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Survival of the Lower Fraser and People of the River

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Survival of the Lower Fraser and People of the River

2018 Salish Sea Ecosystem Conference
April 6, 2018



Presentation Outline

- The Lower Fraser River
- The Lower Fraser Fisheries Alliance
- Food, Social and Ceremonial (FSC) Fisheries and Challenges
- How are Lower Fraser First Nations (LFFNs) adapting? What do LFFNs need?



The Lower Fraser River

- Approximately 190kms of River from the mouth of the Fraser to Yale Canyon
- 30 independent First Nations in the Lower Fraser region
- Multiple ecosystem threats (i.e. urbanization, industrial activities, river connectivity, etc.)



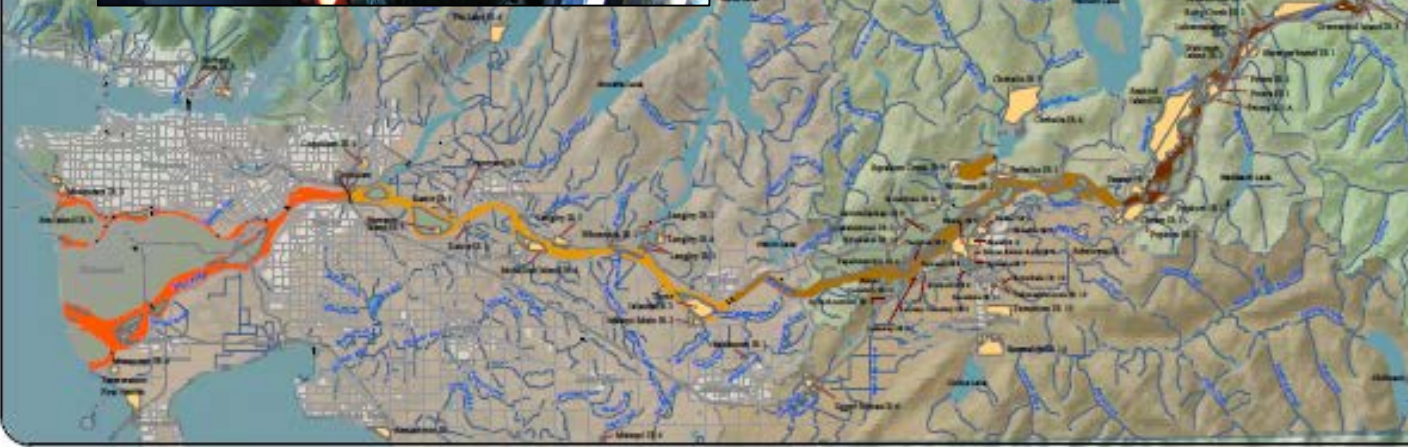
Lower Fraser Fisheries Alliance Regional Overview



Diverse environment,
Diverse fisheries



Watersheds
Watershed
Watershed
Watershed
Watershed



Legend:
 — Bridge & Tunnel
 — Rail
 — Road
 — arterial
 — collector
 — freeway
 — highway



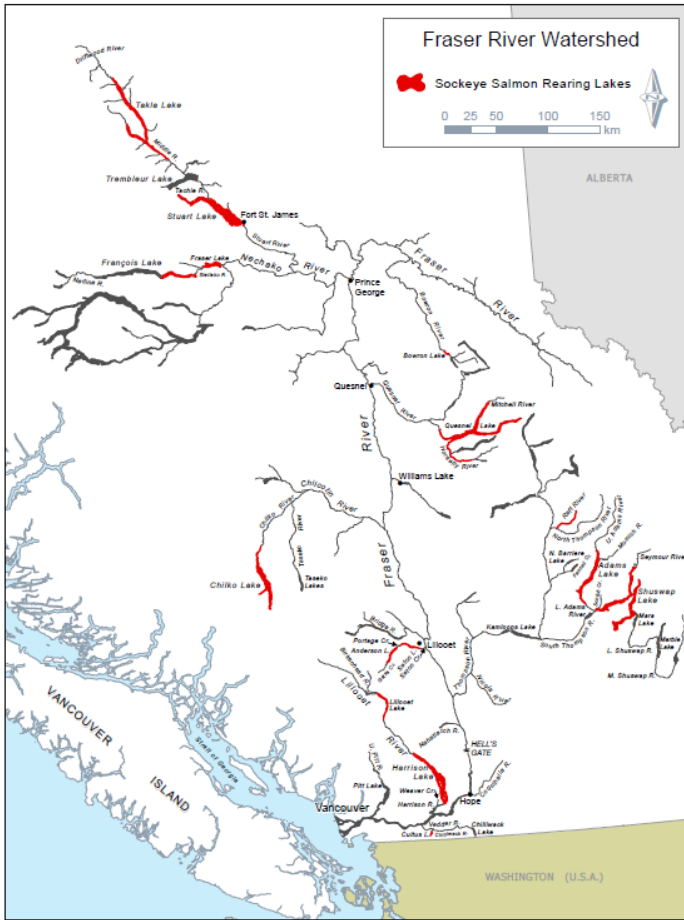
Scale: 0 15 30



This LFFFA region report was developed on the request of the region of the Craft Government Provincial Report 2014 and the terms of the initiative used by salmon as defined in the Government. These regions should be considered to be in shell form as of Oct. 1, 2012.

All portion of the map received from U.S. Parks Service

Beyond the Lower Fraser...



- Many other First Nations communities that fish in the Middle and Upper Fraser River and all Fraser salmon stocks pass through river mouth
- Many more FN communities (and others) that intercept Fraser-bound fish in the marine areas



Lower Fraser Fisheries Alliance



- Organization formalized in 2011
- 22 of the 30 Lower Fraser First Nations are signatories to the LFFA's governance protocol
- Primarily, the LFFA works with First Nations (Tier 1) to plan fisheries and provide technical and resource capacity to engage with Governments (Tier 2) and stakeholders (Tier 3)



Mission and Vision Statements

Mission Statement:

“To promote and support the management of a robust and expanding fishery for the First Nations of the Lower Fraser River.”

Vision Statement:

“The LFFA is a voice for the First Nations of the Lower Fraser River. We work collaboratively and holistically to manage our fishery and to support our cultural and spiritual traditions for future generations.”



Food, Social and
Ceremonial Fisheries

+

Challenges

Salmon

- Primarily a mixed stock fishery
- Targeted fisheries on sockeye, chinook, chum and pink (odd years); Bycatch retention of hatchery coho
- No retention of steelhead



Challenges

- Low returns and recruitment (spawning + survival)
- No directed sockeye fishery and no dry rack fishery in 2017
- Heavier reliance on chum and pink fisheries
- Staple for LFFNs food security is threatened
- Lost fish habitat
- Concerns around open-pen aquaculture and diseases
- Weak stocks constraining fisheries on more abundant stocks
- Priority access under s.35.1 and inherent rights to access is compromised
- Socio-economic impacts not representative for LFFNs

Eulachon

- Fraser eulachon still under review for Canada's Species at Risk Listing as "Endangered Species"
- Limited FSC access (limited number of fishers per community)
- Conservation concern, low return numbers
- Run-timing of eulachon: three return peaks
- Spawning habitat for eulachon, where and what effects?



Challenges

- Low returns and recruitment (spawning + survival)
- Uncertainties with marine survival and migration corridors
- Did not meet harvest targets in 2017
- Lost fish habitat
- Lost food and cultural connection, younger generation growing up without access
- Socio-economic impacts not representative for LFFNs

White Sturgeon

- Lower Fraser First Nations enacted a voluntary moratorium on white sturgeon FSC fisheries in the 1990s which is still in place
- Strong desire from communities to have limited access to white sturgeon for FSC purposes
- Large recreational catch-and-release fishery in the Lower Fraser



Challenges

- Small population and limited recruitment (spawning + survival)
- Earlier freshets, warmer water temperatures and low summer flows
- Physiological stress and effects on spawning
- Low eulachon numbers (prey species)
- Lost fish habitat
- Lost food, medicinal and cultural connection, younger generation growing up without access
- Socio-economic impacts not representative for LFFNs



Shellfish and crab

- Limited access
- Not in the Fraser mainstem
- Restoring lost habitat from urbanizations

Challenges

- Lost habitats
- Sanitary concerns
- Coastal sea-level rise will likely affect habitats
- Socio-economic impacts not representative for LFFNs



How are LFFNs adapting?
What do LFFNs need?



How are LFFNs adapting?

- Include the protection of fish habitat and fishing sites in coastal and inland river flood adaptation projects
- Community and Regional Fish Habitat Restoration:
Lower Fraser Strategic Regional Fish Habitat Restoration Plan
- Assisting right holders to access terminal harvest opportunities for abundant stocks
 - Mixed stock fisheries -> Single stock fisheries



How are LFFNs adapting?

- Expanding fishing opportunities, exploring/ re-introducing alternative fishing gears
 - Fish weirs, fish wheels
 - Others?
- Developing a Governance Process in the Lower Fraser
 - What does it look like with renewed Nation-to-Nation relationship?
- Re-establishing a Lower Fraser eulachon stock assessment program
- Lower Fraser White sturgeon Monitoring Project

What do LFFNs need?

- Expansion and more representative stock assessment for Lower Fraser salmon, particularly coho, chum and steelhead
- Potential run time changes and how it impacts fisheries
- Community-based water monitoring network, establishing environmental flow needs
- Better understanding of climate change extremes, not just averages
- First Nations-led and directed socio-economic impact studies
- Research on cumulative effects on Fraser salmon (and other species)

What do LFFNs need?

- Integrating Aboriginal Knowledge with Western Science
- Collaborations:
 - First Nations-to-First Nations (Regional MOUs with other FN groups)
 - First Nations to Government (Federal, provincial and local governments)
 - First Nations to Stakeholders (Other users of the Fraser River)
 - Transboundary Partnerships (i.e. Salmon, Killer whales, Climate Change)
- Full implementation of the UN Declaration on the Rights of Indigenous Peoples (UNDRIP)
 - Free, prior and informed consent (FPIC)



Thank you!

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