# THE RUNNER

February 2019 • Lower Fraser Fisheries Alliance

Sq'eptset Syoyes Sth'o'th'eqwi

# in this issue

04	Message from the Executive Director
06	Calendar of upcoming events
06	Last quarter's meetings and forums
07	Funding sources
07	Tier 3 Update
	Project updates:
80	Salmon River Risk Assessment
80	Spill Response
09	Climate Adapt
10	Blue Creek Restoration
11	Indigenous Guardians
11	Lower Fraser Aboriginal Knowledge Proje
12	Sqemélwelh Slough
	A MARTIN

#### EDITORIAL POLICY

The Runner newsletter is produced quarterly by the Lower Fraser Fisheries Alliance. Our purpose is to inform readers about LFFA organization processes, developments and news.

We will gladly accept signed comments, questions and opinions about our newsletter and will consider withholding contributor's name if desired. Individual articles from The Runner may be reprinted, photocopied or redistributed with permission from The Runner provided the date of publication and source of the material is indicated. Please notify The Runner if you would like to reprint an article.

All community members are welcome to contribute thoughts, articles and letters to The Runner.

Submissions and letters should be send to: The Lower Fraser Fisheries Alliance 2788 Sumas Mountain Road Abbotsford, BC V3G 2J2

Phone: 778.847.3323 Email: communications@lffa.ca

Publication is not guaranteed.



# staff & contributors

Murray Ned Executive Director

Rosalie Hope Program Assistant

Don Simpson Program Coordinator

Dionne Bunsha Aboriginal Knowledge Coordinator

Aidan Fisher Staff Biologist

Jeanne Hughes Staff Biologist

Mike Staley Contract Biologist

lan Hamilton Staff Biologist

Eden Toth Communications

In the old days there was a house on the top of Chilliwack Mountain facing down-river. The man who lived there had only one job; to watch for two silver bands on both sides of the river; millions of oolichan arriving. His job then was to run down the mountain to spread the word to other runners. People would come from near and far each year.

The Runner endeavors to do this job once again, albeit electronically.

Ken Malloway LFFA Chair

### Letter from the Executive Director

I am excited to see the re-establishment of our LFFA newsletter as a vital means of communication to each of the delegates, communities, and fishers that make up the twenty-two signatory Nations to the LFFA Governance Protocol and Society.

The last few years have brought substantial growth and change to the Lower Fraser Fisheries Alliance. Our three core Aboriginal Aquatic Resource and Ocean Management (AAROM) staff are busier than ever as we support several new projects annually with coordination, reporting and administrative services. While the demand for services has

increased, the AAROM budget has remained the same. This has, at times, impacted the organization's ability to be as effective as we would like. I am grateful for our employees continued commitment and dedication which has ensured we meet our AAROM deliverables. I am also hopeful that the

National Indigenous Fisheries Institute and the Indigenous Program Review conducted in 2018 will eventually result in increased fisheries program funding in the coming years.

Sumas First Nation remains the host agency to our AAROM agreement while LFFA continues to work towards more independence – our servicing agreement is no longer a flat administrative fee but rather our annual fixed and variable administrative expenses are paid directly by LFFA. This has enabled our organization to establish a core business department where we monitor and track all actual expenses, resulting in improved budgeting and increased fiscal accountability.

Our continued challenge is the reliance on DFO AAROM funding which, typically, means funds only begin to flow in the second or third quarter of each fiscal year. To minimize reliance on these delayed funds, LFFA endeavours to secure own source revenues through an economic development venture. We recently received funding to develop a partnership agreement with the Sumas First Nations Tilapia Aquaculture facility and construct a raceway (a large, rectangular fish tank) which should become operational in 2019 – so stay tuned for updates on this important project.

In other news, LFFA is now a proponent of Indigenous Services Canada and has secured multi-year funding for Climate Adapt and Lower Mainland Flood Management Strategy (LMFMS) projects – we have partnered with Solh Temexw Stewardship Alliance and Sto:lo Tribal Council to create a Secretariat to assume these LMFMS operations. With the resulting expanded organizational capacity and additional staff,

"The challenges are immense but the benefits of working for the salmon, our people and future generations are second to none." LFFA can now contribute to the rehabilitation of generational degradation of our respective Lower Fraser watersheds. We strive to support Nations as they re-establish

their roles as stewards and managers of the vital fish and aquatic resources in their territories.

LFFA currently serves twenty-two of the thirty First Nations in the Lower Fraser region and continues to maintain a relationship and communications with those that are not affiliated. We fully respect the autonomy of all Nations who pursue bilateral arrangements with DFO. Our organization also maintains Memorandum of Understanding agreements with the First Nation Fisheries Council, Fraser and Marine First Nation bodies and several First Nation organizations. In developing these formal and informal relationships, LFFA hopes to strengthen the response to the Fraser Salmon crisis and other issues affecting fisheries in the Lower Fraser.

Our delegates can be found on boards or committees at venues such as the National Fisheries Committee, First Nations Fisheries Council, Fraser River Aboriginal Fisheries Secretariat, Pacific Salmon Commission, Provincial First Nation organizations (BCAFN, Summit, UBCIC, FNLC) and numerous others. I am always impressed with the commitment of our Lower Fraser leadership, who often have so many other community priorities but still find time for fisheries and keep LFFA connected at the International, National, Provincial and Regional levels. This is imperative in ensuring our voices and concerns are heard by decision-makers across the country.

Our governance and administrative regimes have had a stable foundation for several years now to engage effectively at the Tier 1 and 2 levels. LFFA is starting to engage more with Non-Government Organizations (NGOs) who have similar objectives and goals to address salmon habitat and restoration requirements. The goal to fix the salmon crisis and declining stocks in the Fraser River system can not be achieved solely by any one government, Nation, NGO or Stakeholder.

The Fraser Estuary and Lower Fraser region is fully industrialized, and it is difficult to comprehend how we would restore the lost habitat. The head-waters of the Fraser River, although less industrialized, have been severely impacted by forestry, mining and agricultural practices. First Nations can not give up and must find ways to re-establish and restore traditional ways as well as contemporary methods to address the historical degradation of our watersheds.

Tier 3 engagement with NGOs, the Recreational and Commercial Sectors will play a significant role in LFFAs work moving forward. It will be a challenge to determine who we can align ourselves and I am sure we will learn from a few mistakes along the way.

In closing, I have been reflecting on how much LFFA has accomplished as an organization since its inception a few shorts years ago in 2010. Let's not forget to take the time to recognize the victories – big and small – and celebrate each other's presence as fishers working together. I am inspired by our leadership, who allow me the flexibility to do long-term, strategic planning as well as participate on numerous provincial and regional committees. The challenges are immense but the benefits of working for the salmon, our people and future generations are second to none.

Yours in Unity,

AC

Murray Ned

Executive Director Lower Fraser Fisheries Alliance



# 3rd quarter at a glance

# Overview of last quarter's meetings

November Forum Leq'a:mel First Nation Community Hall. Nov. 21-22, 2018

This forum was Tier 1 in the morning and Tier 2 in the afternoon.

Tier 1 discussed: •Approval of the November 2018 LFFA Forum Agenda, decision required. •Approval of the July 2018 LFFA Forum Minutes, decision required. •Post Season Review, no decision required.

Tier 2 discussed: • 2018 Post Season Review • National Fishery Monitoring Policy • 2019 Eulachon Allocation

#### **December Forum**

Vancouver, BC. Dec. 11-13, 2018

This forum was all Tier 1 and covered a range of general administrative topics and issues: • Approval of the December LFFA Forum Agenda for December 11 -13

• Review and approval of the November 21 and 22, 2018 Forum Minutes

• Lower Fraser 2018 Post Season Review for Delegate Feedback

• LFFA program and project updates

• LFFA partnership project updates

FNFC/LFFA Charter Update

### Upcoming events





Did you know? From 2016 to 2018 LFFA has managed a budget of \$1M + annually

 Aboriginal Aquatic Resources and Oceans Management (AAROM)

Aboriginal Fisheries Strategy (AFS)

•Fish Habitat Restoration Initiative (FHRI-WCE)

•Oceans Protection Plan (OPP)

 Lower Fraser Aboriginal Knowledge (LFAK)

•Habitat Conservation Trust Foundation (HCTF)-STURGEON

•DFO Biological Station (EULACHON) Assessment

•Pacific Integrated Commercial Fisheries Initiative (PICFI)

•Aquaculture Development Strategy (ADS)

Indigenous and Northern Affairs
Canada (INAC) - CLIMATE ADAPT,
LMFMS,)

### Tier 3 Update

#### Don Simpson

The LFFA has had a liaison arrangement with the local Recreational sector through the nine-year-old Fraser River Peacemakers of which was formally the Joint-Sportfishing-First Nations Working Group (JSFNWG) established in 2009. Many incidents of conflict continue on the Fraser River and its tributaries between Indigenous fishers and their families and non-indigenous individuals.

LFFA continues to seek opportunities to engage and educate any who express willingness to understand the truth and reality of Indigenous priority. Those Rights are as defined and established in Section 35(1) of the Canadian Constitution and Supreme Court of Canada decisions such as "Sparrow" that clarify and affirm Indigenous Rights and priority to the land and its resources.

Recently (Q3) The Fraser River Sportfishing Alliance (FRSA) now in its third year of operations, have approached the LFFA to engage in dialogue on a regular basis and advocating for the creation of a round table as a vehicle to facilitate discussions with respect to "equitable fishing opportunities for all sectors".

While not fully developed at the time of this article, LFFA continues to work on an engagement protocol for Tier 3 activities. The Tier 3 element of LFFA is still in its early stages, but understands that it has been and continues to be a very important part of relationship building and an element of the LFFA five year strategic plan.

### Salmon River Risk Assessment

#### lan Hamilton, LFFA Staff Biologist

The Salmon River in Fort Langley has historically been known as an important spawning and rearing habitat for all five species of Pacific salmon. Previously, it was used as an index river for management decisions of Coho Salmon for the entire Georgia Strait and has long been known as one of the most productive river systems for Coho in the Lower Fraser region. However, due to fisheries pressure and substantial residential and agricultural development within the watershed, only Coho and a small resurgent population of Chum Salmon remain.

In an effort to mitigate future risk from fisheries and climate change, the LFFA is working in partnership with the First Nations Fisheries Council and First Nations Fisheries Legacy Fund to conduct a risk assessment workshop for Coho Salmon within this watershed.

Using a Risk Assessment Methodology for Salmonids (RAMS), devised by the Pacific Salmon Foundation and the Department of Fisheries and Oceans, we are helping facilitate a two-day collaborative workshop based on a life-history model to identify risk factors both currently and in the next 30-50 year period.

In doing so, our aim is to unite invested parties from First Nations, DFO, NGO groups and representatives from industry in a collaborative approach to mitigate potential risks faced by Coho salmon within the Salmon River. A life-history model has been designed to identify risk areas within the developmental stages of these fish and design procedures to conserve current stocks and promote productivity for future generations of Coho Salmon.

The workshop was held on January 30th and 31st at the Kwantlen Community Centre whereupon all invited parties gathered to share knowledge, identify areas of conservation concern and prepare action items for future conservation measures. The workshop hoped to achieve two major objectives: First, not only provide clear management strategies for preserving Coho stocks within this river but to highlight the merits of this approach as a template for identifying and managing risk to salmonid populations across the region. Secondly, to show the merits of a co-management, co-design approach intended to engage all invested parties involved in the harvest, management and survival of salmonids within the Salmon River and other similar watersheds undergoing threats to their native salmon populations.



## Spill Response

Dionne Bunsha, LFFA Staff

With more oil transportation planned in the Lower Fraser area and greater risk to our ecosystem, LFFA has been involved in various spill response planning initiatives. Within the last year, we have participated in spill response calls whenever there has been a spill. There was a spill near Mission and two spills near Richmond.

LFFA staff, Murray Ned and Dionne Bunsha, attended Transport Canada Oceans Protection Plan meetings.



In 2016, the \$1.5 billion national Oceans Protection Plan was launched to improve marine safety and responsible shipping, protects Canada's marine environment, and offers new possibilities for Indigenous and coastal communities.

The LFFA has also been involved in cross border spill response initiatives. LFFA staff, Dionne Bunsha attended the Salish Sea Shared Waters Forum in Oct 2018 in Bellingham and the Transboundary Vessel Traffic Summit at the Swinomish in June 2018.

On 28 March 2019, we will be organizing a Spill Response Forum to discuss our vision for LFFA member Nations involvement in Spill Response. We look forward to seeing you there.

### Climate Adapt

We started our Climate Adapt project in 2017 to support First Nations in planning for and adapting to the potential impacts of climate change on their fisheries and increasing ecosystem resilience. The end result of this project will be a First Nations-led plan on measures we would like to take to adapt to climate change and create ecosystem resilience. Implementing the plan would create jobs and build capacity. (e.g. restoration, monitoring etc.).

In the 1st phase of the project (2017-18), we created a spatial database and maps of environmental values important to FNs. In March 2018, we hosted our 1st Spill Response Forum at Sumas First Nation and where our members looked at preliminary maps and give us valuable feedback on the project.

We are now in Phase 2 and will be hosting Sub Regional meetings in March 2019 to get your inputs. We look forward to seeing you at the meetings and getting your valuable inputs. LFFA's Climate Adapt project got some international attention thanks to Jimmy Allen from Zoetica Environmental who has been working as a contractor on the project. Jimmy presented a paper titled 'Integrating Scientific and Indigenous Knowledge to plan for Fisheries Resilience in the Lower Fraser River' at a conference of The International Society of City and Regional Planners in Bodo, Norway in October 2018 and the article was published in their journal titled ISOCARP Review 14.

We look forward to seeing you all at Sub Regional meetings in March 2019 to get your inputs on the project.

### Project update: Blue Creek Restoration

#### lan Hamilton, LFFA Staff Biologist

The location of this restoration project falls within the traditional territory of the Katzie First Nation. Located within the Pitt Lake and Pitt River systems, approximately 63km northeast of Vancouver, the watershed in question, known as Blue Creek, is a tributary of the Pitt River which flows into Pitt Lake and eventually, the Fraser River.

Historically, the Pitt River has been a key site for spawning, rearing and incubation of all five species of Pacific Salmon. The proposed project focuses on restoring damaged spawning habitat within this creek system. This will involve removing in-stream barriers, stabilizing the culvert located off Pitt River Forest Service Road (FSR) at kilometre 28, implementing landslide prevention measures and repairing spawning gravels within the creek to provide sufficient habitat for historic Chinook populations to return.

The original issue arose due to a collapsed culvert, implemented by the Teal Jones logging company, which diverted drainage waters down the upper bank of Blue Creek. The diverted water then triggered a landslide which filled in much of the lower kilometre of Blue Creek with large rocky debris and substantial sediment. The damaged culvert has since been replaced, though the stability of this installation is questionable. Proper monitoring and maintenance will be required to prevent future issues. The resulting impasse within the creek has resulted in heavy loss of key fish habitat and reduced flow rates and water quality.

This project plans to remove these rock barriers with the use of heavy machinery and install new gravel beds designed to

promote salmon spawning and provide crucial habitat for juvenile incubation and rearing. Mitigation procedures will be implemented to manage this damaged area to prevent further damage and environmental monitoring efforts will be needed to assure the return of historic Chinook populations. These activities will be undertaken with the full community support of Katzie First Nation in partnership with the Lower Fraser Fisheries Alliance.

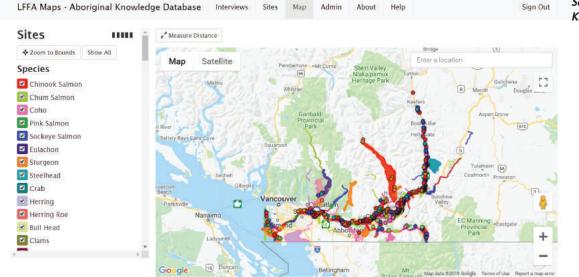
The project is still in the preliminary stages of planning and project design. A letter of intent was sent to the WWF Restoration Fund which has since called for a full project proposal. It is our hope to secure these funds as a means of leveraging further funding from other government and private sources and begin much-needed restoration work within this waterway. Lower Fraser Chinook are currently listed as an Endangered Species by COSEWIC and in dire need of support to maintain current stocks. It is our goal to restore this habitat to its historical state and promote spawning within an economically and culturally important species.



Landslide at Blue Creek

## Lower Fraser Aboriginal Knowledge Project

Dionne Bunsha, LFFA Staff



Screenshot of the Knowledge database

The LFFA's Aboriginal Knowledge project has been mapping important areas to protect for aboriginal fishers. So far, we have 11 Nations participating in this project, and are looking for more to sign up. We have mapped more than 9,000 fishing sites, habitat sites and cultural sites in our database, which can be found online at: www.lffamaps.ca. Only staff and leaders authorized by their Nations can login to the website to view the data.

In February, we are planning to to conduct group interviews about Place names and river Navigation points in each of the four LFFA sub-regions in February and March. This is building on the work on Place Name being done by Naxaxalhts'i (Sonny) McHalsie at Stolo Nation.

Naxaxalhts'i and Sue Formosa from Stolo Research and Resource Management Centre (SRRMC) will also be present to guide the interviews. Each group interview will have 3-4 interviewees. The end result will be a map of Navigation Points and Place Names along the river that can be used by all our fishers.

### Indigenous Guardians

The LFFA has developed a proposal for an Indigenous Guardians program and is looking for funding from several sources.

Based on feedback from our members, the priorities for Guardians work would be fish habitat restoration projects, environmental and cultural monitoring, research, habitat assessment, stock assessment, stream walks, river patrols, spill response, education and awareness.

LFFA staff members Murray Ned and Dionne Bunsha attended the First Nations National Guardians Gathering in Ottawa in May 2018.

We are hoping to find funding to start a Guardian program in the near future.

## Sqemélwelh Slough

Coho salmon



Salish sucker



Cutthroat trout



#### Jeanne Hughes, LFFA Staff Biologist

Beginning in May 2018, the Lower Fraser Fisheries Alliance has been partnering with Chawathil First Nation and Pearson Ecological to assess the feasibility of restoring Sqemélwelh Slough and its tributary creeks. The people of Chawathil have fished Coho and Chum salmon, as well as Cutthroat trout, from this system since time immemorial. In recent decades the impacts of flow diversions, infilling, and upslope logging have severely degraded these creeks; large areas of the system now are completely dry in the summer, and the creeks are no longer connected to the Fraser River due to flow diversions. The Chawathil community is interested in restoring salmon populations to the Sqemélwelh system.

After doing some preliminary site assessments, Chawathil community members, LFFA staff biologists, and Pearson Ecological conducted field work, including fish trapping, water quality monitoring, habitat assessment, temperature monitoring, as well as walking Sqemélwelh Slough to see if it connected to the Fraser River during times of higher flow.

During fish trapping, 237 fish of 11 species and 30 amphibians of 4 species were captured. Of particular note are coastal cutthroat trout, rainbow trout, coho salmon, and Salish sucker. Salish sucker is listed as Endangered under the Species at Risk Act.

Restoration of Sqemélwelh was found to be feasible, and Pearson Ecological developed a restoration plan that consists of three phases for the system:

Phase 1: removing fill and creating fish habitat in the area of an abandoned agricultural project site located immediately east of the pond where the Salish sucker and coho salmon were found.

Phase 2: Reconnect flow from Sqemélwelh to the Fraser River by excavating a channel in order to restore salmon runs (coho and chum) to Sqemélwelh.



Phase 3: Detailed assessment of Cho:lequ Creek, which is located upstream and east of Chawathil Road. Currently Cho:lequ Creek receives large deposits of sand from upstream logging. This phase would involve significant work off reserve involving the landowner to the north.

Due to the presence of the endangered Salish sucker, the restoration project qualifies for funding under the Aboriginal Fund for Species at Risk (AFSAR). Chawathil First Nation submitted a proposal to AFSAR for the first two phases of the proposed restoration plan. This restoration plan will not only benefit the Salish sucker, but also salmon species, as these fish generally occur together. If approved, restoration at Chawathil will begin in May 2019.



#### Phase 1

Removing fill and creating fish habitat in the area of an abandoned agricultural project site located immediately east of the pond where the Salish sucker and coho salmon were found.

### Phase 2

Reconnect flow from Sqemélwelh to the Fraser River by excavating a channel in order to restore salmon runs (coho and chum) to Sqemélwelh.

#### Phase 3

Detailed assessment of Cho:lequ Creek, which is located upstream and east of Chawathil Road. Currently Cho:lequ Creek receives large deposits of sand from upstream logging. This phase would involve significant work off reserve involving the landowner to the north.



ちち