



PO Box 5667
St. John's NL A1C 5X1

Your File Votre référence

Our File Notre référence
13-HNFL-NA1-00502

May 21, 2014

Darren Hicks
Environmental Analyst
Canada-Newfoundland and Labrador Offshore Petroleum Board
140 Water St., 4th Floor
St. John's, NL A1C 6H6

Dear Mr. Hicks

Subject: Fisheries and Oceans Canada Review of the GX Technology Canada Ltd. GrandSpan Marine 2D Seismic, Gravity and Magnetic Survey, 2014-2018

As requested, Fisheries and Oceans Canada (DFO) has completed a review of the document entitled "*Environmental Assessment of GX Technology Canada Ltd. GrandSpan Marine 2D Seismic, Gravity and Magnetic Survey, 2014-2018*" dated March 2014 and offers the following comments:

Section 4.2.1.6

- Page 104 - The COSEWIC assessment of Roughhead Grenadier (Special Concern) should be included in the paragraph on Roughhead Grenadier.
- Page 105 - Applicable populations of Atlantic salmon as well as their COSEWIC statuses should be included in the paragraph on Atlantic salmon.

Table 4.8

- The applicable population should be identified for all species that are SARA listed and COSEWIC designated.
- The COSEWIC assessment of Cusk (Endangered) should be included.
- The COSEWIC assessment of Spiny Dogfish is Special Concern not Threatened.
- The COSEWIC assessment of Basking Shark (Special Concern) should be included.

Table 4.11

- The applicable population should be identified for all species that are SARA listed and COSEWIC designated.
- The COSEWIC assessment of Spiny Dogfish is Special Concern not Threatened.

Table 4.21

- The applicable population should be identified for all species that are SARA listed and COSEWIC designated.



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Table 4.25

- The COSEWIC assessment of Northern Bottlenose Whale, Scotian Shelf population (Endangered) should be included in this table.
- The applicable population should be included for Killer Whale.
- The COSEWIC assessment for Leatherback Sea Turtle in Endangered.

Section 4.2.1.8 Identified Important and Sensitive Ecological Environments

- The paragraph under Protected Areas (Existing and Potential) describing the Laurentian Channel AOI should reference Templeman's CSAS report 2007/052 as the source of the description.
- Typo southwestern in Paragraph 2, line 3

Table 4.13

- The reference to the Fisheries Closure Area Corner Seamounts should be Newfoundland Seamounts.
- Also the size in square km should be verified (for Nfld. Seamounts).

Figure 4.42

- The legend needs to be corrected - Area 5 is Newfoundland Seamounts.

Large Ocean Management Areas

- Gilbert Bay is a Marine Protected Area as well as an EBSA (Figure 4.43). This should be clarified in the text to avoid confusion.

Ecologically and Biologically Significant Areas (EBSAs)

Given their potential for interaction with seismic survey activity, marine mammals should be addressed in more detail in Table 4.14. Eleven of the 14 EBSAs that overlap the study area (**Section 5.8 – Table 5.17**) have significant marine mammal 'components', summarized below:

- Laurentian Channel – importance re: marine mammal migration into the Gulf of St. Lawrence
- St. Pierre Bank - Significant feeding areas for several species of cetaceans
- Placentia Bay Extension - Many cetaceans feed and aggregate and migrate from spring to fall
- Southwest shelf edge and slope - many marine mammals aggregate in summer
- Eastern Avalon - historic aggregation of many marine mammals especially in summer
- Southeast Shoal & Tail of the Banks Important seasonal forage for marine mammals esp. humpbacks



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- Lilly Canyon-Carson Canyon - Year-round aggregation of marine mammals for feeding and overwintering
- Northeast Shelf edge and Slope - Potentially important feeding area for marine mammals
- Fogo Shelf- some marine mammal presence
- Notre Dame Channel - Significant Area for cetacean feeding and migration
- Orphan Spur - significant concentration of marine mammals

The above summary is based on the following two references (included in the EA doc):

Templeman, N.D. (2007). Placentia Bay-Grand Banks Large Ocean Management Area Ecologically and Biologically Significant Areas. DFO Canadian Science Advisory Secretariat Research Document 2007/052.

DFO. (2013). Identification of additional ecologically and biologically significant areas (EBSAs) within the Newfoundland and Labrador Shelves Bioregion. Canadian Science Advisory Secretariat 2013/048.

Section 4.3.1 – Marine Fisheries

- The document quantifies the average landings of commercial species from the Project/Study area in Newfoundland and Labrador over the 2008 -2012 period. Some of fisheries within the study area are managed by NAFO and landings by countries other than Canada are not included in this report.

Section 4.3.1.2 – Commercial Fisheries

- Page 216 – This section indicates that the 3Ps cod fishery only uses fixed gear; in fact otter trawl gear is also used in this area.

Section 5.7

- The Proponent should acknowledge that there could be changes in SARA regulations and requirements, new species added to Schedule 1 or critical habitat identified, and a commitment should be made to monitor for these changes and adaptively manage issues that may arise as a result of these changes.
- Why are tables for assessment of effects on individual VECs not provided? It would be beneficial to include these tables.



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Mitigations

- The proponent should be required to adhere to all relevant minimum mitigations outlined in the Statement of Canadian Practice with respect to the Mitigation of Seismic Sound in the Marine Environment, including in the Planning Seismic Surveys, Safety Zone and Start-up, Shut-down of Air Source Array(s), Line Changes and Maintenance Shut-downs, Operations in Low Visibility and Additional Mitigative Measures and Modifications sections.

Thank you for providing DFO the opportunity to comment on this document. Should you have any questions or comments regarding the above, you can contact [REDACTED] or [REDACTED]

Regards
[REDACTED]

Oil and Gas, Marine and Coastal Projects
Fisheries Protection Program
Ecosystems Management Branch