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VIA ELECTRONIC FILING

Expert Panel
Review of Environmental Assessment Processes
c/o Environmental Assessment Review Secretariat
Canadian Environmental Assessment Agency

Dear Madam Chair and Panel Members:

RE: Science, the Law, and the Environmental Assessment Process: Reclaiming Legitimacy in Federal Environmental Assessments — *Written Submissions of BC Nature to the Expert Panel*

We are counsel to the Federation of British Columbia Naturalists ("BC Nature"). Please accept below their written submissions to the Expert Panel on the Review of Environmental Assessment Processes.

About BC Nature

BC Nature is a non-profit society incorporated under BC's *Society Act* and a federally registered charitable organization. It is a province-wide federation in British Columbia of naturalists and naturalists' clubs with 53 member and affiliated clubs, representing more than 6,000 people. BC Nature's interest is the maintenance of the integrity of British Columbia's wide range of ecosystems and rich biodiversity, and in related public education. Along with other partners, BC Nature coordinates the Important Bird Area program in British Columbia, which is a science-based initiative to identify, conserve, and monitor a network of sites that provide essential habitat for Canada's bird populations.

BC Nature participated in the Joint Review Panel ("JRP") hearings into the Enbridge Northern Gateway Project as a joint-intervenor with its national affiliate Nature Canada. BC Nature and Nature Canada were also joint-intervenors before the National Energy Board ("NEB") in its regulatory review and environmental assessment ("EA") of the Trans Mountain Expansion Project. In these processes, BC Nature sought to bring credible science to the respective hearing panels, and to offer rigorous critique of the scientific and technical evidence provided by project proponents, all to assist the hearing panels in obtaining the best, objective information for carrying out their duties.

Furthermore, BC Nature was one of the successful applicants for judicial review challenging the federal government's approval of the Enbridge Northern Gateway Project at the Federal Court of

Appeal.[1] BC Nature's submissions focused on the proper interpretation and application of the provisions within the *Canadian Environmental Assessment Act, 2012* ("*CEAA, 2012*") mandating the assessment of "malfunctions or accidents".[2] In addition, BC Nature made submissions on legal requirements surrounding the Governor in Council's duty to decide whether significant adverse environmental effects are "justified in the circumstances".[3]

Science, the Law, and the EA Process: Reclaiming Legitimacy in Federal EAs

"The Canadian EA regime is broken."[4] The Canadian public has lost faith in the credibility and legitimacy of the federal EA process in promoting sustainable development. Controversies include tight, statutory deadlines for EAs that impede rigorous testing of the evidence, inadequate opportunities for the public to fully engage in the EA process, perception of regulatory capture for certain responsible authorities, lack of strategic or regional EAs that can deal with cumulative impacts, and more.

BC Nature proposes the following eleven reforms aimed to reclaim public trust and legitimacy in the federal EA regime. These reforms are divided into three broad categories: institutional, procedural, and substantive reforms.

INSTITUTIONAL REFORMS

1. *Single, independent, assessment agency*:

   Under the *CEAA, 2012*, the NEB was given exclusive jurisdiction over federal EAs involving pipelines and other major energy projects. The NEB is ill-suited for this role. The NEB's traditional expertise is in the technical issues surrounding the design, construction, operation, and decommissioning of energy projects; it is not equipped to deal with the much broader considerations required in EAs. Authority to conduct EAs should be vested in an agency that has the proper expertise to deal with assessing a project's broader impacts on environment.

   Moreover, the NEB has been mired in controversy over its independence. Canadians were alarmed to discover that the federal government had appointed a consultant to Kinder Morgan as a member of the NEB while the Trans Mountain Expansion Project was under review by the very same agency.

   To secure the trust of Canadians, federal EAs need to be conducted by an agency that has the expertise and the independence from the interests it is charged with regulating. An example of such an independent EA agency is the Mackenzie Valley Environmental Impact Review Board established under the *Mackenzie Valley Resource Management Act*.[5] This can be accomplished either by enhancing the role and independence of the Canadian Environmental Assessment Agency, or by creating a new, independent agency or board

[1] *Gitxaala Nation v. Canada*, 2016 FCA 187.
[2] *Canadian Environmental Assessment Act, 2012*, S.C. 2012, c. 19, s. 52 ("*CEAA, 2012*"), s. 19(1)(a).
[3] *CEAA, 2012*, s. 52(4). See also, *CEAA, 2012*, s. 31(1)(a).
[4] Jason MacLean, Meinhard Doelle & Chris Tollefson, "Polyjural and Polycentric Sustainability Assessment: A Once-in-a-Generation Law Reform Opportunity" (2016) 30:1 *J. Env. L. & Prac.* (forthcoming).
[5] *Mackenzie Valley Resource Management Act*, S.C. 1998, c. 25, Part 5.

dedicated to conducting federal EAs. In order to maintain independence, appointments to this agency or board should be free from political interference.

2. *Move away from proponent-driven, professional reliance model*:

The current EA regime uses a proponent-driven, professional reliance model for the gathering of scientific and technical information. Responsible authorities rely heavily on the science that is bought and provided by project proponents. The perception of bias in this model is compounded by the large imbalance in the ability of proponents versus the interested public in bringing forth evidence before the responsible authority.

Federal EA should move towards a proponent-funded but agency-led model. The responsible authority (preferably an independent EA agency as discussed above) with the proper expertise should conduct the investigation and EA, or it (rather than the proponent) should hire the most qualified independent consultants to provide technical reports. Moreover, the responsible authority should be able to recover the costs of the EA from project proponents. Proponents can, if they feel the need to, hire consultants to provide additional evidence to the responsible authority. This model provides greater assurance to the public that the scientific and technical reports will be created in an impartial manner, rather than being tainted with an aim to help proponents obtain project approval.

3. *Reinstitute screenings and comprehensive studies*:

There were three classes of EAs under the former *Canadian Environmental Assessment Act*: screenings, comprehensive studies, and review panels.[6] The *CEAA, 2012* abolished screenings and comprehensive studies as classes of EAs, and replaced them with one class called "environmental assessments".[7] In addition, the *CEAA, 2012* dramatically altered the way EAs are triggered. In the former Act, projects involving federal authority or decision are subject to EA unless excluded in regulation; in the *CEAA, 2012*, projects are not subject to EA unless they have been expressly included in regulation. Through these changes, the number of active EAs dropped from about 3000 in April 2010 to 70 within the first month of the *CEAA, 2012* coming into force.[8] The EA regime should reinstitute screenings and comprehensive studies in order to provide rebuild environmental protection that has been lost through the *CEAA, 2012*.

4. *Role for the Chief Science Advisor in Federal EAs*:

The federal government has announced the creation of a Chief Science Advisor. According to the government news release:

> The Chief Science Advisor will be responsible for providing scientific advice to the Prime Minister, the Minister of Science and members of Cabinet. This individual

[6] The former Act also included mediation as a separate process, but these submissions will focus on the three main classes of EAs under that Act.
[7] The *CEAA, 2012* also includes screening, but it is a preliminary procedure to determine whether an EA is required, rather than a class of EA.
[8] Janice Walton, "New federal environmental assessment regime now in force" (11 July 2012) *Blakes Law Bulletin*, online: <http://www.blakes.com/english/resources/bulletins/pages/details.aspx?bulletinid=1491>.

will also advise on how to ensure that government science is open to the public, that federal scientists are able to speak freely about their work, and that science is effectively communicated across government. The office will be supported by a team of scientists and policy experts.[9]

The Office of the Chief Science Advisor ("CSA") should have the jurisdiction to review the conduct of the responsible authority (again, preferably the single, independent agency established for conducting EAs) and act as a final arbiter on competing scientific evidence that is in the record before the responsible authority.

PROCEDURAL REFORMS

5. *Mandatory cross-examinations for comprehensive studies and review panels*:

One of the controversies in the NEB's review and EA of the Trans Mountain Expansion Project was the lack of cross-examination.[10] The federal government should require responsible authorities to provide opportunities to parties to cross-examine experts put forward by other parties in comprehensive studies and in review panel processes.

In settings outside of EA, scientific evidence is tested through peer-review and defence. The rigour of the evidence provided by parties (including the proponent, intervenors, and consultants hired by the responsible authority itself: see recommendation 2) ought to be tested in a transparent and equally rigorous process. Cross-examination serves as the tool for such transparent and rigorous testing.

For responsible authorities to test the evidence before them, intervenors need to be able to cross-examine the experts of the proponent, the government, and any other parties that have adduced evidence. Cross-examination is an effective way to test the reliability of the evidence and for the responsible authority to effectively determine the weight to be given to the evidence. Responsible authorities in comprehensive studies and review panel processes should have the benefit of the testing and weighing the evidence before they make their findings and recommendations.

6. *Adequate and accessible public registries*:

Allowing the public to have adequate and ready access to all the documents in the record before the responsible authority is key to ensuring and allowing meaningful participation by intervenors. For every EA, the Canadian Environmental Assessment Agency maintains a public registry of documents; however, these registries are often deficient. The Agency's registries are very difficult to search, are not well organized, and are sometimes incomplete (as was in the case of the Agency's public registry for the EA of the Pacific NorthWest

[9] Government of Canada, News Release, "Government of Canada launches search for Chief Science Advisor" (5 December 2016), online: <http://news.gc.ca/web/article-en.do?nid=1165289>.

[10] For example, intervenor Robyn Allan filed a motion dated April 14, 2014 to the NEB hearing panel seeking to amend the Hearing Order to include oral cross-examinations (Exhibit C9-1-2). This motion was supported by various other intervenors, including the City of Burnaby (Exhibit C69-3-1) and the City of Vancouver (Exhibit C77-1-1). The hearing panel dismissed the motion (Exhibit A32-1).

LNG Project). These deficiencies hamper the ability of intervenors to meaningfully participate and make submissions to the responsible authority.

BC Nature commends the NEB for the public registries that it maintains. In BC Nature's experience, the public registries maintained by the NEB for its EA of the Trans Mountain Expansion Project and for the JRP's EA of the Northern Gateway Pipeline Project are much better organized, more easily searchable, and more complete.

All public registries of documents in EA processes should be required to be organized, searchable, and complete.

7. *Rigorous rules for responses to information requests*:

The EA statute should include a mandatory provision requiring respondents to provide "full and adequate" responses to IRs.

In many cases, a process for written information requests ("IRs") and responses is an inadequate substitute for cross-examination, as an IR process does not allow parties to adequately follow-up on questions asked, clarify issues of ambiguity and ensure that conflicts in the evidence are brought to light. Written responses to IRs can be carefully crafted to prevent exposure of unfavorable facts or conflicts in the evidence.

However, if the responsible authority decides to implement an IR process, it must be willing to hold proponents to account when they fail to provide full and adequate answers. This is particularly the case if the IR process is not supplemented by oral cross-examinations, such that the IR process is effectively the only method for testing the evidence. In BC Nature's experience, responsible authorities have failed to ensure that proponents provide full and adequate answers. Incomplete and inadequate answers leave important and significant gaps in the body of evidence, thereby depriving the responsible authority of critical information to allow the EA to be completed.

For example, in the NEB's review of the Trans Mountain Expansion Project, which had an IR process but not cross-examinations, the NEB allowed the proponent to provide inadequate responses to IR questions, stock or generic responses to multiple requests, or completely irresponsive answers to questions.[11] While intervenors had the opportunity to seek an order from the NEB to compel full and adequate responses, the NEB sided with the proponent most the time.

A mandatory provision requiring respondents to provide "full and adequate" responses to IRs would enhance the ability of parties to test the evidence before the responsible authority. As BC Nature and Nature Canada argued before the NEB in the Trans Mountain

[11] See *e.g.*, submissions of BC Nature and Nature Canada to the NEB in the Trans Mountain hearings in Exhibit C24-4-1; and also submissions by the City of Burnaby in Exhibits C69-10-1, C69-12-1, C69-34-1, and C69-35-1.

hearings, "full and adequate" should, at a minimum, be: 1) responsive to the requests posed; 2) complete; and 3) clear and coherent.[12]

SUBSTANTIVE REFORMS

8. *Move towards a focus on sustainability*

Federal EA should move beyond its current focus on avoiding significant adverse environmental effects towards a focus on net positive contribution to sustainability. The focus on avoiding significant adverse environmental effects incentivizes project proponents to show that project effects are simply not significant, or can be mitigated below the significance threshold.

Instead, EAs should ask: "does a project provide net positive contribution to sustainability?" The ''core characteristics of sustainability-based assessment establish net gains as the basic objective."[13] The assessment of a project's contribution to sustainability requires a set of sustainability-based criteria that integrate social, economic, and ecological interests (often known as the three pillars of sustainability) in order to find mutually-supporting gains in all categories of sustainability.[14]

There are two main components to a sustainability assessment:

1. A set of sustainability-based criteria to identify the range of various effects that the project under review is predicted to have; and,
2. A set of trade-off rules to ensure that the project under review will generate net sustainability gain.

This sustainability-based EA framework has been adopted in various EAs in Canada, such as the Lower Churchill Hydroelectric Generation Project Joint Review Panel[15] and the Joint Review Panel for the MacKenzie Gas Project.[16]

For more on the topic of sustainability assessments, see the submissions to this Expert Panel by Nature Canada[17] and Robert B. Gibson (one of the leading Canadian scholars on

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[12] BC Nature and Nature Canada motion to for an order compelling full and adequate responses (3 July 2014), Exhibit C24-3-1.

[13] Robert B. Gibson, *Sustainability-based Assessment Criteria and Associated Frameworks for Evaluation and Decisions: Theory, Practice and Implications for the Mackenzie Gas Project Review* (2006), prepared for the Joint Review Panel for the Mackenzie Gas Project, online: Mackenzie Valley Environmental Impact Review Board <http://www.reviewboard.ca/upload/project_document/EA0809-001_Sustainability-Based_Assessment___Frameworks.pdf> at 20.

[14] Robert B. Gibson, "Beyond the pillars: sustainability assessment as a framework for effective integration of social, economic and ecological considerations in significant decision-making" (2006b) 8:3 *J. Envtl. Assmt. Pol'y & Mgmt.* 259 at 262-267.

[15] Lower Churchill Hydroelectric Generation Project Joint Review Panel, Report of the Joint Review Panel (August 2011), online: Canadian Environmental Assessment Agency <http://www.ceaa.gc.ca/050/documents/53120/53120E.pdf>

[16] Joint Review Panel for the MacKenzie Gas Project, Foundation for a Sustainable Northern Future: Report of the Joint Review Panel for the Mackenzie Gas Project, Volume 1 (December 2009), online: Canadian Environmental Assessment Agency <http://www.ceaa.gc.ca/155701CE-docs/Mackenzie_Gas_Panel_Report_Vol1-eng.pdf>.

sustainability assessment),[18] and also see reports from the West Coast Environmental Law Federal Environmental Assessment Reform Summit.[19]

9. *Strategic, regional, and cumulative effects assessments*:

In the present EA regime, cumulative effects assessment forms a part of the project-level EA. The EA must take into account "any cumulative environmental effects that are likely to result from the designated project in combination with other physical activities that have been or will be carried out" and the significance of such effects.[20]

There are several notable problems with the way in which cumulative effects are assessed in the current EA regime. Firstly, the regional scale of cumulative effects renders them ill-suited for assessment in a project-level EA setting. Secondly, project proponents have little motivation nor the knowledge to provide a rigorous analysis of the way in which negative impacts from other sources may combine, synergize, or interact with project effects. The incentive for proponents is to show that the project is not likely to cause significant adverse effects by itself, and that the project is unlikely to generate cumulative impacts. Thirdly, the responsibility for adverse cumulative effects is difficult to assign to any particular project proponent, as cumulative effects by their nature involve multiple sources. Lastly, there is little clarity or transparency in the way cumulative effects are assessed in the current EA regime.

The new EA legislation shall include provisions that encourage the federal government to conduct strategic or regional environmental assessments ("SEAs" or "REAs") in conjunction with provincial, territorial, and Aboriginal governments where appropriate. SEAs/REAs can focus on specific sets of effects or a specific set of activities over a certain geographic scope, and would include an assessment of cumulative effects.

Under the new legislation, SEA/REA shall provide legally authoritative parameters for project-level EAs that are situated within the scope of the SEA/REA. In this way, SEAs/REAs provide greater certainty to project proponents, as the assessment of project effects would be situated within established baselines and development goals for the relevant region.

Legislation shall create explicit criteria for the assessment of cumulative effects, or shall require responsible authorities to create explicit criteria for the assessment of cumulative effects, both in SEAs/REAs and in project-level EAs.

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[17]Nature Canada, Submissions to the Expert Panel (31 October 2016), online: <http://eareview-examenee.ca/wp-content/uploads/uploaded_files/nov.1-13h10-nature-canada-submission-for-presentation-.pdf>.

[18] Robert B. Gibson, Submissions to the Expert Panel (9 November 2016), online: <http://eareview-examenee.ca/wp-content/uploads/uploaded_files/nov.9-14h10-robert-b.-gibson-presentation-gibson-...-9nov16.pdf>.

[19] West Coast Environmental Law, Federal Environmental Assessment Reform Summit: Executive Summary (August 2016), online: <http://wcel.org/sites/default/files/publications/WCEL_FedEnviroAssess_ExecSum%2Bapp_fnldigital.pdf>; and West Coast Environmental Law, Federal Environmental Assessment Reform Summit: Proceedings (August 2016), online: <http://wcel.org/sites/default/files/publications/WCEL_FedEnviroAssess_proceedings_fnl.pdf>.

[20] *CEAA, 2012*, s. 19(1)(a) & (b).

For both REAs and project-level EAs, legislation shall create explicit public reporting requirements for long-term monitoring of cumulative effects, and assign adaptive management responsibilities to clearly identified parties.

10. *Increased transparency in reporting and justifications*:

Currently, responsible authorities and federal decision-makers provide inadequate reasons in their EA reports and decisions, which shroud the rationale of their findings and decisions from meaningful review and analysis.

A review of the Agency's report for the Pacific NorthWest LNG Project, the NEB's report for the Trans Mountain Expansion Project, or the JRP's report for the Enbridge Northern Gateway Project provides examples of the lack of transparency in these reports. Key chapters of EA reports are often divided into a section summarizing the evidence, followed by a section in which the responsible authority offers its own analysis and findings. In the latter section containing the analysis and findings, the responsible authority rarely attributes which part of the evidentiary record it is drawing upon to make those findings. Moreover, the responsible authority almost never provides explicit reasons for deciding upon competing claims in the record, nor express explanations for assigning the weight that it did to certain pieces of evidence.

In order to increase transparency and legitimacy of EA reports, responsible authorities must be required to give better reasons in their reports. Legislation should require reports to contain explicit attributions to the evidentiary record, and provide explicit reasons for decisions regarding competing claims and weight. Giving better reasons not only improves the intelligibility and transparency of EA reports, but they enhance the reviewability of such reports in the courts (or before the CSA: see recommendation 4).

Decisions by the Governor in Council regarding whether significant adverse environmental effects are "justified in the circumstances" suffer from the same lack of transparency. Orders in Council of such justification decisions contain little more than the decision itself, without much in the way of reasoning. While the Governor in Council may be expected to have discretion to make decisions in the national interest, such decisions about major projects should require greater transparency by way of more detailed reasons. Legislation should require the Governor in Council to provide explicit justification of the trade-offs that the Governor in Council has made between the significant adverse environmental effect on the one hand, and other relevant considerations of national interest on the other.

11. *Worst-case scenario analyses*:

The *CEAA, 2012* places upon responsible authorities the duty to assess the environmental effects from "malfunctions or accidents that may occur" in connection with a project.[21] These "malfunctions or accidents" are, by definition, unlikely events but which may carry tremendous consequences. A prime example is the environmental effects from oil spills.

[21] *CEAA, 2012*, s. 19(1)(a).

In the JRP's review of the Enbridge Northern Gateway Project, the potential impacts from a marine oil spill was a key issue that emerged early in the hearing, and remained a source of contention throughout. Ultimately, the JRP adopted the an approach to this statutory provision urged upon it by Northern Gateway, an approach that was in direct conflict with the one advocated for by Environment Canada, BC Nature, and other parties. According to Northern Gateway:

> … the outcome of any assessment of the environmental effects of a major spill … would arrive at a similar conclusion of multiple adverse and significant effects to the marine biophysical environment and human use. What is important in assessing these adverse and significant effects, is the likelihood or statistical probability that a spill will occur during the life of the Northern Gateway Project.[22]

Based on this approach, Northern Gateway never provided the JRP with sufficient information to adequately assess the environmental effects of an oil spill were one to occur. BC Nature submits that such an approach frustrates the legislative intent of this provision and deprives the responsible authority of the information necessary to carry out its duties to assess malfunctions and accidents. Accidents such as an oil spill are admittedly unlikely events. If proponents and responsible authorities can skirt the issue by suggesting that an oil spill is unlikely, they would never have to assess the environmental effects from such accidents. Parliament recognized this by requiring the EA to consider malfunctions and accidents that "may" occur, not those that are likely to occur.

The threat of a marine oil spill is a major concern for many British Columbians. BC Nature has a genuine and continuing interest in protecting marine birds, mammals, and all other marine organisms and their habitats in the Pacific coast, which may be severely threatened by oil spills. In order to reclaim public trust and legitimacy in federal EAs, legislation must clarify the duty that responsible authorities have in providing a fulsome and adequate assessment of malfunctions or accidents that "may" occur in connection with projects under review, and not allow proponents to circumvent assessments of such accidents simply by suggesting that they are unlikely to occur.

Respectfully submitted,

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[22] Northern Gateway response to Federal Government IR No. 2 (Exhibit B46-2).