

# Welcome to the La Joie Dam Improvement Project Public Open House September 2024





# Land Acknowledgement

We acknowledge the La Joie Dam, part of the Bridge River system, is located on the unceded and traditional territory of St'át'imc Nation.

We acknowledge the impacts that BC Hydro's system has had on the Nation and the land they have made use of since time immemorial.

We share in the responsibility to act as stewards of the land and care for its resources.



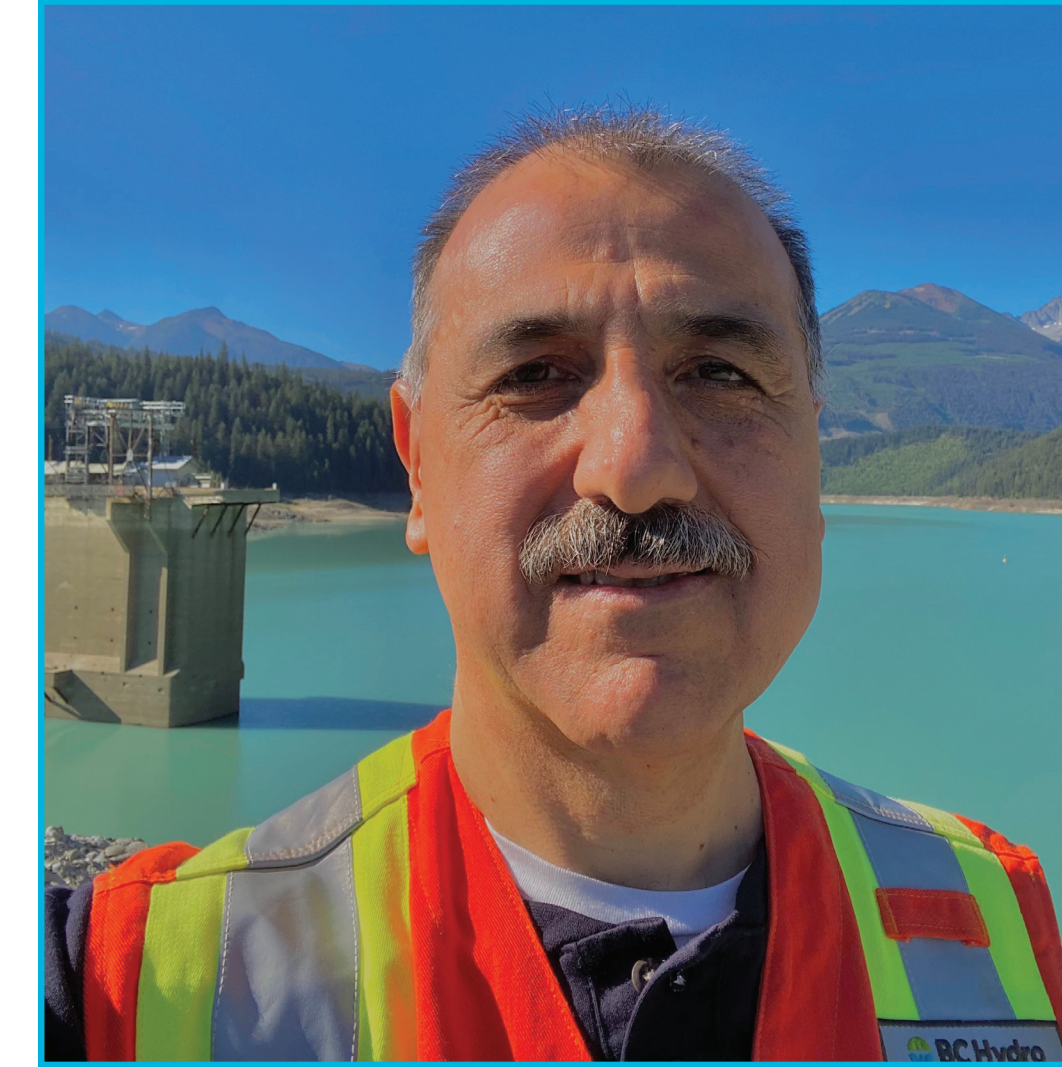
# Meet tonight's team



Treva Blunt, Acting  
Project Manager



Robyn Spencer,  
Indigenous Relations



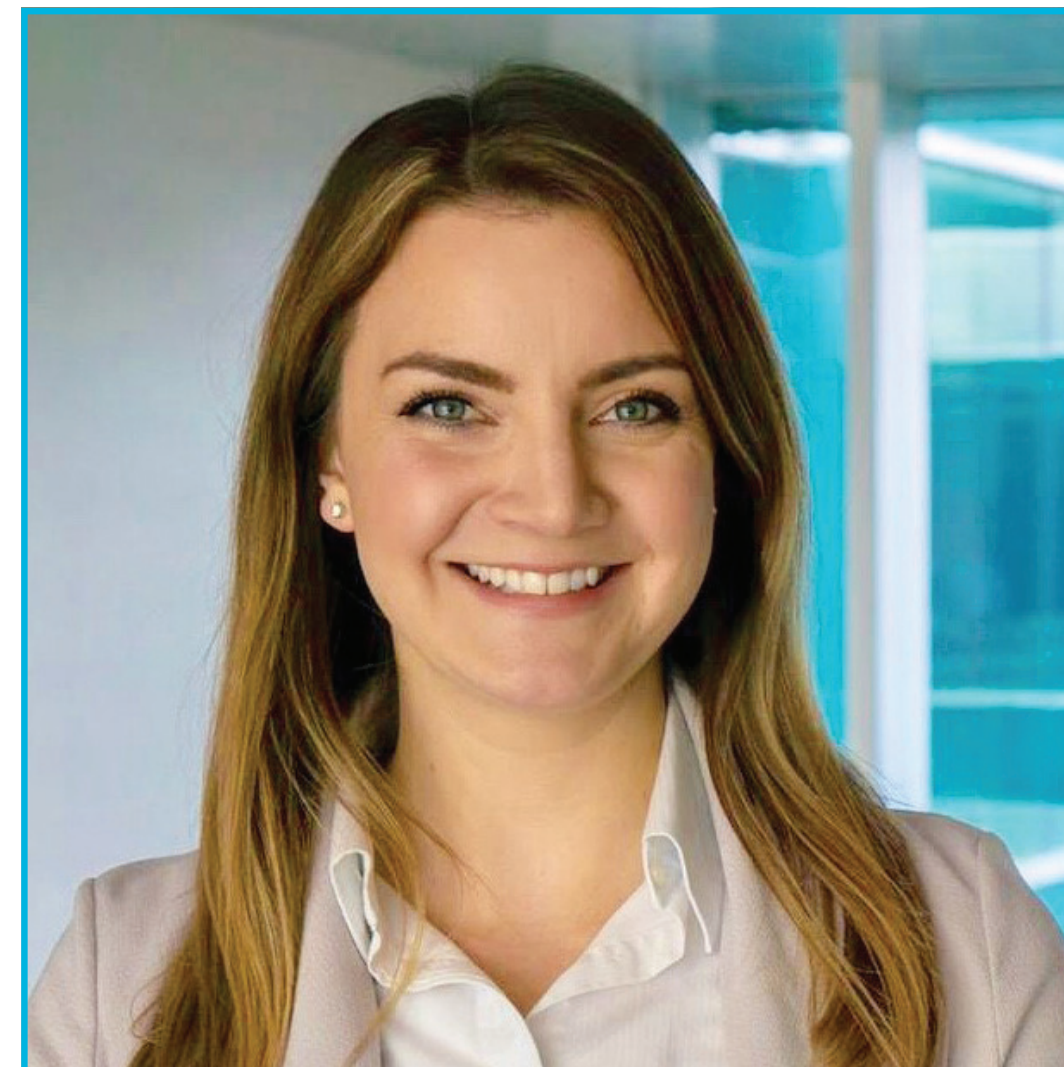
Saman Vazinkhoo,  
Project Engineer Principal



Chris Daniel,  
Engineering Team Lead



Whitney Deane, Stakeholder  
Engagement Advisor



Dayna Isber, Community Relations



Steve Hatton,  
Construction Management



Gillian Rogers, Environmental  
Risk Management





# Honouring our agreements with First Nations

La Joie is part of the Bridge River system, located entirely in St'át'imc Nation Territory



La Joie Technical Working Group tour of Bear Flats (June 2024)

- St'át'imc and BC Hydro have agreements that define how we work together and provide a framework for a relationship based on mutual respect and understanding.
- We're collaborating at various levels to deepen our understanding of St'at'imc values and integrate St'át'imc perspectives into project design and planning.
- We're also working together to identify meaningful economic and employment opportunities.





# Project Overview









# Plans for improvement

Recommended leading alternative: Improve dam to restore full reservoir level.



La Joie Dam and the intake tower standing in Downton Reservoir

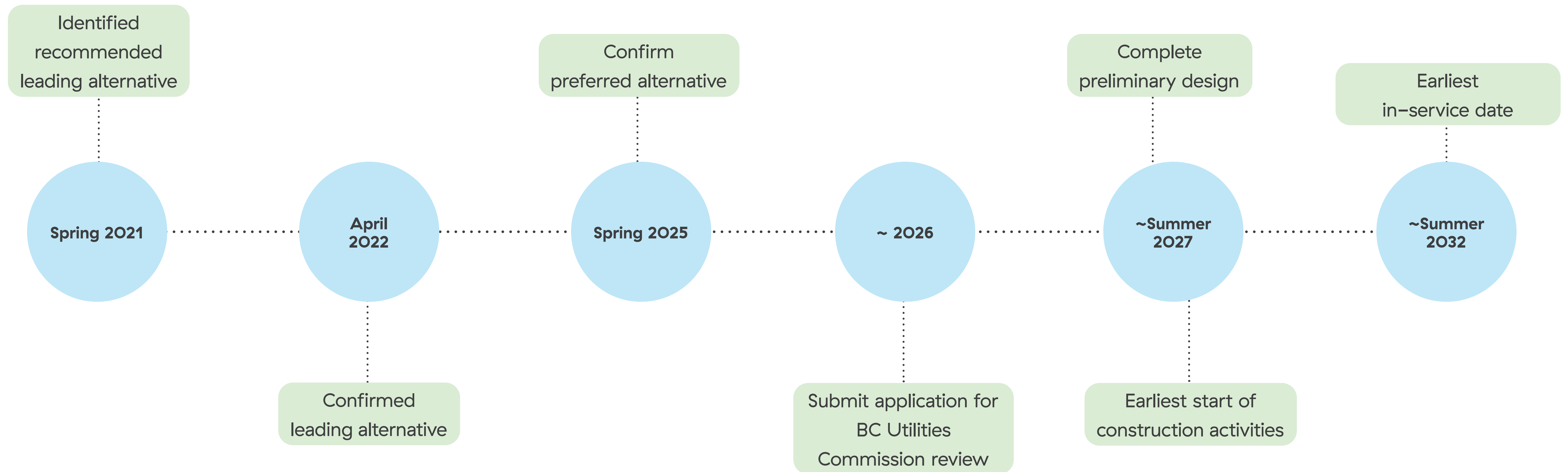
- The leading alternative received conditional endorsement from St'át'imc Authority.
- The project is subject to British Columbia Utilities Commission (BCUC) review.
- This scope of work includes extensive upgrades to:
  - the intake tower,
  - the dam face, and
  - water passage components as required.
- Currently, we're evaluating options on how to improve the dam, intake tower, penstocks and powerhouse.





# Project timeline

St'át'imc, key stakeholder, and public engagement will be undertaken throughout the project's lifecycle.



This is an early estimate of the project schedule. This timeline is subject to change based on the project's progression.





# Temporary Drawdowns

(lowering the water level)





# Reservoir drawdowns are required for construction

- Drawdowns (lowering the water level) are required to provide access to the lower parts of the dam and intake tower.
- To achieve a drawdown, instead of storing water in the reservoir, it is released through the turbine and other outlets throughout the year until the necessary water level is reached.
- The water then moves through the Carpenter reservoir and the Bridge powerhouses.
- Due to the environment risks, the project team is prioritizing efforts to minimize the frequency and duration of drawdowns that are below 710 meters. These deeper drawdowns may require approvals from environmental agencies.
- Options for the number and duration of drawdowns are being studied. Once determined, the construction schedule will follow.
- Safety and environmental management plans during drawdowns will be developed as we get closer to actual construction.





# Downton drawdown April 2022



Crews investigating at the toe of the La Joie Dam during the drawdown (April 2022)

- The one month drawdown saw the reservoir lowered close to 699 metres (~10m below typical levels).
- Key engineering investigations of areas normally submerged underwater were carried out.
- Investigations lasted about 10 days and included:
  - Test pitting and concrete sampling.
  - Monitoring for environmental impacts.
  - Monitoring of cultural heritage.

**Ask us how lessons learned are being incorporated into design, environment and construction planning.**





# Downton drawdown April 2022





# Environment





# What we're working on

- Engaging experts from First Nations and within BC Hydro to identify potential environmental and heritage risks and mitigation measures for drawdowns.
- Undertaking studies on water quality, fish, wildlife and vegetation as well as archeology.
- Ensuring compliance with Federal, Provincial and St'át'imc standards and agreements.
- Identifying environmental and archeological effects of project access and accommodation in the area.

**Ask us about the wildlife and vegetation in the area**





# Behind the dam: Bear Flats and Bridge Glacier project tour





# Construction Planning





# Construction activities

**Earliest construction start would be spring 2027. Construction is expected to last ~5 years. During that time, the area around the dam and quarry is anticipated to become an active construction zone.**

Construction activities will include:

- Drilling, blasting, and construction equipment.
- Continuous and increased traffic along local roads (large rock trucks, large delivery trucks etc.).
- Traffic control measures required to ensure safety.
- Large crews working and support staff.
- Night work.

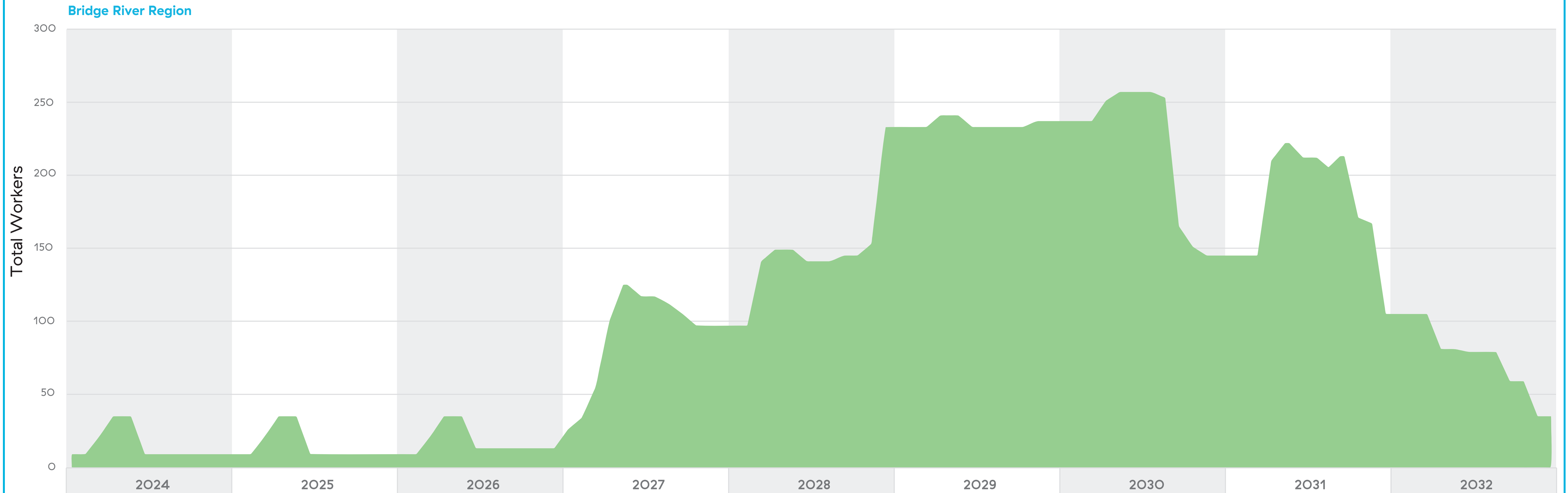
**Dates and details on construction activities will be communicated when information becomes available.**





# Worker forecast

## BC Hydro Worker Forecast—Upper Bridge River Valley/La Joie Facilities



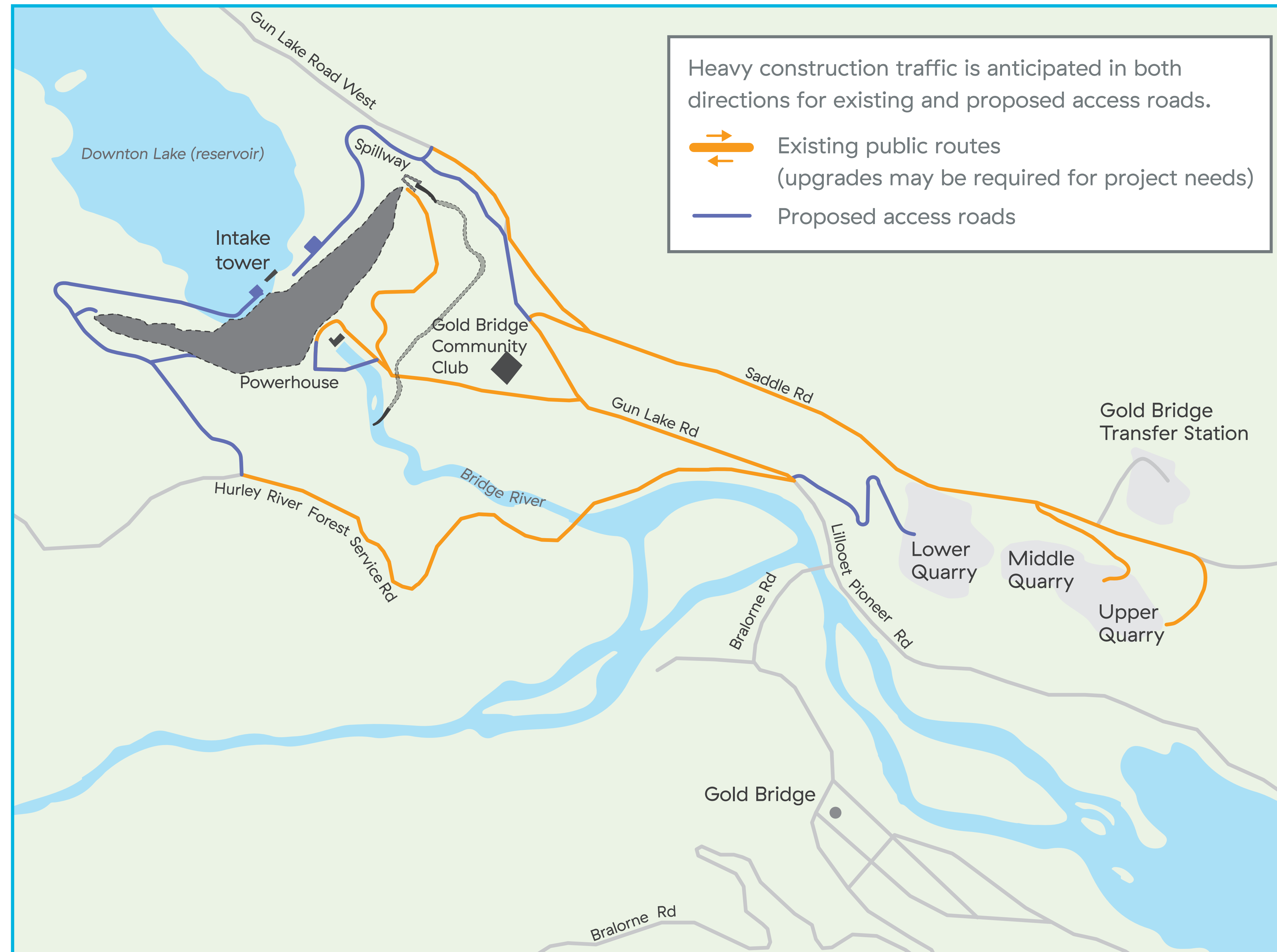
Data Date: 29 May 2024

BC Hydro makes no guarantees on the data shown. This data may be outdated or inaccurate and should be used for presentational purposes only.





# La Joie Dam Improvement project: Heavy construction traffic routes





# Watch: original dam construction

We dug deep into the archives to find the films of the original dam and powerhouse construction.

- La Joie Storage Dam (1949).
- La Joie Extension (1952 – 1955).
- La Joie Powerhouse (1957).





# La Joie access and accommodation study



BC Hydro Worker Conduct Requirements on display at the Lil'tem Mountain Hotel.

- For the La Joie Dam Access and Accommodation Study we're studying:
  - Access and transportation options.
  - Work camp locations.
  - Environment and socio-economic impacts and mitigation options.
- The purpose of the study is to collect baseline technical information and community feedback to be used as we move further into project planning.
- Phase three of engagement was completed June 2024.
- Environmental studies of the options continue.
- Anticipated study completion by late fall 2024, feeding into further investigations.
- We thank you for your interest and participation in the study, as it has been a valuable tool for getting community feedback.





# Connect





# How to connect

## For project information and questions

[bchydro.com/lajoie](https://bchydro.com/lajoie) and subscribe for updates including future engagement sessions.

**Email:** [projects@bchydro.com](mailto:projects@bchydro.com)

**Phone:** 1 866 647 3334

## Local Contractors

The La Joie Dam Improvement Project is in the early planning stages. Once contracts are awarded to major contractors, we'll share information on local suppliers.

Email your information to [projects@bchydro.com](mailto:projects@bchydro.com)





# What's important to you?

Place a sticky note on the board with your questions or feedback on the project.

