



## Woodfibre LNG and FortisBC: Update from Squamish Nation Environmental Implementation Team 18 February 2020

Since June 2019, Squamish Nation's (SN) environmental team has been posting monthly project updates through the community newsletters. In this edition:

- Page 2 – Latest update 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
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### 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).
- Squamish Nation Rights and Title Department is responsible for overseeing the environmental conditions.

### 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.
- WLNG hopes to start construction in 2020.
- Regular newsletter updates will include general background information, and current details of environmental planning.

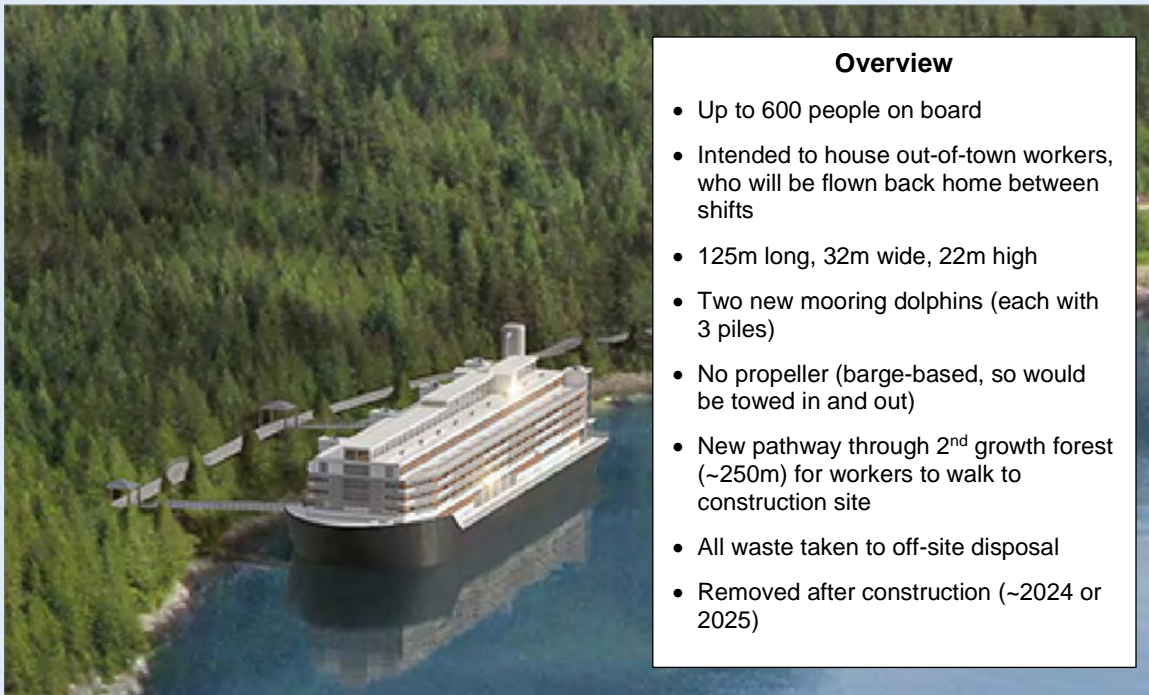
**If you have suggested topics to cover a future newsletter, please let us know! Contact info on last page.**



## FEBRUARY 2020 UPDATE: WOODFIBRE LNG FLOATING CAMP (FLOATEL)

On October 28 2019, 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. This option is a change to the existing approvals for the out of town construction workforce to use local rental housing (expected to be 2021 through 2024).

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).



### Overview

- Up to 600 people on board
- Intended to house out-of-town workers, who will be flown back home between shifts
- 125m long, 32m wide, 22m high
- Two new mooring dolphins (each with 3 piles)
- No propeller (barge-based, so would be towed in and out)
- New pathway through 2<sup>nd</sup> growth forest (~250m) for workers to walk to construction site
- All waste taken to off-site disposal
- Removed after construction (~2024 or 2025)

[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.

During the public comment period in November and December 2019, nearly 1,000 comments were submitted into the regulatory review process for the floatel! Very few comments were specific to the floatel proposal – most were general comments for or against the project in general.

Squamish Nation is coordinating the environmental assessment review with provincial and federal agencies. Decisions were initially expected by February 2020, but likely will take until April to allow review of additional information from the company. WLNG has been asked for more information about the proposal – including environmental protection, worker health, and how the company will manage transportation of out-of-town workers to and from the floating camp.

If you have questions or comments about the floating camp, please contact Rights and Title ([peter\\_baker@squamish.net](mailto:peter_baker@squamish.net)) or the environmental review technical team (Tyler Gray: [tgray@pggroup.com](mailto:tgray@pggroup.com), 250-940-0768).



## Woodfibre LNG – February 2020 General Status Report

- The SN Environmental team meets with WLNG’s environmental team about once per month.
- A key environmental condition for the SN team is review of construction-phase Environmental Management Plans, which need approval from SN prior to construction.
- In addition to technical criteria on environmental protection, we are working to add the *Skwxwú7mesh Sníchim* (Squamish language) into the Environmental Management Plans.
- Pace of Environmental Management Plan review work has been slower in winter compared to last summer, as WLNG needs to know if the floatel is proceeding to know the full scope of the Environmental Management Plans.
- WLNG’s owner has not yet made a “final investment decision” to build the project. Both the WLNG and the SN environmental teams are working on the pre-construction environmental conditions on an assumption that decision will eventually be made.
- Timelines continue to evolve. There are still lots of environmental conditions WLNG has to meet before construction is allowed. WLNG is optimistic about starting construction in 2020.

## WLNG DARRELL BAY CREW DOCK - UPDATE

We reported in January that Woodfibre LNG was proposing to construct a crew transport dock at Darrell Bay. That proposal is being re-evaluated to see if WLNG can use the existing dock at Darrell Bay instead. We will provide further update in March 2020.



Existing dock (photo taken by Keystone Environmental for Woodfibre LNG).

## HERRING IN *ATL'KA7TSEM*

Concerns about impacts to fish in *Atl'ka7tsem* (Howe Sound) have been top of list for SN since the first concept of this project in 2014.

Prior to construction, WLNG must develop fish habitat restoration plans. A century of pulp mill operations leaves lots of room to improve marine habitat at *swiyat*. The objective is to make habitat around *swiyat* better during project operations than it was before construction.

**General direction from SN has been to address herring, juvenile salmon, shellfish, and lingcod habitat impacts around *swiyat*.** WLNG provided early concepts of their plans in January 2020.

Monitoring must be able to show if the restoration is working, and to identify back-up plans if more work is needed. Expect more details later in 2020.



## FortisBC Eagle Mountain (Woodfibre Gas Pipeline)

### General Status Update

- **Construction camp:**
  - In fall 2019, FortisBC began community consultation on temporary workforce accommodations during construction. Existing approvals allow a single construction camp up to 2ha. Planning is ongoing, and FortisBC has not yet indicated a preferred camp location.
- **Geotechnical Investigations**
  - Pre-construction field work (geotechnical drilling) will continue later in 2020, to refine future construction plans for 2021. We expect FortisBC will have helicopter-supported drilling program later this spring.
- **Overall Schedule**
  - Construction of the pipeline may start in 2021. It will take about three years.

### Possible Pipeline and Compressor Station Changes

FortisBC have indicated to SN that they will pursue two changes to the project within SN territory:

1. Changing location of a compressor station from Mt. Mulligan (southeast of Valleycliffe) to on-site at *swíyat*.
2. Changing from west side to east side of Stawamus River. (For those who know the area, the existing FortisBC gas line that was constructed in 1991 is on the east side of the river.)

When FortisBC goes ahead with the proposal, it will require approval by the BC Environmental Assessment Office and by Squamish Nation. FortisBC has not formally submitted their proposal, and no decisions have been made.

Once FortisBC does finalize the details, we will provide maps and further information in future newsletters. The proposals will likely also be reported in local media.



Possible relocation of the new FortisBC compressor from Mt Mulligan to Swiyat. This is the same compressor station that originally would have been near Yekwaupsum 17, but was relocated to Mt. Mulligan as part of Squamish Nation's environmental conditions.



## Recap - Environmental Conditions of Approval

- Squamish Nation's approval of the Woodfibre and FortisBC projects included environmental conditions.
- Many of the conditions were met by changing the project design. Other conditions relate to pre-construction planning, ongoing environmental monitoring, and adaptive management.
- 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 Environmental Working Group representatives report to the Rights and Title Department. The Environmental Working Group also liaises with a sub-committee of the IBA Implementation Committee.

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

### Environmental Working Group Representatives:

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

Bridget Dunne ([bdunne@pggroup.com](mailto:bdunne@pggroup.com) or 604-895-7659)

### Environmental Working Group Community Outreach Coordinator:

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

### Rights and Title Director:

Peter Baker ([peter\\_baker@squamish.net](mailto:peter_baker@squamish.net))

### IBA Environmental Subcommittee Chair:

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