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In the fifth issue of THE **CURRENT**, the community newsletter for our Upper Lillooet Hydro Project (ULHP), we focus on the forest fires that have impacted many of you living in the Pemberton Valley and surrounding areas. The Boulder Creek Fire also impacted the ULHP, as construction was halted for several weeks. Much of the latter part of the summer involved working with the BC Wildfire Service and the Ministry of Forests, Lands and Natural Resource Operations to minimize harm and to ensure the project site was safe before any work resumed. In this issue, we felt it was important to inform Pemberton and area residents of how the ULHP was impacted by the fire, how we helped secure the site so work could commence, and how we routinely prepare for natural disasters.

Construction activities have resumed, and the Area Restriction Order issued by the BC Wildfire Service was rescinded on September 15, 2015.

Boulder Creek Fire

This year's unusually dry and hot weather has caused forest fires in some areas of the province, and many British Columbians have been facing risks to their communities. The Pemberton Valley has been one of the areas that has endured forest fires. On June 30, the Boulder Creek fire was ignited by lightning and quickly spread to approximately 6,800 hectares, sweeping through the area of the ULHP construction site. On July 4, upon recommendation from the BC Wildfire Service, the Squamish Lillooet Regional District issued an evacuation order and nearly 200 personnel were safely evacuated from the ULHP site. Safety is a priority for Innergex, and thankfully, nobody was hurt.

There was a short period of calm before the fire started to resume aggressive behaviour, and Innergex and its contractors were able to visit the site on July 22 to assess preliminary damage. The damages appeared to be limited; main areas that were impacted include: parts of the transmission line between the two powerhouses, a 60 foot section of uninstalled penstock, and a limited amount of construction equipment. The priority has been to have our contractors' qualified professionals conduct air quality testing, geo-hazard re-assessments (i.e. avalanche, landslide and terrain) and danger tree assessments and falling.

We deeply appreciate the work and dedication of the firefighters and other BC Wildfire Service personnel, who worked closely with us and our contractors to minimize damage. During the height of fire activity, a group of firefighters used the project's camp as a base to fight the fire, which greatly reduced their travel



This year, Innergex celebrates its 25th anniversary and we are commemorating 25 years of producing clean and renewable energy while respecting the environment and balancing the best interests of host communities, our partners, and our investors. Innergex is recognized today as a leader in developing, operating, maintaining, and financing renewable energy projects. Each new achievement over the years-first in run-of-river hydro, then in wind, and in solar—has served to build our reputation as a Canadian pioneer in the renewable energy industry. For more information, please visit www.innergex.com.

time each day to and from the fire area.

This is the first time an Innergex project has been impacted to this degree by a natural disaster. Innergex and its contractors will continue to work with local organizations and communities to respond to challenges like this in a safe, effective, and efficient manner. Big thanks to everyone who helped keep us safe during the recent fires.







Construction Update



↑ June 6, 2015 - Upper Lillooet Powerhouse is 957.8 m² in size. Foundation consists of approximately 3,000 m³ of concrete to date.



Powerhouse Construction

The ULHP consists of two hydroelectric facilities and two separate powerhouse structures.



↑ September 11, 2015 - With just over 1,500 m³ of concrete, the Boulder Powerhouse foundation is complete and the large steel superstructure is well underway. Two 42.5 tonne overhead cranes can be seen installed in the top of the structure. The Boulder Creek powerhouse is 792.6 m² in size.

 June 4, 2015 - Crew working on the formwork at the Upper Lillooet Powerhouse.



↑ June 29, 2015 - Upper Lillooet Penstock placement in trench.

Penstock Construction

The Upper Lillooet River Hydroelectric Facility includes a 1.4 km long buried penstock. This pipe measures 3.8 metres in diameter.



↑ September 3, 2015 - Upper Lillooet Penstock joint weld completed and crew setting up for corrosion protection.

Fire Prevention and Preparedness

As part of the environmental assessment process, we were required to assess the effects of the project on the environment as well as how environmental factors may affect the project including extreme weather conditions, natural seismic events, volcanic events, fire, terrain hazards and climate change. Our experience this year with the Boulder Creek Fire has emphasized the importance of being prepared for unexpected environmental factors. As we have seen first-hand, forest fires have the potential to cause damage to infrastructure.

Potential environmental effects associated with forest fires in the project area include: debris causing temporary damming of the stream, damage to project structures and flow control mechanisms causing rapid changes in river flow, and an increased risk of soil erosion and subsequent sedimentation following the fire. The risk and severity of avalanches also increases with the loss of vegetation in mountainous terrain.

The Construction Environmental Management Plan and Operating Procedures and Parameters include fire prevention, preparedness, and response procedures designed, in accordance with the BC Wildfire Act and regulations, to minimize the risk of a human-caused fire and to manage the risk of damage to project infrastructure due to naturally occurring fires. Applying appropriate fire codes during all phases of the project and implementing practices such as keeping underbrush, debris and other possible fuel sources clear from around all structures will also help minimize the risk of fire. Our contractors were required to prepare site specific Fire Preparedness Plans including practices such as:

- Having firefighting tools and equipment in their trucks and at their work sites
- Training a subset of workers in Basic Fire Suppression and Safety Training (S-100) or higher (as per WorkSafe BC Regulations)
- Tracking local fire prohibitions and area restrictions
- Conducting fire hazard assessments and/or abatement measures
- Ensuring high risk activities are not occurring during high or extreme fire danger class ratings
- Training crews on what to do if a fire starts or is discovered on the job site.

Dangerous Tree Assessments and Falling

A part of the forest clearing activities for the ULHP includes falling any dangerous or hazardous trees to ensure people and project infrastructure remain safe. There are specific procedures and guidelines put into place to help balance conservation values associated with trees and public safety.

A dangerous tree (as defined in the Occupational Health Safety Regulations) is a tree (live or dead, regardless of size) that is a hazard due to its location or lean, its physical damage, overhead condition, deterioration of its limbs, stem or root systems, or a combination of these conditions. If there is a possibility that a worker will be exposed to a dangerous tree, the tree must be cut down or a risk assessment of the tree needs to be undertaken.

During the recent forest fires, the BC Wildfire Service was required to conduct danger tree assessments and falling before allowing their firefighting crews to travel along access roads and enter firefighting work zones. Some old growth cedar and hemlock trees had smoke coming out of the ground between the roots, so they had to be removed even though they showed no visible signs of root or stem burnout. These trees are burning internally and when cut down, the stumps burst into flame when exposed to air. The BC Wildfire Services also did some clearing to create fire

Overview of fire area at KM 39, around transmission line. 🤿

breaks, which prevents the spread of the fire. Along with the BC Wildfire Services' work on falling dangerous trees, our crews also had to conduct further assessments and falling before we could recommence construction.





Innergex's Liz Scroggins presenting a cheque to Whistler Adaptive's athletes and representatives.

Innergex Sponsors Pemberton Paddling Program

This summer, Whistler Adaptive Sports Program Society partnered with the Pemberton Canoe Association to provide Pemberton and Mount Currie residents with a cognitive, physical or sensory disability the opportunity to take part in group kayak and canoe lessons. Innergex was pleased to provide funding for Whistler Adaptive's inaugural Pemberton Paddling Program. We are honored to be part of an initiative that will give Pemberton and Mount Currie residents with a disability an opportunity to enjoy their natural surroundings and improve their overall well-being. The Pemberton Paddling Program provides a high instructor-to-student ratio for participants and adaptive paddling equipment for those students with limited mobility; lessons were offered in an inclusive and encouraging environment on One Mile Lake every Tuesday morning from June 30 to September 1. Innergex congratulates Whistler Adaptive for the opportunities they provide for people of all ages and with a wide range of disabilities to participate in sports.

ULHP Economic Benefits Assessment

As part of the 2012 Application for an Environmental Assessment Certificate (EAC) for the ULHP, Innergex submitted socio-economic and local employment opportunity assessment reports, prepared by TyPlan Consulting—an independent, external consultant. The socio-economic reports identified potential economic benefits for the Squamish Lillooet Regional District (SLRD) and the province, derived from construction of the project. In response to local demand and wanting to know if the ULHP was generating the economic benefits that had been estimated in 2012, Innergex commissioned TyPlan once again to prepare an independent, third party review of actual and forecast local (Pemberton), regional (SLRD) and provincial benefits derived from construction using actual and forecast contractor supplier.

TyPlan, with the assistance of BC Stats, used our prime contractors' (CRT-EBC and Westpark Electric) expenditures and allocated them to the appropriate North American Industry Classification System codes and then ran the British Columbia Input Output Model to determine actual local, regional and provincial benefits throughout construction.

The results indicate that, within the SLRD, the project generates more output, GDP, employment, household income and taxes than forecast in the 2012 study.

Figures at the provincial level were similar to the 2012 study. This type of study is unique, as the practice of verifying economic benefit assessment statistics submitted for an EAC is rare. Innergex felt it was important to commission this third party review in order to demonstrate our commitment to working with local communities and governments. According to TyPlan, Innergex has been proactive in working with the local community, the contractors and local governments to identify opportunities for optimizing socioeconomic benefits to the local and regional areas. Innergex has presented the results of this independent benefits assessment report to the SLRD and to Mayor and Council of the Village of Pemberton.



Keep up to date on what's going on!

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: www.upperlillooethydro.com/construction ↑ Local Red Seal Journeyman Carpenter, Corey Newsome, at work on the Boulder Creek Powerhouse. Corey has worked on several run-of-river projects throughout the Sea to Sky Corridor. "It is great to find this type of work close to home" says Corey, who usually has to travel outside the area to find employment.

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