



k^wik^wəłəm
Kwikwetlem First Nation

k^wik^wəłəm (Coquitlam) Sockeye Restoration

Coquitlam River Watershed Roundtable
Vital Signs: Checking our Watershed's Health
November 2023

k^wik^wəłəm (Coquitlam) Sockeye – The dam issue

1st dam with fish ladder on the right

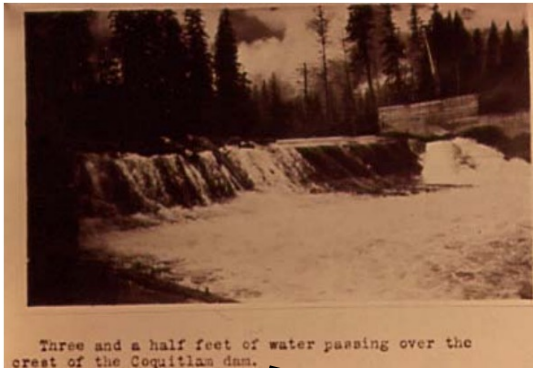


Photo credit: BC Hydro archives

Outlet of Coquitlam Lake, deforested for dam construction



Photo credit: BC Hydro archives

Coquitlam dam (2008)



Photo credit: BC Hydro

- Coquitlam Dam:
- 30m height
 - No fish ladder
 - Flows to Coquitlam R. provided by Low Level Outlets

- Dam Impacts:
- Hydrology
 - Pool height
 - Fish passage barrier

1886 – Coquitlam Water Works Company (Drinking water)

1889 – Purchased by New Westminster

1902 – Vancouver Power Company (BC Hydro)

1903-05
1st dam (3m, fish ladder) & Tunnel To Buntzen Lake

1912-13
2nd dam

2008
Seismic upgrade

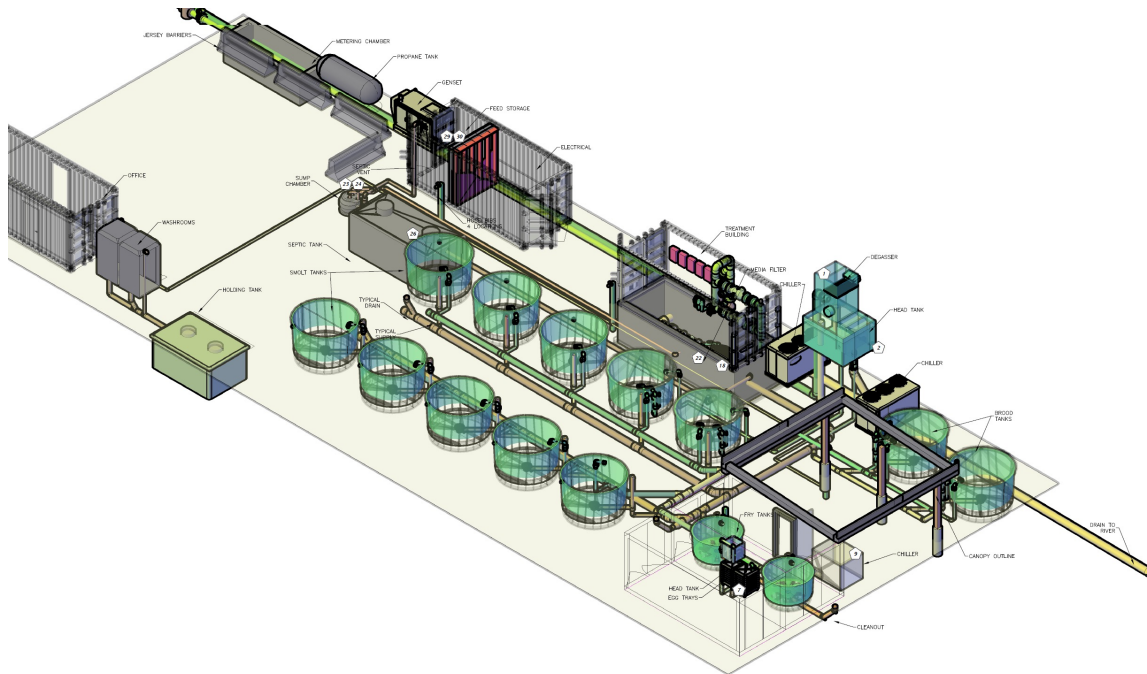
Today

Without access to the Lake, sockeye have been deemed extirpated from the Coquitlam Watershed since 1914

A partnership between....



kʷikwə́ləm
Kwikwetlem First Nation



Why build the hatchery?

- Limiting factor for re-establishing Sockeye is the # of juvenile that are produced from Coquitlam L.

→ improvements to juvenile fish passage are required.

Hatchery objective: To understand the strength of the anadromy trait (desire to migrate to the ocean and return) for kʷikwə́ləm Sockeye, revise smolt to adult survival rates

Current update

- Hatchery is under construction - anticipated completion in 2024.

- Egg incubation is targeted to start in 2024.

Other work underway:

- Coquitlam kokanee hydro-acoustic survey of Coquitlam L. – abundance and bio-mass estimate.

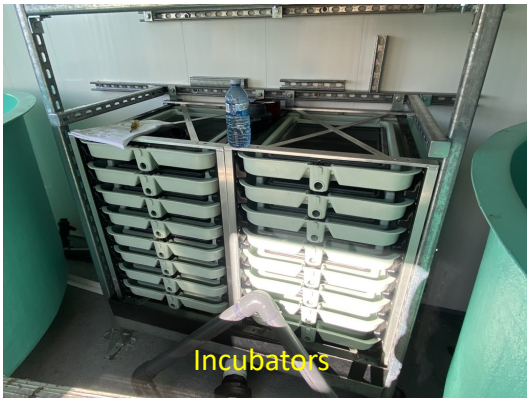
- Broodstock capture for milt cryo-preservation.



Hatchery site viewed from the front



Backup generator



Incubators



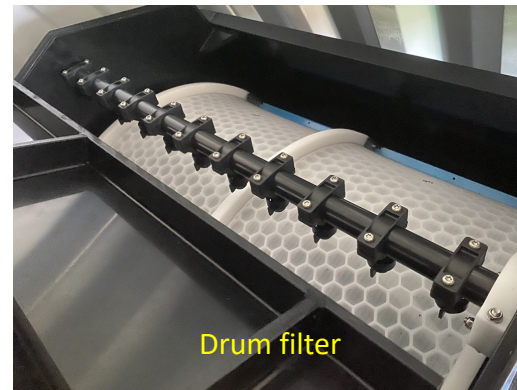
Hatchery site from the north west viewpoint overlooking the construction activities



Circular tubs for grow out



Inside of a UV unit



Drum filter

k^wik^wəłəm Sockeye Hatchery Program Contact

- Rodney Lee, Project Coordinator, k^wik^wəłəm First Nation
 - (m) 604-353-7491
 - rodney.lee@kwikwetlem.com