



Bay du Nord Project

**2022 Annual Environmental Assessment
Conditions Compliance Report**

March 2023

1 Introduction

The Bay du Nord Environmental Impact Statement was released from the environmental assessment (EA) process on April 6, 2022 with a formal decision (the EA Decision Statement) by the Minister of Environment and Climate Change Canada (ECCC). The EA Decision Statement includes over 150 conditions which Equinor Canada Ltd. ("Equinor Canada") must implement for the Bay du Nord Project.

In compliance with Condition 2.10, this document provides a report on the status of the EA conditions in the EA Decision Statement. Per Condition 2.11, the reporting period for this annual report is from April 6, 2022 to December 31, 2022.

During the reporting period, the BdN project continues project design. Activities offshore have not been undertaken, however research activities, as noted below have been undertaken. Therefore, the focus of this 2022 Annual EA Conditions Report is EA Conditions 2.1, 2.5, 2.10, 2.11, 2.12, 2.13, 2.15, 3.14 and 4.7

Condition 2.1

The Proponent shall ensure that its actions in meeting the conditions set out in this Decision Statement during all phases of the Designated Project are considered in a careful and precautionary manner, promote sustainable development, are informed by the best information and knowledge available at the time the Proponent takes action, including community and Indigenous traditional knowledge, are based on methods and models that are recognized by standard-setting bodies, are undertaken by qualified individuals and have applied the best available economically and technically feasible technologies.

Response:

As noted above, BdN is in the early stages of project design and project activities, with the exception of continuing research, have not yet begun. For research activities undertaken in 2022, Equinor Canada, through a careful and precautionary approach, ensured that all applicable conditions were met. Delivery on the EA conditions were driven by Equinor's values – open, collaborative, courageous, and caring. These values in conjunction with Equinor's management systems provided guidance when undertaking BdN project activities.

Condition 2.5

The Proponent shall, where participation is a requirement of a condition set out in this Decision Statement, notify potential parties responsible for applicable research programs of the Proponent's interest in participating in these programs and determine, in consultation with the parties that have expressed interest in the Proponent's participation, the actions and resources needed to carry out the Proponent's participation.

Response:

Through its participation in the Environmental Studies Research Fund (ESRF) and Energy Research and Innovation Newfoundland and Labrador (ERINL), Equinor Canada identifies the research projects of interest funded by these organizations. Through these programs, resources and actions specific to Equinor Canada are identified. For Equinor Canada-led research, research needs are identified internally and are progressed either through collaboration with research partners or executed solely by Equinor Canada.

See responses to Conditions 3.14 and 4.7 regarding participation in research for 2022 reporting year.

Condition 2.10

The Proponent shall, prepare an annual report that sets out, for each reporting year:

- 2.10.1 the activities undertaken by the Proponent in the reporting year to comply with each of the conditions set out in this Decision Statement;
- 2.10.2 how the Proponent complied with condition 2.1;
- 2.10.3 for conditions set out in this Decision Statement for which consultation is a requirement, how the Proponent considered any views and information that the Proponent received during or as a result of the consultation;
- 2.10.4 the information referred to in conditions 2.6 and 2.7 for each follow-up program;
- 2.10.5 the summary of available results of the follow-up program requirements identified in conditions 3.13 and 4.6;
- 2.10.6 for any plan that is a requirement of a condition set out in this Decision Statement, any update(s) to the plan that have been made during the reporting year; and
- 2.10.7 any modified or additional mitigation measures implemented or proposed to be implemented by the Proponent, as determined pursuant to condition 2.9.

Response:

Equinor Canada, in submitting this Annual Report, meets the requirements of this condition.

Condition 2.11

The first reporting year for which the Proponent shall prepare an annual report pursuant to condition 2.10 shall start on the day the Minister of the Environment issues the Decision Statement to the Proponent pursuant to subsection 54 (1) of the Canadian Environmental Assessment Act, 2012.

Response:

Equinor Canada, in submitting this Annual Report, meets the requirements of this condition.

Condition 2.12

The Proponent shall submit to the Board and the Agency the annual report referred to in condition 2.10, including a plain language executive summary in both official languages, no later than March 31 following the reporting year to which the annual report applies.

Response:

Equinor Canada, in submitting the Annual Report in both official languages, meets the requirements of this condition. Given that BdN is in the early stages of project design, in discussions with the C-NLOPB it was determined that Equinor could address this condition by submitting the entire 2022 Annual Report in both official languages rather than producing translated executive summaries

Condition 2.13

The Proponent shall cause to be published on the Internet the reports and the executive summaries referred to in condition 2.10 and 2.12, the seabed investigation survey results referred to in condition 3.6, the communication plan referred to in condition 5.1, the decommissioning and abandonment plan referred to in

condition 5.2, the well control strategies referred to in condition 7.5, the Spill Response Plan referred to in condition 7.7, the Spill Impact Mitigation Assessment referred to in condition 7.11, the implementation schedule referred to in condition 8.1, monitoring and follow-up results for marine mammals, sea turtles, fish and fish habitat, and migratory birds referred to in conditions 3.10, 3.13 and 4.6, the descriptions of the Proponent's participation during the previous year in research and monitoring programs referred to in conditions 3.14 and 4.7, and any update(s) or revision(s) to the above documents, upon submission of these documents to the parties referenced in the respective conditions. The Proponent shall keep these documents publicly available until the end of decommissioning. The Proponent shall notify the Board and Indigenous groups of the availability of these documents within 48 hours of their publication.

Response:

Equinor Canada, in posting the 2022 Annual EA Conditions Report (Condition 2.10) in both official languages, meets the requirements of this condition respecting "The Proponent shall cause to be published on the Internet the reports and the executive summaries referred to in condition 2.10 and 2.12."

Updates on research undertaken during this reporting period are outlined below (Condition 3.14 and condition 4.7). By posting of this report on the internet, it meets the requirements to post information required under Conditions 3.14 and 4.7.

As noted above, no other activities, to which this condition applies, were undertaken during the reporting period of the 2022 annual report.

Condition 2.15

The Proponent shall notify the Agency and Indigenous groups in writing no later than 30 days after the day on which there is a change of operator for the Designated Project.

Response:

While there has not been a change in operator for the Bay du Nord project, the owners of the project have changed. Equinor Canada remains as operator with BP a partner in the project since August 2022. Cenovus (formerly Husky Energy) is no longer a partner in the Project.

Condition 3.14

The Proponent shall participate in research programs in the Eastern Canadian offshore areas pertaining to the presence of Atlantic salmon (*Salmo salar*) and the behavior, presence, distribution, and important habitat areas of cetaceans, where available and agreed upon by the party(ies) responsible for the research programs. The Proponent shall provide Indigenous groups with updates, published annually on the internet pursuant to condition 2.13, describing how the Proponent has participated in these research programs during the previous year. The Proponent shall also provide these updates directly to the Board as part of the annual report pursuant to condition 2.10.

Response:

Equinor Canada, through its participation in the Environmental Studies Research Fund (ESRF), continues to support research on the presence of Atlantic Salmon in the offshore. ESRF funded a multi-year study on Atlantic Salmon Migration.

Atlantic Salmon Migration: Tagged salmon are detected by existing arrays of acoustic receivers located around Atlantic Canada. Tagged salmon will be subject to detection by fixed and mobile receivers and in the case of larger salmon satellite pop-up tags. The ESRF Atlantic salmon project tagged a total of 556 kelt and 2314 smolt from 38 rivers in 2021 and 2022

In 2022 tagging operations focused on Newfoundland and Labrador and Quebec rivers as well as Greenland. In addition to the existing acoustic receivers deployed by the ESRF project and other arrays accessible from other organizations, a glider was deployed to the area of oil industry operations offshore NL. Equinor Canada also deployed an acoustic tag receiver in the Flemish Pass in May 2022, which was recovered, and redeployed in October 2022.

In 2023 tagging operations will continue and focus on rivers and streams where more data is needed. As in 2022, deployment of the glider and any more acoustic receivers located in the oil and gas industry theater of operations will be reviewed with industry in Q1 of 2023.

The project has an extensive network of Indigenous communities and other collaborators across Atlantic Canada which enables it to mount salmon tagging operations efficiently in many streams and rivers in NL, NS, NB, PEI and eastern Quebec

Indigenous partners include members of DFO's Aboriginal Aquatic Resources and Oceans Management programs (AAROM) as well as the Nunatsiavut Government. Funding is provided to each group annually to support project related activities. The Unama'ki Institute of Natural Resources (UINR) coordinates Indigenous partner training, field sampling and has created a forum for sharing sampling strategies and challenges. Indigenous knowledge is used for selecting priority rivers and capturing salmon for tagging while respecting the vulnerability of Atlantic salmon populations. Dr. Shelley Denny is a member of the ESRF Atlantic salmon Steering Committee and the project lead for UINR. Levi Denny (UINR) is the Indigenous Research and Partnership Project Coordinator. A project update was given by Levi Denny at the AAROM science symposium (March 2, 2022) and the AAROM directors meeting (March 23, 2022). ESRF Atlantic salmon hosted an Animal Care and Fish Surgical Tagging Course in October 2021 at the University of PEI (UPEI). Participants from nine Indigenous partner groups attended the course. The UPEI training course in combination with hands-on field training has significantly enhanced the capacity for telemetry fieldwork in Eastern Canada.

Underwater sound and marine mammal behaviour: In 2022, Equinor Canada commenced a research project to determine the feasibility of using a novel acoustic sound recording system for the collection of underwater acoustic data and information on the presence, distribution and behavior of marine mammal and vessel sound propagation. The acoustic sound recording system consisted of three acoustic recording devices - a sound source characterization mooring (SSC) and two autonomous long-term observatory (ALTO) landers. The SSC mooring is used to characterize the sounds created by exploration drilling operations. The ALTO landers are designed to capture marine mammal vocalizations over a large geographical area. The equipment was tested during ongoing exploration drilling activities in the Flemish Pass area in 2022. The first objective of the acoustic monitoring research project was to make calibrated measurements of the sounds produced by the Mobile Offshore Drilling Unit (MODU) West Hercules and to compare these measurements to previous sound measurements from drilling installations in the same general area. The second objective of the program was to characterize the underwater soundscape and the acoustic occurrence of marine mammals at three sites in the Flemish Pass: (1) SCC located within 1 km of the MODU location, (2) ALTO1 east of MODU location and (3) ALTO2 west of MODU location. The SSC mooring was utilized to characterize the sounds created by exploration drilling operations. The ALTO landers are designed to capture marine mammal vocalizations over a large geographical area. Sounds recorded on these devices were analysed by JASCO scientists with the objective of validating the use of the monitoring technology and better understanding sound propagation of project-related activities in the Flemish Pass and the presence and behaviour of marine mammals.

Condition 4.7

The Proponent shall participate in research and monitoring programs pertaining to the effects of light attraction on migratory birds in offshore areas and mitigation measures to reduce the attraction of migratory birds to

lighting, where available and agreed upon by the party(ies) responsible for the research and monitoring programs. The Proponent shall provide Indigenous groups with updates, published annually on the internet pursuant to condition 2.13, describing how the Proponent has participated in these research programs during the previous year. The Proponent shall also provide these updates directly to the Board as part of the annual report pursuant to condition 2.10. Research and monitoring programs pertaining to the effects of light on birds may include:

- 4.7.1 impacts of offshore lights on Leach's Storm-petrel (*Oceanodroma leucorhoa*) and other migratory birds;
- 4.7.2 migratory bird foraging and overwintering areas in the offshore;
- 4.7.3 migratory bird populations distributions and demographics in the offshore; and
- 4.7.4 reducing the attraction of migratory birds to lighting in offshore areas, including the effectiveness of measures related to the spectrum, type or intensity of light

Response:

Equinor Canada, through its participation in the Environmental Studies Research Fund (ESRF), continues to support research on lighting and attraction to migratory birds offshore NL. During the 2021-2022 ESRF funding year (and continuing into 2022-2023). ESRF funded three studies on seabirds – Leach's Storm Petrel Tagging Program, Storm petrel population model and Seabird Literature Reviews.

Leach's Storm Petrel Tagging Program: Work began in 2021, with tagging carried out on 5 of 6 study colonies; some aspects being delayed due to COVID and weather-related logistical challenges. Tagging continued successfully in 2022, with data collected at all 6 colonies. In 2022, GPS tags were used to study movement and habitat use during the breeding season, and GLS tags deployed to study migration in 2021 were retrieved, with new tags deployed for winter 2022-23. Fieldwork to fill remaining data gaps will occur in summer 2023. The regional tracking dataset, and associated metadata, have been assembled in a standardized format and preliminary spatial analyses are underway. Project completion is targeted for 2024.

Storm Petrel Population Model: The objective is to quantify sources of mortality including that associated with offshore installations to assess that effect on the species population biology in relation to other mortality factors over the species life cycle. Work started in April 2022, and the focus over the last 11 months has been data collation and the construction and analysis of the complex survival module spanning data from six colonies in Atlantic Canada. This module is almost complete with the recent addition of the 2022 data and undergoing final QA/QC with project collaborators. The colony census data was recently compiled, and the overall state-space model framework has been drafted. Work in 2023 will focus on completion of that state-space model. Project completion is targeted for Q1 2025.

Seabird Literature Review: ESRF has funded two literature reviews; one to examine the attraction of seabirds in general to anthropogenic light sources and the second to review seabird detection technologies particularly in the context of offshore installations. A scoping document to guide the project has been completed and accepted. A virtual stakeholders meeting was held in January 2023 which attracted 18 participants. Preparation for technical workshops with selected technical experts is planned for the first quarter of 2023. A draft literature report on seabird attraction to light has been prepared and will form the basis for the technical expert workshop on that topic. The same approach will be taken to a technical expert workshop on seabird detection technologies. The draft reports will be revised based on the input of the technical experts with project completion targeted for the end of 2023.