



Fisheries and Oceans    Pêches et Océans  
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OCT 15 2013

Ms. Christine Bonnell-Eisnor  
Director, Rights Management and Finance  
Canada-Nova Scotia Offshore Petroleum Board  
18th Floor, TD Centre  
1791 Barrington Street  
Halifax, NS B3J 3K9

Dear Ms. Bonnell-Eisnor:

**RE: DFO Maritimes Region Comments  
on Canada-Nova Scotia Offshore Petroleum Board Call for Bids NS 13-1**

This letter provides the main comments of Fisheries and Oceans Canada (DFO), Maritimes Region, regarding the Canada-Nova Scotia Offshore Petroleum Board (CNSOPB) Call for Bids NS 13-1. In a letter to the CNSOPB dated March 8, 2013, DFO provided comments on the Strategic Environmental Assessments (SEA) for Misaine and Banquereau (Area 2A) and the Eastern Scotian Slope and Laurentian Fan (Area 2B). In that letter, DFO identified the need for enhanced mitigation for special areas and species and additional data needs for project-specific environmental assessments. DFO noted that the area covered by the SEA reports, including the current Call for Bids area, is among the most ecologically important, complex and sensitive marine regions in Atlantic Canada. It is DFO's view that additional mitigation measures, particularly related to the northern bottlenose whale, are warranted for activities in this area and that they should be identified in advance of project-specific assessments.

DFO's main concern centers on the possible impacts on the Scotian Shelf population of northern bottlenose whale, an Endangered species protected under the *Species At Risk Act* (SARA). There are also concerns about potential impacts on other species at risk that use this area, including blue whales (Endangered), Sowerby's beaked whales (Special Concern), fin whales (Special Concern), and leatherback turtle (Endangered). SARA prohibits the killing, harming, harassing, capture or take of an individual and the destruction of identified critical habitat.

The critical habitat for northern bottlenose whale has been identified in the Recovery Strategy as Zone 1 of the Gully Marine Protected Area (MPA), and in Shortland and Haldimand Canyons. Northern bottlenose whales also occur between these canyons in

areas of water depths greater than 500 m. Section 58 (1) of SARA, which prohibits the destruction of critical habitat, is in force in the Gully Zone 1 area of critical habitat. This area is also protected through prohibitions in place under the MPA regulations. Critical habitat Protection Orders are being prepared for Shortland Canyon and Haldimand Canyon, which will bring SARA 58(1) into force in these areas.

Acoustic disturbance and changes to food supply have been identified as threats to individual northern bottlenose whales and to their critical habitat. The availability of the food supply (squid, *Gonatus* spp.) is a feature of this critical habitat. Squid have a low frequency hearing range that overlaps with seismic pulses. There is evidence that squid respond to seismic sound and there is potential for both lethal and sub-lethal behavioural impacts. Disruptions to this important food supply could affect the northern bottlenose whales that rely on it.

Recovery planning efforts for northern bottlenose whales, as well as other beaked whales and marine species, highlight the need to reduce potential impacts of noise-producing activities. Understanding the impacts and further enhancing mitigation and monitoring measures for beaked whales have been identified as priorities in the northern bottlenose whale Action Plan. As such, DFO is planning to undertake a national science review by March 2014. The review will provide scientific advice on mitigation measures related to seismic for species at risk and their identified critical habitat. The goal is to provide the most up-to-date information on this issue, which in turn will guide our collective effort to develop the most appropriate mitigation measures for this area.

Consultation with DFO is recommended prior to any seismic surveys in this area to identify enhanced mitigation measures beyond the *Statement of Canadian Practice with Respect to the Mitigation of Seismic Sound in the Marine Environment* (SOCP) and to ensure that the most relevant scientific advice is incorporated. Based on the year-round residency of northern bottlenose whales in the canyons and adjacent areas with water depths greater than 500 m, it is likely that they will be present during a seismic survey on or near Banquereau. However, northern bottlenose whales are difficult to detect visually and acoustically as they spend limited time at the surface and are known to dive for up to 70 minutes. As such, operating in areas greater than 500 m depth known to be frequented by these whales will be difficult given the likely requirement for multiple shut-downs and observation periods.

Enhanced mitigation measures that require further discussion include the following:

- Determination of appropriate methods for detecting beaked whales prior to ramp up, including increased observation periods, expanded safety zones, and using a combination of marine mammal observers and passive acoustic monitoring. However, it is important to note that even with the combination of marine mammal observers and passive acoustic monitoring, northern bottlenose whales are difficult to detect.
- Determination of appropriate shut-down/re-start requirements should specified species (e.g., SARA listed) be encountered.

- The requirement for acoustic modelling to predict transmission and received levels of sound in critical habitat and associated areas of northern bottlenose whale presence (i.e., critical habitat and the areas between critical habitat with depths greater than 500 m).
- The requirement for appropriately designed environmental effects monitoring (EEM) to ensure received levels do not exceed modelled predictions and are within acceptable levels.

DFO also notes that the Call for Bids area is important for a number of commercial and Aboriginal fisheries, such as snow crab, surf clam, shrimp and groundfish. A number of fishing interests have raised strong concerns around the potential impacts of seismic and exploratory drilling activities in this area. As such, DFO recommends dedicated and comprehensive efforts for consultation and information sharing with fishing interests during planning and operational phases of any future exploratory work. Effective consultation and cooperation with fishing interests is essential to avoid conflict and negative interactions during future exploration activities.

In addition, DFO notes that the Call for Bids Area is adjacent to the Gully MPA and includes several Ecologically and Biologically Important Areas (EBSAs) that have been identified by the department's marine conservation planning activities.

In closing, DFO would like to thank the Board for the opportunity to provide comments on the Call for Bids NS13-1. DFO would like to continue to work collaboratively with the Board to implement an appropriate set of protection, mitigation and monitoring measures, in addition to those currently in place under the SOCP, for the area and special status species covered by the Call for Bids NS13-1. This collaborative work is consistent with the intent of our shared Memorandum of Understanding and associated annual workplan activities. DFO believes that this work will both serve to improve clarity around expectations for future exploration activities, as well as to enhance environmental safeguards for this important marine area. This work will be informed by DFO's national science review to be completed by March 2014.

If you have any questions or concerns regarding DFO's review and comments, please do not hesitate to contact Glen Herbert at a time convenient to you by telephone, 902-426-9900, or by email, [glen.herbert@dfo-mpo.gc.ca](mailto:glen.herbert@dfo-mpo.gc.ca).

Yours sincerely,



David Millar  
Regional Director  
Ecosystem Management  
Maritimes Region

cc: P. Gentile  
F. Scattolon