

Fugro - Offshore Seafloor and Seep Sampling Program (2017-2027) Environmental Assessment Amendment (Stantec May 29, 2018)

GENERAL COMMENTS

Fisheries and Oceans Canada (DFO)

- The temporal scope of the planned sampling should be indicated, i.e. it is unclear if the sampling within NAFO closure areas is proposed for 2018 only or for the entire duration of the program (up to 2027).
- The NAFO closure areas where sampling is planned for 2018 should be provided. Reference to Figure 3-10 (Stantec 2018) is vague.
- The maximum number of sampling sites within NAFO closure areas planned for both cores and heat probes should be provided.
- Information on the resolution planned for the multi-beam echosounder (MBES) sampling and sub-bottom profiling (SBP) should be provided. Surveys should be conducted at a resolution or scale fine enough to detect coral and sponge community types found in this region.
- As documented in the recent DFO CSAS Science Response (March 2018) on the Review of the Environmental Impact Statements for the Flemish Pass Exploration Drilling Project and the Eastern Newfoundland Offshore Exploration Drilling Project:
 - Some habitat forming communities found in this region cannot be detected using MBES. These include *Geodia* sponge grounds, certain species of glass sponges, and bamboo coral. For instance, *Acanella* is a bamboo coral distributed within the Flemish Pass that only inhabits soft substrates; such species would not be detected based on MBES alone and could be impacted with the proposed mitigation of avoidance of only hard substrates.
- DFO has used MBES and side scan sonar (SSS) to assess sites prior to ROV dives. Both can be used to determine abiotic seabed features and also some biotic features (i.e. *Lophelia* and reef forming glass sponges); however, coral structures down to 1 m² are not detectable with MBES or modern SSS.
- Based on the above, it is recommended that the sampling sites within NAFO coral/sponge closure areas be ground-truthed using ROV and that appropriate avoidance and mitigation measures (e.g. avoid and/or set back from any coral sponge aggregations) be employed prior to coring activity to ensure protection of sensitive benthic habitat features.