## REGIONAL ASSESSMENT OF OFFSHORE OIL AND GAS EXPLORATORY DRILLING EAST OF NEWFOUNDLAND AND LABRADOR

# Technical Advisory Group (TAG) Session on Marine Fish and Fish Habitat September 16, 2019 QUESTIONS AND ITEMS FOR DISCUSSION PARTICIPANT INPUT FORM

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### 1) Key information and datasets

- a) Do you have any suggestions for marine fish and fish habitat related datasets and information sources that should be considered in the Regional Assessment?
- The data sources listed as well as the maps provided in the background paper are quite comprehensive.
- Inclusion of point data from RV surveys and Fisheries Observer programs with regards to sensitive benthic areas should also be included as this provides a high resolution of known coral / sponge locations than just the polygons.
- b) Do you have any suggestions for the analysis, use and presentation of marine fish and fish habitat data in the Regional Assessment?
- The map of fisheries closures is missing the NAFO closure in 30 and that should be added.
- Information in the regional assessment should be made available as a matter of practice to proponents during the bidding process so that they can decide whether or not they want to bid on an area that is under legal protection in Canadian waters or in areas beyond national jurisdiction.

#### 2) Important and/or sensitive aspects of marine fish and fish habitat

- a) Are there any particularly important and/or sensitive aspects of marine fish and fish habitat that the Regional Assessment and its recommendations should focus on (e.g., locations, times, species, etc.)?
- Marine Refuges protected under the Fisheries Act
- Significant Benthic Areas identified by DFO science and the CNLOPB must immediately adopt a Canadian species list for benthic speces as per the recommendation of DFO 2019/25: Current guidelines in relation to benthic conservation objectives are mostly based on knowledge and best practices from Norwegian oil and gas exploration and production examples, which may not be appropriate in the Canadian context. For example, Lophelia is a coral indicator species in Norway and has been applied to oil and gas activities in parts of Canada, but it is not a good indicator in Canadian waters. Norwegian guidelines also characterize coral aggregations as 5 colonies greater than 30 cm, which excludes Canadian sea pen fields. To provide regionally appropriate guidance, development of regionally relevant guidelines similar to those provided by the Norwegian Oil and Gas Authority (NOROG) (DNV 2013), including development of a regionally appropriate species list and criteria for setback distances is required to support determination of what level of coral and/or sponge occurrences/densities (or associated features and species) are consistent with significant concentrations in Canadian waters.
- Vulnerable Marine Ecosystem closures in the NAFO regulatory area
- Vulnerable Marine Ecosystem polygons identified in the NAFO regulatory area, but not closed to fishing.
- Any areas that may be identified by DFO as part of its draft MPA network plan
- Spawning grounds of commercially fished species, with a focus on those that are COSEWIC assessed
- EBSAs within Canada's EEZ and in areas beyond national jurisdiction.
- Canyon areas within the Northeast Slope Marine Refuge, identified for their importance to bottle nosed whales.
- The regional assessment should make a recommendation that exploratory drilling be prohibited from areas closed to other industrial activities because of the presence of sensitive benthic species. DFO's CSAS 19/25 document clearly recommends that avoidance is the best mitigation option and this can be part of a progressive assessment process that sets areas aside from offshore drilling activity.
- A global overview of oil and gas impacts (Cordes et al 2016) recommends: that representatives of all habitat types, ideally based on a strategic regional assessment, should be granted protection. Any high-density, high-

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biomass, high-relief, or specialized (i.e., chemosynthetic) deep-sea habitat should be identified and mapped and avoidance rules or formal MPA designations implemented to minimize adverse impacts.

#### 3) Potential interactions between offshore exploratory drilling and marine fish and fish habitat

- a) In addition to the issues and interactions listed in the backgrounder for this session, are there any others that should be considered in the Regional Assessment?
- The backgrounder is fairly comprehensive, however it is imperative that CNLOPB follow the advice of DFO and no longer use the NOROG species guidelines and develop its own benthic species list, together with DFO so that monitoring and pre-drilling surveys are considering species that are present in the Study Area rather than those from another jurisdiction.

### 4) Existing and potential mitigation and follow-up requirements

- a) In addition to the standard measures listed in the backgrounder for this session, do you have any suggestions for any required new or different ones?
- Avoid areas that are closed to industrial fishing to protect seafloor habitats.
- b) Do you have any suggestions for issue- or situation-specific (certain activities, areas, times) measures that should be considered?
- Specific area closures that will not be open to oil and gas should be an outcome of the Regional Assessment. An option is to reduce the size of the bid areas and refine these areas so that they do not overlap with existing closures. Given that more protections are expected in the future as Newfoundland Region has yet to complete its draft MPA network plan, it should become a matter of practice that the CNLOPB and the province of NL engage proactively in marine protection efforts, with a view towards sustaining an offshore fishery as well as ensuring that oil and gas activity does not take place in areas closed to fishing because of fish habitat protections.
- Information must be transmitted to proponents so that they can make a choice in a bid area with full knowledge of other regulatory and protective measures. For example, BP has a practice of not exploring for oil and gas in protected areas, yet it bid on areas within the Northeast Newfoundland Slope marine refuge. This could have been avoided had DFO been made aware of the upcoming bid process, had BP been given the boundaries of the fisheries closure and had the province of NL engaged across government departments, so that there was a full understanding of the potential conflicts.

### 5) Do you have any other input or recommendations that you would like to provide to the Committee on this topic?

by Cordes et al 2016, following a global overview: The size of the buffer zones around habitats should be based on the available information on the typical distances over which impacts of standard oil and gas industry operations have been documented. Produced water travels 1–2 km on average, elevated concentrations of barium (a common component of drilling muds) are often detected for at least 1 km from the source, and cuttings and other surface disposed materials, along with changes to the benthic community are often observed on the seafloor at distances of up to 200–300 m. Considering that impacts can extend to 2 km, we recommend that surface infrastructure and any discharge sites should be at least 2 km away from known EBSAs. A more conservative approach, based on the variability in water column current structure and intensity, would be to set the distance as a function of the water depth of operations, with the 2 km extent of typical impacts observed

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PARTICIPANT INPUT FORM

as the minimum distance. Seafloor disturbances from direct physical impacts of anchor, anchor chain, and wire laying occur within a 100 m radius of activities.

- Generally there should be a much more precautionary approach to exploration drilling with a view to setting maximum spatial and temporal for drilling based on environmental impacts, including downstream impacts of emissions, rather than those determined by an economic development plan that is not a comprehensive energy plan aimed at decarbonization of the Newfoundland Economy over the longer term.

All comments received will be considered public and may be posted to the Canadian Impact Assessment Registry. For more information on the Canadian Impact Assessment Registry Terms of Use and Submission Policy, please consult <a href="https://iaac-aeic.gc.ca/050/evaluations/introduction?culture=en-CA#innovation">https://iaac-aeic.gc.ca/050/evaluations/introduction?culture=en-CA#innovation</a>. For more information on the Agency's privacy policies, consult the <a href="https://iaac-aeic.gc.ca/050/evaluations/Protection?culture=en-CA">Privacy Notice</a> on its website: <a href="https://iaac-aeic.gc.ca/050/evaluations/Protection?culture=en-CA">https://iaac-aeic.gc.ca/050/evaluations/Protection?culture=en-CA</a>