

Comments on Canada's Regional Assessment for the NL Offshore Area

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Please find below Oceans North observations and recommendations regarding the Regional Assessment for the Newfoundland and Labrador Offshore Study Area. Oceans North staff have engaged as participants in the Regional Assessment for the Newfoundland Shelf, including several of the Technical Advisory Groups. We look forward to discussing these with the Panel and CEAA staff as appropriate.

Our concerns are detailed in the following categories:

General concerns:

- 1. Overall context of the regional assessment
- 2. Alignment with *Impact Assessment Act*
- 3. Climate change
- 4. Transboundary considerations
- 5. Application of precaution
- 6. Requirement for same season relief well policy

Process based concerns:

- 7. Time constraints of the Regional Assessment
- 8. Transparency of existing information
- 9. Relational databases across CEAA, ECCC and DFO including traditional and Indigenous Knowledge Databases
- 10. Integration of past recommendations by DFO with regards to species lists of sensitive benthic communities
- 11. Process for peer review of chapters

Our expectations for the Regional Assesment are that it result in the following:

- Recommendations for areas where oil and gas development should not occur, including key fishing areas, sensitive benthic areas, vulnerable marine ecosystems with a priority on areas already closed to fishing activity.
- Alignment with Section 22 of the Impact Assessment Act in consideration of all factors to be considered in that section of the Act.
- Improved data availability and peer reviewed scientific studies on oil and gas impacts in Newfoundland.
- A downstream emissions cap consistent with meeting Canada's comitments under the Paris Agreement, be established prior to exploratory drilling taking place as part of establishing thresholds for exploratory drilling and to be in line with oil and gas exploration in other regions of Canada.
- The transboundary nature of the Regional Assessment be recognized by the government of Canada, and that States who are Contracting Parties to NAFO be invited to review the Regional Assessment, and consideration be given to Canada's obligations under Article 194 of UNCLOS.
- A requirement for any proponent for exploratory drilling to have demonstrated its capacity to drill a same season relief well, in keeping with policies in Canada's Arctic.

From a process perspective, we recommend that a peer review process, ideally using existing scientific expertise be undertaken for each of the chapters of the Regional Assessment, with a view towards ensuring credible and comprehensive scientific information is used as the basis for any management recommendations. The precautionary approach as well as consideration of cumulative impacts should also drive any outcomes of the Regional Assessment. Annual updates of the GIS data base and new relevant scientific data and information should be undertaken.

General Concerns

The context of our general observations in part includes the recent passage of the new Impact Assessment Act, which incorporates social and economic factors into decision-making under the Act. The Canadian government needs to demonstrate further leadership by ensuring that initiatives like the Regional Assessment are consistent with the values inherent in the Impact Assessment Act. Furthermore, we are of the view that the impact assessment practice must be consistent across Canada, in both terrestrial and marine environments. Additionally, Environmental and conservation organizations have significant reservations regarding the Vision 2030 and its stated goal to drill 100 wells over the next decade, in large part because of the inconsistent practices of the C-NLOPB. There is an appearance that rather than regulate, the C-NLOPB is primarily a promoter of the oil and gas industry. The C-NLOPB should have been the first to raise the problem of a politically-determined number of wells. There is yet to be an explanation as to how this number of 100 wells was determined. Ideally, the number of exploratory wells should be determined from a strategic assessment. Instead, it seems that the regional assessment is a result of a predetermined political goal; this is not in keeping with the intentions of the Impact Assessment Act. We are also concerned that the Regional Assessment has not taken into account its transboundary nature, obligations under UNCLOS and how this assessment could be viewed in light of ongoing negotiations for a new implementing agreement under UNCLOS, to protect biodiversity in areas beyond national jurisdiction. Our detailed comments are below, and include specific recommendations going forward:

1. Context of the Regional Assessment

- a. Relationship of the Regional Assessment to Strategic Environmental Assessment: The Strategic Environmental Assessments (SEAs)should be the documents that provide guidance on whether or not 100 exploratory wells is even acceptable. The fact that they are not able to help in this decision, or that they were not considered before creating the Vision 2030 program is indicative of the poor management and application of the SEAs. They have not been used as intended, which is to strategically guide oil and gas development in the offshore, with the following objectives having been previously articulated and at least in part adopted by both the C-NLOP and the C-NSOPB:
 - to inform decisions related to the issuance of exploration licences in the study area;
 - **ii.** to understand the interaction between expected exploration activities and the receiving environment, including its current use;
 - iii. to minimize environmental and safety disasters;
 - iv. to identify sensitive environmental areas which require special mitigation protocols; and

v. to identify areas where development should be avoided.¹

Were this Regional Assessment following the objectives of the SEA, there would be a increased confidence that the Regional Assessment is not only being completed to simply fast track the Vision 2030 objectives, and to avoid doing project based assessments on each application for exploration. There would also have been an opportunity to set aside areas from leasing that had already been identified as closures or areas important for biodiversity protection, rendering Canada's overall ocean management as much more cohesive and considerate of the implementation of our full suite of ocean and fisheries law and governance regimes. We see a key outcome of the Regional Assessment to be the recommendation on areas where exploratory drilling should be avoided, including in key fishing areas as identified by the fishing industry and in areas identified by Fisheries and Oceans Canada as significant benthic areas or by the Northwest Atlantic Fisheries Organization (NAFO) as vulnerable marine ecosystems. Any areas currently closed to bottom fishing activity should not be open to oil and gas exploration.

- b. Past record of monitoring by C-NLOPB: It is our view that the C-NLOPB has done a poor job of encouraging the proponent to develop and implement monitoring plans and learning from previous projects, indicated by the lack of coordinated and available data for environmental impact assessments. The C-NLOPB needs to improve their monitoring, oversight and encourage an iterative process for the reviewed projects to feed into future projects. This is imperative in terms of building public confidence in the oil and gas regulatory regime and ensuring that oil and gas activities do not undermine conservation efforts by other industries, as well as positioning Canada as a responsible actor in reducing risk of oil and gas spills in the offshore.
- c. Defining Regional Assessment: Currently, the process of this Regional Assessment is not consistent with the definitions of "regional assessment" under the Impact Assessment Act. This current RA appears to be a class screening under the former Canadian Environmental Assessment Act to allow proponents to not complete a full project impact assessment. The description of Regional Assessments according to the Impact Assessment Agency of Canada are to identify:
 - A baseline against which to assess the incremental impact of a discrete project;

¹ As noted in Doelle, M., Banks, N. and Porta, L. 2012. https://www.ecelaw.ca/media/k2/attachments/SEAs_in_the_Beaufort_Sea_OPS_3.pdf

- Thresholds to support future project decisions;
- Standard mitigation measures for future projects;
- Potential impacts on rights and interests of Indigenous peoples; and,
- Guidance for land- or marine-use planning and other initiatives for managing cumulative effects that may be undertaken by various jurisdictions

The above points include the incorporation of social and economic assessment into decision-making under the *Impact Assessment Act*. Despite this being a new type of impact assessment, it is a required part of any Regional Assessment. The economic and social impacts of offshore exploratory drilling must be incorporated into the Regional Assessment. Now that the IAA incorporates both economic and social impact assessment we would like clarity as to how this Regional Assessment will be consistent with the more inclusive concept of impact assessment. Currently the Technical Advisory Groups are focused on environmental data and information, with the exception of landings information from the fishing industry.

We recognize the intended efficiency in this process, however within this efficiency should be considered areas that are in fact not open to oil and gas activity, as we would have expected from a Strategic Environmental Impact Assessment. The current leasing process allows for large areas to be up for bid, and then actual oil and gas activity takes place in much smaller areas. We recommend that any areas that have been set aside for biodiversity protection, including Fisheries Act closures and those areas considered by Fisheries and Oceans Canada as "marine refuges" not be open to oil and gas on a go forward basis. In addition, precaution should be used in any authorization exploratory drilling within areas known to have high concentrations of spongs and corals, as identified by DFO in 2016

d. Data and science availability: We note that in a global overview of impacts of oil and gas² Atlantic Canadian oil and gas activities are not included. It is our understanding that this is because there is relatively little published data and analysis from this area. We understand that there is a significant library of grey literature available from the offshore regulators, however until this information is peer reviewed, and publicly available, it cannot be included in a global overview. Canada has committed to better science and science-based decision making and as such this commitment should be extended to our offshore oil and gas industry. We would appreciate better understanding of how current

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² Cordes, Erik E., Daniel OB Jones, Thomas A. Schlacher, Diva J. Amon, Angelo F. Bernardino, Sandra Brooke, Robert Carney et al. "Environmental impacts of the deep-water oil and gas industry: a review to guide management strategies." *Frontiers in Environmental Science* 4 (2016): 58.

government science expertise, databases, including AZMP data, fisheries catch data, fisheries survey data and ecosystem data as examples, from the Canadian Wildlife Service (CWS), Fisheries and Oceans Canada (DFO), and Environment and Climate Change Canada (ECCC) is being included in the TAG process and how peer reviewed literature from other juridsictions, given the paucity in Atlantic Canada is to be incorporated.

- e. Consideration of seismic activity: The Regional Assessment is limited to exploratory drilling and does not include seismic exploration. Had the objectives of a Strategic Environmental Assessment been the goal of the Regional Assessment, we feel that the impacts and cumulative impacts of seismic activity should be included in the assessment of exploratory drilling activity, as one necessarily precludes the other. Canada has invested in ocean noise impacts as part of its Ocean Protection Plan and as such this Regional Assessment should consider ocean noise. We know there has been a decline in primary productivity as well as a change in zooplankton species composition. It is well known that seismic activity impacts marine mammals. This should be considered in terms of impacts of oil and gas exploration and drilling, particularly given the increasing importance of cumulative impacts in overall environmental impact assessment. We recommend that any additional seismic activity in the Regional Assessment area be included as part of potential cumulative impacts.
- 2. Alignment with Impact Assessment Act: Canada recently passed the Impact Assessment Act and is in the process of drafting guidance to practitioners³ to ensure proper application of the Act and its provisions. We are particularly concerned that the Regional Assessment, while begun before the IAA was passed, does not adhere to all aspects of Section 22 of the Act, which we include below. We recognize that some of these provisions may not be in force, however given that the Regional Assessment is being done to avoid project level assessments, these factors should be considered here:
 - **22** (1) The impact assessment of a designated project, whether it is conducted by the Agency or a review panel, must take into account the following factors:
 - (a) the changes to the environment or to health, social or economic conditions and the positive and negative consequences of these changes that are likely to be caused by the carrying out of the designated project, including
 - (i) the effects of malfunctions or accidents that may occur in connection with the designated project,
 - (ii) any cumulative 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
 - (iii) the result of any interaction between those effects;

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³ https://www.canada.ca/en/impact-assessment-agency/services/policy-guidance/practitioners-guide-impact-assessment-act.html

- (b) mitigation measures that are technically and economically feasible and that would mitigate any adverse effects of the designated project;
- (c) the impact that the designated project may have on any Indigenous group and any adverse impact that the designated project may have on the rights of the Indigenous peoples of Canada recognized and affirmed by section 35 of the Constitution Act, 1982;
- (d) the purpose of and need for the designated project;
- (e) alternative means of carrying out the designated project that are technically and economically feasible, including through the use of best available technologies, and the effects of those means;
- (f) any alternatives to the designated project that are technically and economically feasible and are directly related to the designated project;
- (g) Indigenous knowledge provided with respect to the designated project;
- (h) the extent to which the designated project contributes to sustainability;
- (i) the extent to which the effects of the designated project hinder or contribute to the Government of Canada's ability to meet its environmental obligations and its commitments in respect of climate change;
- (j) any change to the designated project that may be caused by the environment;
- (k) the requirements of the follow-up program in respect of the designated project;
- (I) considerations related to Indigenous cultures raised with respect to the designated project;
- (m) community knowledge provided with respect to the designated project;
- (n) comments received from the public;
- (o) comments from a jurisdiction that are received in the course of consultations conducted under section 21;
- (p) any relevant assessment referred to in section 92, 93 or 95;
- (q) any assessment of the effects of the designated project that is conducted by or on behalf of an Indigenous governing body and that is provided with respect to the designated project;
- (r) any study or plan that is conducted or prepared by a jurisdiction or an Indigenous governing body not referred to in paragraph (f) or (g) of the definition jurisdiction in section 2 that is in respect of a region related to the designated project and that has been provided with respect to the project;
- (s) the intersection of sex and gender with other identity factors; and
- (t) any other matter relevant to the impact assessment that the Agency requires to be taken into account.

Climate change

3. Climate change and total CO₂ outputs by Canada, including oil and gas extraction:

Canadian opposition to and scrutiny of oil and gas has largely centred on the terrestrial extractions from Alberta. Significantly less attention has been paid to the offshore oil and gas extraction in Atlantic Canada. There is an opportunity to ensure that the Atlantic

Canadian provinces, and in this case Newfoundland and Labrador in particular, be bound to total carbon emission ceilings, as has been agreed in Alberta. We fully recognize the economic importance of the oil and gas industry in Newfoundland and Labrador and the effort that has gone into developing a local and regional supply chain. However, the recent spill incidents in summer 2019 as well as the need to curb global emissions suggest a new approach is needed to regional assessments and to regulation of the offshore oil and gas industry itself with regards to climate change and cumulative impacts. Estimates of oil and gas extraction potential as well as downstream emissions from oil that will be extracted, resulting from successful exploratory drilling, should factor into the climate change aspects of the Regional Assessment. Examples of incorporating climate impacts and emissions into the regional assessment could include:

- Setting a carbon emissions cap for downstream emissions that would establish a threshold for drilling activity.
- Setting a sunset date for the drilling of 100 wells, beyond which no further exploration will occur, in order to meet IPCC recommendations on reducing global GHG emissions.
- Citing and basing recommendations related to climate change on the recent report by the IPCC on Oceans and the Cryosphere⁴.
- Identifying investments for royalties that result in reducing the level of dependence of the Newfoundland and Labrador economy on oil and gas as the largest part of the energy sector.

Transboundary Considerations

4. Biodiversity Beyond National Jurisdiction:

a. **UNCLOS Obligations:** Canada has a responsibility under the United Nations Law of the Sea Convention⁵, Part XII. Below we have included the text of Articles 192-194 and made comments in bold where we feel the current trajectory of this Regional Assessment is not inline with Canada's commitments as a signatory to UNCLOS:

PART XII PROTECTION AND PRESERVATIONOF THE MARINE ENVIRONMENTSECTION

GENERAL PROVISIONS

Article 192: General obligation
States have the obligation to protect and preserve the marine environment.

Article 193

⁴ https://www.ipcc.ch/srocc/home/

⁵ https://www.un.org/depts/los/convention_agreements/texts/unclos/unclos_e.pdf

Sovereign right of States to exploit their natural resources. States have the sovereign right to exploit their natural resources pursuantto their environmental policies and in accordance with their duty to protectand preserve the marine environment.

Article 194

Measures to prevent, reduce and control pollution of the marine environment

- 1.States shall take, individually or jointly as appropriate, all measures consistent with this Convention that are necessary to prevent, reduce and control pollution of the marine environment from any source, using for this purpose the best practicable means at their disposal and in accordance withtheir capabilities, and they shall endeavour to harmonize their policies in this connection.
- 2.States shall take all measures necessary to ensure that activities under their jurisdiction or control are so conducted as not to cause damage bypollution to other States and their environment, and that pollution arising from incidents or activities under their jurisdiction or control does not spread beyond the areas where they exercise sovereign rights in accordance with this Convention. The measures taken pursuant to this Part shall deal with all sources of pollution of the marine environment. These measures shall include, inter alia, those designed to minimize to the fullest possible extent:
- (a) the release of toxic, harmful or noxious substances, especiallythose which are persistent, from land-based sources, from or through the atmosphere or by dumping;
- (b) pollution from vessels, in particular measures for preventingaccidents and dealing with emergencies, ensuring the safety of operations at sea, preventing intentional and unintentional discharges, and regulating the design, construction, equipment, operation and manning of vessels;
- © pollution from installations and devices used in exploration or exploitation of the natural resources of the seabed and subsoil, in particular measures for preventing accidents and dealing withemergencies, ensuring the safety of operations at sea, andregulating the design, construction, equipment, operation andmanning of such installations or devices;
- (d) pollution from other installations and devices operating in themarine environment, in particular measures for preventingaccidents and dealing with emergencies, ensuring the safety of operations at sea, and regulating the design, construction, equipment, operation and manning of such installations ordevices.
- 4.In taking measures to prevent, reduce or control pollution of the marine environment, States shall refrain from unjustifiable interference with activities carried out by other States in the exercise of their rights and inpursuance of their duties in conformity with this Convention.

- 5. The measures taken in accordance with this Part shall include those necessary to protect and preserve rare or fragile ecosystems as well as the habitat of depleted, threatened or endangered species and other forms ofmarine life.
- b. Obligations to communicate with NAFO Contracting Parties: With regards to UNCLOS obligations identified above, there has been a lack of communication with States party to the NAFO Convention and in particular a lack of transparency of data and information related to oil spills in the Regional Assessment study area. While there is now improved communication between NAFO and the C-NLOPB regarding fishing activity and relevant NAFO science on vulnerable marine ecosystems, this information has yet to be translated to management advice on oil and gas exploration. Additionally, there are several NAFO Contracting Parties with experience in oil and gas impacts and mitigation in active fishing grounds, yet this information has not been requested or incorporated into the Regional Assessment, to the best of our knowledge. NAFO Scientific Council undertook a review of impacts on NAFO fisheries by activities other than fishing and oil and gas was identified as one of these impacts. More communication, collaboration and shared efforts to protect fisheries resources and vulnerable marine ecosystems is needed between NAFO and the C-NLOPB as well as Canada and NAFO Contracting Parties.
- c. Biodiversity Beyond National Jurisdiction: Canada, and the rest of the world, is in the process of negotiating a new treaty for the high seas, that will consider legal mechanisms for high seas marine protected areas, environmental impact assessments, access and benefit sharing to marine genetic resources and capacity building and technology transfer. Canada's conducting of this Regional Assessment which in effect is a transboundary impact assessment as it crosses the 200 mile Exclusive Economic Zone (EEZ) and includes part of the Northwest Atlantic Fisheries Organization. As noted above, while NAFO does not have jurisdiction over oil and gas activity, Canada has a responsibility to Contracting Parties of NAFO to ensure that State activities do not undermine decision taken at NAFO. Additionally, the Ecologically and Biologically Significant Areas as determined by the Northwest Atlantic workshop lead by the Convention on Biological Diversity in 2016 should be included as a data layer. Finally, this Regional Assessment could be used as a case study of activities that take place in the Area but impact other activities and biodiversity in areas beyond national jurisdiction. We are of the view that the current Regional Assessment process and expected outcome would not be an optimal case study for best practices of a transboundary assessment, and hence Canada would not be contributing to a global dialogue on what could be best practices based. We see this as an unfortunate circumstance and urge NRCAN, Global Affairs and DFO to work together to address gaps and failures in this process and ensure that Canada is able to bring forward this assessment as an example of where impacts of oil and

gas activity in areas beyond national jurisdiction are addressed and avoided. As we have noted and raised in our discussions with the Panel and CEAA staff over the process of this assessment, one of the most effective ways of avoiding impacts would be to recommend that areas of high fisheries production and areas of high biodiversity value (polygons identified by NAFO and DFO where high concentrations of vulnerable marine ecosystem indicators are known or likely to occur) are not open to exploratory drilling.

- d. **Best practices in Impact Assessment:** Impact assessment of deep sea fisheries is guided by the 2008 FAO Guidelines for the Management of Deep Sea Fisheries in the High Seas⁶, which includes impacts of fishing on ecosystem function. We recommend that the Regional Assessment consider the factors included here in its assessment of impacts and significant adverse impacts in particular on sensitive seafloor species / vulnerable marine ecosystems.
- 5. Application of Precaution: During the TAG sessions the subject of the precautionary approach and precautionary principle was raised. Fisheries and Oceans Canada with regards to fisheries, states: "In general, the precautionary approach in fisheries management is about being cautious when scientific knowledge is uncertain, and not using the absence of adequate scientific information as a reason to postpone action or failure to take action to avoid serious harm to fish stocks or their ecosystem. This approach is widely accepted internationally as an essential part of sustainable fisheries management. 7" The Canadian Environmental Protection Act also includes a definition of the precautionary principle as part of its guiding principles: "The government's actions to protect the environment and health are guided by the precautionary principle, which states that "where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation⁸." These two examples clearly identify that precaution is a management measure to avoid risk of irreversible damage - not a principle to be used to justify authorizing an activity because of the lack of uncertainty. It is imperative that the Regional Assessment does not advise on a reversal of the burden of proof as a mechanism to enable 100 additional wells. Ideally, the Regional Assessment uses existing data on sensitive ecosystems, biodiversity and sensitive and valuable fishing grounds to apply precaution and recommend against exploratory drilling in these areas.

⁶ http://www.fao.org/3/i0816t/i0816t00.htm

⁷ https://www.dfo-mpo.gc.ca/reports-rapports/regs/sff-cpd/precautionary-precaution-back-fiche-eng.htm

⁸ https://www.canada.ca/en/environment-climate-change/services/canadian-environmental-protection-act-registry/publications/guide-to-understanding/chapter-3.html

6. Implementation of a same season relief well policy: With recent spills off Newfoundland and the expectation of increasing climate related weather events, as well as the precedent set in the Arctic through the same season relief well policy, and given the number of wells this Regional Assessment is addressing, an outcome of the Regional Assessment should be to recommend that the capacity for same season relief wells be a requirement for exploratory drilling. As noted in the review of Arctic Oil and Gas Drilling conducted by the National Energy Board in 2011, and detailed in Chapter 5 of this document, it states:

"The Canada Oil and Gas Drilling and Production Regulations say that an application for an authorization to drill an offshore well in the Canadian Arctic must include "... contingency plans, including emergency response procedures, to mitigate the effects of any reasonably foreseeable event that might compromise safety or environmental protection ..."

A relief well is one contingency measure used to respond to an out-of-control well. In the Canadian Arctic offshore, we have a policy that says the applicant must demonstrate, in its Contingency Plan, the capability to drill a relief well to kill an out-of-control well during the same drilling season. This is referred to as same season relief well capability."

....The intended outcome of the Same Season Relief Well Policy is to kill an outof-control well in the same season in order to minimize harmful impacts on the environment. We will continue to require that any company applying for an offshore drilling authorization provides us with specific details as to how they will meet this policy. An applicant wishing to depart from our policy would have to demonstrate how they would meet or exceed the intended outcome of our policy. It would be up to us to determine, on a case-by-case basis, which tools are appropriate for meeting or exceeding the intended outcome of the Same Season Relief Well Policy."

Canada should be consistent in its requirements for offshore drilling and the lack of a capping stack or ability to deal with a blow out has been a concern for oil and gas activities off Nova Scotia and Newfoundland.

7. Clarity on Regional Assessment Updates and Monitoring Requirements: Given that the Regional Assessment is to replace project level assessment for each exploratory well, and that the Study Area is very large, the assessment data and information relating to environmental impacts should be updated on a regular basis (annually). In order to accommodate new information, changes in human activity as well as environmental data the Regional Assessment could quickly be out of date. Because of the short timeline to complete this Regional Assessment, the level of data analysis is necessarily quite shallow with little ability to examine or predict cumulative impacts. In order to better understand and track the impacts of individual wells, each proponent should be required to video survey the seafloor prior to exploratory drilling and submit

information to the Regional Assessment GIS portal as well as the regulator. While we recognize that this is an additional expense, given that the Regional Assessment will significantly impact the level of oil and gas activity on the Newfoundland Shelf area, there is a need for increased monitoring at the site level.

Process based consideration:

- 8. Time constraints of the Regional Assessment While we recognize the importance of this process and the proposed timelines particularly from the perspective of the Newfoundland government and the desire to move forward with its 100 wells by 2030 agenda, given that this is the largest offshore oil and gas area in Canada, and for all the reasons we raise above in the context of the Regional Assessment section, we do not feel that adequate time has been allocated for this process. Because of the need for stakeholder input, the Technical Advisory Group process, the capacity of stakeholders and rights holders to engage on substantive input we feel that the timeline to complete this in the fall of 2019 is far too ambitious to complete a quality impact assessment that will receive considerable international scrutiny. We were pleased to hear from the Panel that the intent is to get this right, despite the current schedule to have a report to the Minister of Environment and Climate Change Canada by December 2019, however it is unclear how the peer review process and timelines are expected to be undertaken. We recommend that a draft of the assessment be completed by December 2019, with final assessment, pending review and public comment be ready for Spring 2020.
- **9. Transparency of existing information:** While we appreciate the commitment from the Panel to make information pertaining to the Regional Assessment available online, we would appreciate having the participation in the Technical Advisory Groups made public as well as all submissions by participants, stakeholders and rightsholders made public.
- 10. Relational databases across CEAA, ECCC and DFO as well as traditional and Indigenous knowledge: We commend the Panel for its commitment to a publicly available GIS database. As we have stated in other discussions and correspondence with the Panel and staff, this database should be a relational data base with those being developed by ECCC and the Canadian Wildlife Service as well as DFO on species at risk and critical habitat. While critical habitat has not been designated as effectively in the marine environment as it has in the terrestrial environment, and we acknowledge the success of this Species At Risk Act designation on land as well, it is important that updates on sightings and distribution of listed and non-listed Species At Risk are regularly updated in the proposed GIS data base. At a minimum, identified Ecologically or Biologically Significant Areas (EBSAs) and existing fisheries closures and marine refuges that are seen to count towards Canada's protected areas should be made available on all maps and GIS platforms used by the CNLOPB in communicating with proponents and in releasing sites for new bids. Furthermore, the databases should also include traditional and indigenous knowledge, and ensure that all appropriate protocols are followed in terms of publicizing and using this information.

- 11. Integration of past recommendations by DFO regarding oil and gas impact: As noted by DFO science responses to the Flemish Pass and Eastern Newfoundland Shelf Exploratory Drilling Process (CSAS 2018/036), there are several seemingly outstanding recommendations related to appropriate species lists, methodologies for assessing impacts of exploratory drilling as well as mitigation practices. Additionally, the Assessment of the Effectiveness of Mitigation Measures in Reducing the Potential Impacts of Oil and Gas Exploration and Production on Areas with Defined Benthic Conservation Objectives (CSAS 2019/025) includes several important conclusions and recommendations related to mitigating oil and gas activities on Sensitive Benthic Areas. These recommendations should be take up directly in this Regional Assessment, as a matter of priority.
- as within publicly funded academic institutions, there exists a wealth of expertise regarding the environmental conditions and biodiversity of the study area. As well, there is a growing body of expertise on oil and gas impacts, nationally and internationally. To date, it is unclear how the Panel or CEAA intends on having the Regional Assessment chapters be credible, through a peer reviewed process. To this end, we recommend that all chapters, in a draft form be either reviewed through a Fisheries and Oceans Canada CSAS process or in lieu of this, that a peer review roster be created and credible scientists and experts on each of the Chapters be asked to review the Regional Assessment and data layers in the GIS platform so that Canadians know that the outcomes of the assessment are based on science and that any management recommendations related to exploratory drilling are science based. If it is not already accounted for, peer review should be undertaken by external experts. Peer reviewers should be requested from:
 - a. Fisheries and Oceans Newfoundland and Labrador Region
 - b. Relevant agencies or communities engaged in Indigenous Knowledge
 - **c.** Academic institutions, including those outside of Canada, where there is expertise in the study area and / or oil and gas impacts / best practices in impact assessments.