# Bridge River Hydroelectric System Projects Update-Summer 2019

We're working to renew the Bridge River electricity system which is about 300 kilometres north of Vancouver and in the Traditional Territory of the St'at'imc Nation.

The system consists of the Lajoie Dam and Powerhouse (Downton Reservoir), Bridge 1 and 2 Powerhouses (Terzaghi Dam and Carpenter Reservoir) and Seton Dam and Powerhouse (Seton Lake).

We're spending almost \$700 million on these 55 to 70 year old facilities, whose proximity to the Lower Mainland helps us operate more efficiently. This includes a number of projects in the region.

# Bridge 1 Generating Station Upgrade– Units 1 to 4

Bridge 1 is a four-generating unit, 200 megawatt, powerhouse built in 1948 that requires upgrading. The station produces enough electricity to power 92,000 homes.

We'll be replacing generators and other related equipment as part of our project work. Planning is underway for this project which is targeted for completion in 2029.



Bridge Generating Station 1.

# **Bridge River System**



#### Did you know?

The system uses Bridge River water three times in succession to generate about 6% of BC's electrical supply.

## Bridge 2 Generating Station Upgrade– Units 5 to 6 Complete

Bridge 2, a four-generating unit, 278 megawatt, powerhouse built in the late 1950s/1960, requires upgrading. The station produces enough electricity to power 126,500 homes.

Replacement of generators 5 and 6 was completed in 2019 and they are in service. Units 7 and 8 are scheduled to be replaced in 2021.

#### Safety Update-Seton Canal Fencing

Recently, BC Hydro completed repairs to fencing at locations along the canal to close access points.

We want to remind people that cutting fencing to gain access to fishing spots is dangerous given safety risks in this area.



### La Joie Dam Improvements

The La Joie Dam was constructed in 1951 to a height of 70 metres and in 1955 was raised to 87 metres. Today, parts of the dam are considered to be at or near the end of their useful life as its concrete face, built in the 1970s, is becoming more challenging to maintain.

The project – which is in early stages – will address potential dam safety risks. We're currently considering alternatives to address these concerns. Upgrades to the dam and related structures may be necessary. The condition of the dam will require us to keep the Downton Reservoir lower than normal operating levels until those risks are addressed.

Construction is planned to start in 2026/2027 with anticipated completion by 2030/2031 although the schedule is very preliminary.

Prior to construction, the project will need approval from the independent provincial regulator, the British Columbia Utilities Commission (BCUC).



La Joie Dam.

#### **Bridge River Cell Towers**

We're planning a dam safety monitoring project that requires the installation of two cell towers in the Bridge River area. We anticipate the project will begin construction in summer 2020.

Telus will own and operate the towers and will secure the tower locations. The towers will allow us to improve communications between our Bridge River facilities and our control centre. As an additional benefit, the towers will support public cell service in the area of coverage. As the locations of the towers haven't been confirmed, we don't know what that coverage area will be yet.

#### **Bridge River Transmission Project**

The Bridge River Transmission Project will ensure that the regional transmission system continues to reliably move electricity from Bridge River generating facilities to our customers during peak periods.

For more information and maps of the alternatives, visit **bchydro.com/brt**.



Crews install structures for a power line realignment in the Lillooet area in late 2018.

#### **Quick Facts**

- The Bridge River system generates enough electricity to power the equivalent of 300,000 homes a year.
- There are two 2,500-metre tunnels drilled through Mission
  Mountain to bring water from Carpenter Lake Reservoir to two powerhouses in a neighbouring valley at Seton Lake.

For more information, visit bchydro.com/bridgeriver.

If you have questions, please contact us at **projects@bchydro.com** or 604 623 4472 or toll free at 1 866 647 3334.



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