Decommissioning And Removal Of The Old John Hart Generating Station Facilities

Community Update: April-June 2019

Report #2

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Decommissioning Status

Completed since April 1:

- Old John Hart powerhouse equipment removed, with generators removed and lower floors/voids filled with gravel;
- John Hart generating station demolition underway;
- All wood and steel penstocks removed with majority of contaminated soils removed; and
- Since 2014, the project team has now surpassed 3.6 million person hours of work without a lost-time incident. We are very proud of this achievement.

July to September 2019

- The two Surge Towers to be removed (one will remain in place after the project's completion);
- Old powerhouse removal completed with pad paved, fencing installed;
- Contaminated soil removal completed (replanting to be done in October/November when rain is forecast);
- Canyon View Trail loop reinstated near the river, and re-established river put-in opened to kayaks, canoes, and river rafts only;
- Final paving for the aboveground areas, such as the road and parking lot beside the two tunnel portals;
- Final clean up of site office at old Campbellton School site; and
- Clean up, demobilization and site restoration of all construction areas.



Stephen Watson-BC Hydro

View from above the John Hart Reservoir looking down the old penstock corridor to the surge towers, & over Campbell River.

The last sections of the three woodstave penstocks, each 3.66 m in diameter & 1100 m long, were broken up & removed today.



4:17 PM - 30 Apr 2019



Stephen Watson-BC Hydro @SWatson BCH

End of an era: 72 years after producing its first megawatt, the old John Hart generating station building is being removed down to the ground level. #History



^{7:11} AM - 14 Jun 2019

Old John Hart Project Site Map – Planned Decommissioning Works



On April 7, we had a drone fly the site to take some good aerial pictures. These next seven pages show the decommissioning work at the time. This picture view is from the John Hart Reservoir looking down the old penstock corridor to the surge towers below.

View up the old penstock corridor, with the penstocks removed, to the John Hart Reservoir.

From the top of the slope at top right, the penstocks transition to steel, with some showing removed and others cut in half during the removal process.

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View of the old surge towers, penstocks and generating station.

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View down one of the generator pits, with the top of a generator shaft shown. With drone photos complete, we'll show general site remediation photos since April. This one shows the removal of the three woodstave penstocks.

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The final piece of woodstave penstock, as shown in the inset photo, was removed on April 30. The general picture is an earlier photo of the near full removal of the penstocks.

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View from the pedestrian crossing looking upstream. Inset picture shows the before view.

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Removal of some shallow hazardous waste soils (high creosote saturation) along the woodstave penstock corridor. All contaminated material is being properly disposed in Campbell River or beyond, such as for the hazardous soils.



An April view looking upstream at the steel penstock corridor.

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A mid-June view of the steel penstocks removed and the anchor blocks being broken up. The inset Tweet shows our ongoing diligence for the environment.



Stephen Watson-BC Hydro @SWatson_BCH

Critters relocated - happy little guys: as part of the ongoing removal/decommissioning of the old John Hart hydroelectric facility, our subcontractor team checked & then removed 5 frogs & 4 newts before an area by the penstocks was filled in. @HatfieldConsult #FMI #Environment



Removal of the anchor blocks and steel penstocks downstream of the surge towers.



A neat angle of the three surge towers.

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In June, the removal of the walls of the old powerhouse building began.



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A different vantage of the removal of the old powerhouse building.

View of the old powerhouse from the Canyon View Trail.

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Upstream view of the old powerhouse and surge towers, with the new underground powerhouse tunnel to the right. The scaffolding and poly is in place to prevent debris from falling into the river.

Campbell River Mirror

Friday, May 24, 2019 A33 **Removal of old Elk Falls parking lots conducted**

With the John Hart Generating Station Replacement Project nearing completion so is the final touch ups to the surrounding Elk Falls Provincial Park.

The John Hart project required a parks boundary adjustment that will lead to a net gain to the park. Another benefit was the majestic Rotary Club-constructed Elk Falls Suspension Bridge. Since project inception, in 2007, there have been a lot of wins along the way.

"We've come a long way on how the John Hart project was planned, designed, and constructed," said BC Hydro spokesperson, Stephen Watson. "Over that time we've worked collaboratively with BC Parks so that we could have a successful project, and BC Parks could benefit as well. Looking back, I think it's been a big success for us and BC Parks."

BC Hydro was required, through a Park Boundary Adjustment process, to obtain some park land to allow for access and build the project within their 250-acre site located in the middle of the Elk Falls Provincial Park. The land needed was mostly for the widening of existing access roads through the park to BC Hydro's property. When getting approval for the boundary adjustment, Hydro committed to giving more land back



BC Hydro is removing the two original Elk Falls Provincial Parking lots through an agreement with BC Parks. This was the view last week of the former upper parking lot. **BC Hydro photo**

to the park than taken out, which may equate to about a six- to seven-acre net gain to the size of the Elk Falls Park.

"It has been very impressive to follow this massive project so closely since inception, and along that path ensure the various components of Elk Falls Park are protected, restored or enhanced," said BC Parks Area Supervisor, Brent Blackmun. "The end outcome is

very favorable. There have been many benefits for the park, the broader Campbell River community and visiting local and international tourists."

Those end benefits included discussions over the years between BC Hydro, BC Parks and the Campbell River Rotary Club that led to the Rotary Club's construction of the suspension bridge at Elk Falls. Available parking was a show-stop-

per for the bridge proposal, as the old parking lots were too small, poorly constructed and located in the iconic old growth forests. That ultimately led to BC Hydro, given the three-year road closure across the John Hart Dam during project construction, to build a project legacy through a permanent 80spot parking lot, that included RV and bus parking. The access road, parking lot and trail system was about a \$2 million contribution. Hydro also made a funding contribution of \$150,000 towards the suspension bridge construction.

The Elk Falls Day Use Area had annual visits climb from about 75,000 a year to about 200,000. The suspension bridge is a free attraction that has increased tourism.

"With the new Elk Falls permanent access and parking in place since 2013, and timed to our decommissioning of the old John Hart facilities this year, we had another commitment to BC Parks to remove the pavement in the original two parking lots within the old growth forest," said Watson. "That work is happening now and is perhaps two weeks from completion. The final results will further protect the park's old growth trees and the habitat they provide. The work also includes improvements to trails, relocated picnic tables and

retaining emergency access."

Hydro will also freshen up the existing parking lot, including painting new road lines. The work to remove and restore the original parking lot pavement and freshen up the new parking lot has a combined cost of about \$90,000, with an additional \$30,000 from BC Parks for restoration planting, trail work and monitoring.

"For years we've been discussing with BC Hydro what Hydro lands may be transferred over to BC Parks at Elk Falls Park as early as 2020," said Blackmun. "Part of the land package may include the new Elk Falls parking lot, adjacent treed lands with trails and some lower reaches of the Elk Falls Canvon."

"While the John Hart project was successful in getting a safe, reliable, environmentally-benefitting hydroelectric facility, it is also important to work with agencies and the community to mitigate the project impacts as much as possible, and where possible find mutual wins," Watson said. "With BC Hydro and BC Parks working closely together since the very beginning, we achieved positive outcomes."

Hydro says the old woodstave penstock corridor will eventually return to forest, and better fit within the surrounding parkland.



BC Hydro Land To Be Provided To the Elk Falls Provincial Park



Back in June 2012, BC Hydro submitted a Park Boundary Adjustment Application (PBA) to BC Parks on the removal of lands from the Elk Falls Provincial Park for the John Hart project. Hydro was granted a PBA and now in 2019, we are following through on our commitments such as the removal and remediation of the old parking lot, and to providing a net gain to the Park property. The above map shows the light brown areas that are BC Park's lands to be provided to BC Hydro as part of the PBA, and the areas in green are BC Hydro lands to be provided BC Parks – an overall net gain in Park land area of about 3 hectares. In addition, BC Hydro will grant BC Parks a right of way for the trail from the new parking lot down to the Millennium Trail including a transfer of ownership of the pedestrian bridge crossing over the old penstock corridor. Any questions about the land transfer, which may take place in 2020, can be sent to steve.watson@bchydro.com.

Campbell River's Canyon View Trail loop to be opened up by end of summer

Interpretive panels and two new totem poles to be installed on old powerhouse site

Jun. 21, 2019 1:30 a.m. / COMMUNITY

BC Hydro says they have some good plans for the Canyon View Trail besides having it re-established and open at the old powerhouse site by late summer.

Plans include not just the trail going back near the river on Hydro property, but also a nice lookout with interpretative panels and two totems.

"The Canyon View Trail was actually the top community point of interest or concern during our John Hart project planning process, and we're quite excited for the community and those trail users about how this will all look when we're finished," said BC Hydro spokesperson. Stephen Watson. "The powerhouse is currently being removed down to the ground level, and then once done and along the front of it, there will be a nice lookout area for people to look downstream. Within the lookout there will also be five large interpretive panels to describe the facility and operations, fish, and First Nations, including the meaning behind the two new totems we'll be receiving."

The We Wai Kai Nation and Wei Wai Kum Nation are providing two totems within the lookout and they will be facing the river.

The trail will pass through a short-length fenced security corridor, where the old powerhouse once stood, to the foot of the hill of the old penstock corridor. From there it will go up some stairs before cutting across northward and above the new tunnel outlet area, and join into the existing Canyon View Trail.

"We're also refreshing the area around the public parking lot by the river, and the trail to the old powerhouse area," said Watson. "That includes wayward signage such as maps, and more interpretive panels within a new and an existing kiosk."

The section of the Canyon View Trail, which was re-routed to the temporary Station View Trail, that went past the three John Hart surge towers continues to be closed off as work advances in removing the old above-ground hydroelectric facility. People can continue to walk the trail up or down either side of the Campbell River. The Station View Trail will be decommissioned, as originally planned, this fall.

BC Hydro is also looking at restoring public river access near the old powerhouse outlets, on the right bank of the river. That public access may be reestablished by early fall 2019. Originally, people could enter the river near the entrance to the canyon, off a rock outcrop, just upstream of the old powerhouse. Watson noted that there will be no swimming or tubing allowed in the area of the old powerhouse because of safety risks from the six old draft tubes and the downstream rocks on the right bank of the river, and to lessen the disturbance to salmon habitat as the old powerhouse discharge area will likely be a calm holding area for salmon during the summer.

Watson says Hydro has been consulting about the trails and river access with First Nations, and working with the two-dozen member Campbell River Hydroelectric Facilities Liaison Committee, including representatives from the Department of Fisheries and Oceans Canada, City of Campbell River, Greenways Land Trust, Campbell River Environmental Committee, to Destiny River Adventures.

Questions about the trail can be directed to steve.watson@bchydro.com.



Some of the members of BC Hydro's John Hart project team.

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Construction – Point Of Interest

Each report, BC Hydro and InPower BC will provide a construction fact, occurrence, or situation.

First Island Flow Split

A key requirement for the project was to ensure that the new underground tunnel discharge outlet (tailrace) would retain the existing water flow split around First Island – the first Island downstream from the generating station's outflow. As an update:

- To confirm that this has been achieved, as a follow up to the modelling done prior to project construction, flow testing was done at a full range of river flows;
 - The last test was completed the first week of June with the river flowing at a low 40 cubic meters per second (m3/s); and
- Flow measurements have been completed at 110, 80 and 40 m3/s, and early results indicate that the flow split has remained similar to the old flows. This will be a success for the design and construction of the new discharge outlet from the new powerhouse.

A May 2018 photo of the old powerhouse and the new tunnel outlet, with First Island shown downstream.

