Spotlight on the Nicola Watershed Salmon Ecosystem Table (SET)

Fraser Salmon Management Council Fraser & Marine Approach Salmon Visions Forum

November 27, 2024
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DFO Integrated Planning for Salmon Ecosystems Team



Presentation Overview

- The Nicola Watershed and Threats to Salmon
- How the Salmon Ecosystem Table came to be
- Our Goal: the Nicola Watershed Integrated Salmon Ecosystem Strategy
- **What can we learn from this process?**
- Upcoming Engagement and Opportunities to Collaborate

Nicola Hydrology and Watershed Groups

Located in the traditional territory of the Nlaka'pamux and Syilx people.

Watershed Groups & Major Waterbodies

Lower Nicola River · 3671 km²

 Clapperton Creek, Coldwater River, Lower Nicola River, Spius Creek

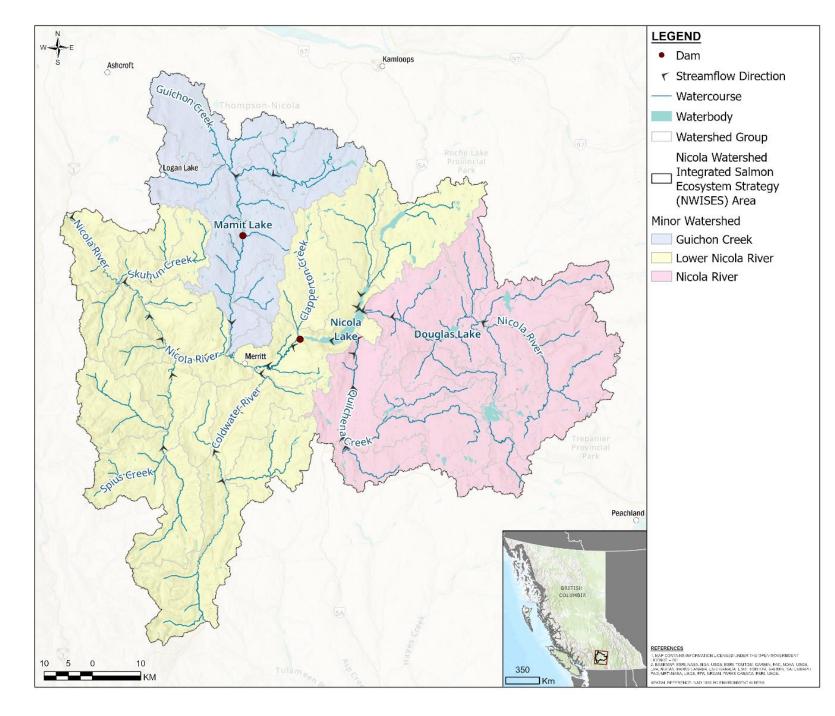
Nicola River · 2289 km²

Upper Nicola River, Quilchena Creek

Guichon Creek · 1224 km²

Guichon Creek

Total Area: 7,184 km²



Data retrieved from BC Data Catalogue
Map created by DFO FFHPP Integration & Reporting GIS.

Anadromous Salmon Populations in the Nicola Area

	CU Index and Name	WSP Status	COSEWIC DU and Status	Salmon CUs in Watershed Groups		
Species				Nicola River	Lower Nicola River	Guichon Creek
k'wy'i?e/pəgéłus - ntytyix Chinook salmon	CK-17 – Lower Thompson SP 1.2	Red (poor)	DU15 – Endangered		*	√
sxa ygs - kisú? Coho salmon	CO-7 – Lower Thompson	Green (good) / Amber (fair)	DU6 – Threatened	>	`	√
Pink salmon	PKO-1 — Fraser River	Green (good) / Amber (fair)	Not assessed	*	*	√
cóswłe? - gwayggaysaća? Steelhead trout	Thompson River*	Not assessed	Endangered		√	✓

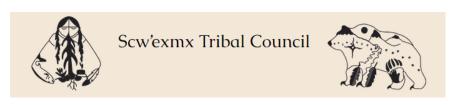
Indigenous species names retrieved from Mazany-Wright et al. (2021).

Nicola Watershed Land Uses

Land Use	Guichon Creek·1224 km²	L. Nicola River·3671 km²	Nicola River·2289 km²	Total·7184 km²
Forest Tenure Cutblock	404 km² (33%)	628 km ² (17%)	511 km² (22%)	1,543 km² (22%)
Agricultural Land Reserve	166 km² (14%)	475 km ² (13%)	800 km ² (35%)	1,441 km² (20%)
Permitted Mine	56 km² (5%)	15 km² (<1%)	N/A	71 km² (<1%)
Built Area	6.8 km ² (<1%)	24 km² (<1%)	1.6 km ² (<1%)	32.4 km ² (<1%)
Road Length	4,123 km	9,013 km	4,997 km	18,133 km
Pipeline Length	214 km	710 km	326 km	1,250 km



How the Salmon Ecosystem Table came to be





Salmon Ecosystem Table Membership







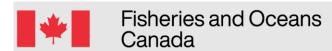












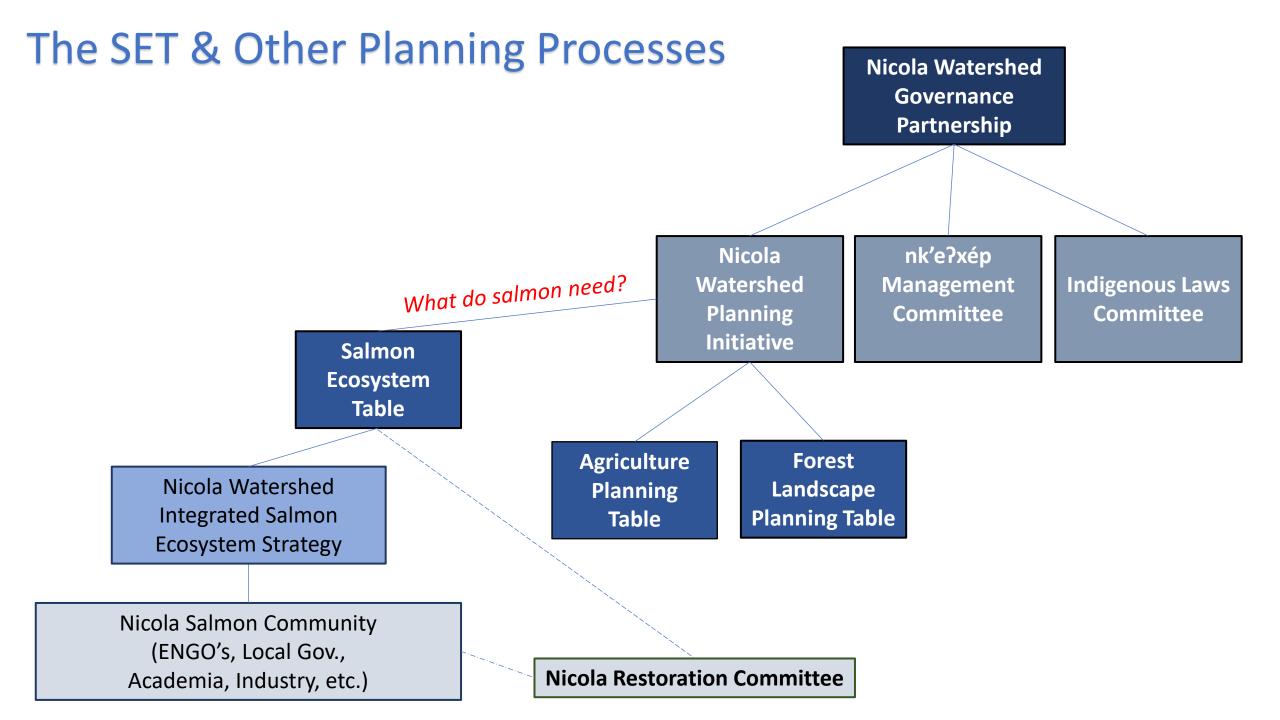
Pêches et Océans Canada

The Purpose of the Salmon Ecosystem Table

Our goal is to develop the Nicola Watershed Integrated Salmon Ecosystem Strategy

Watershed Vision:

Work collaboratively and strategically in an environment of mutual respect and accountability to create an ecosystem strategy that will support long-term recovery and resilience of salmon in the Nicola Watershed.



Strategy Development and Timeline



Top Threats in the Nicola



- Temperature Extremes
- Altered Hydrograph (H2O quantity & timing)
- Activities that degrade habitat
- Human disconnection to fish and land
- Poor water quality
- Land disturbance
- Invasive species



Level	Conditions	What to Expect	
		There is sufficient water to meet human and ecosystem needs	
2 (Yellow)	Dry	First indications of a potential water supply problem	
3 (Orange)	Very Dry	Potentially serious ecosystem or socio-economic impacts are possible	
		Water supply insufficient to meet socio-economic and scosystem needs	
Loss of Supply		Potential loss of community's potable or fire fighting water supply	







Strategy Overview

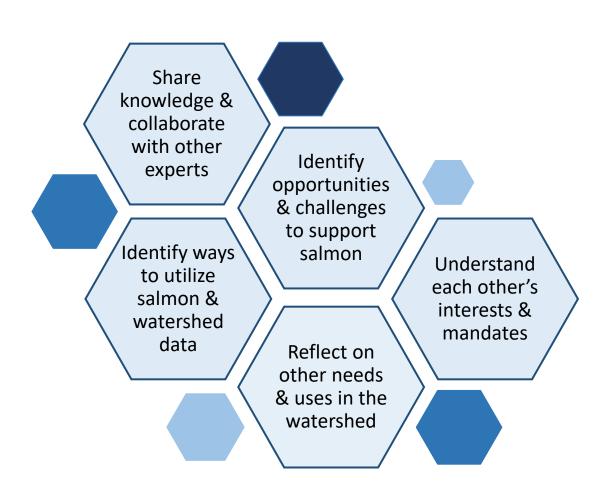
- Co-developed with partners
- Technically focused and grounded in best available research and local and Indigenous knowledge
- Focus is on salmonid habitat & ecosystems
- In alignment with other planning processes
- The outcome will be prioritized immediate, mid- and long-term recommendations and actions and highlight "What do Salmon Need"
- Will include identification of potential funding mechanisms for implementation



Chinook in the Nicola River, Salmon Watersheds Lab Jonathan Moore and Team

Goal is to inform the work of SET members, the Nicola Watershed Planning Initiative, other jurisdictions, and those living and working in the Nicola watershed as we work together towards a healthier aquatic ecosystem.

Upcoming Engagement Opportunities



- Salmon Habitat Mapping
 - Ongoing reach out to join in
- SET Information Session
 - January 2025
- Workshop #3: Action Identification
 & Prioritization
 - March 2025
- Collaboration and info sharing with Nicola Restoration Committee
 - Ongoing

What has been learned from this process?

- Support Structures
- Resource/Process
 Requirements
- Tools/Tech Needs
- Limits to Progress











