Issues – this year's focus is on water.</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.

Objective:	Effectiveness and Indicators
<p>Health promotion: Enhance the health and well being of the fresh water habitat for salmon in Fraser Lake.</p>	<p>Indicators from both workshops could include both western science indicators and cultural indicators to clearly identify the success of this work. If the objective is cleaner water for salmonids (and all of the people, plants and animals) then this could be measured as water quality testing pre new water policies and cultural indicators (Elders observation of clean water before the changes are made) and then again, after the policies were implemented. This would involve further research, community education and training.</p>
<p>Cultural resilience: Enhance the transmission of traditional knowledge between children, youth and elders sharing as appropriate with the wider community (locally, nationally, internationally) regarding watershed health and sustainability. Indigenous youth researchers gathering traditional knowledge for their own elders.</p>	<p>Elders spoke in their own language at the meetings, and in the follow-up dialogue on water, they discussed in their focus groups what water means to them in their language and cultural practices. Youth were encouraged to record what they heard. The focus groups only wrote down what they want to write down, and shared with the wider community what they wanted shared. Also, in the paper, the community will share what is culturally appropriate to them and their community. They discussed what their beliefs are about climate change, and what their solutions are. In the second meeting, they reviewed the finding, and enlarged upon them.</p>
<p>Education: Create community education strategies in Fraser Lake to effectively engage diverse populations increasing knowledge and the ability to take actions to benefit watersheds, salmonids and their habitat. Indigenous youth researchers gathering traditional knowledge from their own elders Indigenous education: Stellat'en language will be supported in the research process; Community education: academics, and water policy developers will be informed as appropriate of Stellat'en strategies to protect Fraser Lake and address climate change</p>	<p>The community identified education strategies in their strategies for solutions, and these were culturally based: learn about the traditional hunting and fishing technologies, and the semi-nomadic culture. The local youth were engaged in the research process from the beginning of the community discussion (they were the catalysts for holding these workshops in the first place – having asked the environmental director to address climate change issues, who then asked Canada Research Chair Dr. Stephen Dery. It was Dr. Dery who invited me to participate in the development of these workshops. The workshop results were transcribed by the youth, and then collated in collaboration with the facilitator. Although the youth had just completed high school, this was an opportunity for her to see how research can be applied in a way that can be meaningful to her community. This research was part of her work responsibilities. The youth also participated in the analysis of the findings, participated in the creation of the power point, then presented it to her community. (She then delivered her first baby on the same day! It</p>

	<p>was a big day for her in more ways than one) Language education was always supported in these workshops, and encouraged in the development of children's education (the book) and in the transmission of knowledge from Elders to address climate change issues.</p>
<p>Build networks and linkages: Enable local government(s), Stellat'en First Nation, stewardship groups and northern communities to work together to address watershed sustainability issues e.g. through training workshops, curriculum development, publications, & presentations.</p> <p>New partnerships for the co-creation of knowledge between Aboriginal and non-Aboriginal scholars both in Canada</p>	<p>Both Stellat'en First Nation and Nadleh Whut'en First Nation sent community members to the BC Water Science Strategy conference, building on the connections made in these workshops. In addition, the topic of climate change and water brought together for subsequent meetings on water 2 communities that share a common history. The communities will in the future be able to build their connections with other aboriginal communities, ongoing relationships with UNBC and UVic, and non-government organizations that are also committed to building networks between Indigenous communities in BC and the Pacific (the Pacific Peoples' Partnership)</p>
<p>A better understanding of the relationship between Aboriginal and non-Aboriginal peoples and their respective intellectual and cultural traditions; by building networks and linkages: Enable local government(s), Stellat'en First Nation, stewardship groups and northern communities to work together to address watershed sustainability issues</p>	<p>Through the education provided in these workshops, there was an opportunity for a shared learning to take place: between Elders' teachings, western scientists, local government (Fraser Lake District Council), and youth in the community. It was a unique opportunity to hear First Nations' perspectives on climate change, building networks between First Nations, (Stellat'en, Nadleh Whut'en), UNBC, UVic, Elders, youth and building capacity in aboriginal women's leadership.</p>
<p>An appreciation and increased awareness of traditional Aboriginal knowledge and Aboriginal knowledge systems, as well as of approaches, issues, values, experiences and contributions of Aboriginal peoples both in Canada and abroad</p>	<p>There was a cross-fertilization of knowledge and ideas between western and traditional knowledge systems.</p>
<p>An increased capacity, both at the community level and at the international level through research training and skill development; Capacity building, research training and mentoring opportunities for Aboriginal students</p>	<p>Capacity was built within the communities, transferring knowledge between Elders, and youth; capacity building also occurred in the universities' engagement with communities on climate change issues.</p>
<p>Aboriginal leadership and participation in research, and advancement of Aboriginal scholars' research careers</p>	<p>Aboriginal women in both communities took leadership roles in organizing the workshops, and nominated and mentored the youth in her participation in the research. The youth had the opportunity to transcribe and analyze the workshop results, as well as present the outcomes back to her community.</p>

2- Cultural resilience: Enhance the transmission of traditional knowledge between children, youth and elders sharing as appropriate with the wider community (locally, nationally, internationally) regarding watershed health and sustainability. Indigenous youth researchers gathering traditional knowledge for their own elders.	
Engagement of First Nations. Please specify who, and in what capacity.	30 Stellat'en community members
Active partnerships with one or more organizations.	UNBC, UVic, Stellat'en First Nation, Nadleh Whut'en and Fraser Lake District Council
Engagement and participation of diverse and under-represented groups.	A rural First Nations community
Relationship building, as a foundation for sustainable, enduring activities.	Building relationships between traditional knowledge keepers and western scientists
Capacity building, including mentorship models, leadership training and skills development.	Focus groups focused on the meaning of water in their language and cultural practices, role modeling re asking Elders about this topic, and the adults will be able to do the same; local role modeling of showcasing aboriginal youth success stories in education and training on environmental issues
Recognition and support of champions and their initiatives.	As above
Opportunities to influence policy and decision making,	Invitation extended to Mayor and Council in Fraser Lake. The Mayor attended the morning session. The report will be sent to the Mayor's office.
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?	
<p>This project enhanced healthy relationships within and between First Nations communities and their waterways by elevating traditional knowledge and education about water and climate change; it built bridges between western science on climate change and the relevance of TEK in addressing these issues; it identified community beliefs and perceptions about climate change, and articulated community-based strategies for action; it built capacity fro aboriginal youth and women to affirm and enhance their community leadership roles and abilities; it gives voice to aboriginal concerns and solutions to academia, and to district councils; it provides an example of how other universities and communities can work together on climate change issues.</p> <p>Another grant is requested to replicate this work in another aboriginal community, and also to follow-up with work with Stellat'en. In order to be sustainable, all community members must apply the knowledge they have gained, and follow-up work will ensure this happens. Water quality testing and training would be useful so that a baseline of water quality may be assessed, both by western science indicators and secondly, by Elders' cultural indicators for a before and after parameters may be done. This would indicate success of this work if the water policies result in cleaner water for the salmon and the community.</p>	
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. Communities carry their own solutions 2. Guidance by the Elders 3. There are many opportunities to bridge gaps in water policy development in a culturally sensitive way 	

REQUIRED: Attach all DOCUMENTATION of Final Deliverables, and LIST attachments in Section 7. 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.

1. Media release from UNBC when project was launched
2. Shared this work at other conferences:
 - The Consensus Conference on Small Water Systems Management for the Promotion of Indigenous Health at UVic, March 21-23, 2010;
 - First Nations' Perspectives on Water and Climate Change, July, 2010, sponsored by the Center for Indigenous Environmental Research and ACT (SFU);
 - Community-based presentation on the sacred nature of water at the Cadboro Bay United Church, August, 2010;
 - Pacific Wayfinder's Conference, November 10-13, hosted by the Pacific Peoples' Partnership (Date)
 - Invited to be a member of Sectoral Committee for the Canadian Commission of UNESCO, November, 2010
3. Encouraged the inclusion of this report on FN websites
4. In progress – scholarly paper that includes community based researchers' input.