

Wilsey Fish Passage Project

December 2019

We have started a project to achieve fish passage at Wilsey dam so that Chinook, Coho and Sockeye salmon can access 32 kilometres of historical spawning habitat upstream of the facility. We are building on the work of the Wilsey Dam Fish Passage Committee that explored a number of options to restore fish passage and recommended construction of a fishway channel along the north riverbank through BC Hydro’s Shuswap Falls recreation site.

We recently completed a review of Wilsey Dam and the Shuswap Falls powerhouse that indicates considerable investment is required to refurbish these facilities and construct a fishway channel. To ensure we are making the best decision for the facility, the first step of our project will investigate whether decommissioning of Wilsey Dam and the Shuswap Falls powerhouse is a better option. The project will not consider decommissioning of our upstream Sugar Lake Dam.

It is early days for the project and we expect this to be a complex undertaking. Based on the preliminary information we currently have, we anticipate the following general timeline.

Project steps		Estimated duration of each step	Earliest completion of each step
Step 1	Preliminary investigation of potential Wilsey Dam decommissioning and determine a leading alternative for fish passage.	Underway, about 1.5 years to complete.	Spring 2021
Step 2	Once leading alternative is identified, complete detailed studies to determine if it is feasible. BC Hydro Board of Directors review feasibility design and decide whether to move ahead with project.	About 1.5 years	Fall 2022
Step 3	If approved, complete preliminary design and seek regulatory approvals. Decommissioning would require preparation of detailed application to the BC Utilities Commission (BCUC). The BCUC would then hold a formal review and make a decision on whether or not to approve.	1 to 2 years depending on chosen fish passage option.	Fall 2023
Step 4	If regulatory agencies approve the project, BC Hydro Board of Directors will decide whether to proceed with project construction.	3 to 6 months	Spring 2024
Step 5	If approved, detailed design is completed and then project construction will start.	2 to 3 years depending on chosen option	Spring 2026

*Note this schedule is subject to change.

Decommissioning option

It is too early to know exactly what decommissioning would look like and how long it would take – for example whether the entire dam would be removed or what additional work might be required in the river channel. Addressing questions like this will be part of our investigation of decommissioning. We anticipate that it will take a year or longer to properly investigate the decommissioning option to ensure we make the best decision for the facilities and fish passage.

What this means for other BC Hydro initiatives

We recently started work to renew our water licences that allow us to operate Wilsey Dam and its Shuswap Falls powerhouse and also began an Order Review of our Shuswap Water Use Plan. Since both of these initiatives rely on our continued operation of these facilities, we intend to pause work until we confirm our preferred alternative for fish passage at Wilsey Dam.

Ongoing consultation and engagement

We recognize and appreciate the substantial work of the Wilsey Dam Fish Passage Committee, First Nations, elected officials, agency staff, and stakeholders in pursuing fish passage at Wilsey Dam. We will continue to consult and engage during our evaluation of the alternatives and decision process.

BC Hydro's Shuswap facilities



Wilsey Dam and generating station

The facility is aging and currently one of the two generating units is out of service. The facility now generates approximately 12 gigawatt hours each year, less than 0.1% of BC Hydro's total hydroelectric generation capability. Restoring full generating capacity would require significant refurbishment work to both Wilsey dam and the powerhouse.

For more information

For more information or to sign up to receive project updates by email, please contact Jen Walker-Larsen at 250 814 6645 or Jennifer.walker-larsen@bchydro.com

Long-standing interest in salmon restoration

Since Wilsey Dam was constructed, Indigenous groups and local communities have had a strong interest in restoring Shuswap salmon populations.

The Wilsey Dam Fish Passage Committee with representation from First Nations, elected officials, agency staff, BC Hydro, and local stakeholders has been working since 2003 to advance fish passage through BC Hydro's Fish Passage Decision Framework.

In June 2018, the Committee's findings were endorsed by the Fish and Wildlife Compensation Program Coastal Board, fulfilling its role in the Fish Passage Decision Framework.

BC Hydro's Wilsey Fish Passage Project will now complete the remaining Fish Passage Decision Framework steps.

The West Canadian Hydro Electric Corporation built Sugar Lake Dam, Wilsey Dam and the downstream generating station at Shuswap Falls in 1929. Later the BC Power Commission succeeded the Corporation which in turn became BC Hydro. Wilsey Dam was built at the site of the original 21-metre high Shuswap Falls and a spillway channel was blasted through solid rock immediately to the north.

In 1942, the Sugar Lake Dam was raised to its current height and increased storage and power production. The Shuswap Falls facility with two generating units and a capacity of 6.5 megawatts provided most of the electric power for the North Okanagan region until 1951.