

Fraser Salmon & Watersheds Program



Fraser Basin Council



2008 Final Report Template

FSWP File Number*	Traceability FSWP 09 D 73
-------------------	---------------------------

Contact Information						
Sponsoring Organization's Legal Name						
Chehalis Indian Band						
Are you a federally registered Charity, Non-profit organization or Business (Yes /No)?						Indian Band
If yes, please indicate which.	<input type="checkbox"/>	Charity	<input type="checkbox"/>	Non-profit organization	<input type="checkbox"/>	Business
Registration number				GST number		
Are you a registered Society (Yes / No)?		<input type="checkbox"/>	Society Registration number			
Mailing Address						
4690 Salish Way, Agassiz, BC V0M 1A1						
Street Address (if different from above)						
Same as above						
Project Manager ¹						
Name:	Kim Charlie			Title: Fisheries Coordinator		
Affiliation:	Chehalis Indian Band			Phone: (604) 796-2116		
Fax: (604) 796-3946				E-mail: kim.charlie@chehalisband.com		
¹ All correspondence will be directed to the Project Manager.						
Alternate Project Contact						
Name:	Dave Moore			Title: Fisheries Advisor		
Affiliation:	Chehalis Band			Phone: (250) 372-9472		
Fax: (250) 372-9471				E-mail: davemoore08@xplornet.com		
Partners / Subcontractors						
Name:	Ken Wilson			Affiliation: Professional Fisheries Biologist		
Phone: (604) 301-0418				E-mail: wilsonkh@telus.net		
Name:	Rebecca Robertson			Affiliation: UBC/BCIT		
Phone: (604) 822-4100				E-mail: Rebecca_Robertson@bcit.ca and fis@interchange.ubc.ca		

Name: Ruth Withler	Affiliation: DFO Pacific Biological Station
Phone: (250) 756-7148	E-mail: Ruth.Withler@dfo-mpo.gc.ca

Project Information

Project Title

Development of an Inland Rivers Fisheries Traceability System – Demonstration of the Chain of Custody and Identification of Fish Stocks.

Project Location

Harrison River, BC

Amount Requested	\$28,500	Total Project Value	\$58,011	Non-FSWP funds ²	\$29,511
------------------	-----------------	---------------------	-----------------	-----------------------------	-----------------

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.

DFO’s Pacific Fisheries Reform emphasizes a shift to more precautionary and selective commercial fisheries in the future. To this end, the Fraser River First Nations have been building a river-based salmon fishery through a series of demonstration projects. Traceability is a necessity in this fishery as it must be clearly demonstrated at the point of retail sale the source of the fish to give the assurance that the fish have been handled and processed in sanitary conditions. It is also a necessary part of these fisheries to demonstrate that the fish are from the designated fish run and not from an endangered stock. This information will be obtained by performing DNA tests on fish samples.

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.

This project breaks new ground in the way it builds the groundwork for the sustainable Fraser salmon fishery of the future. New in-river selective commercial fisheries must demonstrate that they are achieving their goal of precautionary fishing and the reform of the black market fishery. The burden of proof is on the producer who must tackle this challenge head-on, by validating selective fisheries through weak stock management and product traceability – from river to plate.

Species and life stage(s) the project targets: please list

Sockeye – selective fishing of adults
Chum – product traceability

Watershed(s) the project targets: please list

Harrison River

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
A) Traceability	
<ul style="list-style-type: none"> • Fishery Location (where have the fish been caught) 	Yes – sold as Harrison River chum catch on www.myfishwarehouse.com which was co-funded by DFO PICFI
<ul style="list-style-type: none"> • Documentation of the Chain of Custody 	Yes – managed manually in 2008 through virtual warehouse and listed in accompanying report
<ul style="list-style-type: none"> • Investigation of traceability technologies – computerization techniques, bar codes, and radio frequency identification (RFID) 	Yes – analyzed in accompanying report
<ul style="list-style-type: none"> • Pilot project using appropriate traceability technology or technologies as indicated by the investigation 	Yes – rudimentary pilot project in 2008 using web-based system of manual tracking - DNA technology unsuitable for chum but recommended study design and technologies plan prepared for 2009
<ul style="list-style-type: none"> • Recommendation for future inland salmon fisheries 	Yes – see accompanying report
B) Selective Fishing	
<ul style="list-style-type: none"> • Sampling Plan Development 	Yes – developed through joint technical committee with DFO
<ul style="list-style-type: none"> • DNA sampling 	Yes – analyzed by DFO's DNA laboratory at Pacific Biological Station
<ul style="list-style-type: none"> • Recommended sampling protocol for future fisheries 	Yes – see accompanying report

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).

The study designs and results have been vetted through two intergovernmental committees:
 Test fishery science working group – Chehalis/Scowlitz/DFO committee led by Paul Ryall & Timber Whitehouse of DFO.
 Intergovernmental Working Group on Traceability - led by Chris Manore of DFO and Yves Antaya and staff of BC Fisheries

The study designs and outputs have been reviewed and reported to both committees. The final reports detail the investigations and the outcomes.

The test fishery demonstrated the mix of 4 discrete stocks of sockeye in the fishery, periods of dominance by the target stock, and evidence of unique temporal distribution. Further test fishery experimentation has been tentatively approved for funding by DFO in 2009.

The traceability study determined the challenges with DNA technology in salmon traceability into the market place, and an accompanying report outlines the range of technologies and identifies suitable choices that emphasize low technology systems in the fishery, specific challenges and problems in some control points for follow-up work in 2009.

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. There is an important role for test fisheries associated with new in-river salmon economic opportunities to support and validate precautionary fishing;
2. Traceability plans for the emerging in-river economic fishery must emphasize the low technology systematics

before investing in high technologies that are difficult and potentially expensive to implement with less results than what can be achieved with low technology in the fishery;

3. There is a need for additional work that can be achieved by piloting these new ideas in the developing fisheries.

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
Traceability System Development	<ul style="list-style-type: none"> • Manual systematic tracing with the processor and producer (web-based) • Technological investigations and analysis of suitability • Chain of custody documentation, gap analysis (control points) and study design for an advanced pilot in 2009 • Peer review with regulators and fishers
Fish stock identification	<ul style="list-style-type: none"> • Joint development of study design with DFO • Pilot implementation of test fishery (funded by DFO) • DNA-based fishery analysis (jointly by DFO and Chehalis) • Peer review with regulator

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.

In-river test fishing and traceability represent the building blocks for reforming the Fraser salmon fishery. In addition to the primary objectives around precautionary fishing and accountability, these activities provided other benefits. Test fishing results in-season inform harvest planning so that producers waste less money on mobilizing equipment and people when the target stock is not available in abundance. Traceability systems have demonstrated a benefit to fishing communities who are empowered to manage a community-friendly trade environment, provide financial incentives to fishers for sound quality management and accountability, and close-to-real-time reporting inherent in traceability systems empowers the fishers to evolve to greater heights in the value chain, improving employment and income prospects in the fishery.

Accompanying reports:

- 1) Harrison River Test Fishery 2008 – Investigations and results. Wilson K. H., and K. Charlie
- 2) Traceability Literature Review - Traceability Tools for an Inland Fishery. Robertson, R., UBC
- 3) Traceability Plan for 2009. Robertson, R. UBC
- 4) Chain of Custody Documentation (Gap Analysis) in a Harrison Chum Case Study. Robertson, R., UBC

Pilot Website: www.yourfishwarehouse.com

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