

THE CURRENT

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With our second issue of **THE CURRENT**, the community newsletter for the Innergex Renewable Energy Upper Lillooet Hydro Project (ULHP), we are excited to bring you updates on our work on the project, in the community, and on the environmental front. It's been a busy spring and early summer with the commencement of pre-construction and construction activities and noteworthy community initiatives such as sponsorships at local events and the construction of the new trail in the Upper Lillooet River area. In other Pemberton-area news, the temporary worker's accommodation set up in the industrial park to house construction crews will be dismantled and moved to the Project site imminently .

Protecting important wildlife in the area, like Grizzlies and coastal tailed frogs, have been central in our planning this season—you can read all about them on pages two and three. We hope you find all of the articles in this issue of **THE CURRENT** informative and interesting. As always, we're delighted to be able to connect with the Village of Pemberton and area residents about our work in the community, so do not hesitate to contact us via phone, email or a visit to our office!

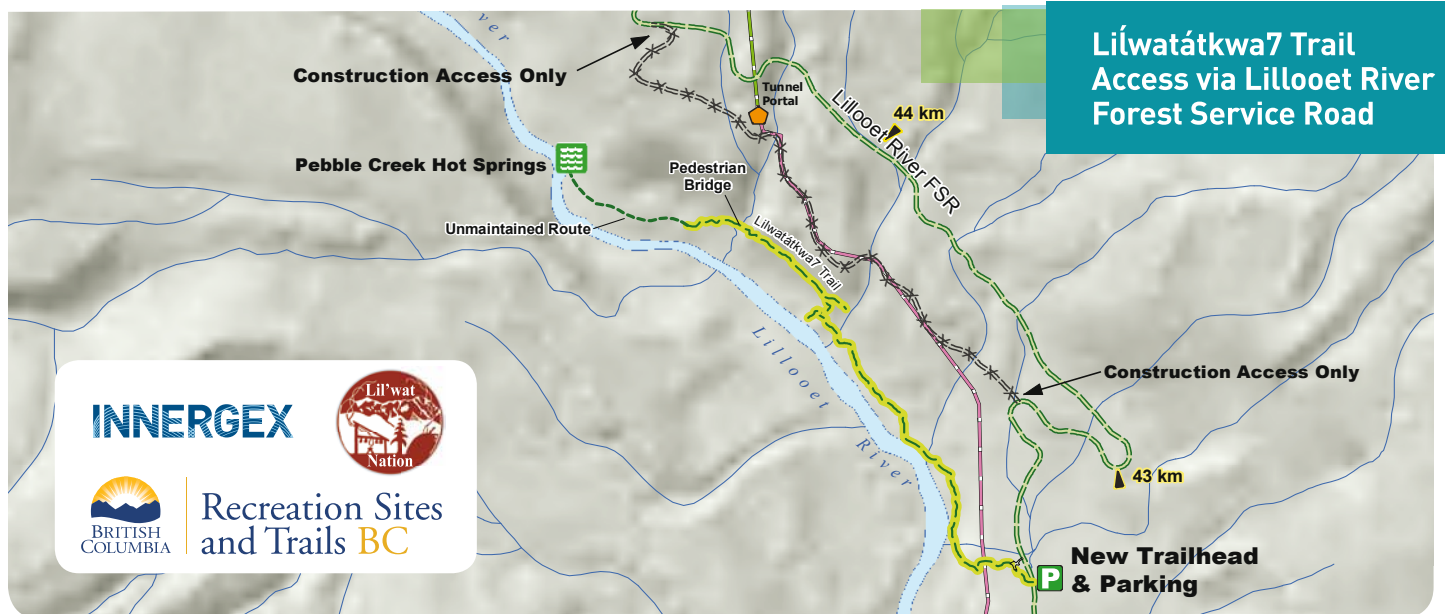
ABOUT INNERGEX

Innergex develops only renewable energy projects because we believe that the way to a cleaner future is through truly sustainable energy sources. We began developing, owning, and operating run-of-river hydroelectric facilities, wind farms, and solar photovoltaic farms in 1990. Today, we operate facilities in Québec, Ontario, British Columbia and Idaho, USA. From the very beginning, our mission has been to produce clean and renewable energy by developing and operating high quality facilities while respecting the environment and serving the best interests of the host communities, our partners, and our investors. For more information, please visit www.innergex.com.

Lil'watátkwa7 (Lillooet River) Trail

In order to maintain safe access to the Upper Lillooet River near the Pebble Creek Hot Springs during construction and afterwards, Innergex, in conjunction with Recreation Sites and Trails BC and the Lil'wat Nation, created a new trail which includes a new parking area just past KM 42 along the Lillooet River Forest Service Road (FSR). The new trail is called Lil'watátkwa7 Trail which means Lillooet River in Ucwalmicwts, the native language of the Lil'wat Nation.

The new trail is approximately 1.2 km long and follows the Upper Lillooet River passing by a number of viewpoints such as waterfalls and scenic views of the river. A pedestrian crossing has been built over Truckwash Creek to get to the final viewpoint. Beyond the end of the trail is an unmaintained route that leads to the Pebble Creek Hot Springs. We are working on realigning the Lillooet River FSR, and once it's complete, there will be no public access to the old hot springs parking lot or trailhead.



Lil'watátkwa7 Trail
Access via Lillooet River
Forest Service Road



Project Timeline

Construction Update

August 2014:

- Continue tunneling at the Boulder Creek downstream portal
- Completion of excavation of both powerhouses
- Start tunnelling at the Upper Lillooet River downstream portal
- Opening of the construction camp.
- Boulder Intake crane pad preparation and access road completion

September 2014:

- Excavate Upper Lillooet River diversion channel and cofferdam
- Start concrete substructures at both powerhouse locations

October 2014:

- Start tunneling at the Upper Lillooet River upstream portal
- Completion of transmission line from the north side across the Lillooet River to the south side of the Lillooet River

Upper Lillooet Hydro Project (ULHP)

The ULHP includes two run-of-river, clean and renewable energy-generation hydroelectric facilities (HEF) located in the Pemberton Valley: an 81.4 MW one on the Upper Lillooet River and a 25.3 MW HEF on Boulder (Pebble) Creek. Electricity generated by the facilities will be transmitted to the BC Hydro system by a 230 kV transmission line.

Preparing to Construct the Powerhouses

We have completed clearing and grubbing the areas where both the Upper Lillooet River and Boulder Creek powerhouses will be constructed. During the clearing and grubbing phase, an Independent Environmental Monitor (IEM) worked alongside Innergex and construction crews. In the case of the Boulder Creek powerhouse location, the IEM performed an amphibian precautionary sweep: the powerhouse area is located near a coastal tailed frog stream and, as a precaution prior to construction, a survey was done to check for the little frogs under any debris that may be disturbed during the clearing and grubbing phase. During the sweep, no frogs were found however, if a frog were found, a salvage would be done by a Qualified Professional to remove them from harm's way. No construction activities took place until the IEM determined the area was frog free.

In addition to the frog surveys, pre-ground disturbance surveys were also completed by the contractor with the IEM. Information gathered during a pre-ground disturbance survey included: types of soil, depths of each kind of soil, and marking the areas of naturally existing drainage patterns with a GPS so that they can be restored during site restoration. This survey allows us to provide erosion control and sediment retention measures for the exposed surfaces and affected drainages;

we will also be able to effectively recommend quantities of coarse woody debris and soils needed for restoration work at a later date.

Truckwash Creek Bridge and Lillooet River FSR realignment

An essential part of construction and maintenance of the ULHP is safe roads and bridges. The existing Lillooet River FSR required realigning at Truckwash Creek to facilitate construction activity and continued access to the Upper Lillooet River Valley. The realignment included the installation of a new bridge crossing the creek (upstream of the existing ford crossing) a new trail along the Upper Lillooet River and a pedestrian crossing over Truckwash Creek.

Industrial users were consulted on the design of the new section of the FSR (e.g. switch back sizes and road grades) and it was approved by Ministry of Forests, Lands and Natural Resource Operations. The realigned FSR and new bridge crossing will be opening shortly.

The new FSR alignment will turn up the hill east of Truckwash Creek at approximately KM 42.5, following an upgraded forestry road. A new 49 m free-span steel structure bridge has been installed across Truckwash Creek that connects with a new section of the FSR, which then joins the existing switchbacks at approximately KM 44.5 (see map on page one).

This new alignment was constructed to prevent vehicles from driving through Truckwash Creek and to protect the safety of the public during construction.



Upper Lillooet River powerhouse excavation site ↑

Newly installed bridge over Truckwash Creek ↓



A day in the life of a surveyor

An important part of Innergex's environmental commitment during construction of the ULHP is bird surveys. Because of the potential disturbance construction activities could have on birds in the area, surveys are conducted during the breeding bird season (May 1 to July 31). Notably, breeding birds are protected by federal and provincial legislation: the federal Migratory Birds Convention Act protects all migratory birds by prohibiting disturbance to nests or eggs without permits and the BC Wildlife Act contains provisions to protect against possession, injury, disturbance, or destruction of birds, bird eggs, nests which are occupied by a bird or an egg, and the nests of certain species (such as eagles, Burrowing owls or Peregrine falcons). At least three Active Migratory Bird Nest Surveys must be completed prior to vegetation clearing. All species observed are recorded. If found, the active nests and its inhabitants will be protected by no-disturbance buffers until either the young have fledged or the nest is no longer active. A tremendous amount of attention to detail and care goes into making sure that breeding birds are not harmed during construction. We recently caught up with Fred Wells, Lil'wat Nation technician, and one of the hard-working bird surveyors working on the ULHP to get an idea of what life was like in the day of a bird surveyor.

What time do you start work?

We usually start around 4 am. Surveys can begin as soon as there is light, and should be concentrated during the morning hours,



when birds are most active—until about 10 am.

How many people are doing the surveys?

There are two to three people in our crew.

How far do you go in a day?

The minimum is usually 200 metres to a maximum of two kilometers within the construction area, depending on terrain and amount of bird activity.

What is the most number of nests you've seen?

The most birds we've seen in one survey area were nine nests within two kilometers. One morning, we saw seven nests—and that was the most we've seen in one day.

Where are the nests found?

It depends. Some are found in the ground, like the Dark-eyed junco, where others are found in tree cavities.

What are some of the most interesting birds you've seen?

What other interesting things have you seen in the field?

We've spotted an Olive-sided Flycatcher and a Band-tailed pigeon. We're always on the lookout for the Sharp-shinned Hawk. We've seen lots of signs of predators in the area. We've also seen part of a wolverine skull.



Preserving Grizzly Bear Habitat

During construction, Innergex is implementing extensive measures to minimize any potential impacts on Grizzly bears and their habitat—including foraging sites and salmon spawning streams. We believe that, in order to protect the species, we must effectively manage all human activities and preserve bear habitat.

The Environmental Assessment for the project established that there would be minimal impacts on Grizzlies if the following conditions were met:

- Avoiding Grizzly foraging areas; if we cannot avoid a key foraging area, we will implement additional measures such as noise reduction and timing restrictions on construction activities
- Limiting, or in some cases, prohibiting construction during times that bears are foraging or when salmon are spawning
- Maintaining or replanting vegetative

screens as buffers so that interactions with Grizzlies is avoided

- Revegetating any areas where berries have been removed in key foraging areas
- All staff/construction crews that go to the ULHP site will undergo bear awareness training

Additionally, a Human-Wildlife Interaction Management Plan and a Human-Bear Conflict Management Plan have been put in place to help protect Grizzlies – and humans – during construction and operation of the project. These plans will help us avoid, minimize or mitigate any potential impacts on wildlife in the area.

Another way Innergex is limiting potential impact on Grizzlies in the area is through a financial contribution. In September 2013, Innergex contributed \$300,000 to the British Columbia Ministry of Forests, Lands and Natural Resource Operations to carry



out a five-year study into the grizzly bear population present in the Upper Lillooet River drainage, where the ULHP is located. A part of the project's Environmental Assessment Certificate requirements, the provincially-led regional research program will conduct a grizzly bear inventory and a monitoring and evaluation program to understand the impacts of all types of development on the grizzly bear population. Innergex's contribution is used for collaring and monitoring of female grizzly bears and collection of hair-slug/DNA samples.



Rutherford Whitewater Facility

Innergex constructed the whitewater kayaking facility at the Rutherford Creek Hydroelectric Facility in 2003. The course has been used for competitions in the past decade. CanoeKayak Canada (CKC) held its national slalom team trials on the Rutherford course May 17-18, 2014, following several days of training. The Rutherford facility has not been used by CKC or CanoeKayak BC since 2010 but officials from both groups said they were thrilled to be back at the course. "It's great to be back out here" said James Cartwright of CKC, "Just seeing the smiles on the faces of all the athletes, (you can really tell) they enjoy it here".

The high-end facility was constructed in 2003 and the course is quite difficult, and as Dave Ford, five time Olympian and world champion, stated, "It is great for the world's best, but unusable by athletes still developing their skills."

Innergex is working with CKBC, CKC and the newly-formed local Surf Pemberton to establish a standing-wave park at the lower section of the course. All three groups and Innergex hope to turn the Rutherford Whitewater Facility into a venue that is widely used area for kayakers, both recreational and competitive, and surfers.

Join our Mailing List!

Interested in receiving regular updates on the project, including construction highlights, road closures, and events? Send us an email at:

info@upperlillooethydro.com and we'll add you to our mailing list. Don't forget to check our website regularly for updates on the project at:

www.upperlillooethydro.com/project

Info Kiosk

Have you seen our kiosk sign placed at the 9-km mark along the Lillooet River Forest Service Road (FSR)? On the kiosk, you will find a location map and contact information for Innergex and the prime contractor CRT-EBC. A Project Update notice is posted regularly on the board that includes: current road conditions, road delays and/or closures, blasting and any other relevant information related to the ULHP site, the FSR, and surrounding areas. The Ministry of Forests, Lands and Natural Resource Operations occasionally closes roads temporarily when risks from landslides and other seasonal elements are high. For more information, please contact the Ministry's Sea to Sky Office at **604-898-2100** and/or refer to our Project Update notices. All information is also available on our website www.upperlillooethydro.com/project.



The Pemberton Community Barn gets a lift with the CRT-EBC crane. →

Interested in working on the Upper Lillooet Hydro Project?

You can submit your resume to:

Civil Contractor:

CRT-EBC

Office Location:

Pemberton Industrial Park

Phone: **604 894-5002**

Resumes can be sent to:

recrutement@crtconstruction.ca

OR

Transmission Line Contractor:

Westpark Electric Ltd.

Phone: **604 846-0039**

Resumes can be sent to:

careers@westparkelectric.com

