

Bridge River System Capital Project Update

Squamish Lillooet Regional District

December 2024

Agenda

- Bridge River System Overview
- Capital Plan Update
- First Nations Consultation
- Workforce Forecast Update
- Access and Accommodation Studies
- Communications

Bridge River System



Capital Plan Summary – Seton

Seton Bypass Project



Drone photo of the rock slope along the bypass route with the Seton forebay in the background (July 2023)

- The Seton Dam and Generating Station are at the downstream end of the Bridge River system, playing a critical role in how water is moved
- With the Seton Generating Unit nearing end of life, the need for a bypass was identified
 - A bypass will provide an alternative way to move water around the facility into the Fraser River
 - This will reduce the risk to fish and fish habitat in the Seton River
- This will provide certainty during planned or unplanned unit outages
- Project planning is underway and is subject to BC Utilities Commission (BCUC) approval
- Targeted completion is 2029. Unit replacement schedule is under review

Capital Plan Summary – Seton



Crews drilling at the bypass tunnel portal (Nov. 2024)

Seton Bypass Site Activities:

- Contractor site visits held in April and October 2024.
- Heli supported drilling program and Archaeology Investigations completed in November.

Seton Canal Embankment Project:

- Construction is planned to begin September 2025, with a target in service date for 2026.

Capital Plan Summary – La Joie

Project purpose: Address safety risks related to the dam's age and seismic vulnerabilities.



La Joie Dam and the intake tower standing in Downton Reservoir

- Recommended leading alternative: Improve dam to support 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.
- Construction will require at times, very low water levels in Downton Reservoir (temporary drawdowns) to enable the work.
- Earliest start of construction activities is 2027, and targeted completion in 2032.

Capital Plan Summary – La Joie



Drillers conducting packer tests on a floating barge near the toe of the dam (October 2024)

Current and ongoing activities:

- Evaluating options on how to improve the dam, intake tower, penstocks and powerhouse.
- Site investigations at the powerhouse and dam (including geotechnical drilling at the dam)
- La Joie Access & Accommodation study.
 - Report release anticipated for January 2025.
 - Feasibility studies on report recommendations including a work camp site and project access routes.
- Field studies (environmental, archaeological, etc.)

Capital Plan Summary – Bridge River 1



Bridge River Generating Station – Unit 1

Bridge 1 Units 1 to 4 Generator Replacement Project

- Built in 1948, Generating Units 1 to 4 require upgrading as they are nearing end of life
- Certificate of Public Convenience and Necessity (CPCN) granted by the British Columbia Utilities Commission (BCUC) October 2022
- Construction is scheduled to begin in 2028
- Targeted completion is July 2032

Capital Plan Summary – Bridge River 1



The end of the related GM-0399 penstock foundation refurbishment project that went into service in October 2024.

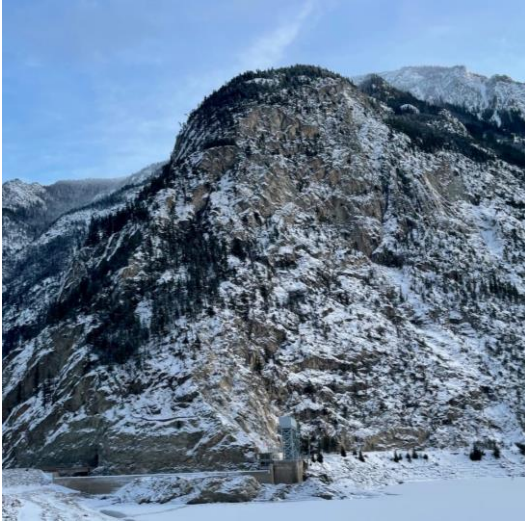
Bridge 1 Units 1-4 Penstock Internal Recoating Project:

- Construction is planned to start May 2026, targeted completion in 2031
- We anticipate doing some minor access road construction for a staging area at the base of penstock 4 in summer 2025.

Bridge 1 Penstock Foundation Upgrade Project

- Construction started in 2021 and went into service in October 2024.

Capital Plan Summary – Terzaghi



Mission Mountain towering over Terzaghi dam with Carpenter Reservoir blanketed in white

Terzaghi Dam Spillway Chute Access Improvement Project

- Project will make the repair and inspection of the spillway safe for workers.
- Construction is planned for 2026, targeted completion in 2027.
 - Intermittent road closures will be required along Mission Mountain Road.

Terzaghi Dam Low Level Discharge Reliability Project

- The project will improve reliability of the low-level outlet system.
- The project is currently in the early planning stages, with targeted completion in the early 2030s.

Capital Plan Summary - Transmission



Transmission Line 2L90 running along Seton Ridge.

Bridge River Transmission Project (B RTP)

- The project is required for upgrades and repair work on an existing transmission line in the region (2L90)
- A Certificate of Public Convenience and Necessity (CPCN) filed with the BC Utilities Commission (BCUC) July 2021
 - An updated application will be filed spring 2025
- Phase 2 of the archaeological investigation started fall 2024 and is on-going
- Construction is anticipated to start fall 2026 with completion targeted for 2029

Bridge River Transmission Substation – T4 Transformer Replacement Project

- T4 transformer anticipated to be in-service for December 2024



First Nations - Consultation



Field work for the Bridge River Transmission Project

The Bridge River system is located entirely in St'át'imc Nation Territory.

In 2011, St'át'imc, BC Hydro and the Province signed an historic agreement that addressed past impacts and provides a framework for creating a new, more positive, relationship into the future.

As projects move forward, we're collaborating at various levels to better understand and integrate St'át'imc perspectives and interests into our planning, and to work together to identify meaningful economic and employment find opportunities across the projects.

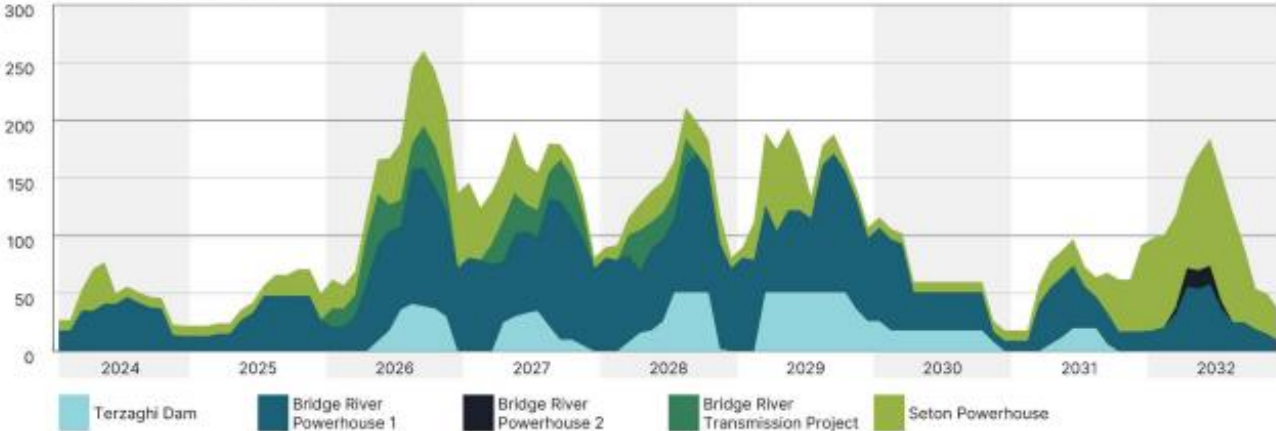
Ongoing collaboration on economic opportunities, including accommodation solutions.

Workforce Forecast Update

BRIDGE RIVER AREA WORKER FORECAST, 2024-2032

CUMULATIVE

Data Date: February 2024



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The data may be outdated, or inaccurate, and should be used for presentational purposes only.



Access and Accommodation Studies



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

- In the Bridge River region, we studied:
 - Access and Transportation
 - Worker accommodation
 - Socio-economic impacts and options to mitigate impacts
- The study results include a series of general recommendations. To view the full report visit bchydro.com/bridgeriver.
- This big-picture study, helped BC Hydro understand what the potential options could be, comparing the projected benefits and trade-offs of each.
- **The La Joie Access and Accommodation study results are expected to be available in January 2025.**

Access and Accommodation Study: Key Upcoming Steps

- Continuing to consult with St'át'imc Nation.
- Continuing to engage and communicate with local communities and stakeholders.
- Looking for specific sites for work camps.
- Looking at the feasibility of using a new hotel to lodge workers in Lillooet.


Note: This is not a comprehensive list of the next steps being taken.



To view the full report, please go to bchydro.com/bridgeriver. Sections 7 and 8 discuss the results and recommendations.

Any of the results and recommendations originating from study will need further evaluation before they are implemented.

Communications



Bridge River Newsletter
Capital Projects Update—Fall 2023

The Casper Creek wildfire burning in the background of the Bridge 7 power house on Sept. 14th 2023.

Cooperation and coordination on Casper Creek wildfire

I wanted to take a moment to acknowledge the incredible efforts in response to the Casper Creek and Dominion wildfires performed by BC Wildlife Services, Tara's Nation, the Squamish-Lillooet Regional District's protective services, BC Hydro's emergency management team as well as operations and transmission crews on the ground, elected officials and residents. Thank you to everyone and our thoughts are with you during this time of recovery. Whitney Deane, BC Hydro Community Relations/ Stakeholder Engagement BC Hydro.

We came, you talked, we listened: Bridge River brings enthusiasm to engage in Access & Accommodation studies

A warm welcome from Lillooet and the Upper Bridge River Valley as residents turned out to our open house in June for the Bridge River Capital projects and the Access & Accommodations studies for the area.

The studies are looking at transportation, access to site, worker accommodation, and socio-economic impacts including business opportunities. It's an important opportunity to better understand how we operate in the region and find collaborative solutions.

The person who spotted the need for these studies was Lalole Dam Improvement project manager Zefiro Cecchi, who brought on the area's Indigenous Relations lead, Robyn Spencer to help with getting this off the ground.

The following Q&A is edited for brevity.

Whitney Deane: Where did the idea for an access and accommodation study come from?

Zefiro Cecchi: Lalole is in a unique location in that it's very remote. We realized there were going to be challenges with accessing the site given the site of the project. We wanted to have a holistic view of the trade-offs of access versus accommodation. It is important to get a full picture view of what is possible to support the project.

WD: When was the moment you knew we needed a study?

ZC: I think it evolved over time. I recognized this was a major challenge and that it was different than most, if not all BC Hydro projects. Having Robyn take over, she's brought in a different aspect to the role where we are really engaging with stakeholders more holistically. I think that's been positive.

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Bridge River newsletter | Summer 2023

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Questions?