



## Woodfibre LNG and FortisBC: Update from Squamish Nation Environmental Implementation Team 18 December 2019

- Since June 2019, Squamish Nation's (SN) environmental team has been posting monthly project updates through the community newsletters. In this edition:
  - Page 2 - Info on the Woodfibre barge-based camp ("floatel")
  - Page 3 – Woodfibre LNG project update
  - Page 4 – FortisBC EGP project update
  - Page 5 – Environmental conditions of approval for both projects
  - Page 6 – Squamish Nation contacts

### Background

- FortisBC Eagle Mountain Pipeline (EGP) are planning to build a buried pipeline to move natural gas from a starting point north of Coquitlam to an end point at Woodfibre.
- Woodfibre LNG (WLNG) is planning to build a large industrial facility (export terminal) where gas would be condensed into liquid natural gas (LNG) and loaded onto tankers.
- Both companies must comply with environmental conditions from Squamish Nation and provincial / federal agencies before construction can begin, and then meet a different set of conditions before operations could begin (see Page 5 for more).

### QUICK FACTS

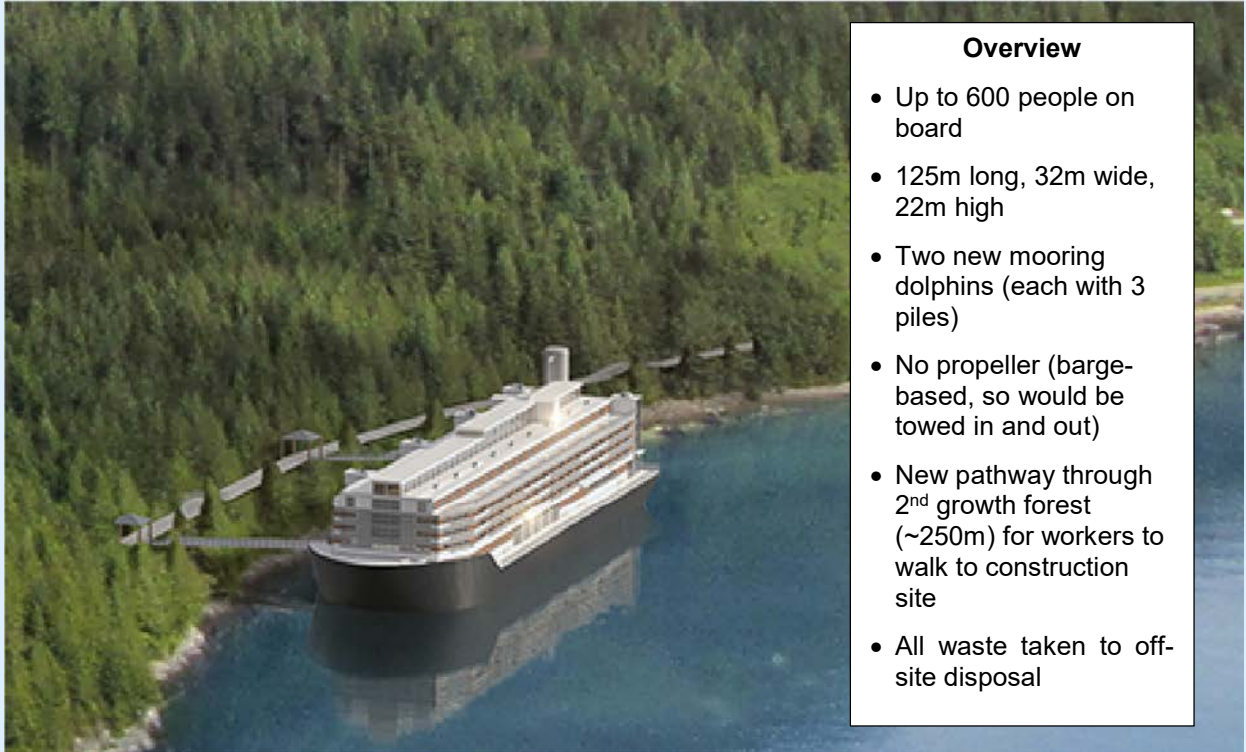
- WLNG and EGP project areas are shown on page 5.
- The pipeline will be about 50km long and mostly follows an existing gas pipeline built in 1990.
- The export terminal will involve a large facility both on land and on a floating storage/offloading unit (called "FSO").
- Approximately one LNG tanker per week will come in and out of Howe Sound for loading.
- Construction of the export terminal is expected to start in late 2020 and pipeline construction is expected to start either in 2021.
- Regular newsletter updates will include general background information, and current details of environmental planning.



## WOODFIBRE LNG FLOATING CAMP (FLOATEL)

On October 28, Woodfibre LNG applied for permission to house construction workers in a floating work camp (floating hotel = “floatel”) and a walkway connecting camp to the construction site.

To use a floating camp, WLNG will require approval from Squamish Nation, the provincial government (Environmental Assessment Office) and federal government (Impact Assessment Agency of Canada). Squamish Nation is conducting a due diligence review of the proposal and its potential environmental and social impacts compared to the existing approval of workers living in market housing.



[You can access WLNG's application report and environmental assessment here](#) (electronic copy) or by visiting [www.projects.eao.gov.bc.ca](http://www.projects.eao.gov.bc.ca) and searching for Woodfibre LNG.

Squamish Nation is coordinating the environmental assessment review with provincial and federal agencies. Decisions to approve or not approve are expected in January or February 2020. A call for comments and concerns closed on December 15. All comments will be reviewed and considered through December and January – we will update further in the January newsletter.

If you have questions or concerns about this application, please contact Deanna Lewis ([Deanna\\_lewis@squamish.net](mailto:Deanna_lewis@squamish.net)), Adrienne Charlie ([acharlie@pggroup.com](mailto:acharlie@pggroup.com)), or Tyler Gray ([tgray@pggroup.com](mailto:tgray@pggroup.com)) from Squamish Nation's environmental management team.



## WLNG ENVIRONMENTAL MANAGEMENT PLANS

Squamish Nation has participated in development and approval of four Environmental Management Plans that are required prior to construction:

- **Wildlife Management Plan:** construction practices for reducing disturbance and habitat loss for wildlife during construction, and monitoring to ensure those practices are followed.
- **Water Management Plan:** details for how and when water from Mill Creek and Woodfibre Creek can be used during construction – biggest focus on monitoring and restricting water use in low flow conditions.
- **Invasive Plant Management Plan:** how to prevent new species from being introduced to site, and how to reduce spread of those already on site.
- **Marine Mammal Noise Monitoring Plan:** ensuring marine noise during construction is below injury threshold for whales, and that marine construction stops if whales (or other mammals) come within 1km of the site.

We are working to add the *Skwxwú7mesh Sníchim* (Squamish language) into the Environmental Management Plans.

8 more management plans remain to be prepared and approved before construction is allowed to start. A similar process with new documents will take place prior to operations.

## WLNG DARRELL BAY CREW DOCK

Woodfibre LNG is proposing to construct a crew transport dock at Darrell Bay with:

- Placement of an access ramp and floating dock (both constructed offsite and towed into position); and
- Installation of fixed approach, steel piles.

A maximum of six round trips are expected per day to transport crews between Darrell Bay and Swiyat. The dock would be located adjacent to the BC Ministry of Transportation and Infrastructure ferry dock.

If you have questions or concerns about how this dock may influence traditional use of waterways or Aboriginal rights please contact members on page 6.



Proposed Woodfibre LNG crew transport dock at Darrell Bay





## FortisBC Eagle Mountain (Woodfibre Gas Pipeline) – Status Report

- FortisBC has begun community consultation on temporary workforce accommodations during construction. Considerations are different than Woodfibre since the project area for a pipeline is not all in the same location.
- FortisBC finished the 2019 geotechnical investigation program (to confirm rock and soil conditions and) to fine-tune the pipeline route in November 2019. Final 2019 work was in Mamquam, Stawamus and Valleycliffe areas. Test-holes drilled in 2019 have all been along existing roadways. Further work in 2020 will be supported by helicopter, for parts of the pipeline that are outside of existing cleared areas.
- It seems increasingly likely that FortisBC will seek permission to move the new compressor stations from Mt. Mulligan to *swíyat* (Woodfibre). We expect to know for sure by early 2020. In this case, FortisBC would then need to apply for permission to make this change to Environmental Assessment Agreements with the Squamish Nation, as well as provincial government.
- Pipeline construction will likely start later than the Woodfibre LNG facility. The Environmental Working Group expects to start detailed discussions on Environmental Management Plans in 2020 for review and approval by the Environmental Working Group before construction can proceed.



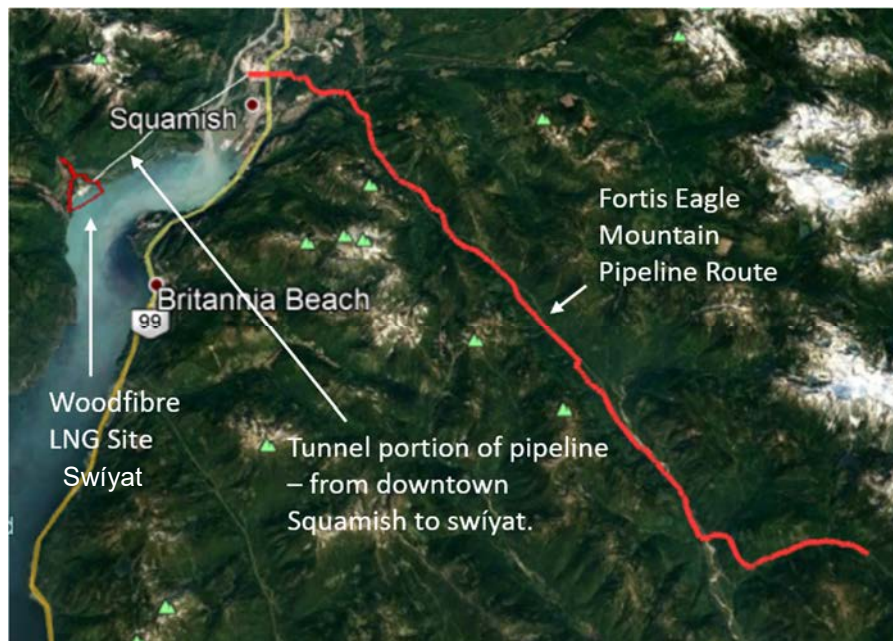
Squamish Nation's environmental team for the Fortis pipeline visited some of the creek crossing locations in June 2019.



## Recap - Environmental Conditions of Approval

- Squamish Nation's approval of the Woodfibre and FortisBC projects included environmental conditions that must be met. These created significant changes to project design.
- Additional environmental conditions were issued by provincial and federal governments.
- *Examples* of Squamish Nation conditions include:
  - Abandoning sea water cooling, due to concerns of large water intakes and discharge of chlorine.
  - No machinery or digging in Skwelwil'em (Squamish River estuary). Tunneling will be used instead.
  - Gas compressor stations not permitted near any Squamish Nation reserves.
  - Ensuring the project never switches from LNG to oil shipments.
  - No project expansions without Squamish Nation approval.
  - Providing access for Squamish Nation members through security-restricted areas and minimizing disruption where pipeline work is near cultural sites.
  - No bunker fueling (ship-to-ship refuelling) of tankers permitted within Squamish Nation territory.
  - Squamish Nation approval authority for environmental management and follow-up monitoring plans – this will include emergency prevention and response plans for operations.
  - Supporting additional research for Howe Sound marine life.
  - Accountability for both companies to fulfill all voluntary environmental commitments (other governments do not monitor voluntary commitments).

### Pipeline Route and Woodfibre LNG Location (*swíyat*)





## Squamish Nation: Project Environmental Contacts

Squamish Nation appointed technical representatives to the WoodfibreLNG and FortisBC EGP Environmental Working Groups:

**Tyler Gray** and **Bridget Dunne** on contract from PGL Environmental Consultants as technical leads and project managers. Both are biologists.

**Adrienne Charlie** hired by Squamish Nation and PGL as the Community Outreach Coordinator on both projects.

- This role provides cultural, technical, and administrative support with implementing the environmental conditions.
- This role will also be one way in which Squamish Nation leadership is reporting to, and listening to, membership about environmental and cultural concerns with the projects.

Squamish Nation's **IBA Implementation Committee** appointed an **Environmental Subcommittee** including a mix of department staff and elected councillors. The subcommittee is an advisory group that oversees the progress of the Environmental Working Groups. **Deanna Lewis** is the Chair of the subcommittee.

If you have environmental questions or concerns about Woodfibre LNG or the related FortisBC pipeline, please contact:

Tyler Gray ([tgray@pggroup.com](mailto:tgray@pggroup.com) or 250 940 0768)

Adrienne Charlie ([acharlie@pggroup.com](mailto:acharlie@pggroup.com))

Councillor Deanna Lewis ([deanna\\_lewis@squamish.net](mailto:deanna_lewis@squamish.net))