

Fraser Salmon & Watersheds Program



2010/11 FINAL REPORT

FSWP File Number *

FSWP 10 LR 55 HWRS

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

1. Project Information

1.1. Project Title

Mapping Flow Challenged Streams in the Fraser Basin

1.2. Proponent's Legal Name

Watershed Watch Salmon Society

1.3. Project Location

Basin Wide

1.4. Contact for this report

Name: Craig Orr

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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:
\$ 63,000.00	\$ 63,000.00	\$ 12,600.00	\$ 31,162.54

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.

Watershed Watch Salmon Society (WWSS), and data visualization firm Periscopic produced an interactive map of the Fraser Basin showcasing water use and salmon status in six case study watersheds. Visualizations of water licenses, wells, instream flow, temperature and precipitation show where increased monitoring, regulations and public access to reliable data are needed; a primary value of this tool is in portraying the role of water in the management of salmon (as per Canada's Wild Salmon Policy). Visualizations detail information on Fraser Conservation Units, and should prove handy to a variety of interests. The interactive map uses a unique interface accessible to a wide range of users, is compatible with all major web browsers, and contains easily embedded sharing features and a variety of links to data sources; all users will interact more easily with the many federal and provincial agencies involved in water and salmon management, including the provincial Living Water Smart Program.

The attached wireframe document shows how our first objective will be completed; due to complications around data, visual design and scheduling issues, the map is still in development. The wireframes document has been finalized (this will govern the design of the website, which will be built using the Flash programming language) and the database that will power the website are complete, but previous delays in sourcing data, contractor availability and glitches in finalizing the visual design have moved the final launch date to mid-July. More work is ongoing on outreach of the project.

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

The most compelling outcome from this project is the ability of the interactive map to detail water use within DFO salmon conservation units, using historical and geographic information not currently available; it also highlights the incomplete nature of current environmental monitoring programs.

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. An interactive map (data visualization) that will be a central source of information on rivers in the Fraser Basin facing threats due to instream flow issues and groundwater extraction.</p>	<p>The scope of the final map was increased to enhance information on salmon and conservation units. This reflects better how salmon are managed throughout the province, and the quality of data available at the “conservation unit” level. This information fits well within the overall design, is not currently available to the public, and provides important context to the water data. The sections related to water focus on the Fraser Basin as a whole unit and six case study watersheds, and will include data on surface water licenses, wells, instream flow, temperature and precipitation where available.</p>
<p>2. Increased awareness of British Columbians to the various threats facing rivers within the Fraser Basin and an increase in the capacity and networking ability of ENGO’s and First Nations currently working on water issues throughout the province.</p>	<p>The slight delay in the map launch impeded us and currently makes it difficult to meet this objective, but we have full faith it will be met, considering the potential value of this tool. The tool gives us a concrete way to talk about the situation facing the Fraser Basin, a clear example of the lack of environmental management in BC, and highlights the need for increased monitoring and data accessibility. Our planned outreach involves featuring the map through groups in the profiled watersheds, classroom</p>

	outreach to public schools, distribution through our outreach network, and through online communities passionate about open data and visualization tools.
3.	
4.	
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>One of the key parts of our first objective was to create a tool that could combine data from various sources into a single, user friendly application that could be used to show the status of systems within the Fraser Basin and the gaps in monitoring programs and available data. With this tool we have made great strides towards providing a public data resource on water and salmon, in a format that will be reliable and easy to use, and relevant to the Wild Salmon Policy. One of the main reasons the final design has taken so long to finalize has been a desire to represent the information available in a way that highlights our concern around management, the various ecological realities of the profiled systems, and is still an intuitive user friendly experience. The data included in the map come from a variety of sources and the mere process of determining what data were accurate and what were too poor to include took considerable time and was a challenge that was present throughout the phase of map design.</p>	
3.4 IF applicable, please describe how your project has achieved one or more of the following supported processes (Section 2.2 of RFP; section 7 of detailed proposal template). If results differ from those originally anticipated, please describe.	
Engagement of First Nations. Please specify who, and in what capacity.	We were able to work with the Nicola Tribal Association and use water temperature data for the Nicola/Coldwater River from a previous FSWP project that we sponsored in 2008-2009. We will also liaise with other First Nations.
Active partnerships with one or more organizations.	During the map development stage we were able to work with groups in the six case study watersheds (including the Nicola Watershed Community Round Table, Langley Environmental Partners Society, the City of Coquitlam and the Fraser Valley Watersheds Coalition) to develop messaging about the specific situation facing each watershed. These groups will also be involved with hosting and distributing the final map.
Engagement and participation of diverse and under-represented groups.	
Relationship building, as a foundation for sustainable, enduring activities.	
Capacity building, including mentorship models, leadership training and skills development.	
Recognition and support of champions and their initiatives.	

<p>Opportunities to influence policy and decision making,</p>	<p>This interactive map contains information related to resource management (both water and fish) that is not currently available to the public and showcases gaps in monitoring and information are crucial to making effective policy decisions. The clear presentation of information illustrates the need for increased monitoring, something that is currently a cornerstone of work on the Living Water Smart Program and the Water Act Modernization.</p>
<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?</p>	
<p>The map (and its corresponding database) is built using a format that will allow them to be updated yearly as additional information becomes available so the map can maintain a “living document” of how monitoring programs expand or contract, and whether the situations affecting the Fraser Basin improve or continue to decline.</p>	
<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?</p>	
<ol style="list-style-type: none"> 1. Environmental data that is collected by any government agency can be difficult to obtain and delays in processing requests for information should be expected. 2. It is difficult to estimate the time needed for quality control for all data obtained through third party sources (including consultants) and thus more time should be allocated to these tasks in project schedules. 3. Communication between collaborators of different backgrounds and areas of focus often requires additional time and clear description of concepts and information to prevent misunderstandings. 	
<p>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.</p>	

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.

Since the interactive map is still not ready for launch, this portion of the project remains incomplete; however, we will issue a release to announce the launch of the map and have been working with organizations in the six case study watersheds who will be hosting a link to the website and helping us distribute the map. We will be posting an announcement of the map launch through the Community Mapping Network, The Vancouver Observer, various online message boards and popular data visualization sites like flowingdata.com and visualizing.org. There has been significant online activity in the environmental community during the Water Act Modernization process and we will be utilizing that network (including sites like Water Bucket, The Living Water Policy Project and Water Connections) to publicize the map.