



## Lax Kw'alaams Band

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March 7, 2016

Canadian Environmental Assessment Agency  
Suite 410 – 701 West Georgia Street  
Vancouver, BC V7Y 1C6

Attention: Catherine Ponsford, Project Manager

Dear Ms. Ponsford:

**Re: Pacific Northwest LNG Project (the "Project")**

You may consider this letter as the response of the Lax Kw'alaams to the draft Environmental Assessment Report issued February 10, 2016 (the "Draft Report") in respect of the Project.

The Lax Kw'alaams do not resile from or withdraw any of their submissions or evidence tendered throughout this process to date. The Lax Kw'alaams continue to oppose the Project in its current form. In particular the Lax Kw'alaams oppose the construction of the LNG facility on Lelu Island and adjacent to Flora Bank (defined as the area encompassing Flora Bank, Agnew Bank and Horsey Bank). Nevertheless, the Lax Kw'alaams proposes to limit their comments to those deficiencies in the Draft Report that are of critical importance to the Lax Kw'alaams.

The first critical issue is the impact of the Project upon the fish and fish habitat associated with Flora Bank. The second is the issue of accommodation of the Lax Kw'alaams' interests.

### **Flora Bank**

In Section 5.1 (Biophysical Environment) the Draft Report states that "The marine habitats around Lelu Island are representative of marine ecosystems throughout the north coast of B.C." The Lax Kw'alaams considers that this statement, together with Section 5.2 (Human Environment) typifies the underlying inadequacy of much of the report in accurately describing the uniqueness of this area with respect to its morphological evolution and existence, and its great importance as a fisheries resource. The Lax Kw'alaams request, at a minimum, that Section 5 contains an accurate synopsis of the unique attributes of the Flora Bank region based on extensive aboriginal knowledge and scientific literature that spans the last 40 years. Facts which should be prominently stated in the Final Report are as follows:

*The formation of Flora Bank has resulted in a geomorphic feature unique to the BC coastline.*

*It contains the largest eel grass area in the entire Skeena Estuary and Chatham Sound.*

*It is used for spawning by herring and surf smelt, rearing for juvenile Dungeness crabs, and has higher abundances of juvenile steelhead than all other estuary locations.*

*As a nursery ground it contains the highest abundances of juvenile salmon of any habitat in the Skeena River estuary.*

*More than 50 different locally adapted populations of Chinook and sockeye salmon use the Flora Bank ecosystem, as evidenced by genetics.*

*It contains 37 times as many sockeye smolts as any other area in the Prince Rupert/Port Edward region and 72 times as many sockeye salmon smolts in the eel grass beds as other eel grass beds in the same region.*

*It provides critical refuge for salmon smolts originating throughout the Skeena River system, including all its major tributaries.*

*Flora Bank salmon originate from the territories of at least 11 different First Nations as well as from the Nass and Stikine River systems*

*The habitat provided by the eel grass on Flora Bank protects juvenile salmon during the most vulnerable stage of their life cycle when they undergo morphological changes in their adaption to salt water.*

*Because of the habitat provided by Flora Bank there are dozens of commercial, recreational and Aboriginal fisheries affected throughout the Skeena Watershed and beyond.*

The Lax Kw'alaams oppose siting the Project on Lelu Island and Flora Bank by reason of the extensive past and present scientific literature demonstrating the uniqueness and high sensitivity of this area. The Lax Kw'alaams' scientists have concluded that there exists a balance of high energy tide, wind, wave, and river forces that act together to hold and maintain Flora Bank in its present position. They have further determined that the planned trestle and ship loading facility are likely to interfere with the equilibrium of these forces such that Flora Bank will be lost to erosion.

It is beyond dispute that if Flora Bank is lost to erosion, the unique and essential fish habitat that has sustained members of the Lax Kw'alaams and their ancestors for thousands of years will be irrevocably destroyed. It is also beyond dispute that the loss of this critical habitat would negatively impact the entire fisheries resource in the Skeena River and its estuary, and thereby constitute interference with the Lax Kw'alaams' Aboriginal rights as protected by section 35 of the Constitution Act.

The Draft Report notes that the technical submissions of the Lax Kw'alaams with respect to sedimentology were reviewed and, although not directly stated, rejected in favour of the Proponent's modelling. Contrary to the Lax Kw'alaams's scientific findings, the latter concluded that the forces of wind, wave, tide and river currents acting on Flora Bank are of such a low magnitude that the interference with and impact upon those forces by the presence of the LNG terminal will have no effect on Flora Bank.

In light of the foregoing and in the context of the application of the precautionary principle as required by section 4(2) of the CEAA, 2012 the Lax Kw'alaams requests that the Draft Report be amended so that section 6.6.3 provides an analysis or gives an explanation of the reason why the authors of the Draft Report accepted the predictions of the Proponent's model. In particular the Lax Kw'alaams ask the following questions and seek the following revisions to the Draft Report:

1. Why has CEAA based its conclusions entirely on the "results" of a numerical model? In addressing this question the Lax Kw'alaams ask that the Agency consider the uncontradicted evidence that numerical models are gross simplifications of reality based on assumed inputs and processes that can be manipulated to meet desired results. In this case the model makes assumptions about how the various forces of wind, wave, tide and river currents will inter-react but they do not explain the existence of observed features on Flora Bank.
2. According to the Proponent's model the forces of wind, wave, tide and river currents on Flora Bank are assumed to be less than "threshold (speed) for most of the sediment, all of the time". If that is true, it would not be possible to (i) maintain the coarsest and most highly sorted sand that is unique to Flora Bank and (ii) produce the existing variety of sand-wave fields that are known to require currents from 2 to 6 times larger than the 30 cm/sec current that is the threshold for the movement of Flora Bank sand and which, according to the modelling outputs, is rarely achieved. The Lax Kw'alaams request that the Draft Report be amended to include an explanation of the rationale for accepting this modelling output (that wind, wave and tide speeds are less than 30cm/sec) when the evidence described above demonstrates that this cannot be correct.
3. Government modeling experts from Natural Resources Canada conclude that there are uncertainties in the model and recommend "follow-up programs to increase the confidence in the predictions and verify that morphological changes on Flora Bank are within the natural range and that construction of the marine terminal does not cause significant loss of sand volume on Flora Bank" (pg. 60). In light of this conclusion and recommendation and in light of the resulting devastating loss of Flora Bank should the model prove unreliable, the Lax Kw'alaams seek an explanation of the rationale for accepting the model as proof that the morphological and hydrodynamic changes caused by the "in water" works "would not result in serious harm to fish habitat" (pg. 65). Further, the Draft Report should address the regulatory consequences if the model proves inaccurate.
4. Because of the inability of the model to explain easily measured and observable features that are found today on Flora Bank (i.e., its sediments and morphology), it seems reasonable to conclude that a prediction of the future of Flora Bank based on that model could not possibly be correct. If the Agency rejects this rationale, the Lax Kw'alaams seek an explanation of the reasons therefor.
5. The conclusion made by Patrick McLaren that the pilings supporting the proposed trestle

and dock structure could result in a sufficient loss of energy to destroy Flora Bank's equilibrium resulting in both sand and fish habitat loss has been published in a peer-reviewed international scientific journal. The Lax Kw'alaams ask that the Draft Report be amended to acknowledge this and explain why this peer reviewed science has been rejected.

The Lax Kw'alaams also request that potential conditions numbered 6.2, 6.13 and 6.22.4 be clarified to provide that if the model is revised to predict, or actual observations conclude, that the forces of wind, wave and current will be or are altered by the "in water" construction to such a degree that the sediment deposit comprising Flora Bank will, or is, eroding away that "in water" construction will cease and mitigation measures up to and including removal of installed "in water" works will be implemented so as to bring the forces of wind, wave and current back into equilibrium.

### **Accommodation**

It is of fundamental importance to the Lax Kw'alaams that this project be altered to provide an alternative site for the LNG facility, docking and ship loading facility. The Lax Kw'alaams acknowledge that it is beyond the jurisdiction of the Agency to require the Proponent to acquire or use an alternative site.

The Lax Kw'alaams therefore request that section 8.2 of the Draft Report be revised to clarify that although the Agency is expressing opinions on potential adverse impacts on potential or established Aboriginal rights or title it should not be taken as expressing any opinion on the strength of claim of any Aboriginal group, nor is it in a position to satisfy the duty of consultation and accommodation that rests on the crown, not the Agency, particularly in view of the limited mandate of the Agency. The Lax Kw'alaams consider it of utmost importance that this be stated clearly in the Report.

Similarly, we request that in section 8.3 of the Draft Report the word "Accommodation" in the title line and throughout the section be changed to "Mitigation". The Lax Kw'alaams make this request because "accommodation" as defined by the Court in *Haida* (2004 SCC 73, para 49 and elsewhere) has a precise and technical meaning that is distinct from "mitigation", whereas the concept addressed in this section clearly refers to mitigation, not accommodation.

For similar reasons, the Lax Kw'alaams request that in section 8.4 the word "accommodation" be removed from the second bullet point on p. 155 ("mitigation, compensation, and accommodation measures proposed to address potential outstanding concerns not addressed through the EA"). Again, it is misleading and constitutionally inappropriate for the Agency to imply that it has engaged in consultation and accommodation in the constitutional sense. That is a duty resting on the crown. There is nothing in the governing legislation or processes of the Agency to indicate any intention to delegate this duty to the Agency, even if that were possible.

It is clear that s. 8.5 will have to be changed in the Final Report since it discusses input in the period leading up to the Final Report. With regard to the statement "The Agency welcomes further input from Aboriginal groups on the effects of the Project on potential or established Aboriginal rights or title, including their views on the implementation of mitigation measures

It is clear that s. 8.5 will have to be changed in the Final Report since it discusses input in the period leading up to the Final Report. With regard to the statement "The Agency welcomes further input from Aboriginal groups on the effects of the Project on potential or established Aboriginal rights or title, including their views on the implementation of mitigation measures and follow-up programs to address those concerns to the extent possible at the EA stage of the planning process" we wish to say only that we do not consider that the Agency has any mandate to determine the legal consequences flowing from the effect of the Project on the Aboriginal rights and title of the Lax Kw'alaams people. Hence, our input is limited to requesting that the Agency make it clear in its Final Report that it does not consider that it is a delegate of the crown with respect to the full extent of the duty to consult and accommodate.

In section 8.5, under the heading "*Issues Beyond the Scope of the Federal Environmental Assessment*", we request that the Agency state that one such issue is the crown's duty to consult and, if appropriate, accommodate Aboriginal concerns. Although stated elsewhere in the Draft Report, it could be stated again that this is a matter for the Minister of Environment and Climate Change to consider if the Project is determined not likely to cause significant adverse environmental effects.

In conclusion, we ask that these issues receive consideration by the Agency and that the Final Report be revised accordingly.

Please address any questions to the undersigned.

<Original signed by>

Mayor John Helin