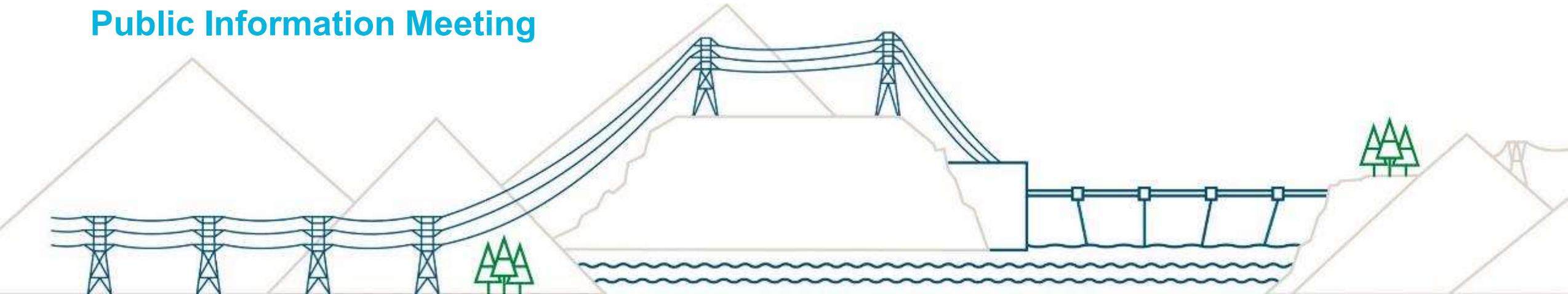


Wahleach Water Use Plan Order Review

Public Information Meeting



25 April 2022

Objectives and Agenda

- Objectives

- Provide an overview of the Wahleach Water Use Plan Order Review (WUPOR) renewal process and discuss system operations
- Identify next steps in the WUPOR process

- Agenda

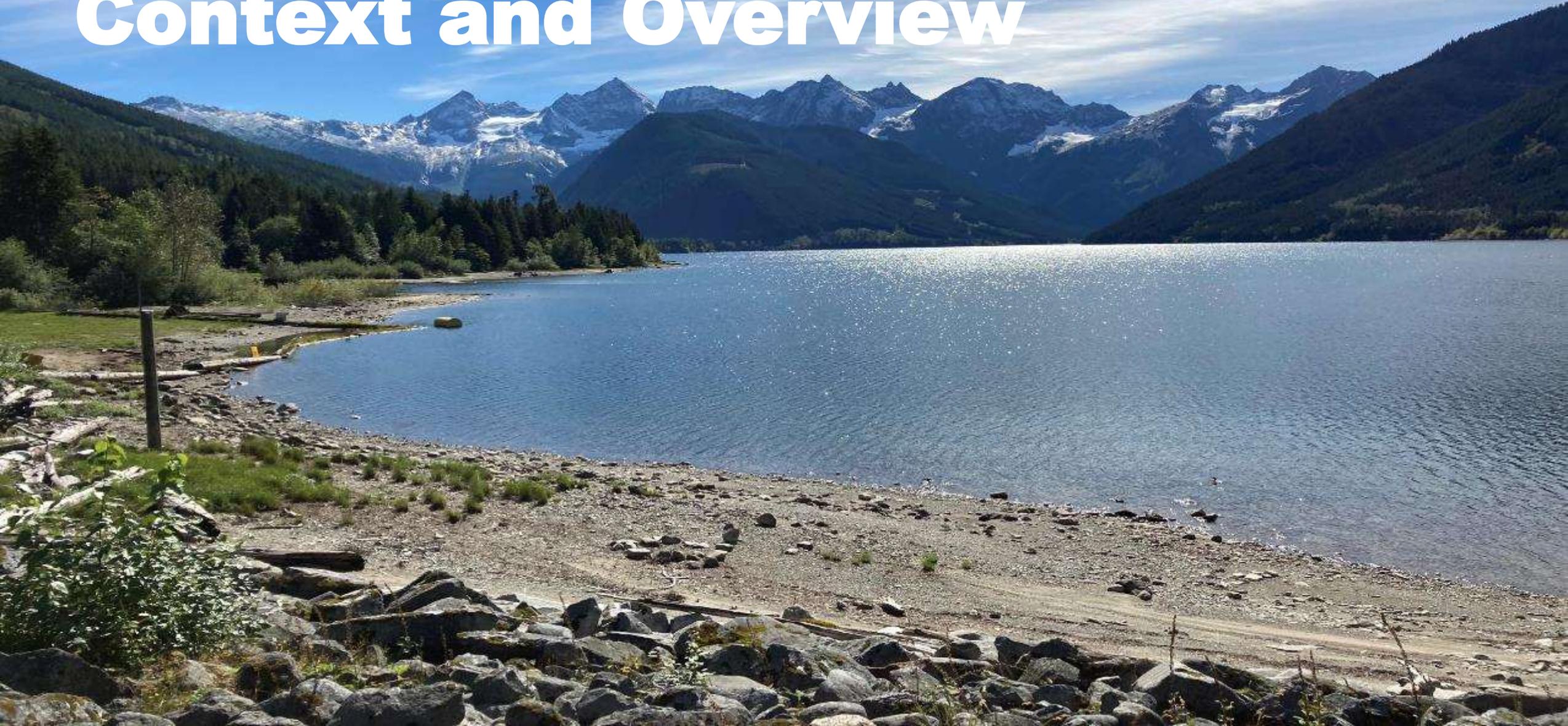
- Welcome & Introductions
- WUPOR Context and Overview
- Next Steps and Q&A

Virtual Meeting Etiquette



- Use the 'raise your hand' button or the chat box for comments/questions
- Use your camera, particularly when speaking
- Mute your microphone when not speaking
- Please don't use a virtual background with video to save bandwidth
- Share air space so that everyone can participate
- Challenge ideas, not people
- We aren't recording this session, and kindly ask that others do not record

WUPOR Context and Overview

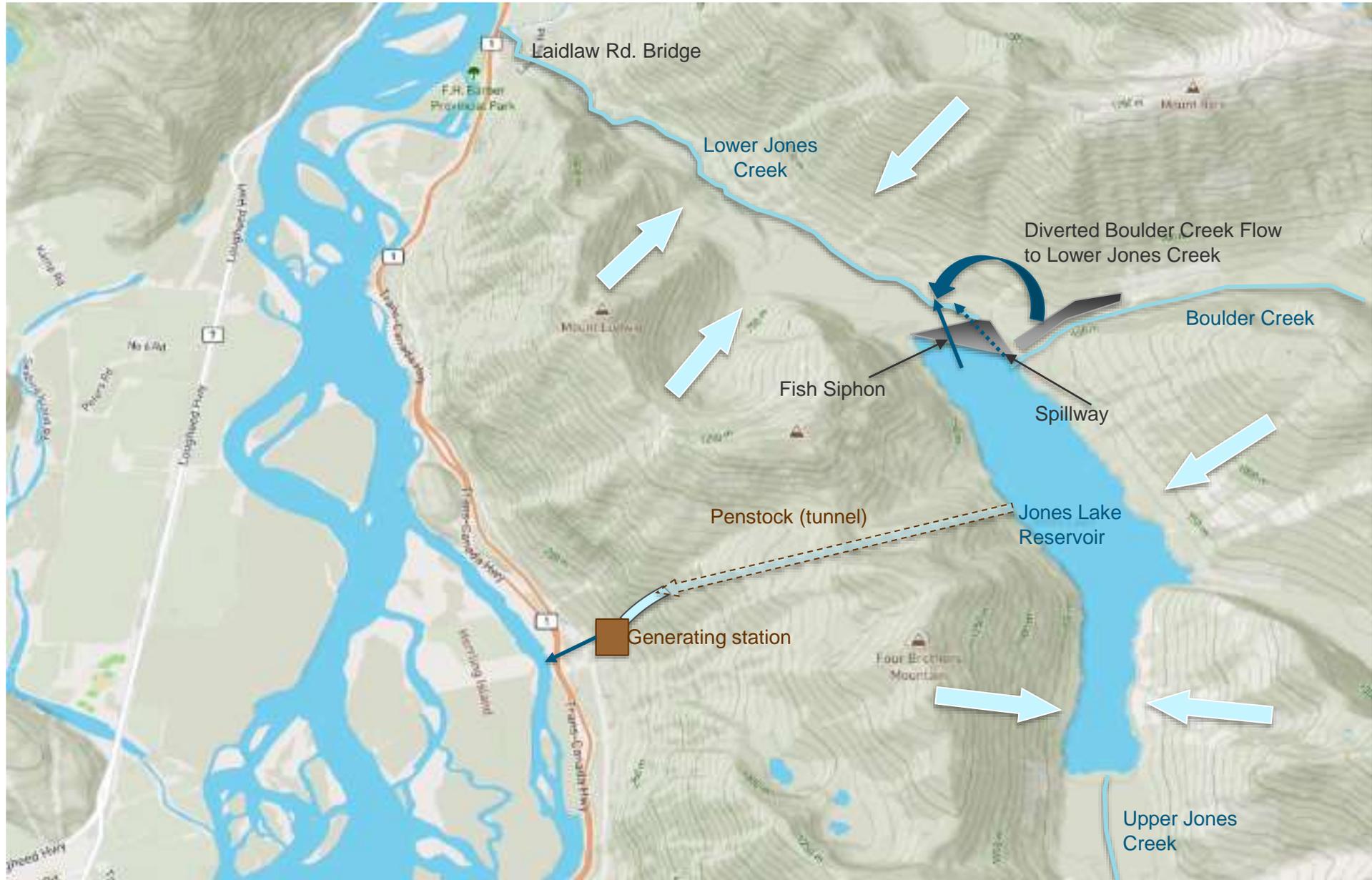


WUP/WUPOR 101

What is a Water Use Plan, Order and Order Review?

- Water Use Plans (WUPs) were mandated by the Province under the *Water Act* in the late 1990s, with an aim to provide a better balance between power production and other water uses.
- Water Use Plans are implemented through an Order issued by the Comptroller of Water Rights (CWR).
- The Order stipulates how BC Hydro can operate within a watershed by imposing operational constraints, monitoring programs, and physical works.
- The Province requires WUP Orders to be reviewed to ensure intended benefits are being achieved.

Wahleach System Overview



Water Use Planning at Wahleach

History

- Water Use Plan submitted to the Comptroller of Water Rights (CWR) in 2003
- Water Use Plan Order issued by CWR in 2005
 - 2009 Amendment
- *Fisheries Act* Authorization issued in 2009

Original Issues Identified

- Fish
- Recreation
- Flood Control
- Greenhouse Gas Emissions
- Power Production

Implementing the WUP

Ordered operating requirements and monitoring studies have been implemented at Wahleach since 2005

- Minimum reservoir elevation
- Seasonal generation shutdowns
- Minimum flows into Lower Jones Creek
- Monitoring studies and works projects, focussing on fish and fish productivity

What's the Process for the WUPOR?

The Review has three phases

- 1. Issues Identification:** Identify priority issues to focus on in the WUP Order Review
- 2. Alternative Analysis:** Develop and evaluate alternative hydro operations along with other actions that could address those issues using Structured Decision Making (SDM) methods
- 3. Recommendations:** Informed by the analysis of alternatives, develop and submit recommendations to CWR



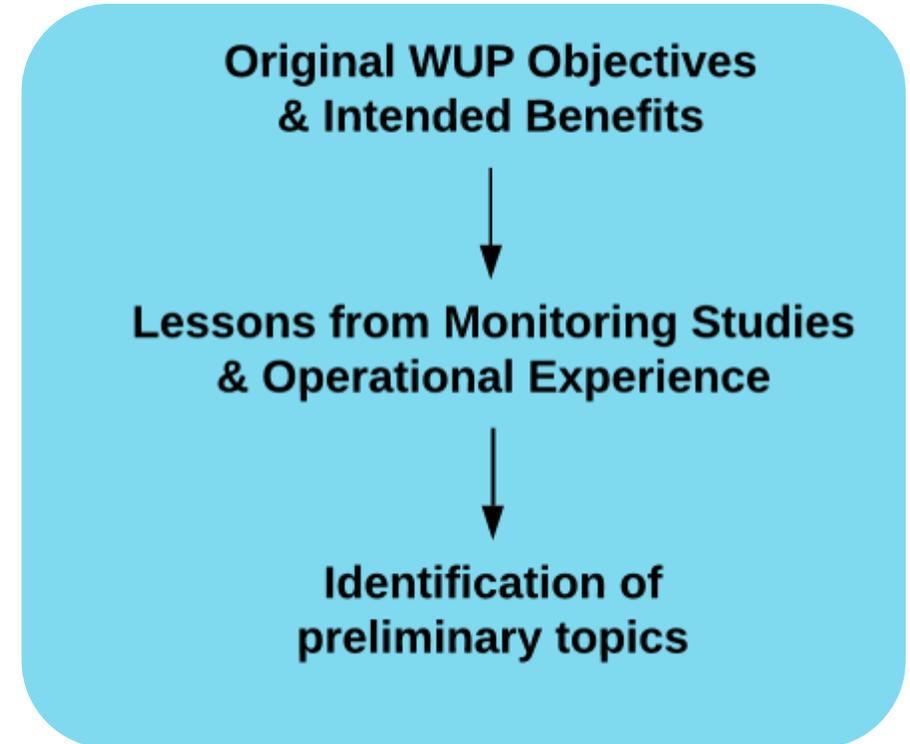
WUPOR Issues Identification



Identifying Issues

Issues are being identified in many ways

- Previous Consultative Committee Reports and Water Use Plans
- New information obtained since the Orders were issued:
 - Results of WUP monitoring studies
 - Operational experience
- Input from First Nations, regulators and stakeholders



Preliminary priority issues

The WUPOR will focus on priority issues

- We've identified the following preliminary priority issues for discussion
 - Fish & Aquatic Habitat
 - Heritage and Culture
 - Recreation
 - Climate Change
 - Flooding

Key Discussion Questions

- Feedback?
- Need more information?

Next Steps



Next Steps

- Set up workshops for First Nations, regulators and key stakeholders
- Confirm and assess issues
- Prepare report for submission to the Comptroller of Water Rights
- Seek renewed *Fisheries Act* Authorization



Wahleach Operation Summary

WUPOR Open House



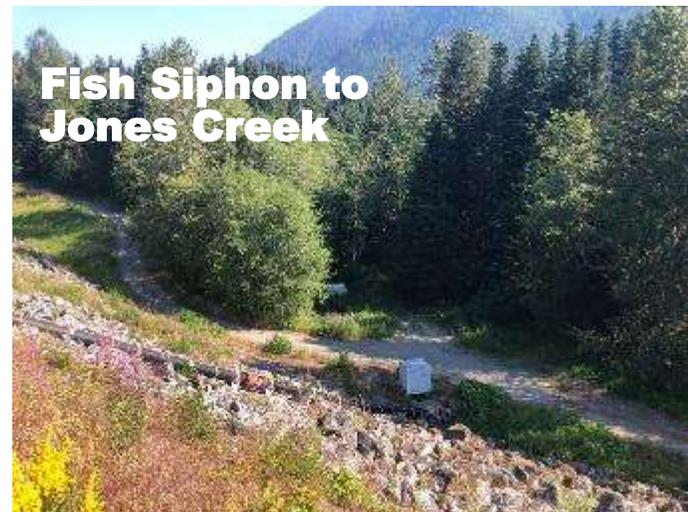
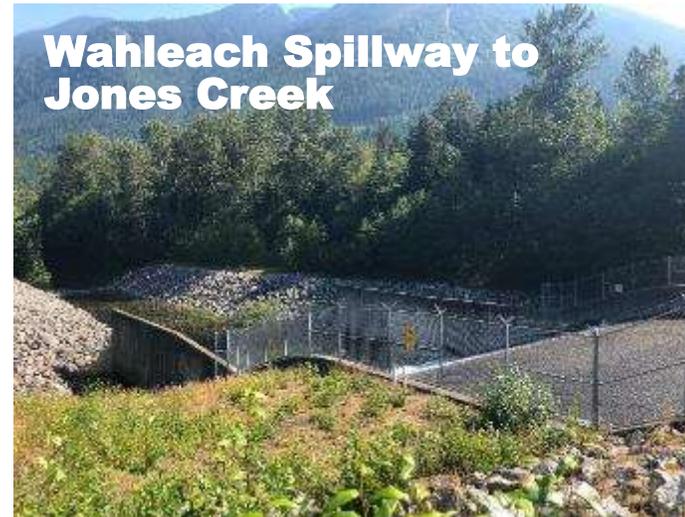
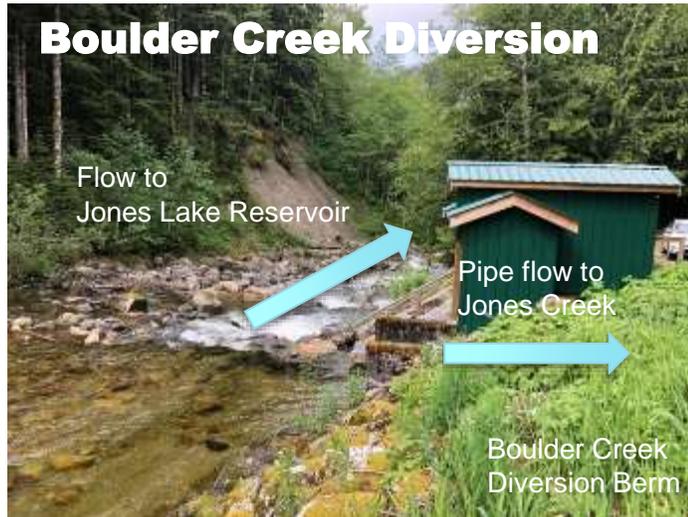
Sarah Portelance – BC Hydro Operations Planning Engineer



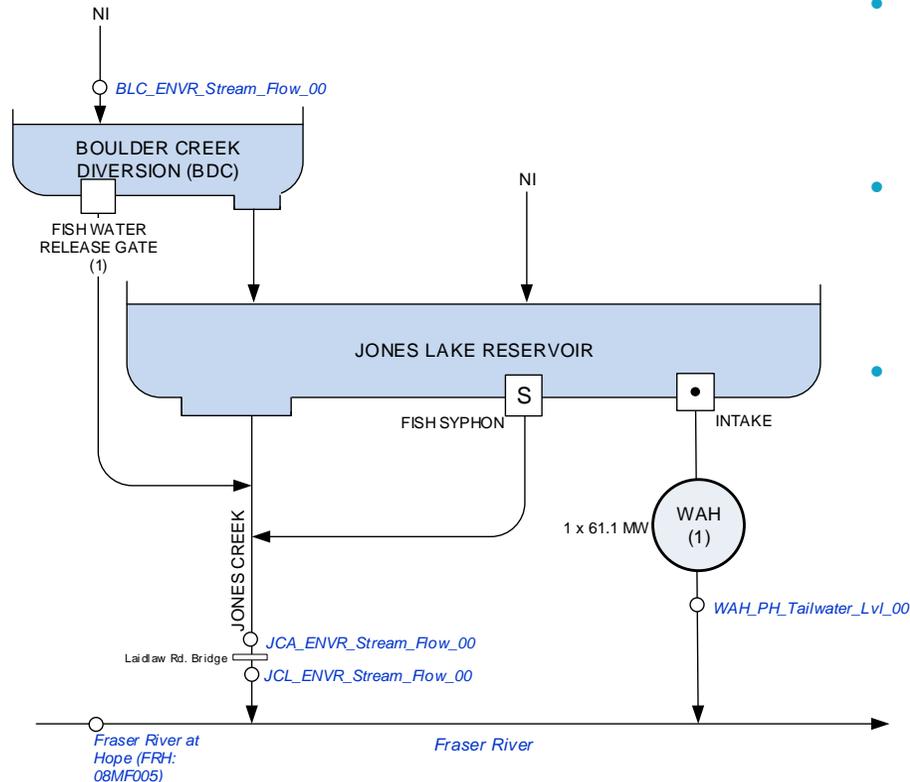
Wahleach System Overview



Wahleach System Overview



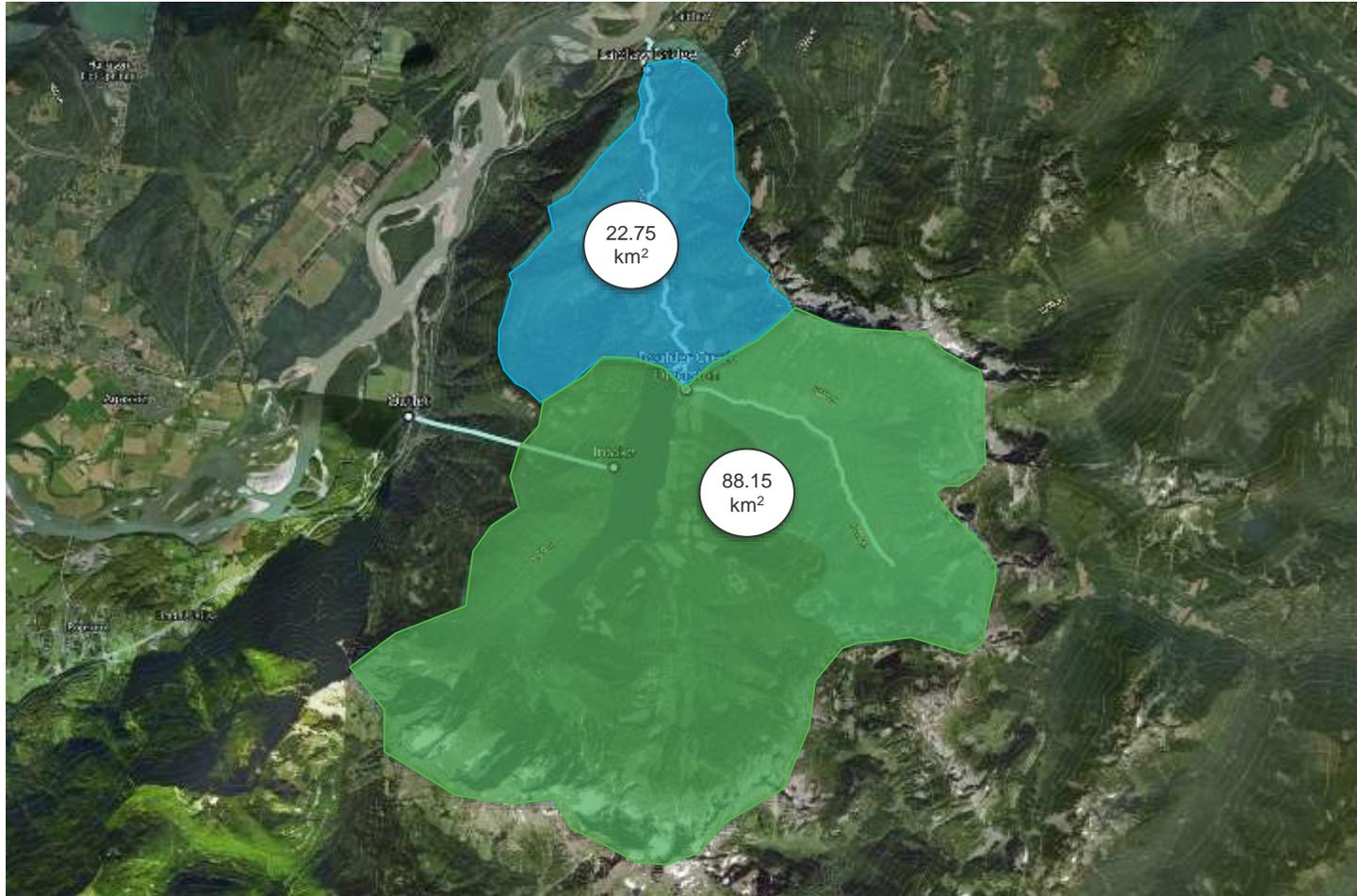
Water Management at Wahleach Dam



- Under normal operations, Jones Lake reservoir relies solely on turbine discharge to manage reservoir levels.
- Only other option to manage reservoir levels is with the Dam free crest spillway channel to Jones Creek.
- There is only a limited amount of water discharged from the fish siphon to Jones Creek.

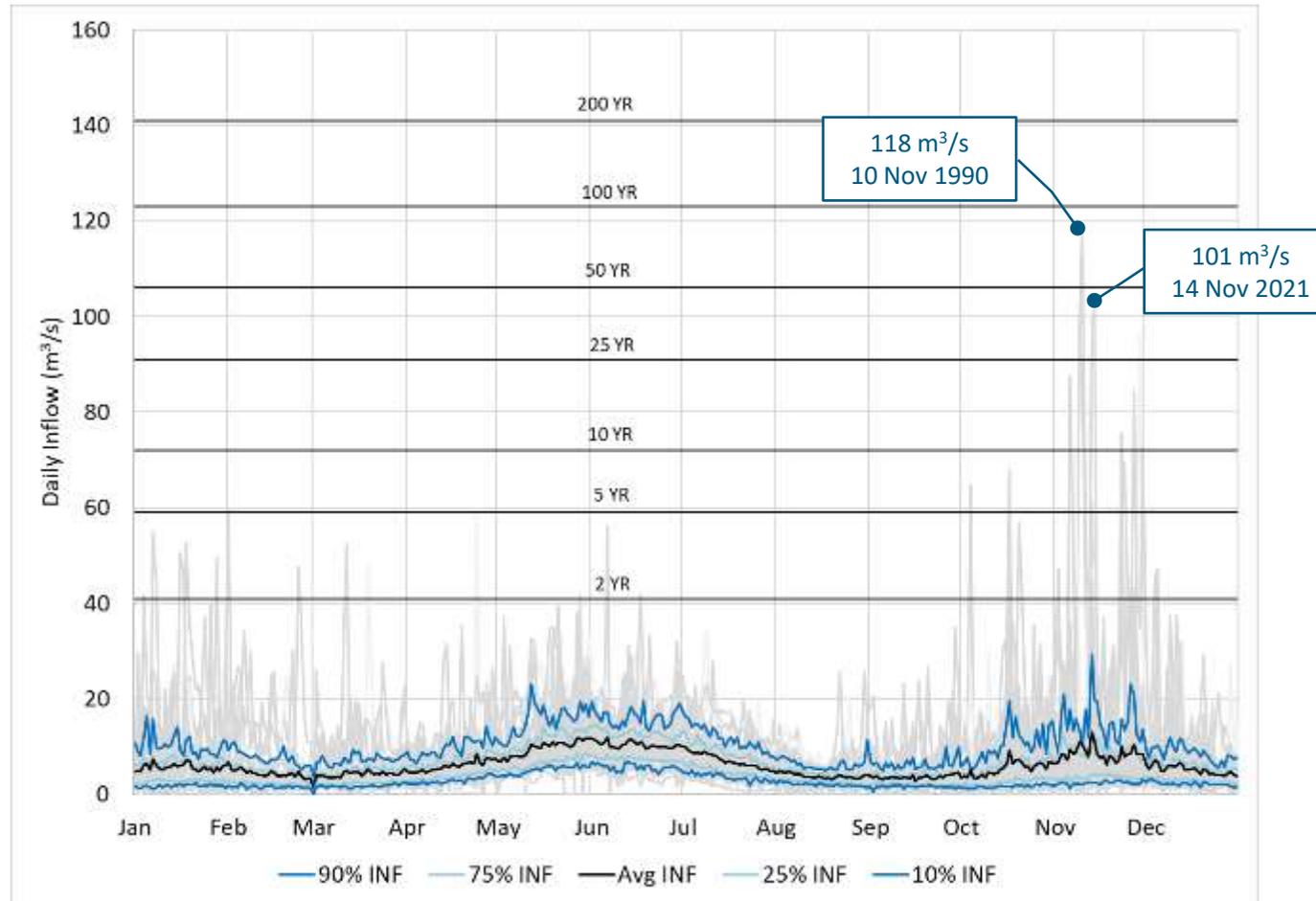
Works	Discharge Point	Discharge @ El. 641.6 m
Power Intake	Tailrace Channel to Fraser River	~13 m ³ /s
Siphon	Jones Creek	0.85 m ³ /s
Free Crest Weir	Spillway channel to Jones Creek	Sized for Inflow Design Flood

Wahleach Dam and Lower Jones Watersheds



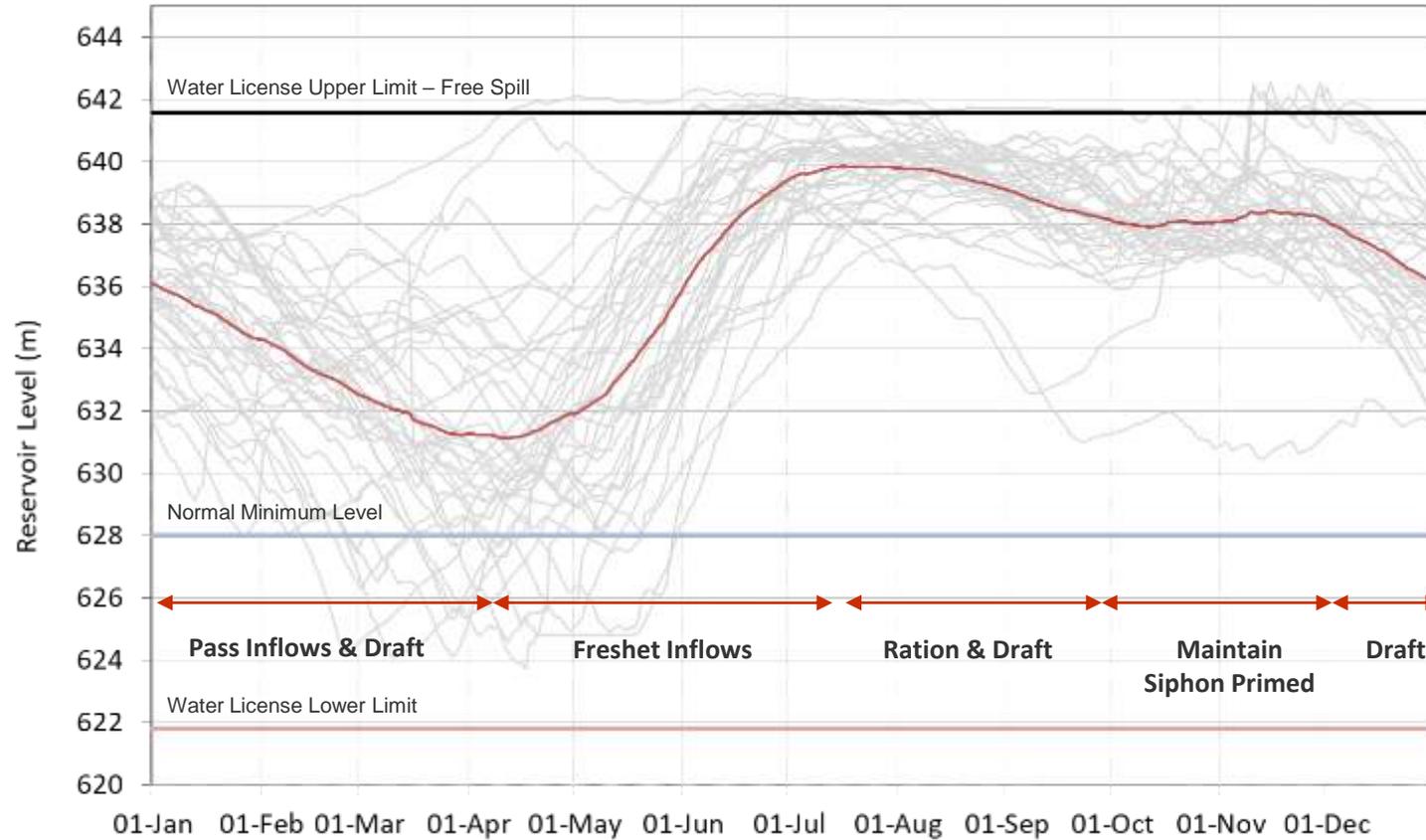
Seasonality of Inflows

Jones Lake Reservoir Inflows (1960-2021)



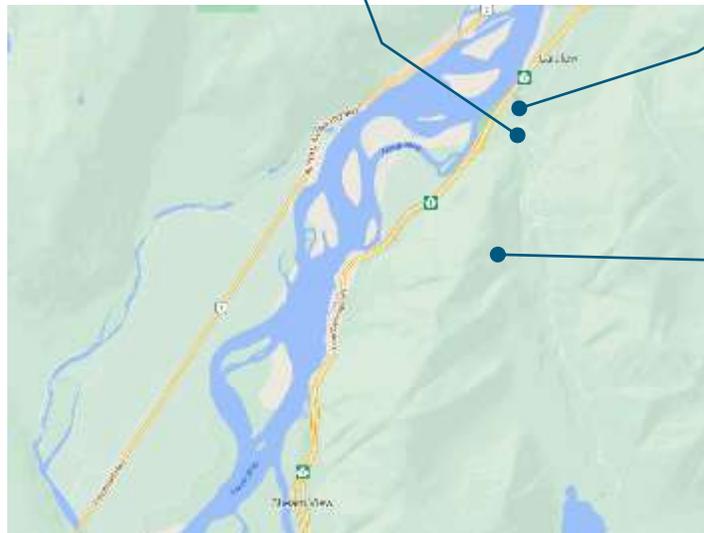
Operations at Wahleach

Jones Lake Reservoir Levels (1960-2021)

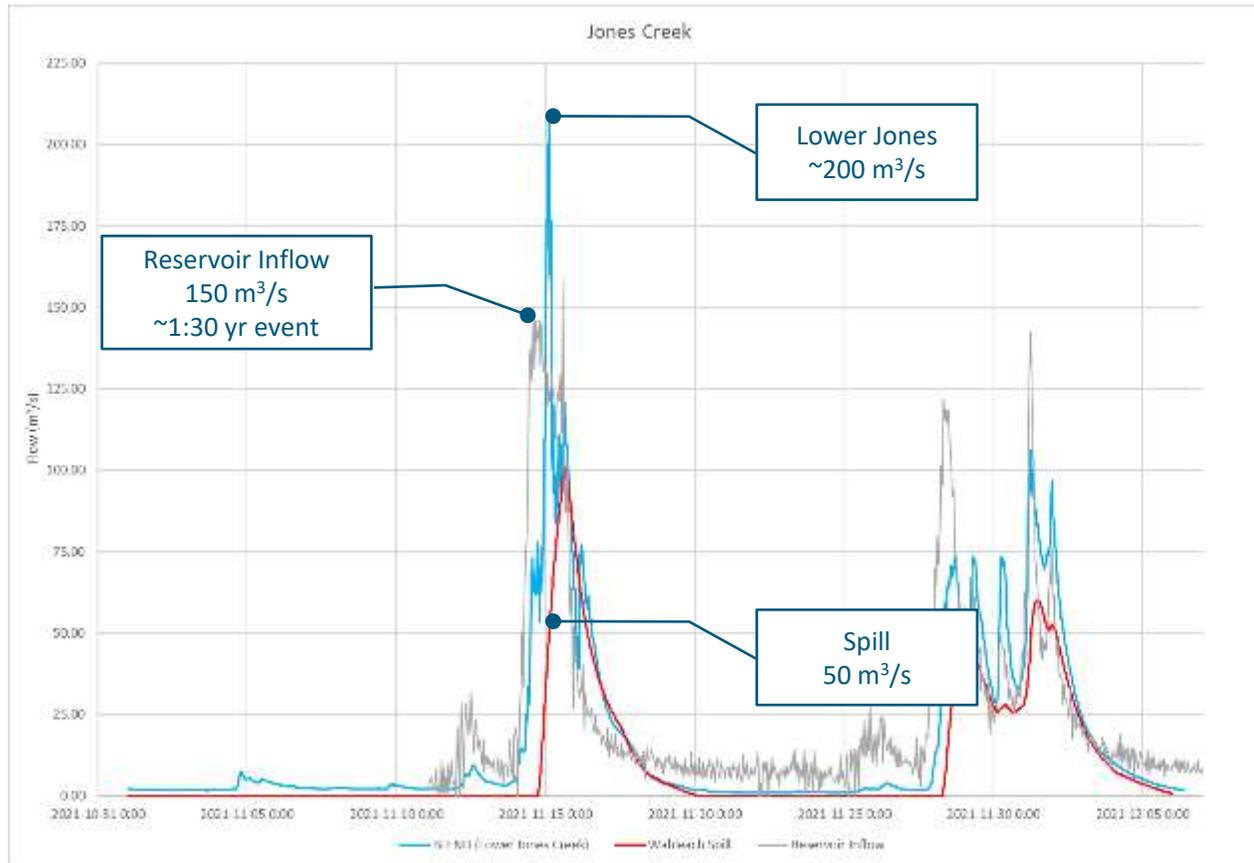


— Historical Average — WLU/WEIR — WOL — WLL

November 2021 Storm Event



Estimated Lower Jones Creek Flows



Lower Jones Creek flows were reconstructed based on available data and extrapolation. These estimates are provided for discussion purposes only and BC Hydro makes no warranty or representation.

Location	Area (km ²)	2-yr (m ³ /s)	5-yr (m ³ /s)	10-yr (m ³ /s)	25-yr (m ³ /s)	50-yr (m ³ /s)	100-yr (m ³ /s)	200-yr (m ³ /s)
At Wahleach Dam	88.15	63	86	107	140	172	212	260
At Laidlaw Bridge (excluding Dam)	27.75	26	36	45	59	72	89	109



BC Hydro

Power smart

Further Information and Contact Details

- Project information and updates will be available at:
www.bchydro.com/wahleach
- If you have any questions or comments related to the project or would like to discuss potential issues further, you can reach us at:
 - E-mail: projects@bchydro.com
 - Phone: 1 866 647 3334



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