

# Fraser Salmon & Watersheds Program



Fraser Basin Council



## 2011/12 FINAL REPORT

**FSWP File Number\*** FSWP 11 61 HWRS LR

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

### 1. Project Information

#### 1.1. Project Title

Salmon River Watershed Monitoring Project

#### 1.2. Proponent's Legal Name

Salmon River Watershed Society

#### 1.3. Project Location

Salmon River, Tributary to South Thompson

#### 1.4. Contact for this report

Name: Mike Wallis

Phone: 250-573-7838

Email: mikewallis@hughes.net

#### 1.5 Funding Amount

Original Approved Grant Amount:	Total FSWP Expenditures:	Final Invoice Amount:	Final Non-FSWP leveraging, including cash and in-kind:
\$ 30,000	\$30,000	\$9,000	\$56,928

### 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.

In the final year of the FSWP program the Salmon River Watershed Roundtable was fortunate to be sponsored to complete an inventory and assessment of 300 streambank restoration sites undertaken since 1992 at various locations within the watershed. The sites collectively form a 20 year history of co-operative behaviour change supported through sponsorship by many funders, as well as contributions of in-kind materials and labour, volunteer effort, landowner cooperation and technical support from many sources. The SRWR managed to keep partners at the table to complete these undertakings using watershed based consensus planning and by developing win-win approaches year after year as funding permitted. Over its life the FSWP consistently supported the SRWR contributing toward completion of nearly half of these restoration sites. The 2011 monitoring project results indicate not only site-by-site success but also a cumulative watershed scale improvement in streambank stability and

riparian health. The general acceptance of bioengineering methods introduced proactively by DFO beginning in 1992 over past practices suggests a willingness to follow beneficial practices such as controlling livestock access, re-development of riparian buffers and stabilizing eroding streambanks with natural features to create improved fish habitat values and protect valuable farmland from erosion.

Individual site conditions as of 2011 were compared with pretreatment conditions by scoring structural integrity, hydraulic function, riparian vegetation regeneration, and fish habitat features. An individual site summary and map sheet series was assembled in a GIS mapping database to document this success. These results will be formally presented at the anniversary of the SRWR in 2013, marking success in one of several key watershed sustainability goals established by the SRWR in 1993 and signals that other key goals from the 20-200 year watershed sustainability plan such as improving water management can also be achieved similarly through cooperative partnership.

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

The project demonstrates that the collective effort of many partners working pro-actively toward common goals can achieve watershed scale change in terms of both ecological benefit and human behavior change.

### 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. Review, digitize and e-file archived photos by site for 300+ sites	300+ site photos selected and included on individual site mapsheets
2. Complete database by entry of remaining file information describing site history, age, condition data for 300 restoration sites	Site history, age, condition data entered to data base, organized by reach and site number
3. Completion of data collection in summer 2011	Field collection and site assessments to complete 300+ sites
4. Completion of Interim Report	Interim report completed and delivered
5. Completion of Final Report	Final report site assessments delivered

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.

The amount of time required to review site photos exceeded the expected effort. Field assessments and data organization took as much effort as was expected. Sites were organized by reach so that sites can be easily relocated. Consistent language and terms were used to evaluate sites for so sites could be more easily compared. Standardizing the template used to describe the sites, regardless of location, site age, restoration technique used and site condition helped streamline the evaluation process, and is repeatable, so that in future years sites can be re-evaluated in relation to 2011 condition. The use of high resolution digital air photos enabled high quality site maps to be developed for all the sites that were evaluated. Other sites located outside the area covered with high resolution air photos will not be as easily mapped, however the sites that were assessed and mapped in this project are the majority of the total number of restoration sites within the watershed and reach by reach comparisons indicate similarity between reaches, suggesting that the work done to date does characterize the level of success generally achieved using these restoration methods throughout the Salmon River Watershed.

**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>Restoration sites undertaken on Okanagan, Neskonlith and Splatzin, and Upper Nicola Band lands over the past 20 years were evaluated as part of the project. Many First Nations participants were involved in organizing and constructing these and other of the projects. The success of the project is shared with First Nations through our working partnerships.</p>
<p>Active partnerships with one or more organizations.</p>	<p>The sites collectively form a 20 year history of co-operative behaviour change supported through sponsorship by many funders, as well as contributions of in-kind materials and labour, volunteer effort, landowner cooperation and technical support from many sources. By monitoring the outcome and sharing knowledge about successes and failures of the education, planning, restoration and monitoring actions of the 20 year collective effort made by thousands of participants on the Salmon River Watershed Project is validated.</p>
<p>Engagement and participation of diverse and under-represented groups.</p>	
<p>Relationship building, as a foundation for sustainable, enduring activities.</p>	<p>A foundation for continuing toward the 20-200 year sustainability plan goals has been made by contributing significantly to ecosystem resilience and salmon habitat improvement through the cumulative restoration activity, linking over 300 individual streambank restoration sites into a more contiguous, sustainable riparian watershed feature than what existed 20 years ago.</p>

Capacity building, including mentorship models, leadership training and skills development.	By reviewing restoration site effectiveness in this monitoring project, a dividend from all the investment made to date in the SRWR experience is being extracted that can be transferred as a river restoration planning tool to other groups and watersheds. The results of this assessment describe an effective restoration experience in terms of preferred methods and techniques and can be reused as a case study.
Recognition and support of champions and their initiatives.	
Opportunities to influence policy and decision making,	
<b>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?</b>	
<p><b>There are still approximately 80-100 restoration sites of various ages located in other reaches of the Salmon River that were not yet assessed, and these restoration sites in total comprise only approximately 68% of the sites that the SRWR set out to restore as of 1995. The accomplishment to date documented in this project will be used to tell the story of success and to seek support to complete the riparian restoration goal that has seen much progress, and is substantially completed, but not finished. In addition, this progress towards reestablishing riparian health (Part of Goal 5 of 13 watershed sustainability Goals set out in 1995) can be used to encourage the pursuit of other sustainability goals such as improving water management, which are also important aspects of salmon and watershed health and are identified as priorities in the watershed plan.</b></p>	
<b>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?</b>	
<p><b>1. Be careful what you commit to do with limited funding</b>  <b>2. Don't miss an opportunity to monitor and document success out of respect for the efforts of participants</b>  <b>3. Standardize assessment procedures early when developing a monitoring tool, and allow enough scope and range in scoring templates to accommodate the continuum from fully degraded, dis-functional to fully naturalized, functional site conditions.</b></p>	
<b>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.</b>	

#### 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.

The deliverables consist of hundreds of site by site and reach by reach summaries saved as high resolution PDF files, and will be couriered on flashdrive to FSWP for project reporting purposes. They are not to be distributed to website/public access until they are vetted by the SRWR Executive.