

Comments on the

Literature Review for the Regional Assessment of Offshore Oil and Gas Exploratory Drilling East of Newfoundland and Labrador

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By the NunatuKavut Community Council 200 Kelland Drive, PO Box 460, Stn. C Happy Valley-Goose Bay, NL A0P1C0 http://www.nunatukavut.ca

INTRODUCTION AND CONTEXT

The NunatuKavut Community Council ("NCC") is pleased to present its comments on the literature review summaries on five modules circulated by the Regional Assessment Committee ("RA Committee") overseeing the Regional Assessment of Offshore Oil and Gas Exploratory Drilling East of Newfoundland and Labrador ("RA"). These comments, however, are limited to responding to the summary literature reviews and are not intended to represent all of NCC's views, positions and/or requests in relation to the RA. NCC will need to review carefully the RA Committee's Draft Report to the Minister in order to obtain a fuller picture of the anticipated project impacts, and determine from its own perspective and in the context of its Indigenous knowledge base the extent and nature of potential impacts. Thus, it will necessarily be in the context of NCC's comments on the RA Draft Report that it provides comments on the various potential effects that the offshore exploratory drilling East of Newfoundland and Labrador may have for NunatuKavut communities. Furthermore, our present submission is made on the expectation that Canada will follow up the current engagement on this RA with a fulsome consultation in order to discharge its constitutional duty to consult and accommodate.

On September 4, 2019 the Government of Canada signed a *Memorandum of Understanding* (MOU) on self-determination with NCC, representing a significant step forward in our relationship with Canada on the recognition of our Inuit rights and self-determination. Through the MOU, NCC looks forward to finding shared and balanced solutions to a wide variety of issues – including impact assessments, regional assessments and strategic environmental assessments – that advance reconciliation in a way that respects the interests of the people of NunatuKavut and all Canadians. The MOU, which represents the culmination of formal talks that began in July 2018, further heightens our interest in Nation-to-Nation dealings with Canada in relation to Canada's impact assessment regime and the regional assessment of offshore oil and gas development. As the traditional stewards and guardians of our territory of NunatuKavut, our people are in the best position to provide relevant knowledge, and to make decisions, monitor and enforce protections with respect to projects that may affect the natural resources on which we depend, and thus our rights in relation to those resources.

NUNATUKAVUT, NCC AND THE CENTRALITY OF THE ENVIRONMENT TO OUR WAY OF LIFE: BRIEF BACKGROUND

NunatuKavut means "Our Ancient Land." It is the territory of the Inuit of NunatuKavut, the Inuit residing primarily in southern and central Labrador. Our people lived in Labrador long before Europeans set foot on North American soil. As it was in times of old, and still today, we are deeply connected to the land, sea and ice that make up NunatuKavut, our home. Today, our people continue to hunt and fish to harvest country food that is important for health and well-being and which connects us to our culture and traditions of the past. Salmon, turrs (murres) and eider ducks are among the species that we harvest for these purposes and which may well be affected by offshore exploratory drilling in the study area. Additionally, and as is described below, NCC's commercial communal fishery, which harvests in the study area, plays a central role in the life and economy of NunatuKavut communities.

NCC serves as the representative governing body for more than 6,000 Inuit of south and central Labrador. A council elected by our membership and comprised of members representing each of the six regions of our territory and led by a President and Vice-President governs the NCC, whose primary function is to

ensure the land, ice and water rights and titles of its people are recognized and respected. We are also fully present at the grassroots level in our communities, which are many and remote, the vast majority of which are located along Labrador's coast south of Hamilton Inlet.

GENERAL COMMENTS ON THE LITERATURE REVIEW SUMMARIES

NCC fully understands that the five (5) draft literature review summaries provided for comment were "works in progress". That said, NCC has identified numerous gaps in the references cited for the summaries, and has certain concerns that are common to all or most of the summary texts.

With respect to gaps in the references cited for the summaries, NCC has compiled a list of suggested additional sources from the Western scientific literature, and these appear in the **Appendix** to this document. With respect to NCC's general concerns, we outline these in briefest form below.

- None of the literature review summaries mention any information about Indigenous knowledge on the topics covered. We understand that the process can be slow in obtaining and incorporating such knowledge, but NCC holds that such knowledge is essential for helping to cover the many information gaps concerning the potential impacts of oil and gas exploratory drilling in the study area.
- Furthermore, even the notion of potential effects is too narrow in that the literature covered looks mainly on the immediate effects to marine life, for example, but not with the exception of the fisheries module the potential social, economic and cultural impacts connected to impacts on these species. We note, for example, that in the migratory birds module, there is a statement saying that "some species are also an important resource for recreational and tourism-related pursuits", but there is no mention at all of the harvesting of species like sea ducks by Indigenous communities such as those of NunatuKavut.
- The literature reviews should also include and integrate existing information from previous and ongoing environmental assessments of past and planned projects in the study area.
- For example, information from the Labrador Shelf Offshore Strategic Environmental Assessment (SEA)
 Update will provide critical information that should be taken into consideration in the RA, yet we seen
 no mention made of this assessment in the literature reviews. While still underway we hope that
 every effort will be made to incorporate information gathered thus far, including Indigenous
 knowledge, which is an important part of this update.
- More recent information, specific to the North Atlantic, on potential impacts from oil spills is needed.
 Every attempt must be made to study and reveal the impacts of spills such as the November 2108 spill off the coast of Newfoundland and Labrador. Relying heavily on Gulf of Mexico information is unwise.

COMMENTS ON SPECIFIC LITERATURE REVIEW MODULES

MODULE 7: MARINE FISH AND FISH HABITAT

Marine fish are a central part of life and culture for NunatuKavut communities. NCC holds Food, Social and Ceremonial (FSC) licences for species – like Atlantic salmon – that may migrate between the study area and our coastal communities in southern Labrador. Nonetheless, there is not a single mention of Atlantic salmon or capelin in the Module 7 literature review summary, and only one passing general reference to salmon in Module 12 on fisheries. It should be noted that there is also no mention of oil spill impacts during icy conditions, and too much reliance on spill impact information from the Gulf of Mexico. In light of these and other knowledge gaps concerning marine fish and fish habitat in the study area, NCC finds that the Module 7 draft literature review summary in its current form is substantially incomplete.

Issues such as the migration patterns of salmon, for example, are critical to understanding the potential impacts of oil and gas exploratory drilling on this iconic species that is so essential to the people of NunatuKavut and others. The literature review should, for example, acknowledge and incorporate a 2018 Science Response by the Canadian Science Advisory Secretariat on the Flemish Pass and Eastern Newfoundland Offshore Exploration Drilling programs, which warns against premature conclusions concerning the presence of salmon in the Flemish Pass area during overwintering, and it points to limited surveys as an important information gap.¹

Furthermore, as CNOOC notes in a May 2019 addendum to its International Flemish Pass EIS, "[t]here are efforts underway to address knowledge gaps regarding Atlantic salmon migration, including planned studies already underway such as the Atlantic Salmon tagging program by the Atlantic Salmon Federation (ASF)and potential initiation of new studies with the Environmental Studies Research Fund (ESRF)." From NCC's viewpoint, it is important that every effort be made to incorporate the results of studies like these before a new round of exploration goes forward in the study area. In the meantime, it is essential that the literature review reflect the fact that the issue of migration patterns for the Labrador population of Atlantic salmon are not yet resolved.

In the **Appendix**, NCC recommends numerous additional sources of Western scientific knowledge on these key issues for marine fish and fish habitat, and – as with other topics in the RA – expects that the RA Committee will take the additional steps necessary to ensure the incorporation of Indigenous knowledge into the heart of the analysis.

¹ Canadian Science Advisory Secretariat, Newfoundland and Labrador Region, Science Response 2018/026, April 2018, Review of the Environmental Impact Statements for the Flemish Pass Exploration Drilling Project and the Eastern Newfoundland Offshore Exploration Drilling Project, https://waves-vagues.dfo-mpo.gc.ca/Library/4068958x.pdf, p. 3.

² CNOOC Petroleum North America ULC, *International Flemish Pass Exploration Drilling (2018 –2028) Environmental Impact Statement Addendum*, May 2019, https://www.cnlopb.ca/wpcontent/uploads/nexenergyfp/roundtwoirsres.pdf, p. 9.

MODULE 8: MARINE AND MIGRATORY BIRDS

Seabirds present off Newfoundland and Labrador are said to be one of the largest concentrations anywhere in the world. As mentioned above, they also serve as an important part of the traditional foods (referred to locally as "country foods"), and cultural heritage of NunatuKavut members. In particular, murres (referred to locally as turrs) and eider ducks are among the sea ducks hunted, within prescribed limits, by those in NunatuKavut coastal communities. NCC's Environment and Natural Resources Dept. issues annual spring bird and gull egg harvest guidelines to ensure the sound management of seabirds and sea ducks and protection of endangered species. For example, the 2019 Guidelines (referenced in the Appendix), specify that the seasonal take for eider ducks (Common Eiders), is five per household. It is understood that some populations of eiders migrate south to wintering areas near and along the coast of Newfoundland.

NunatuKavut members also hunt turrs (murres) during the designated hunting season, and both main species of Labrador turrs, the Common murre and the Thick-billed murre, spend significant amounts of time in offshore areas, whether during winter or year-round. Consequently, NCC is concerned that offshore oil and gas drilling (exploratory or production) could cause harm to the sea ducks it harvests.

More sources are needed than those provided in the literature review on threats to these populations due to factors like rig lighting (especially at night), oil leaks and sheen on surface waters, risks of large oil spills, and sound disturbances, etc. Turrs are capable of diving very deep in search of prey, and more must be known about underwater risks to turrs. In the **Appendix**, NCC provides many additional sources of Western scientific knowledge on eiders, turrs, marine birds in general and the risks they face.

MODULE 9: MARINE MAMMALS AND SEA TURTLES

NCC's main observation for this module is that there seem to be no studies cited nor discussion of ranges and migration patterns in relation to marine mammals in the Northwest Atlantic Ocean. There are some studies cited that mention migration of marine mammals, but they relate to coastal California and Alaska. Additionally, NCC noticed that the summary omits reference to a relevant 2015 report by the Canadian Science Advisory Secretariat concerning mitigation and monitoring measures for seismic survey activities in and near cetacean habitat. Given that the Introduction to the report mentions oil and gas development in eastern Canada, it would seem that this document should be included for consideration in the RA. NCC provides the reference information for this source in the **Appendix.**

MODULE 12: FISHERIES AND OTHER OCEAN USES

NCC has already addressed in its comments on the Module 7 literature review summary those issues concerning species, such as salmon, which comprise our food fishery, for subsistence fishing. Thus, our comments here are focused primarily on commercial fisheries. NCC holds several commercial communal fishing licences for a variety of fish and marine species in the study area, including NAFO zones 2J and 3KL. NDC Fisheries Limited, which is a wholly owned subsidiary of NCC's business arm, Nunacor, holds quotas for snow crab and shrimp in and near the study area and is required to hire NunatuKavut members as crew. Commercial fisheries are a major employer in southern Labrador communities, thus NunatuKavut

community members have important concerns about potential impacts to species fished under the commercial communal licenses.

In light of the above, NCC finds that substantially more work is needed to round out the sources referenced and relied upon in the Module 12 literature review summary. We are highly concerned that — as of yet — the Module 12 literature review summary contains few or no sources listed for key species fished by NunatuKavut commercial fishers. In particular, there are only two sources listed discussing potential impacts on snow crabs (seismic or oil penetration into tissues), and zero sources listed that discuss either baseline populations or potential impacts on shrimp, turbot, or groundfish generally. Crab, shrimp and turbot are critical species for NunatuKavut commercial communal fishery and the importance of filling in these knowledge gaps cannot be understated. Similarly, there are no sources provided or discussed on capelin, a critical fish stock of concern to NCC. NCC has, in fact called for the suspension of the commercial capelin fishery due to serious concerns with conservation of capelin, which of course are prey for turbot and other fish and marine birds. On page 1 of the **Appendix**, NCC provides several of its own sources pertinent to the commercial communal fisheries and to capelin, but is unable at this time to offer additional sources on Western scientific studies on potential impacts to commercial fisheries.

MODULE 14: ATMOSPHERIC ENVIRONMENT

Climate change affects the lives of those in our communities in countless ways, including due to the warming of the oceans, the increasing presence of invasive and other species pushing their ranges further north, to name just a few. As mentioned above, NCC has suggested some sources that deal with climate change impacts, particularly with respect to salmon. But NCC is also seriously concerned about the root cause of climate change – namely, increases in greenhouse gas (GHG) emissions. As such, we would be entirely remiss in not pointing out that the literature review for the atmospheric environment module takes an extremely narrow view of potential GHG emissions from offshore oil and gas exploration drilling.

With respect to the draft literature review summary for this module, NCC is particularly concerned about the lack of sources on, and discussion of, the massive stores of methane on the seabed, that are inevitably disturbed when drilling happens — whether that drilling is for exploration, delineation, testing or production. Researchers such as those at Princeton University have said that that controlling methane leaks around oil and gas wells — whether on land or at sea — is a powerful way to combat climate change.³ One of the Princeton U. researchers puts this very simply: "The fastest way to reduce the effects of greenhouse gases significantly is by decreasing methane emissions".⁴ In a recent study, Princeton researchers found that offshore oil and gas rigs in the North Sea leak more than twice as much methane as they report to the British government, and they did this using measurements from fishing boats downwind of offshore rigs when they were in stand-by mode (e.g., no flaring or transfer of oil).⁵ In the **Appendix**, NCC provides sources relating to this and other studies addressing methane leaks to the

³ Steven Schultz, "Q & A: Princeton U. researchers say controlling methane leads can 'pay off quickly' to lessen effects of climate change", State Impact Pennsylvania, Sept. 22, 2019,

https://stateimpact.npr.org/pennsylvania/2019/09/22/qa-princeton-u-researchers-say-controlling-methane-leaks-can-pay-off-quickly-to-lessen-effects-of-climate-change/.

⁴ Ibid.

⁵ Ibid.

atmosphere, particularly for drilling operations at shallower depths (such as some projects contemplated for the study region), leaks around boreholes, and methane mitigation and we trust that the RA Committee will look carefully at these sources and issues.

CONCLUSION

NCC understands that the draft literature reviews circulated for comment were not intended to represent final versions. Nonetheless, given the extremely tight timeframe within which the RA Committee has been trying to fulfill its mandate, NCC has serious concerns about the extent to which additional sources, such as those provided by NCC in the **Appendix** to this document, can be reviewed and properly integrated into the analyses upon which the Committee will base its report. Furthermore, and equally if not more important from NCC's perspective, there is precious little time – under the limits of the current timeframe – for obtaining Indigenous knowledge from the affected Indigenous groups and integrating it with the Western scientific knowledge in a meaningful way. As has been discussed during various meetings with NCC and other Indigenous groups to date, it is imperative that the integration of the two knowledge systems be done as comprehensively as possible and with the necessary care. This approach is essential to make the RA process meaningful in relation to Indigenous group concerns, and to make the resulting body of integrated knowledge truly useful in assessing the potential impacts of exploratory drilling in the study area, not only to Indigenous peoples but to all.

NCC looks forward to continuing the conversation and creating an RA that will be credible, thorough and meaningful and will reflect the needs and concerns of NCC and other Indigenous groups.