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The Hon. Catherine McKenna, MP  
Minister of the Environment and Climate Change  
House of Commons  
Ottawa, ON  
K1A 0A6

March 8, 2016

**Re: Pacific Northwest LNG, 10478, comments on Draft Environmental Assessment Report**

Dear Minister McKenna:

Thank you for the opportunity to comment on the Canadian Environmental Assessment Agency's (CEAA) *Draft Environmental Assessment Report* for the proposed Pacific Northwest LNG facility (PNWLNG). I begin my comments with four quotes from Prime Minister Justin Trudeau.

- "It is time for a renewed, nation-to-nation relationship with First Nations peoples, one that understands that the constitutionally guaranteed rights of First Nations in Canada are not an inconvenience but rather a sacred obligation."

<http://www.thestar.com/news/canada/2015/12/08/trudeau-commits-to-nation-to-nation-relationship-with-first-nations.html>

- "While governments grant permits for resource development, only communities can grant permission."

<https://www.liberal.ca/realchange/environmental-assessments/>

- "People want to do more, but they want to know that what they do [to reduce greenhouse gases] fits into a bigger picture, because there is no point in bending over backwards if your neighbour or your government is not also doing its part to ensure that we all have the maximal impact together. There can be no laggards in this."

<http://news.nationalpost.com/news/canada/canadian-politics/trudeau-on-climate-change-indigenous-peoples-have-known-for-thousands-of-years-how-to-care-for-our-planet>

- "We will use scientific evidence and the precautionary principle, and take into account climate change, when making decisions affecting fish stocks and ecosystem management."

<https://www.liberal.ca/realchange/water/>

Any reasoned analysis of this project that includes the response of First Nations and the public, indicates that your ministry cannot approve the project without being contrary to those words and sentiments of the Prime Minister. Further, an approach to this project that is centered on "approve and mitigate" (business-as-usual) would turn the Prime Minister's pledges into less than half-truths. It is time for a departure from that paradigm. You have the confidence of the electorate to break new ground and proceed.

The CEAA draft document is heavy on mitigation as a means to project approval, sometimes with complete disregard for public concern and science. I understand that much of the authorship of the document took place under the Harper government and has been book-ended by a regulatory timeframe. But overall, the document utterly fails to address serious issues and the potential for social and environmental harm, specifically in the following areas.

1. The lack of respectful consultation with BC First Nations
2. The disregard of the precautionary principle as it applies to protecting the environment and communities
3. The disregard for impartial, peer-reviewed salmon science
4. The risk to public safety that would result from the project
5. Significant flaws with the BC Environmental Assessment Office's approval and permitting of the project's feeder pipeline, the Prince Rupert Gas Transmission Project.
  - The lack of respectful consultation with BC First Nations
  - The risk to a Schedule 1 Species at Risk, three mountain populations of woodland caribou.
  - Failure to properly follow federal assessment parameters for a project that would ship a natural resource across a provincial boundary for international export.

One legal challenge and a First Nation camp have resulted from point 1, and two legal challenges and a First Nation camp have resulted from point 5.

### **First Nations**

Time and again in the report, the CEAA describes substantial concerns voiced by First Nations. These are "umbrella" concerns, pertaining to environmental and social issues, and aspects of traditional land use and access. The proponent's response always incorporates multiple forms of mitigation that seek to absolve it from any requirements to consult properly with First Nations. It is disturbing that, for the most part, in its analysis the CEAA aligns with the proponent, indicating a lack of sincerity by the government agency to respond meaningfully to articulated concerns. Framing a list of concerns and then suggesting mitigations is not proper and sincere consultation if the ultimate intent is to disregard those concerns and proceed with the project.

It must be emphasized that the majority interest in this project, Petroliam Nasional Berhad (Petronas), has an atrocious human rights record elsewhere, particularly at home in Malaysia. <http://desmog.ca/2014/10/23/bc-ought-consider-petronas-human-rights-bowing-malaysian-companys-lng-demands>

In bringing this ethic to Canada, Petronas is attempting to either end-run around First Nations' resistance to the project, or to divide and conquer First Nations by offering cash in return for their acceptance of the project. The proponent has negotiated in secret with many First Nation band councils, winning their favour. In a few cases, the band councils include hereditary chiefs but, in most cases those councils do not include hereditary chiefs. Thus, those band councils have no right to speak for the use of traditional lands outside village boundaries. This is not "consultation." This is an approach by which government and industry attempt to take the path

of least resistance to achieve the desired aim. Government and industry have not followed due diligence in this regard. Legal challenges are pending. Others will follow.

When asked why Lelu Island was chosen for the site of PNWLNG, an industry representative reportedly replied: "It's the cheapest location to put an LNG plant."

[http://skeenawatershed.com/news/petronas\\_vs\\_lelu\\_island](http://skeenawatershed.com/news/petronas_vs_lelu_island)

The government of British Columbia has been party to this corruption of process – with its offers of Pipelines Benefits Agreements (cash) for signing on, and a promise of a share in a cash payout when pipeline construction reaches a certain threshold,

<http://www2.gov.bc.ca/dTmLj/MYLXP/gov/content/environment/natural-resource-stewardship/consulting-with-first-nations/first-nations-negotiations/natural-gas-pipeline-benefits-agreements>

In its May 2015 collaboration with PNWLNG, BC offered the Lax Kw'alaams First Nation land, cash, and infrastructure upgrades totalling \$1.15 billion – the largest financial "incentive" ever made to a First Nation in Canada. Because of multiple, unresolved concerns regarding the proposed siting of the LNG terminal, the Lax Kw'alaams First Nation, given less than a week's notice to digest the matter, in three public meetings voted absolutely "no" to this offer.

<http://www.cbc.ca/news/canada/british-columbia/b-c-lng-deal-worth-1-billion-pitched-to-lax-kw-alaams-first-nation-1.3059302>

<http://desmog.ca/2015/05/14/lax-kw-alaams-nation-rejects-1-billion-payday-petronas-lng>

As if to indicate that this is irrelevant, the CEAA report excludes reference to the offer and the vote, indicating an attempt by the proponent and the CEAA to disregard the rights and title of the Lax Kw'alaams First Nation and their desire to be allowed to manage their traditional territory as they see fit. Any perceived division within that First Nation was resolved in January 2016, when the Nine Allied Tribes of the Lax Kw'alaams joined together to oppose siting PNWLNG on Lelu Island.

<http://www.ilrtoday.ca/lax-kwalaams-stands-united-against-pacific-northwest-lng/>

The Gitwilgyoots tribe of the Lax Kw'alaams First Nation has been occupying a camp on Lelu Island since August 2015. You cannot evict these people from their rightful place, from their home. There will be no benefit to Canada to divide it further. Many have lent their support to this camp, in force and in kind.

[www.leludeclaration.ca](http://www.leludeclaration.ca) (more than 900 signatories, March 6, 2016)

Your government, Minister McKenna, must acknowledge that a "no" from any First Nation to a specific industrial development on its unceded territory means "no."

The Haida First Nation opposes LNG. "The 2015 House of Assembly, the legislative body of the Haida Nation, passed a resolution expressing opposition to British Columbia's LNG agenda and demanding that the mass export of any fossil fuel through its territory be prohibited."

[http://www.haidanation.ca/Pages/splash/public\\_notices/Haida%20Nation.Nov.9.15.pdf](http://www.haidanation.ca/Pages/splash/public_notices/Haida%20Nation.Nov.9.15.pdf)

The pipeline that would feed this project (Prince Rupert Gas Transmission Project) is firmly opposed by the Luutkudziwwus House of the Gitksan First Nation, who have built a camp in the Suskwa Valley near Hazelton and have closed a 32 km length of the proposed pipeline route on their territory to industrial activity. Luutkudziwwus will soon be filing for a judicial review of the provincial process that permitted this pipeline.

[www.madiili.com](http://www.madiili.com)

As a non-First Nations person reading the CEAA report, I must voice my outrage at several passages.

**6.10.3** *Agency Analysis and Conclusion (with respect to Current Use of Lands and Resources for Traditional Purposes)*, p. 109

The CEAA's response to the multitude of concerns from First Nations regarding the methodology and the integrity of the proponent's information is staggering:

"The Agency considers that the involvement of Aboriginal groups in the design and implementation of follow-up and monitoring programs related to traditional fisheries and marine resources [after project construction] could contribute to increasing the confidence of Aboriginal groups in the results of the EA [environmental assessment] related to the current use of lands and resources for traditional purposes."

In other words: Let's offer First Nations jobs and cash. Money will erase their concerns. Minister McKenna, this is not respectful consultation – "government to government."

**6.12.3** *Agency Analysis and Conclusion (with respect to Culturally Modified Trees)*, p. 121

The gist here is that the CEAA acknowledges that culturally modified trees (CMTs) represent evidence of an historical record of use of Lelu Island by First Nations. Approximately 300 of the island's 550 CMTs would be "affected" (destroyed) by the project. The remainder would be off-limits for safety reasons. The Metlakatla First Nation (which has taken money from the proponent and the BC government in exchange for approval of the project) supplied the "traditional knowledge" used by the proponent in its assessment of CMTs. The views of the Lax Kw'alaams First Nation with regard to CMTs were disregarded. Divide and conquer. Nonetheless, the agency deems that destruction of CMTs before a systematic cataloguing would represent "a significant adverse environmental effect." (Environmental? What about cultural?) But after such cataloguing (digital photographs, GPS positions) – which would involve "Aboriginal group representatives" – the agency deems that this aspect of the project "would not result in significant adverse environmental effects."

Minister McKenna, both of these passages are highly offensive, bureaucratic, industry-oriented bafflegab. These passages advocate cultural assimilation for the benefit of an off-shore industry and its profit. I am ashamed as a Canadian that this material has been dropped on your desk for consideration by an agency that my taxes help to fund.

## **Salmon Science**

In reaching its conclusions with regard to the project's possible effects on marine habitats and species, the CEAA has relied heavily on the "science" provided by the proponent. Particularly with regard to juvenile salmon, the proponent's studies were based on a comparatively small sample size. Although it had access to peer-reviewed and published independent science of much greater scope that evaluated the potential biological and geomorphological effects of this project, the CEAA chose not to include that information as part of its determination of risk. Recent independent research categorizes the Flora Bank region as "exceptionally important nursery habitat for salmon." This corroborates findings that go back to the 1970s with regard to the area.

Salmon numbers are dwindling. Little has changed with the Flora Bank habitat in 45 years. What has changed is the economic imperative of the BC government to develop it at any cost.

When there is a conflict between views on science or there is incomplete information, or there is an overwhelming economic initiative to disregard science, adherence to the precautionary principle dictates that there should be no movement forward into the unknown until those issues are resolved.

As you are aware, a consortium of independent scientists has endorsed the following conclusion concerning the draft report. "While our assessment finds that the CEAA draft report is scientifically flawed, the science also demonstrates that protection of Flora Bank would benefit the second-largest salmon-producing watershed in Canada. Such protection would demonstrate the Liberal Government's commitment to protection of marine ecosystems, rights of indigenous people, and scientific integrity."

## **Risk Versus Benefit**

The proponent claims that up to 4500 jobs would be created during construction of the LNG terminal, but does not acknowledge that some of these "jobs" include the rehiring of those laid off in previous work seasons, and a heavy reliance on the use of temporary foreign workers. The governing agreements for temporary foreign workers are already in place.

<http://www.vancouversun.com/China+agree+allow+foreign+workers+help+build+industry/10063770/story.html>

Pipeline construction workers typically move from site to site. These jobs are not "created" and added to the national total – they simply morph from place to place. The proponent claims that operation of the LNG terminal would create up to 330 permanent jobs, and 300 spin-off jobs in the surrounding area. Operation of the pipeline would create 60-80 permanent jobs, but TransCanada Pipelines stated at a public meeting in Hazelton that those employed to operate the pipeline "would come from our operations in Alberta." In other words, these would be jobs that already exist.

Nonetheless, the prospect of 600 to 630 permanent jobs is a significant bump to employment, particularly at this juncture in the big picture of the fossil fuel industries. However, it comes with a significant risk to the environment that eclipses the potential payroll and potential tax

revenue, particularly so since the BC government has given away the methane resource at a 3.5 percent royalty rate, only payable after the proponent has recouped capital costs. A best case scenario would see PNWLNG generate \$200 million per year for BC over 25 years, but the cost of infrastructure needed to sustain this industry would have to come from that revenue. BC's annual budget at present is \$46 billion, so the potential net revenue is insignificant.

<http://theyee.ca/Opinion/2015/07/14/BC-LNG-Deal-Petronas/>

What would be at risk, economically, if PNWLNG were to proceed?

- The Skeena River commercial and recreational salmon industry, valued at \$100 million annually.  
<https://skeenawild.org/watershed/economy>
- Tourism at Prince Rupert, valued at more than \$50 million each summer. (In 2015, the federal government invested \$4 million in upgrades to improve marine tourism at Prince Rupert.)  
<http://www.thenorthernview.com/opinion/144675615.html>
- The perception of the BC North Coast as a pristine environment, conducive to future "green" economic initiatives.

### **Public Safety**

The industry best practice for LNG terminal and vessel operation is summarized in *Site Selection and Design for LNG Ports and Jetties*, published in 1997 by the Society of International Gas Tanker and Terminal Operators (SIGTTO).

<http://www.witherbyseamanship.com/site-selection-design-ip-no-14-for-lng-ports-jetties.html>

That document stipulates that:

- LNG ports must be located where LNG vapors from a spill or release cannot affect civilians.
- LNG ship berths must be far from the ship transit fairway to prevent collision, and since all other vessels must be considered an ignition source.
- LNG ports must be located where they do not conflict with other waterway uses now and into the future.
- Long, narrow inland waterways are to be avoided, due to greater navigation risk.
- Waterways containing navigation hazards are to be avoided as LNG ports.

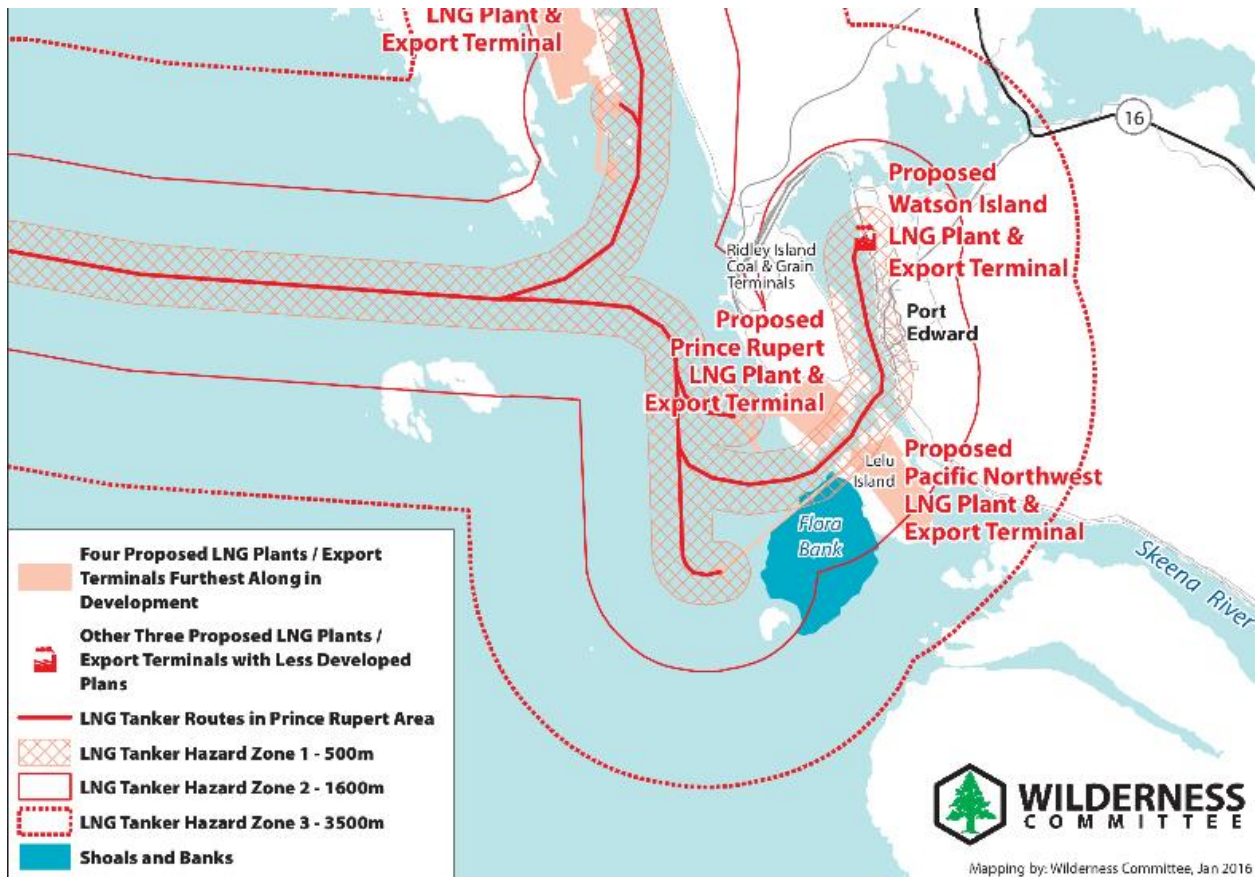
The proposed siting of PNWLNG violates all of the above industry best practices. The draft assessment makes no reference to SITTGO. Every exception obviously made to its guidelines is to the economic advantage of the proponent while disregarding the hazard to the more than 14,000 residents who live in the vicinity of Port Edward and Prince Rupert, and to the more than 60,000 annual ferry passengers who would transit the waterway adjacent to PNWLNG.

In 2004 and 2008, the US Department of Energy commissioned Sandia National Laboratories to find out what would happen in various scenarios should LNG breach from a vessel or a marine terminal. Sandia's reports described three zones of hazard around an LNG vessel should a breach occur with ignition. Within 500 metres of the vessel, death to all living things on the



water, surfacing from the water, in the air, or on adjacent land would be likely. This could result from shrapnel, incineration, cryogenic freezing or from suffocation. Between 500 metres and 1.6 km from the vessel, these threats lessen but are still critical. Second-degree burns to exposed human flesh would typically result from 30 seconds of exposure. Structural fires, grass fires, and forest fires would be ignited. (This zone would include all of Port Edward.)

[http://www.lngfacts.org/resources/SANDIA\\_2008\\_Report\\_-\\_Large\\_LNG\\_Vessel\\_Sa.pdf](http://www.lngfacts.org/resources/SANDIA_2008_Report_-_Large_LNG_Vessel_Sa.pdf)



Effects would lessen moving from 1.6 km out to 3.5 km, beyond which the hazard is considered negligible. In the US, these hazard zones have been embodied in regulations governing LNG facility location. It is also standard for LNG ports to have fireboats that are foam-capable, as use of water on an LNG-fed fire would exacerbate it.

The CEAA report fails to address any of the above concerns in the context of PNWLNG. The report is selective in referencing industry best practices with regard to the design of LNG vessels that would call on the terminal, but disregards industry best practices for the physical siting of the terminal itself and the navigable waterway leading to it.

Further, the report fails to adequately address the impacts to existing marine use that would certainly result from LNG vessel and terminal operations. The “airdraft” of the proposed Lelu Island Bridge receives six mentions in the document, as if this adequately speaks to all of the potential alterations to shipping, and to commercial, and recreational boating patterns. In other jurisdictions, setbacks of 500 metres and transit delays of up to an hour are required around

LNG carriers, as safety and security measures. According to its website, the Prince Rupert Port Authority is considering implementing “safe transit zones” and “traffic separation patterns to define specific routes for specific types of vessels”, yet the CEEA document makes no mention of these potential measures and how they would impact the operations of a commercial port with a narrow waterway, and its attendant commercial and recreational fishing fleet.

The only conclusion to make is that, despite the fact that “comments from First Nations” and “comments from the public” repeatedly raise marine safety and marine access issues, the greater public is intentionally being un-informed as to what could transpire should PNWLNG be built. Imagine a commercial fishery “opening” for salmon on a stormy morning when two LNG vessels are being held off to transit in to Lelu Island. Who wins? LNG or the Prince Rupert fishing fleet and BC Ferries?

### **Precautionary Principle – Species at Risk**

The draft report identifies eight SARA Schedule 1 marine species at risk which would suffer mortality/injury and behavioural changes as a result of the project. This is a significant cumulative effect that cannot be minimized by saying that the potential for harm to each of those eight species is “not significant”.

The draft report quantifies the risk to eulachon, a COSEWIC Species of Special Concern, as “moderate”, due to changes in water quality, loss of habitat, mortality and physical harm, and alteration of movement/behaviour. Should not a species at risk benefit from a management strategy that minimizes risk, not that one that bombards it with a constellation of new risks?

The draft report fails to consider the effects of PNWLNG’s feeder pipeline, the Prince Rupert Gas Transmission Project, on boreal caribou - a federal species at risk. That pipeline would bisect the ranges of four herds of boreal caribou, a species subject to a federal recovery program. Under the *Species at Risk Act*, provincial governments are required to protect evolutionarily significant species subpopulations such as those of boreal caribou in northeastern BC.

All four herds are small in number. Two herds have declined precipitously within the last decade - Kennedy Siding herd from 120 animals to 48 animals; Moberly herd from 191 to 34 animals. The Scott herd has a population of 8 animals; the Takla herd a population of approximately 100 animals. One herd, Burnt Pine, was extirpated from the pipeline project area in 2009, with industrial activity a likely cause.

<http://www.saulteau.com/wp-content/uploads/2015/07/population-status-of-caribou.pdf>

The Prince Rupert Gas Transmission Project would remove 1397 ha of caribou habitat, chiefly by increasing the “linear density feature of the landscape”, a facet that has a proven correlation to mortality risk for ungulates.

<http://www.raincoast.org/2015/05/witnessing-extinction-habitat-loss-caribou-and-the-wolf-cull/>

The Species at Risk Public Registry reports the following: “Wilson (2012) predicted that a status quo management scenario would result in the extirpation of the Burnt Pine, Moberly, and Kennedy Siding subpopulations and declines of >20% for the Narraway and Quintette subpopulations over the next 20 years.” Minister McKenna, this is with “status quo



management” – not with adding a pipeline and attendant destruction of caribou habitat into the mix. To approve PNWLNG would be to add defacto approval to its feeder pipeline, thus ensuring the extirpation of at least two more boreal caribou herds on its route.

<https://www.registrelep-sararegistry.gc.ca/default.asp?lang=En&n=E6271D78-1&offset=3&toc=show>

### **Other Federal Issue With Prince Rupert Gas Transmission Project**

In the project description for the Prince Rupert Gas Transmission Project, the pipeline that would feed PNWLNG, proponent TransCanada Pipelines describes how gas from Alberta may be included in the pipeline. Thus, that project should have received a full federal review, not a substituted one. A legal challenge of that pipeline’s permitting has recently been granted leave to proceed.

<https://www.neb-one.gc.ca/pplctnflng/crt/index-eng.html>

### **Greenhouse Gases**

On this topic, the CEAA has taken a bold initiative, and I applaud the agency. The inclusion of GHG emissions from wellhead to waterline is essential in properly appraising the risk of the project. The draft report’s conclusions on this matter are overwhelming – the project is out-of-step with Prime Minister Trudeau’s pledge to the country and the world with regard to reducing GHGs, and would make his stated reduction targets impossible to achieve.

The concern is that carbon offsets and trading will be employed to greenlight the project. It would be difficult to justify to the global audience such a “business as usual” approach to the dirty side of the fossil fuel industry. Canada is already rightfully viewed as one of the worst industrial polluters in the world. PNWLNG would become the third-largest industrial GHG emitter in the country, and the largest dealing with fracked (natural) gas. The project would add 13.98 million tonnes of CO<sub>2</sub>e annually to the atmosphere during a timeframe when Canada has pledged to reduce its emissions by 200 million tonnes of CO<sub>2</sub>e annually. PNWLNG would account for 32 percent of BC’s legislated GHG target for 2020, making achievement of that and future provincial targets impossible.

In short: PNWLNG is an old school proposal, out of its depth in your government’s stated new-school approach to appraising environmental risk with regard to the fossil fuel industry and global planetary health. The GHG numbers dictate that you must reject this project.

### **Conclusion**

Minister McKenna, apart from its Greenhouse Gas Emissions component, the CEAA analysis of PNWLNG is entirely in favour of an off-shore proponent, and promotes the desire of that industry over the legitimate concerns of the Canadian public and First Nations. You must say “no” to this project to enshrine the rights of Canadians and First Nations who wish to protect the land, its species, and its peoples from the corporate greed and provincial government complicity that would render an entire landscape ruined. You also need to consider a meaningful incorporation of Prime Minister Trudeau’s global commitments to protect the atmosphere.

Thank you for considering these comments. I look forward to your reply.

Take care, and best wishes,

Graeme Pole

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cc: The Hon. Justin Trudeau, Prime Minister

The Hon. Hunter Tootoo, Minister of Fisheries, Oceans, and the Canadian Coast Guard

The Hon. Ralph Goodale, Minister of Public Safety and Emergency Preparedness

The Hon. Carolyn Bennett, Minister of Indigenous and Northern Affairs

The Hon. Jim Carr, Minister of Natural Resource

The Hon. Marc Garneau, Minister of Transport

The Hon. Jody Wilson-Raybould, Minister of Justice and Attorney General

Nathan Cullen, MP

Christy Clark, BC Premier

Rich Coleman, BC Minister of Natural Gas

Doug Donaldson, BC MLA Stikine

Robin Austin, BC MLA Skeena