



To: Sean Moore, Project Assessment Manager,
Environmental Assessment Office,
P.O. Box 9426, Stn Prov Govt,
Victoria, B.C., V8W 9V1

2 March 2017

Re: Proposed Aurora LNG Project, Digby Island, Prince Rupert, B.C.

Dear Mr. Moore:

BC Nature is a non-profit federation of 53 naturalists societies in British Columbia totalling over 6,000 members. We are writing to express our concerns about this proposed project. These concerns were brought to our attention by several of our member clubs and many individual members.

The proposed location for the LNG complex and its infrastructure, including roads and utilities associated with the project, will have a direct impact on the wetlands, bogs, and forests of Digby Island. Digby Island, a low elevation coastal island, supports important populations of terrestrial coastal wildlife. Found within the proposed Aurora LNG project area are medium to high value breeding habitats for amphibians, including Northwestern Salamanders and provincially Blue-listed and federally SARA-listed Western Toads. In addition the island has Little Brown Myotis bat roosting habitat (SARA: Endangered), suitable breeding habitat for Marbled Murrelet (SARA: Threatened), and nesting habitat of the coastal Great Blue Heron (SARA: Special Concern). As the Aurora Environmental Assessment documents, there are several other listed species recorded in the proposed LNG project area.

Of special interest to us are the Western Toads on Digby Island. Western Toads are listed as a species of Special Concern under the federal Species at Risk Act and are listed as a Blue-listed species in British Columbia. In the EA Certificate Application by Aurora LNG, the *Assessment of Potential Environmental Effects* section of the application, there is an acknowledgment that this project will directly affect important breeding habitat for the healthy population of toads on the island (quoting Section 4.7-24: "*there are 582 ha (21% of the terrestrial portion of the Local Assessment Area) of moderate to high breeding habitat for Western Toads*"). Approximately 50% of the high suitability breeding habitat is located within the proposed industrial site for dumping and storing organic soils removed for plant construction.

Western Toads have been identified as a species eligible for a Western Canada management plan under SARA. It is our concern that this population of island Western Toads has not been adequately studied and requires protection from development. Of special concerns are the losses of wetland habitat proposed in the Aurora LNG plan and the impacts of toad mortality by vehicle traffic.

Impacts by losses of medium to high value breeding habitat for this isolated island population of Western Toads would be significant. Additional detailed studies are needed:

- investigating the genetics of these Digby Island toads to determine if this is a unique isolated genotype;
- quantifying the utilization of specific breeding and rearing habitat sites; and
- an independent assessment of which sites should be protected.

As most of the south end of the island, where the project is proposed to be located, is covered by bogs, and the toad population has stabilized to the current availability of breeding and feeding habitat, removal of wetlands will only lead to a reduction in the toad population. Relocating toads to areas already occupied by other stable local populations of toads is unlikely to provide adequate compensation for habitat loss.

Change in mortality rates is also an important factor. The south end of Digby Island within the proposed development area for Aurora LNG, currently does not have any roads suitable for vehicles. Road and industrial pad development would be an entirely new addition to toad mortality, and as presented in the Aurora application, *"increased vehicle traffic will increase the risk of mortality for migrating amphibians such as the western toad dispersing between wetland breeding habitat and forested overwintering habitat."*

There is voluminous research showing that roadkill is a critical factor for survival of both adult toads and tiny migrating toadlets (metamorphs) throughout their range. Western Toads have high breeding site fidelity which increases their risks when roads and other developments encroach on their habitat. This high fidelity also negates the “mitigation” measures that Aurora proposes. Adult Western Toads are strongly nocturnal, and, based on the monitoring observations by one of our member Societies in the vicinity of the community of Dodge Cove, these toads also come out on to open, warmed surfaces (such as the proposed roads and industrial pads for Aurora LNG) to feed on insects at night during the spring, summer and fall months, making them highly vulnerable to roadkill. Please see Canada’s SARA management plan for Western Toads which clearly documents these traits and risks to toads: https://www.registrelep-sararegistry.gc.ca/virtual_sara/files/plans/mp-western-toad-e-proposed.pdf

It is unlikely that adherence to speed limits and group transportation will be adequate mitigation measures to reduce toad roadkill. The proposed roads pass directly through Western Toad habitat, and the industrial pads will displace habitat currently used by the toads. At minimum, if the project proceeds, mitigation measures should include a high density of toad tunnels under any roadways and amphibian fencing along roadways and around industrial pads. It should also include careful consideration as to the location of any facilities and infrastructure to minimize losses of wetlands. It does appear, though, that this proposed project, in its current proposed

location, is in direct conflict with the continued existence and wellbeing of Western Toad populations on the south end of Digby Island.

We suggest that inadequate attention has been placed on assessing the impacts to Blue-listed Western Toads in the Aurora LNG proposal. We urge that both Environment and Climate Change Canada and the Provincial Ministry of Environment be closely involved in ensuring the wellbeing and longevity of this population of island-constrained Western Toads. We suggest that Digby Island is an inappropriate location for this large Aurora LNG project and urge the governments and proponent to look elsewhere for a less damaging location. At the very least, if the proposed Aurora LNG facility is approved on Digby Island, we urge all regulatory authorities to place stringent restrictions on the location, design and use of roads, pads and other constructions to minimize their impacts on Western Toads and the other wildlife that currently use Digby Island.

We have focused on Western Toads in this submission, but we strongly urge you to take into serious consideration the impacts on the other listed species known to use this area. From the information provided by the Aurora EA and information obtained by BC Nature naturalists who know the area well, it is clear that this project will have a major impact on many species. The Highest Habitat suitability for the Marbled Murrelet is all within the structural boundaries of the proposed LNG plant. Moderate and low suitability are also within this potential site as well as nearby. The majority of the High Suitability all-season habitat suitability (60% by our naturalists' estimation) for the Western Screech-Owl (Kennicott subspecies) on map 4.7-4 is also within the proposed LNG site. At least 80% of the highest Roosting Habitat Suitability for the Endangered Little Brown Myotis within the local assessment area is in the proposed LNG site.

The proponent in this project is touting mitigation for the habitat loss that will result in their project. As a professional biologist with 30 years of experience working on wildlife habitat, especially that of the Marbled Murrelet, I know that there is no way to mitigate the loss of old-growth forest, functioning marshlands and other key ecosystems on Digby Island. The BC Nature members who know this area well concur.

Overall, it seems that the impacts on listed species, functioning ecosystems and local people on Digby Island cannot be ignored and we urge that this proposal be rejected.

Yours truly,

A handwritten signature in cursive script that reads "Alan Burger". The signature is written in black ink and is positioned above the typed name and title.

Alan Burger, PhD
President – BC Nature (Federation of BC Naturalists)