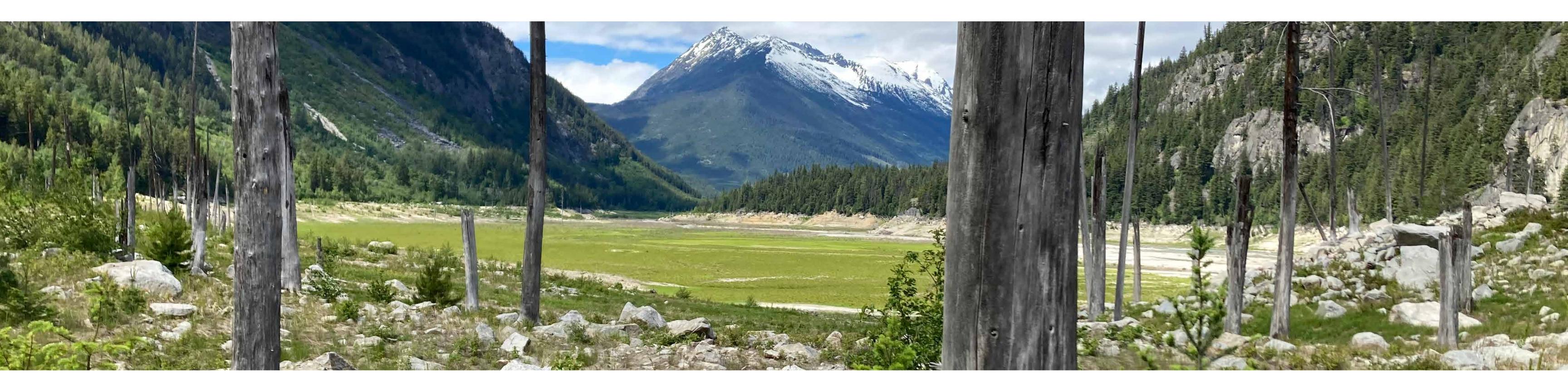


#### Land Acknowledgement

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.

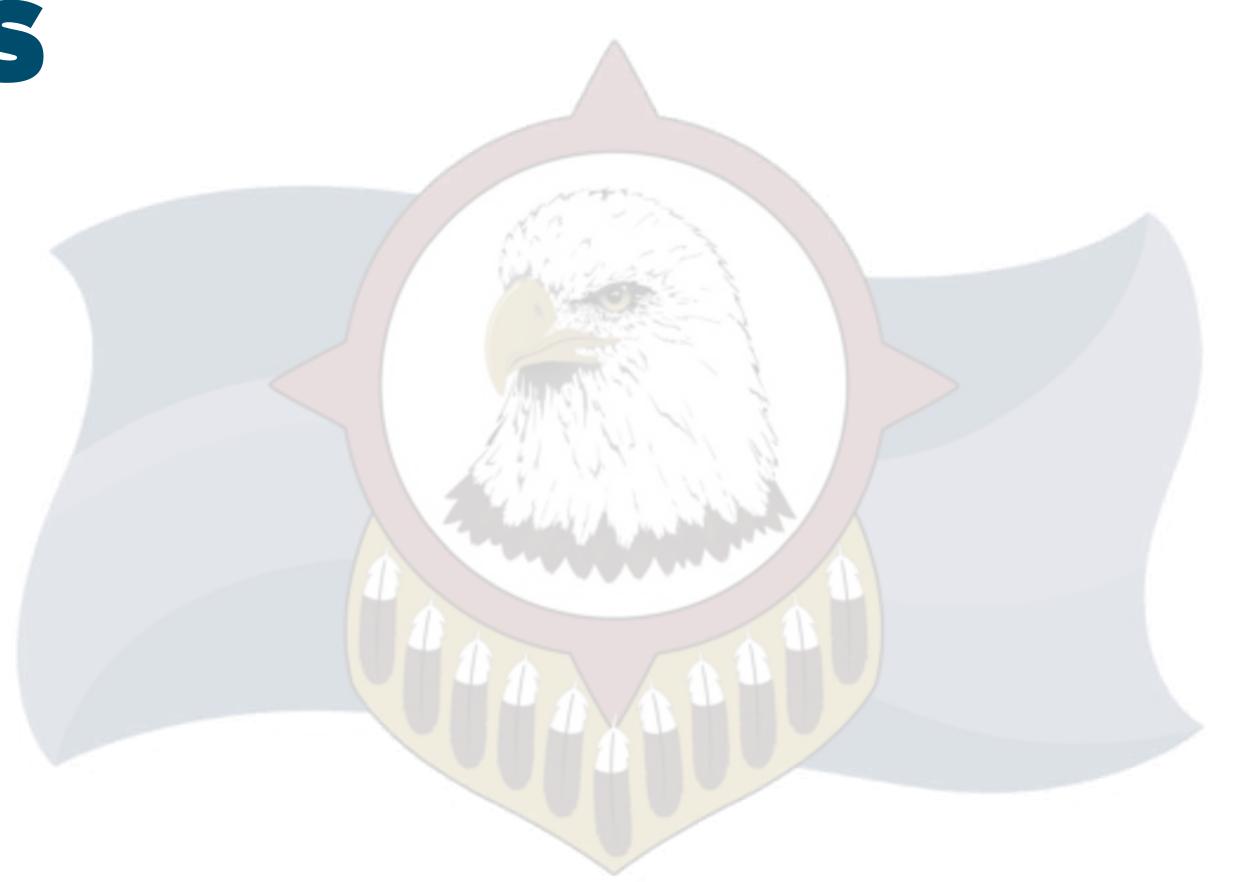




Honouring our agreements with First Nations

LA JOIE IS PART OF THE BRIDGE RIVER SYSTEM, LOCATED ENTIRELY IN ST'AT'IMC NATION TERRITORY.

- 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.
- O We're also working together to identify meaningful economic and employment opportunities.





### Project Overview



#### Bridge River System



#### Why the project is needed



Aerial view of the La Joie Dam, powerhouse, and Downtown Reservoir.

#### Purpose: address safety risks related to the La Joie dam's age and seismic vulnerabilities

In 2015, we adjusted dam operations to mitigate seismic risks by reducing Downton Reservoir's maximum elevation from 750m to 734m. This lowered the reservoir's storage capacity by approximately one-half, reducing our ability to manage flows throughout the Bridge system.

### RECOMMENDED LEADING ALTERNATIVE: IMPROVE DAM TO RESTORE FULL RESERVOIR LEVEL

- The leading alternative received conditional endorsement from St'át'imc Authority.
- The Project is subject to British Columbia Utilities
   Commission (BCUC) review.



# Investigating improvements

Addressing existing deterioration and seismic deficiencies requires extensive upgrade.

We're evaluating how to improve the facility to meet dam safety requirements.



La Joie Dam and intake tower standing in Downton Reservoir.



#### Project timeline

Dates	Key project milestones
Spring 2021	O Identified recommended leading alternative
Spring 2022	O Confirmed leading alternative
Spring 2026	<ul><li>Confirm preferred alternative</li><li>Work camp and project access route: Identify preferred option</li></ul>
2026-2027	O Undertake preliminary design
~2028	<ul> <li>Submit application for BC Utilities Commission review</li> <li>Anticipated construction of work camp</li> <li>Anticipated start of construction on project access upgrades</li> </ul>
~2030	<ul><li>Earliest start of main works construction activities</li><li>Anticipated completion of project access upgrades</li></ul>
~Winter 2030/2031	O First drawdown anticipated
~Fall/Winter 2034	O Earliest in-service date

Timeline is subject to change based on the project's progression.

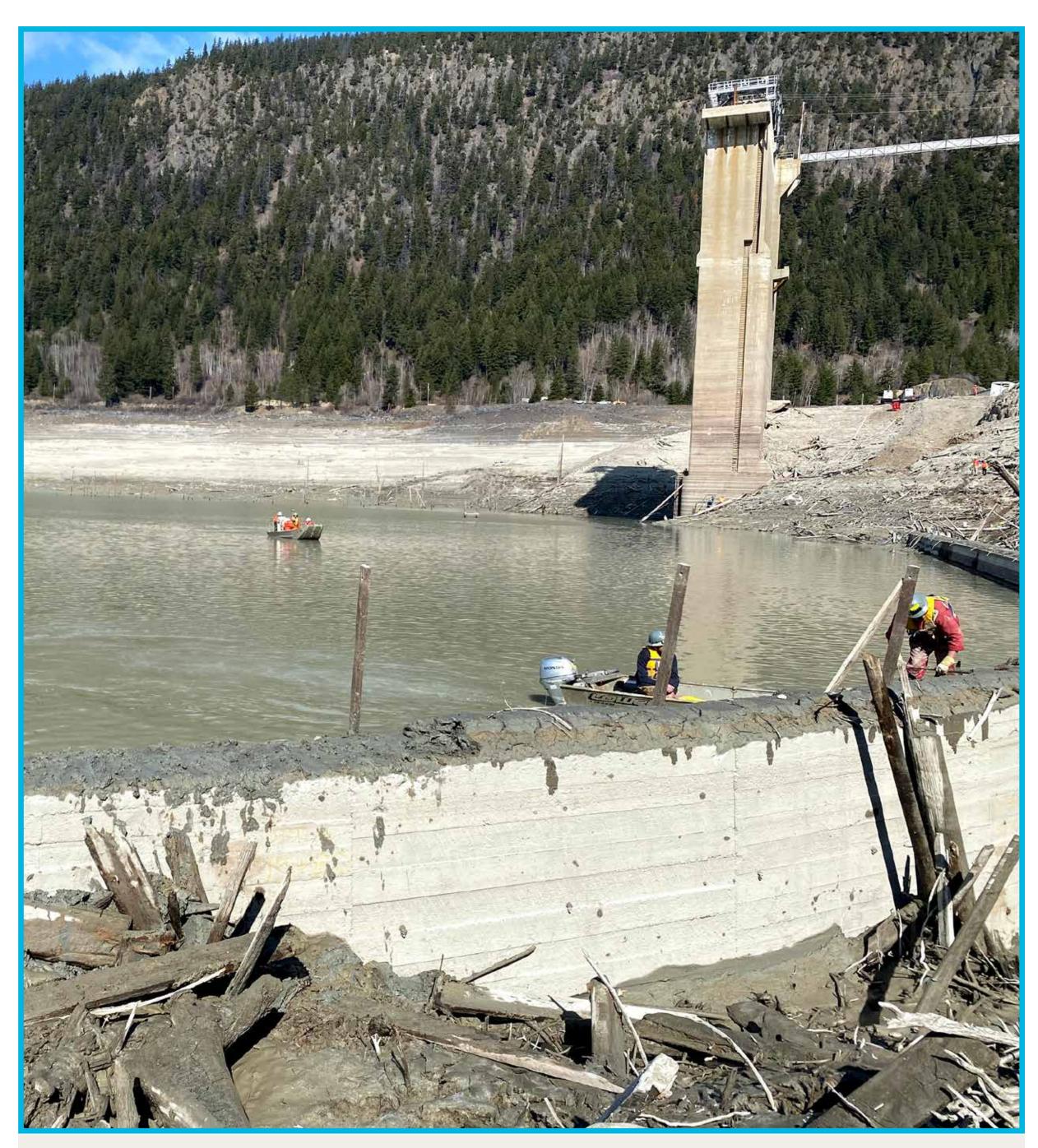


#### Temporary Drawdowns

(lowering the water level)



## Deep reservoir drawdowns are required for construction



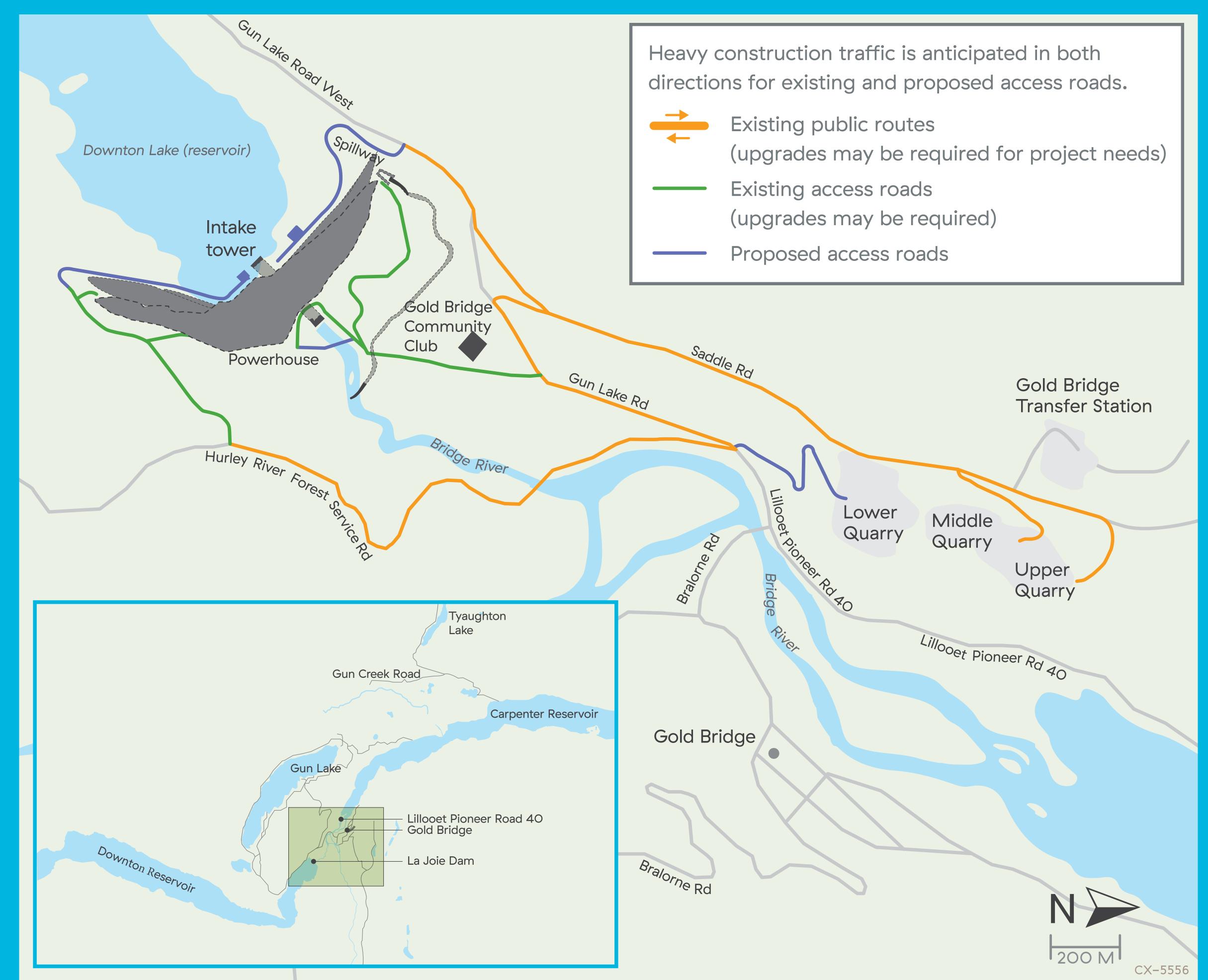
Crews investigating at the toe of the La Joie Dam during a drawdown. (April 2022)

### Deep temporary drawdowns (lowering the water level) of the reservoir are required to provide access to the lower parts of the dam and intake tower.

- O To achieve a drawdown, water is released through the turbine and outlets year-round until the target water level is reached.
- O The water then moves through the Carpenter reservoir and the Bridge powerhouses.
- O Due to environmental risks, we're working to limit drawdowns below 710 meters, which may require approvals from environmental agencies.
- Options for the number and duration of drawdowns are being studied. This is key to construction planning and schedule.
- Safety and environmental plans will be developed closer to construction.



#### La Joie Dam Improvement Project: Heavy construction traffic routes



#### Construction activities

Earliest start of main works construction would be spring 2030. The earliest in-service date would be fall/winter 2034. During that time, the area around the dam and quarry will become an active construction zone.

Construction activities will include:

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

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



#### Quarry development: Rock supply and site preparation

We'll need a reliable local supply of rock that can be mined and processed on-site. Examples of site preparation activities include:

- O Geotechnical investigations: Assessing the physical properties of soil and rock around a site.
- O Geophysical studies: Using non-invasive methods crews can explore the subsurface properties at the site such as map geological formations, mineral deposits, and groundwater resources.
- O Hydrogeological investigations: These investigations focus on the distribution and movement of groundwater (drilling for test wells will be required but is expected to be minimal).
- O Environmental studies: Overview assessments to include wildlife, habitat, and vegetation.
- O Archaeological studies: To identify and protect cultural heritage before construction.
- O Planning access roads and haul routes.



#### Photos: the quarry at La Joie





#### 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.
- O 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.
- Oldentifying environmental and archeological effects of project access and accommodation in the area.

How well do you know your wildlife and fauna?

Test your knowledge with one of our project team members and share your stories of sightings in the area!



#### Photos: Environmental field studies - 2025





### Construction Planning



## La Joie Dam Improvement Project: Access and accommodation feasibility studies



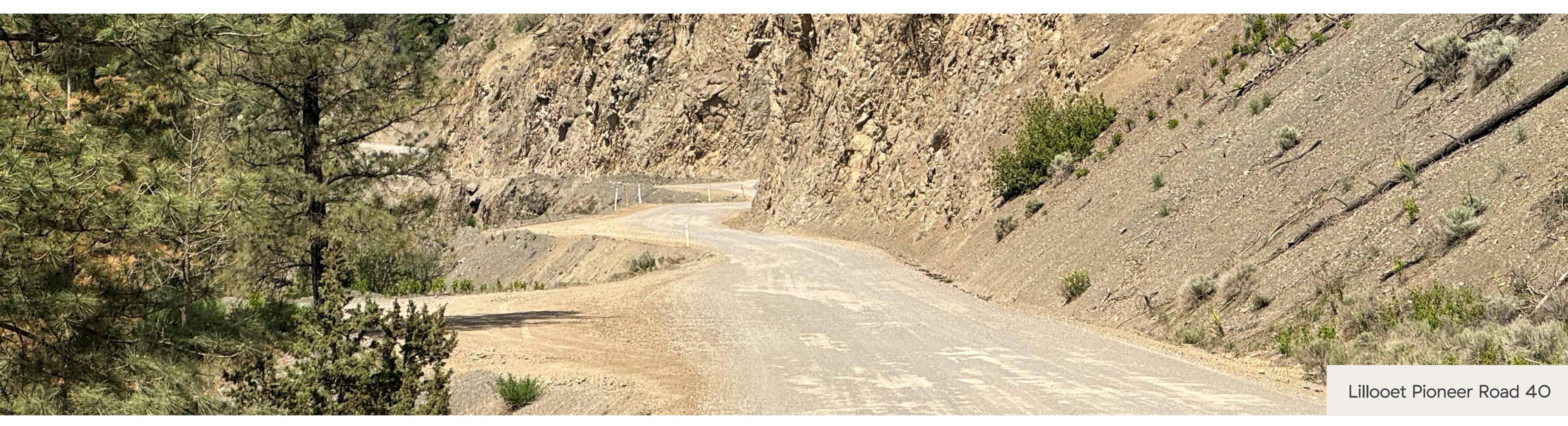
#### Access and Accommodation



#### Access: feasibility studies

Further design and field investigations are planned or underway for potential project access routes:

- O Lillooet Pioneer Road 40 (Road 40) improvements
- O Hurley Forest Service Road (FSR) improvements, potential for all season access
- O Gun Lake Airstrip to support plane access





#### Access:

# **Examples of work anticipated** or underway

- O Environmental and archeological assessments.
- Coordinating with Ministry of Transportation and Transit (MOTT) regarding potential Road 40 improvements.
- O Assessing the Hurley Forest Service Road bridges, drainage conditions, and winter maintenance required for all-season use.
- O Confirming airstrip operability through wind and ceiling height studies.
- O Geotechnical assessments at the airstrip.
- O Investigating point of origin(s) for workers, equipment, and materials.



## Accommodation: Work camp locations



Crews at the Hurley work camp site option (May 2025)

#### Feasibility studies are underway for the work camp location.

- Significant constraints identified at the Gold Bridge Town
   Site and Quarry-Adjacent Site
  - No further site investigations planned
- O Hurley Site remains under consideration
  - Site investigations continue with physical investigations (i.e. test well drilling) anticipated for October
- Contingency Site option added
  - Desktop and preliminary site assessments underway
  - Physical investigations if needed

Note: As part of our procurement process when selecting a work camp operator, the intent is to remain open to bidders proposing alternative sites, provided they meet or exceed the standards of the preferred location.



#### How to connect



BC Hydro open house, Gold Bridge Community Club (September 2024)

#### For project information and questions:

Email: projects@bchydro.com

Phone: 1 866 647 3334

#### bchydro.com/lajoie

subscribe for project updates

#### **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

