



Environmental Update – Woodfibre LNG and FortisBC Gas Pipeline Projects

11 June 2019

1.0 GENERAL UPDATE

- The Woodfibre LNG (WLNG) and FortisBC natural gas pipeline projects are likely to start construction in early 2020.
- We recognize that these projects cannot be built without impacting the environment, which is not ideal. However, part of Squamish Nation's role on both projects is as a regulator, ensuring environmental and cultural conditions are met. In 2015/2016, Squamish Nation Environmental Certificates were issued to WLNG and FortisBC requiring them to uphold legally binding conditions outlined by the Nation.
- Squamish Nation's conditions focussed on Nation-specific interests that would not be properly addressed by other governments (municipal, provincial, federal).
- Squamish Nation's environmental conditions have significantly improved the environmental impacts that would have happened otherwise. In 2015 and 2016, both companies made changes to their project designs to meet Squamish Nation conditions. For example:
 - WLNG abandoned sea-water cooling, and instead switched to air cooling.
 - FortisBC relocated the compressor station away from Yekwaupsum 17 (and downtown Squamish in general), relocating to the Mt. Mulligan location.
 - FortisBC abandoned plans to dig a trench through the Squamish River estuary for the pipeline. Instead, FortisBC will construct a tunnel and will avoid impacts in the estuary and the wildlife management area.
- At Woodfibre (*swiyat*), WLNG has been active with ongoing clean-up of the site as there was a lot of pollution left from the pulp and paper mill.
 - This is not part of project construction. The site was left with many environmental issues after mill closure in 2006, and Squamish Nation has been supportive of the site clean-up.
 - In late 2018 and early 2019 approximately 3,000 old marine piles (coated in creosote, a type of tar that is toxic to marine life) were removed. Work stopped at the end of January 2019 to ensure no marine work was occurring when the herring came back to spawn.
 - There is an old landfill on site from pulp mill operations. WLNG plans to cap & close this landfill in summer 2019. WLNG has been diligent about capturing and cleaning the water that comes out of this landfill.
- Both companies have environmental conditions to meet before construction can be authorized. Authorization is required from Squamish Nation in addition to other levels of government. There are other Squamish Nation conditions that must be met during construction and closure.
- Both companies are also exploring possible changes to the projects. None have been approved yet, and would require regulatory approval (including Squamish Nation) to proceed. Of note:
 - FortisBC is investigating if the Mt. Mulligan compressor station could be relocated to the Woodfibre site.



- WLNG is investigating a barge-mounted construction camp at the project site, instead of housing all workers in Squamish.
- We are satisfied that, so far, both companies have met their environmental requirements, and are on track to meet future requirements.

2.0 ENVIRONMENTAL WORKING GROUPS AND IMPACT BENEFIT AGREEMENTS

- The Squamish Nation Environmental Certificates triggered the creation of an Environmental Working Group for each project. It is the job of the Environmental Working Groups to ensure Squamish Nation's environmental conditions are met. Squamish Nation appointed technical representatives to the two Environmental Working Groups:
 - Tyler Gray and Bridget Dunne were hired on consulting contracts from PGL Environmental Consultants.
- Squamish Nation Council approved Impact Benefit Agreements (IBAs) for the projects in late 2018.
 - With the IBAs approved, Squamish Nation formed an Environmental Subcommittee (as a part of the larger IBA Implementation Committee).
 - The Environmental Subcommittee includes Squamish Nation's two Working Group representatives (Bridget Dunne and Tyler Gray), and Councillors Deanna Lewis (chair), Richie Baker, and Deborah Baker.

3.0 GET INVOLVED

Some environmental conditions will require internal planning to ensure Squamish Nation's values are properly represented. The following are examples where more community involvement is needed.

If you would like to get involved in any of the projects listed below, have interest in participating in other areas, or have any concerns with environmental commitments for WLNG or FortisBC please get in touch (contact details are below).

- **Protect Cultural Sites:** The FortisBC project will involve pipeline construction that is outside of – but very near to - two Squamish Nation *Síiyamin ta Skwxwú7mesh* (Cultural Sites): Stawamus River, and Indian River. FortisBC must adopt measures to minimize disruption to those Cultural Sites (e.g. visual or noise-related impacts that diminish the cultural site value). Additional measures may be related to timing of certain work, visual screening, buffer areas for “ancillary” activities like equipment lay-down zones, etc. **Timing:** summer 2019.
- **Marine Mammals:** The WLNG Environmental Agreement requires that, prior to operations, WLNG must contribute to a long-term monitoring project to better understand noise-related impacts on marine mammals in Howe Sound (of all vessels, not just WLNG). Decisions will be necessary about budget allocation and monitoring priorities, as well as the option of partnering with other research programs. **Timing:** planning may begin in 2019, but implementation is to start during project operations (approx. 2024). (Noise monitoring is also required during construction, with monitoring details outlined in environmental conditions from the BC Environmental Assessment Office. The operations plan is overseen only by Squamish Nation).



- **Green Zone Restoration:** Mill Creek is a salmon-bearing stream that cuts directly through the middle of the WLNG property. Creek habitat is badly degraded from past pulp & paper operations. One of the WLNG conditions requires WLNG to restore Mill Creek and surrounding riparian area. Squamish Nation will need to decide on restoration objectives and potential trade-offs (e.g. in-stream restoration or riparian vegetation) and identify possible funding partners. **Timing:** planning in 2019-2020 with rthis restoration work following project commissioning (approx. 2024).
- **Marine Traffic Management:** Through construction and operation of the WLNG project, and during construction of the FortisBC project, both proponents will create new marine traffic in Howe Sound. Both proponents are also required to minimize disruption to Squamish Nation members using Howe Sound as much as possible. Squamish Nation will need to coordinate with relevant departments and affiliated recreational groups, and develop a system for how to report marine use conflicts. **Timing:** summer 2019 and throughout construction and operations.
- **Emergency Response Planning:** Avoiding and responding to environmental emergencies was one of this highest concerns noted from Squamish Nation members during early project reviews. Squamish Nation will have the regulatory authority to approve (or not) some aspects of the proponent's emergency response plans. This may relate, for instance, to if and how Squamish Nation departments, or affiliated groups, are involved in emergency response protocols (e.g. spill clean-up). **Timing:** early discussions may begin in 2019, but detailed planning will likely occur in 2021 through 2023.

4.0 CONTACT FOR ENVIRONMENTAL CONCERNS

Newsletter updates will be issued regularly to keep the Nation up to date on these two projects.

If you have environmental questions or concerns about Woodfibre LNG or the related FortisBC pipeline, please contact Tyler Gray (tgray@pgggroup.com or 250 940 0768), or Councillor Deanna Lewis (Deanna.lewis@squamish.net). Tyler is Squamish Nation's lead representative on the Environmental Working Groups for these two projects. Deanna Lewis is the Chair of the IBA Environmental Subcommittee.



Woodfibre LNG site on 22 May 2019. Many of the old pulp & paper mill buildings and broken piers have been removed.



At the Woodfibre LNG site, new nesting cups for Barn Swallows are being used to replace nesting habitat removed when old buildings are demolished.



Part of the existing landfill at the Woodfibre LNG site. During the project environmental assessment, WLNG expected to use this landfill, but have since decided to permanently close and decommission it.