Equinor Canada Ltd.
Newfoundland and Labrador Offshore Area
2023 Environmental Assessment Update

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1.0 INTRODUCTION

Environmental assessments (EAs) for offshore oil and gas exploration and production activities are scoped for a range of activities that are typically carried out over multiple years. The Canada-Newfoundland and Labrador Offshore Petroleum Board (C-NLOPB), in its EA decisions, requires that operators, when applying for various authorizations (e.g. Operations Authorization, Geological / Geotechnical / Environmental Program Authorization, Geophysical Program Authorization, Vertical Seismic Profile Authorization) submit information confirming that the proposed activities fall within the scope of a previously approved EA, indicate if the EA predictions remain valid, and provide an update on species at risk (SAR). The information in this document herein provides the information to support the above requirements and notes changes that need to be addressed.

The purpose of this 2023 EA Update is to:

- Provide an overview of proposed field program activities for the upcoming year
- Update applicable baseline information for key environmental components that has become available since the EA was produced
- Described the engagement and consultation activities undertaken
- Confirm that the nature and scope of the proposed activities are within the scope of the previously approved EA, including the appropriateness and adequate of the associated environmental effects predictions and mitigation measures

This document provides the necessary update to the existing EA for 2023 Project activities by confirming that the scope of the assessment and mitigation measures Equinor committed to in the EA remain valid. This EA Update is specific to the Equinor Canada Ltd. (Equinor) 2023 field program (refer to Section 2.1.1). The scope of the project activities planned in 2023 were assessed under the approved EA noted in Table 1.1.

Table 1.1 Approved EA

| Document | Temporal Scope | Reference No. |
|--|------------------------------------|---|
| Flemish Pass Exploration Drilling Program Environmental Impact Statement (EIS) (Statoil 2017) | | Canadian Impact |
| Responses to Information Requirements (Statoil 2018, Statoil and ExxonMobil 2018, Equinor and ExxonMobil 2018a, 2018b) | Year-round, 2019 to 2027 inclusive | Assessment Registry (CIAR) 80129 (Impact Assessment Agency of |
| EA Decision Statement – Flemish Pass Exploration Drilling Project (Environment and Climate Change Canada [ECCC] 2019) | | Canada [IAAC] 2019) |

2.0 ENVIRONMENTAL ASSESSMENT UPDATE

2.1 Geographic Scope of Approved EA

The Project Area, as defined in the previously approved EA (Statoil 2017) is illustrated in Figure 2-1 and coordinates are provided in Tables 2.1 and 2.2 for the Northern and Southern Sections of the Project Area, respectively. Table 2.3 provides the coordinates for the 2023 Program Area.



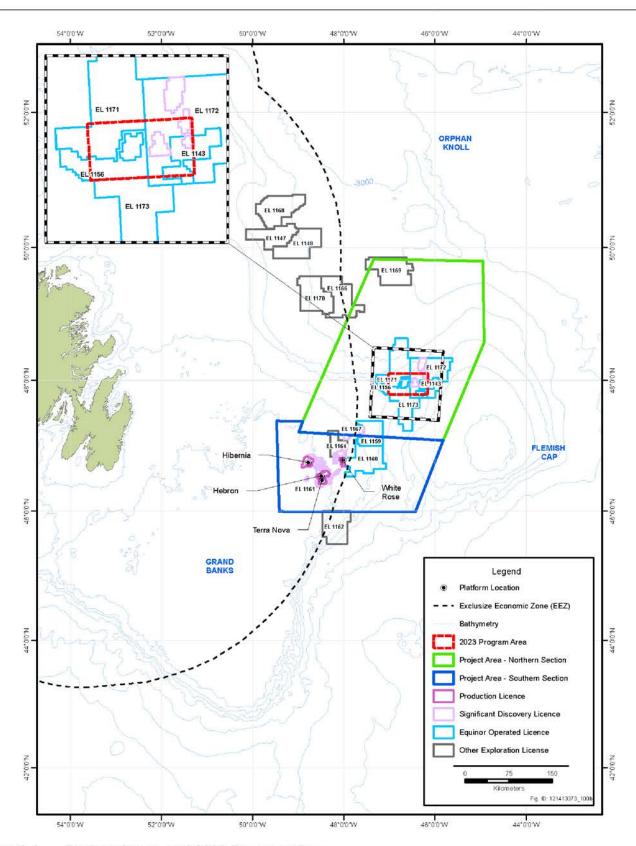


Figure 2-1 Project Areas and 2023 Program Area



Table 2.1 Project Area – Northern Section Coordinates

| Project Area | Coordinates – NAD83 UTM ZONE 22N | | | | | |
|--------------|----------------------------------|----------------|-------------|--------------|--|--|
| Vertices | Longitude (DMS) | Latitude (DMS) | Easting (m) | Northing (m) | | |
| A | 44° 56' 48" W | 49° 47' 31" N | 935562 | 5533101 | | |
| В | 44° 55' 21" W | 48° 34' 30" N | 948190 | 5398059 | | |
| С | 45° 49' 04" W | 47° 04' 57" N | 893344 | 5227380 | | |
| G | 48° 59' 13" W | 47° 12' 49" N | 652421 | 5230868 | | |
| I | 47° 21' 04" W | 49° 49' 18" N | 762440 | 5525202 | | |

Table 2.2 Project Area – Southern Section Coordinates

| Project Area | Coordinates – NAD83 UTM ZONE 22N | | | | | |
|--------------|----------------------------------|----------------|-------------|--------------|--|--|
| Vertices | Longitude (DMS) | Latitude (DMS) | Easting (m) | Northing (m) | | |
| С | 45° 49' 04" W | 47° 04' 57" N | 893344 | 5227380 | | |
| D | 46° 26' 02" W | 45° 59' 28" N | 853605 | 5103218 | | |
| E | 49° 25' 01" W | 45° 59' 42" N | 622584 | 5094695 | | |
| F | 49° 28' 29" W | 47° 23' 03" N | 615122 | 5248990 | | |
| G | 48° 59' 13" W | 47° 12' 49" N | 652421 | 5230868 | | |
| Н | 48° 54' 10" W | 47° 22' 44" N | 658314 | 5249404 | | |

able 2.3 2023 Program Area Corner Coordinates

| Longitude (DMS) | Latitude (DMS) | Easting U23 (NAD 83, CM 45°W) | Northing U23 (NAD 83, CM 45°W) |
|------------------|-------------------|----------------------------------|-----------------------------------|
| 47° 1' 35.005" W | 47° 46' 59.640" N | 348211.2843 | 5294196.2934 |
| 47° 1' 45.237" W | 48° 6' 2.389" N | 348926.4583 | 5329480.3084 |
| 46° 9' 15.860" W | 48° 6' 0.165" N | 414053.7801 | 5328064.5045 |
| 46° 9' 42.197" W | 47° 46' 51.232" N | 412975.0708 | 5292601.8013 |

2.2 Temporal Scope of Approved EA

The activities scoped in the previously approved EA (Statoil 2017) could be carried out year-round from 2019 to the end of 2027.

2.3 Proposed Activities for 2023

For 2023, Equinor is proposing to complete a field program between the months of May to October 2023 with the potential to extend further into the fall months if operations require. The expected scope of work includes a seabed survey, comprised of a bathymetric and environmental seabed habitat survey and sediment (geotechnical) investigation.



2.3.1 2023 Survey

The general objective of the offshore seabed survey is to acquire detailed information of seabed conditions for detail design and planning of field infrastructure and installation.

2.3.1.1 Seabed Investigation Survey

A seabed survey is to be completed using either an autonomous underwater vehicle (AUV) or a remotely operated vehicle (ROV) to collected bathymetric and seabed hazard information in the survey area.

The survey will require approximately 45 days of (ROV) operations, with lesser time required if an AUV is used. The survey will provide Equinor with detailed bathymetry information within target areas to support design and planning of future seabed infrastructure. The total survey area covers approximately 75 km²; the survey will be completed using multibeam echosounder (MBES), sub-bottom profiler, and/or side-scan sonar, with a target MBES resolution of 0.3 m or less; the ROV would be flying at 15 to 20 m altitude. The water depth ranges from approximately 550 to 1,170 m within the survey area. Data collection will likely occur on parts of ELs 1143, 1156, 1171, and 1172 and SDLs 1055, 1056, 1057, 1058 ,and 1059 within the 2023 Program Area (Figure 2-1).

2.3.1.2 Seabed Habitat Survey (Coral and Sponge)

The general objective of the environmental habitat survey is to collect digital images of the benthic habitat for identification of coral, sponges, and sea pens in the survey area.

Digital images will be collected by either an AUV or ROV. The seabed habitat survey will be performed within the survey area (Figure 2-1) in water depths ranging from 550 to 1,170 m. Seabed habitat information will be collected at potential wellsite(s) and in areas not previously surveyed. Data collection will likely occur on parts of ELs 1143, 1156, 1171, and 1172 and SDLs 1055, 1056, 1057, 1058, and 1059 within the 2023 Program Area (Figure 2-1).

Prior to commencing the seabed survey, sea trials will likely be carried out to test the deployment, retrieval, and functionality of the AUV or ROV. Sea trials typically take between one and two days. The final locations will be determined in consultation with the Fish, Food and Allied Workers-Unifor (FFAW-Unifor) to determine that there is no conflict with ongoing fishing activities in the area of the sea trials. Survey requirements may evolve as program continues in development; requirements will be communicated and implemented in the Survey Plan.

As per the decision statement issued under Section 54 of the Canadian Environmental Assessment Act, 2012, conditions 3.6, Equinor will develop a coral and sponge survey plan, to be accepted by the C-NLOPB and Fisheries and Oceans Canada (DFO) prior to commencement of the wellsite surveys. The wellsite survey scope will follow the updated Regional Guidance on Measures to Protect Corals and Sponges During Exploratory Drilling in the Canada-Newfoundland and Labrador Offshore Area, drafted in August 2022 by DFO. This plan will be implemented throughout the scope of the 2023 Project surveys by qualified personal. Results of the coral and sponge survey will be provided to the C-NLOPB and DFO within required timeframe.

The duration of the survey(s) is expected to take approximately 30 days; however, survey plan will be developed to determine survey patterns as part of the authorisation. Equinor will inform DFO and the



C-NLOPB, as well as other stakeholders (e.g., fisheries organizations) once the location have been selected (e.g., survey areas, equipment, and duration).

An AUV (or ROV if required to support operations) contains approximately 20 L of hydraulic fluid in a closed system, and therefore there is no risk of hydraulic fluid loss during normal operations. Chemicals that will be, or have the potential to be, discharged to the marine environment will be screened in consideration of the Geotechnical Selection Guidelines for the Drilling and Production Activities on Frontier Lands (Chemical Screening Guidelines) (National Energy Board [NEB] et al. 2009).

2.3.1.3 Soil Investigation

The geotechnical survey will be completed using a portable remotely operated seabed-mounted drilling instrument (PROD). The instrument will collect sediment cores via the drilling of boreholes up to 30 m deep and the collection of sediment data through cone penetration tests (CPT) and will be completed in areas with water depths ranging from approximately 500 m to 1,170 m. A geotechnical program (sediment investigation) will be conducted within an expected 15 to 30 days duration, excluding weather, operational, or technical delays. Sediment investigation will be conducted within portions of data collection will likely occur on parts of ELs 1143, 1156, 1171, and 1172 and SDLs 1055, 1056, 1057, 1058 and 1059 within the 2023 Survey area (Figure 2-1). Sample locations will be confirmed prior to commencing the 2023 geotechnical program.

The soil investigation scope includes both CPT and borehole samplings of up to 50 locations (note sample numbers and locations may change as survey design is finalized)

During operations, the PROD unit will be placed on the seabed using three-off legs. The PROD unit will cover an approximately footprint of 30 m² and potential radius of up to 150 m² on seabed. Prior to landing the PROD unit on the seabed, a pre-survey will be completed with AUV or ROV to identify hazards and to identify any corals, sponges or seapens. If species are identified, the location of PROD unity will be relocated to an area deemed suitable.

Due to surveying in these water depths, the geotechnical survey vessel will have dynamic positioning and will not use anchors to maintain position. The selected vessel will be specifically designed to deliver geotechnical investigations and subsea services.

The PROD unit is hydraulically driven from the support vessel. It has a seawater system that is also driven from the support vessel. The volume of hydraulic fluid in the system is a total of 100 L. Operating fluids for subsea equipment (e.g., hydraulic fluid, di-electric fluid) will be housed internally, with small volumes of hydraulic fluid to be released during operating functions. Chemicals will be screened and accepted for use as per the Chemical Screening Guidelines (NEB et al. 2009). The seawater cooling system is self-contained and therefore, is no risk of contamination with hydraulic fluids or hydrocarbons (and therefore no risk of engendering environmental effects).

2.3.2 Sound Detector Equipment Recovery

The 2023 Program includes retrieval of two Marine Mammal Monitoring and Sound Source Characterization units (ALTO Landers). Equinor deployed the units in the Flemish Pass basin in October 2023 to collect data on marine mammals and to verify acoustic modelling of underwater noise generated by an exploration drilling unit and associated support vessels.



2.3.3 Other Offshore Programs

If Equinor executes other offshore programs outside the scope of this EA update, a separate EA Update will be prepared and submitted to the C-NLOPB.

3.0 ENVIRONMENTAL ASPECTS

This section addresses the environmental aspects associated with the activities outlined in Section 2.3.1.

3.1 Commercial Fisheries

Figure 3-1 illustrates the pattern of fishing activity between 2016 to 2020 for commercial species based on domestic (i.e., Canadian) geospatial catch data as obtained from DFO with respect to Project Areas. This pattern of activity is consistent with that documented in the previously approved EA (Statoil 2017).

Within offshore NL and the Drilling EIS Project Areas, general fishing distribution and activity for most species has remained consistent since the EA Update in 2022. Quotas for fisheries have changed throughout fishing seasons, resulting in lower harvesting activity for some fisheries. However general fishing trends and locations of harvesting activities for species have remained consistent. The most recent available fish management decisions for Atlantic Canada, Quebec, and the Arctic were posted in 2022.

Commercial harvesting for northern shrimp (*Pandalus borealis*) in Shrimp Fishing Area 7 (Northwest Atlantic Fishing Organization [NAFO] Division 3L, where it occurs within the Canadian 200 nautical mile [NM] Exclusive Economic Zone [EEZ]) was placed under moratoria in 2015 due to declining shrimp stocks and poor recruitment numbers (DFO 2018; 2020a; 2021). In the portion of Division 3L outside the EEZ regulated by NAFO, fishing for shrimp in Division 3L takes place in depths greater than 200 m (NAFO 2023). The proposed 2023 activities fall within NAFO Division 3L, as a result there is no directed fishing activity for northern shrimp overlapping with the 2023 Program Area (Figure 3-2).

DFO's fishing activity information for commercial species of interest (i.e., Greenland halibut [Reinhardtius 10ippoglossoides] and snow crab [Chionoecetes opilio]) are provided in Figures 3-3 and 3-4, respectively. Mapping for additional species of commercial interest (i.e., Atlantic cod [Gadus morhua], American plaice [Hippoglossoides platessoides], and redfish [Sebastes spp.]) are provided in Appendix B.

Snow crab is harvested within the EIS Project Areas but with low activity within Equinor's ELs. Figure 3-4 shows the 2016 to 2020 patterns of Canadian fishing activity for snow crab. The pattern of activity for snow crab indicates a decline in fishing activity in the areas / locations associated with proposed 2023 activities as compared to the previously approved EA.

The fisheries quotas allocated to NAFO vessels for 2023 are described in NAFO/COM Doc. 23-01 (NAFO 2023). This document indicates a total allowable catch (TAC) of 11,2275 tonnes (t) for Greenland halibut and 49,371 t for redfish. Of these amounts, 1,684 t of Greenland halibut TAC and 14,252.6 t of redfish TAC have been allocated to Canadian vessels. Domestically, the most recent fisheries management decision for snow crab set the current TAC for the 2022 fishing season in NAFO Divisions 3LNO at 30,940 t (DFO 2022), which is an increase compared to the 2021 season (23,648 t) (DFO 2022).



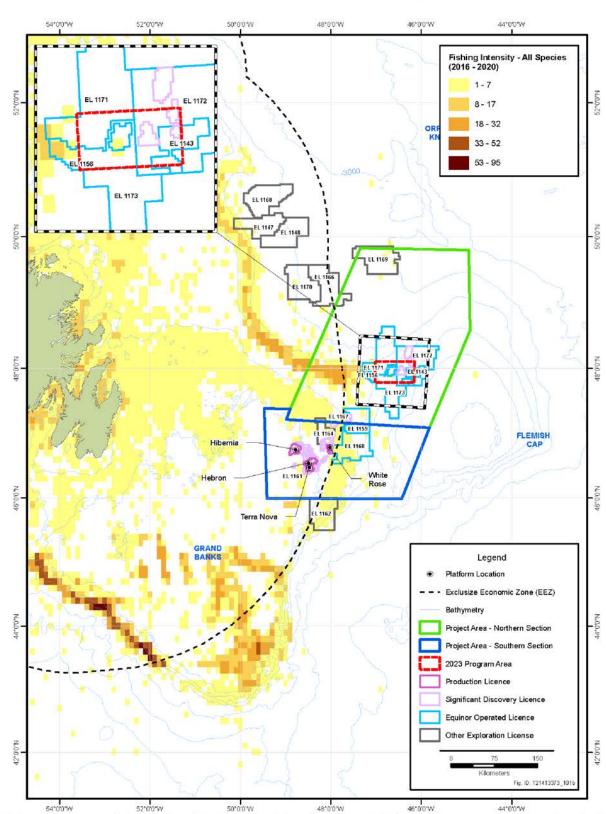
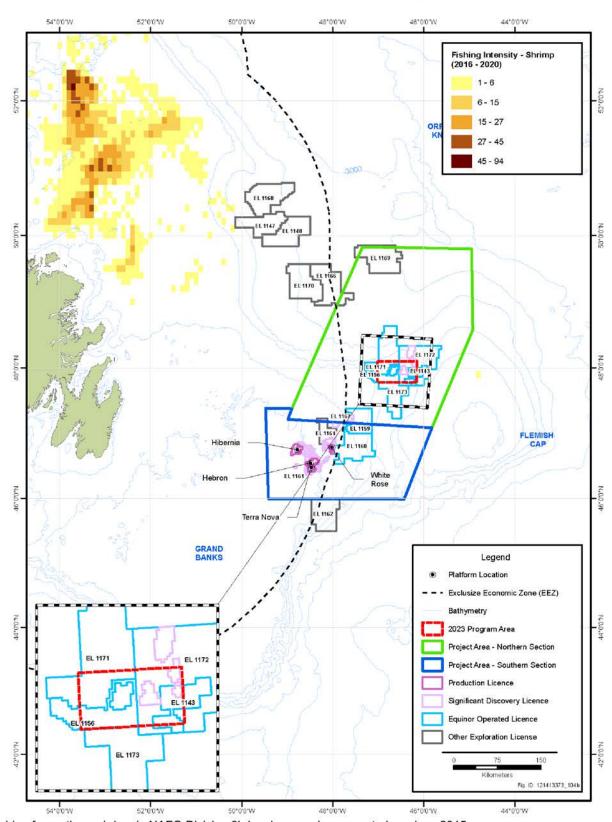


Figure 3-1 Pattern of Canadian Fishing Activity (2016 to 2020) for Commercial Species in Relation to the Project Areas (Canadian data only)





Note: Fishing for northern shrimp in NAFO Division 3L has been under a moratorium since 2015.

Figure 3-2 Pattern of Northern Shrimp Fishery, 2016 to 2020 (Canadian data only)



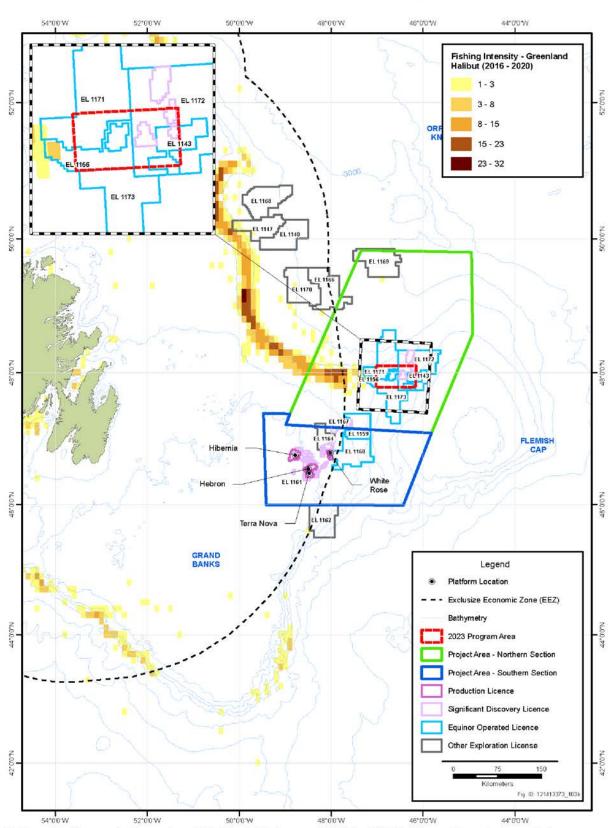


Figure 3-3 Pattern of Greenland Halibut Fishery, 2016 to 2020 (Canadian data only)



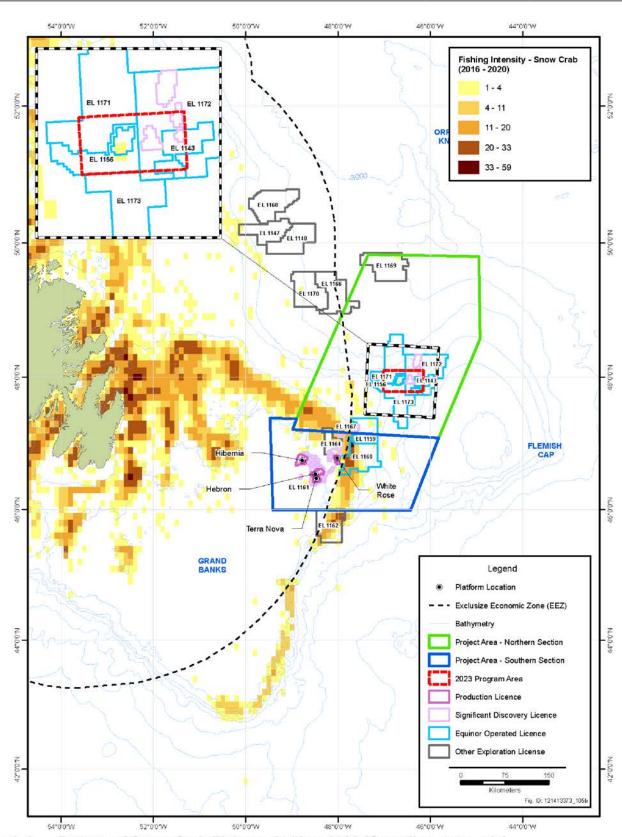


Figure 3-4 Pattern of Snow Crab Fishery, 2016 to 2020 (Canadian data only)



For international fishing operations, the data on previous fishing activities cannot be definitively used to predict the extent quota allocations will be taken in the EIS Project Areas or 2023 Program Area.

3.2 Species at Risk

Appendix C outlines SAR as designated by the *Species at Risk Act* (SARA) and the Committee on the Status of Endangered Wildlife in Canada (COSEWIC), as well as the NL *Endangered Species Act*, for the Grand Banks and Flemish Pass areas. As of November 2022, no new species had been assessed by COSEIC. As of December 2022, no additional species had been added to SARA Schedule 1. A search of the SARA Registry as of January 25, 2023, indicated no new Recovery Strategies, Management Plans, or Action Plans had been issued for species at risk in the Project Area.

The federal Minister is currently conducting consultation to assist in the determination of whether or not Leach's storm-petrel (*Oceanodroma leucorhoa*; Atlantic population; threatened) should be added to SARA Schedule 1. The list of SAR in the EIS Project Areas has been updated from the previously approved EA (Appendix C).

A review of the SARA species-specific recovery plans and critical habitat statements, as noted in Appendix C, do not indicate that new or modified mitigation measures are required beyond those already committed to by Equinor for the scope of the operations addressed by the previously approved EA relevant to the activities described in this update. There are four species that have the potential to occur in the Project Areas with identified critical habitat. These are described below.

3.2.1 North Atlantic Right Whale

North Atlantic right whale (*Eubalaena glacialis*) has a Critical Habitat Protection Statement pursuant to SARA (DFO 2009); however, there has been no critical habitat designated in the EIS Project Areas and based on known sightings to date, it is an infrequent visitor to the EIS Project Areas (Statoil 2017). The National Oceanic and Atmospheric Administration (NOAA) Northeast Fisheries Science Centre (NEFSC) has an interactive North Atlantic Right Whale Sightings Map and most reported sightings between January 2010 and end December 2022 have been along the United States eastern seaboard, southwest of Nova Scotia and east of New Brunswick (NOAA NEFSC 2023). A few observations occurred off NL between January and December 2022; none were reported within the 2022 Program Area (Whale Map 2023). A few observations were also documented in the Flemish Pass Exploration Drilling EIS (Statoil 2017).

Critical habitat has been identified for North Atlantic right whale. However, the only critical habitat currently designated is in the Grand Manan Basin in the Bay of Fundy, which is outside the EIS Project Areas.

3.2.2 Northern Bottlenose Whale (Scotian Shelf Population)

The northern bottlenose whale (*Hyperoodan ampullatus*) (Scotian Shelf population) has a Critical Habitat Protection Statement pursuant to SARA Government of Canada 2018). However, the identified critical habitat is in the Scotian Shelf area, outside the EIS Project Areas (Statoil 2017).

There is some evidence that northern bottlenose whale are also found on the edge of the Grand Banks near the Flemish Cap, although it's unclear whether these individuals are from the Scotian Shelf or Davis Strait-Baffin Bay population (Statoil 2017; DFO 2016, 2017; Equinor 2020c). Seismic activities are not planned for 2023, which reduces potential interactions and effects with this species.



3.2.3 Northern and Spotted Wolfish

The "Recovery Strategy for Northern Wolffish (*Anarhichas denticulatus*) and Spotted Wolffish (*Anarhichas minor*), and Management Plan for Atlantic Wolffish (Anarhichas lupus) in Canada" (DFO 2020) identifies critical habitat for the northern and spotted wolffish. DFO has issued Critical Habitat Protection Statements for these species (Government of Canada 2020a, 2020b). The critical habitat identified falls within the EIS Project Areas but does not overlap with the 2023 Program Area (Figure 3-5).

3.3 Special Areas

As illustrated in Figure 3-5, there are a number of special areas within the EIS Project Areas, including NAFO Fishery Closure Areas (FCAs), a marine refuge, Vulnerable Marine Ecosystems (VMEs), and Ecologically or Biologically Significant Areas (EBSAs).

Proposed 2023 activities are entirely within the United Nations Convention of Biological Diversity EBSA – Slopes of the Flemish Cap and Grand Bank, which has a total area of approximately 87,817 km². This area contains most of the aggregations of indicator species for VMEs in the NAFO Regulatory Area and includes NAFO closures to protect corals and sponges and a component of Greenland halibut fishery grounds in international waters. A high diversity of marine taxa, including threatened and listed species are found within this area. NAFO Northwest Flemish Cap Coral, Sponge or Seapen Closure, with a total area of approximately 317 km², is within the 2023 Program Area. This is surrounded by A VME of sea pens, also within the 2023 Program Area, as is a small VME of large gorgonian coral and a small VME of sponge.

Given the mitigation measures outlined in the approved EA (Statoil 2017) and in Section 3.4 of this update, the conclusions of the previously approved EA and amendments remain valid.



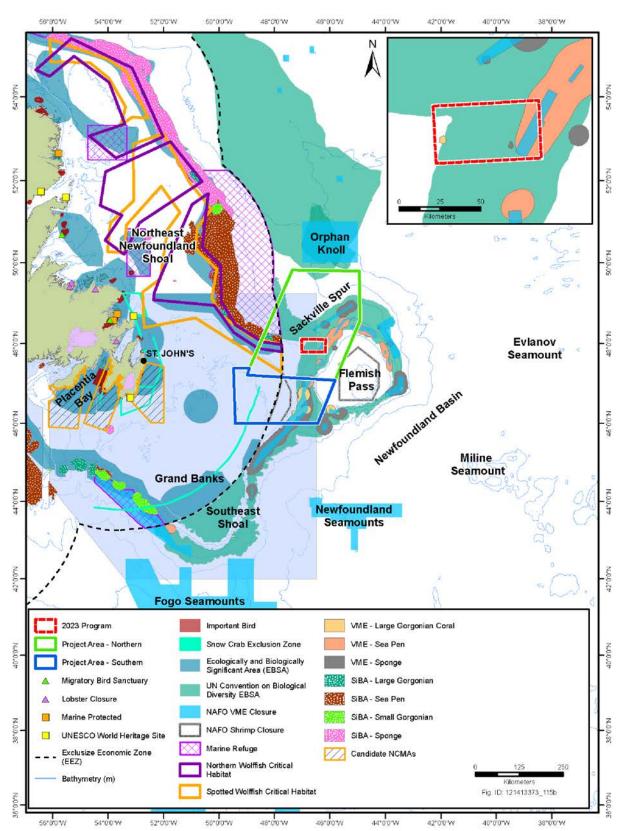


Figure 3-5 Locations of Special Areas within and near the Project Areas and 2023 Program Area

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3.4 Mitigation Measures

Equinor re-commits to implementing the mitigation measures described in the approved EA for the proposed activities to be carried in 2023. Mitigation measures to be implemented for the proposed 2023 activities, as outlined in the previously approved EA and amendments, include the following:

- · Communication with DFO regarding research vessel surveys
- Fishing gear and vessel compensation program
- Establish a SPOC for consultation with fishers and Indigenous groups
- Marine mammal and seabird observations, including protocols for observing and reporting
- Handling and release of stranded seabirds including protocols for these activities
- Adherence to the C-NLOPB's Offshore Waste Treatment Guidelines (NEB et al. 2010)
- Communication with DND regarding planned offshore military activity
- Communication with Indigenous groups as per decision statement conditions including an Indigenous Fisheries Communication Plan
- Communicate according to approved Fishers Communication Plan (Equinor 2020b)
- Communication with One Ocean and NAFO (through DFO)
- SPOC for reporting potential fishing gear interactions during 2023 activities
- Issuance of Navigation Warnings (NAVWARNs) and notification to stakeholders
- Notice to shipping is not required as there are no shipping lanes in the well locations for the 2023 activities
- As per Equinor Marine Operations Plan and Environmental Protection and Compliance Monitoring Plan supply and other support vessels will maintain 300 m from Cape St. Francis and Witless Bay Islands Important Bird and Biodiversity Areas, unless there is an emergency
- Marine vessels will reduce speed to a maximum of 13 kilometres per hour [7 knots] when a marine mammal or sea turtle is observed or reported within 400 m of a supply vessel, expect if not feasible for safety reasons

3.5 Engagement

3.5.1 Regulatory Agencies

3.5.1.1 C-NLOPB – EA Commitments and Conditions

Commitments and conditions applicable to the 2023 activities are outlined in the Flemish Pass EIS (e.g., refer to table 17.2 in Statoil 2017), responses to select Information Requirements (Equinor and ExxonMobil 2018a, 2018b; Statoil 2018; Statoil and ExxonMobil 2018), and conditions outlined in the Decision Statement (Environment and Climate Change Canada [ECCC] 2019).

Equinor will continue to meet with the C-NLOPB on a regular basis review the Decision Statement conditions (ECCC 2019) and associated compliance plans, commencement / completion dates, and verification details. The frequency of meetings will be determined with the C-NLOPB; however, it is anticipated that monthly meetings will occur initially and will then increase to biweekly for the duration of the 2023 program.



3.5.1.2 C-NLOPB – Follow-up and Monitoring Programs

Under the EA Decision Statement (ECCC 2019), Equinor is required to execute a follow-up and monitoring program. Compliance associated with this program will be provided to the C-NLOPB and associated regulatory agencies within established timelines and reporting format.

3.5.1.3 DFO - Research Vessel Surveys

DFO undertakes annual fisheries research surveys in the NL offshore area. Table 3.1 provides a proposed schedule for DFO research surveys for 2023 (P. Upward, pers. comm. 2023). Equinor will coordinate with DFO prior to commencement of proposed 2023 activities described in Section 2.1.1 to determine if there are spatial or temporal conflicts.

Table 3.1 Proposed 2023 DFO Research Vessel Surveys

| Vessel | Activity | NAFO Divisions | Planned Start | Planned End |
|------------|--|------------------|--------------------|--------------------|
| RV Cabot | NL Multispecies Spring Survey | 3LNOPs | April 10, 2023 | June 21, 2023 |
| | NL Multispecies Fall Survey | 2НЈЗК | September 17, 2023 | December 15, 2023 |
| RV Teleost | NL Spring Multispecies Survey | 3LNOP | April 13, 2023 | June 20, 2023 |
| | Shellfish Survey | To be determined | August 29, 2023 | September 10, 2023 |
| | NL Fall Multispecies Survey | 2HJ3K | September 17, 2023 | December 15, 2023 |
| RV Cartier | NL Spring Calibration and Capelin Survey | To be determined | April 26, 2023 | May 21, 2023 |
| | NL Fall Multispecies Survey | 2HJ3KL3LNO | October 6, 2023 | December 15, 2023 |

There is also an annual Industry-DFO Collaborative Post Season Trap Survey for snow crab, which is conducted using commercial and modified snow crab traps at established trap stations. The survey typically starts in late August or early September after the commercial snow crab season has ended. Appendix D outlines the 2022 locations of the post-season survey, and there is no overlap with proposed 2023 activities. The 2023 post-season crab survey moveable survey locations were not available at time of preparing this Update (W. Coffey, DFO, pers. comm.). Note that locations inside the Laurentian Channel, 3O Coral, and Northeastern Shelf Marine Refuges (outside the 2023 Program Area) will be moved to approximately 800 to 1,000 m outside the nearest boundary.

3.5.1.4 DND – Military Exercises

As part of Equinor's standard pre-drilling program, Equinor's SSU Manager will contact the Department of National Defence to determine if there are planned military activities scheduled in 2022 that overlap spatially / temporally with the proposed drilling program.



3.5.2 Fishers

Equinor continues to engage with fisheries organizations. Information regarding the proposed 2023 activities will be provided to the following:

- Association of Seafood Producers (ASP)
- Atlantic Groundfish Council (AGC)
- FFAW-Unifor
- Ocean Choice International (OCI)

There is also ongoing liaison with the fishing industry through the regular meetings of the One Ocean Industry Board that includes representatives from the various operating oil and gas operators and the fishing sector.

Equinor recognizes that other countries fish outside Canada's 200 NM EEZ. To reduce potential conflict, Equinor will inform Canada's representative, DFO, on NAFO regarding 2022 activities. In addition, Equinor communicate NAVWARNs to the NAFO Secretariat via DFO.

Equinor recognizes that communication and coordination between oil and gas industry activities and fishing interests are critical to avoid or reduce interference with other industries or offshore operators. Key factors to achieve this from Equinor's perspective include:

- Implementing protocols outlined in the 2022 Fisheries Communication Plan (Equinor 2022)
- Ongoing communication with commercial fish harvesters in the Project Areas including AGC, ASP, FFAW-Unifor and OCI
- Ongoing communication with One Ocean and NAFO (through DFO)
- If nearshore sea trials are required, determining final location in consultation with FFAW-Unifor to prevent conflicts with ongoing fishing activities in sea trial areas
- There are no designated shipping lanes within the designated 2023 activities
- Establishing a single point of contact (SPOC) for reporting potential fishing gear interactions during 2023 activities
- Implementing a compensation program for damages resulting from program activities, and in consideration of the Compensation Guidelines Respecting Damages Relating to Offshore Petroleum Activities (C-NLOPB and Canada-Nova Scotia Offshore Petroleum Board [CNSOPB] 2017)
- Issuing NAVWARNs

3.5.3 Indigenous Groups

Indigenous groups have been provided notification of the intended scope of work associated with the 2023 program. Further consultation will be provided upon request. A SPOC will be established to provide consistent and accurate information.

If material changes are made that could have result in adverse impacts on the environment, Equinor will consult with Indigenous groups at least 60 days prior to initiating the change. Potential environmental effects, proposed mitigation measures, follow-up requirements, as well as results of consultation feedback and views, will be tracked using the engagement log.



4.0 CONCLUDING STATEMENT

The proposed 2023 drilling program to be executed by Equinor has been reviewed and assessed to be within the scope of previously approved EA, specifically:

- The scope and nature of proposed activities and addressed under the previously approved EA and amendments have not changed
- The nature and extent of the fishing activities being undertaken in the Project Areas have been validated and have not changed such that proposed activities pose potential effects not previously assessed
- The nature of the SAR in the Project Areas have been validated; no new species has been added to Schedule 1 of SARA, two new species have been added to COSEWIC listings (beluga whale (Eastern Hudson Bay population) and Leach's storm-petrel (Atlantic population)
- As noted previously in this update, no critical habitats for these species defined pursuant to the SARA occur in the Project Areas
- The mitigation measures defined and committed to in the previously approved EA are still valid and will continue to be implemented
- The commitments and conditions associated with the previously approved EA will be implemented
- Equinor continues to consult with regulatory agencies, fishers and Indigenous groups directly affected by the proposed activities under the previously approved EA

The environmental effects predicted in previously approved EA remain valid. Equinor reaffirms its commitment to implement the mitigation measures, commitments and conditions associated with the EA.

5.0 ADDITIONAL INFORMATION

5.1 Abbreviations

| AGC | Atlantic Groundfish Council |
|---------|---|
| ASP | Association of Seafood Producers |
| AUV | Autonomous Underwater Vehicle |
| BdN | Bay du Nord |
| CEAR | Canadian Environmental Assessment Registry |
| CIAR | Canadian Impact Assessment Registry (formerly the Canadian Environmental Assessment Registry) |
| C-NLOPB | Canada-Newfoundland and Labrador Offshore Petroleum Board |
| CNSOPB | Canada Nova Scotia Offshore Petroleum Board |
| COSEWIC | Committee on the Status of Wildlife in Canada |
| CPT | Cone Penetration Test |
| DFO | Fisheries and Oceans Canada |
| EA | Environmental Assessment |
| EBSA | Ecologically or Biologically Significant Area |
| ECCC | Environment and Climate Change Canada |



| EEZ | Exclusive Economic Zone |
|------------|---|
| EIS | Environmental Impact Statement |
| EL | Exploration Licence |
| Equinor | Equinor Canada Ltd. |
| ExxonMobil | ExxonMobil Canada Ltd. |
| FFAW | Fish, Food and Allied Workers Union |
| IAAC | Impact Assessment Agency of Canada |
| km | Kilometre |
| km² | Square Kilometre |
| MBES | Multibeam Echosounder |
| NAFO | North Atlantic Fisheries Organization |
| NAVWARN | Navigational Warning |
| NEB | National Energy Board |
| NEFSC | Northeast Fisheries Science Centre |
| NL | Newfoundland and Labrador |
| NM | Nautical Mile |
| NOAA | National Oceanic and Atmospheric Administration |
| OCI | Ocean Choice International |
| PROD | Portable Remotely Operated [Seabed-mounted] Drilling Unit |
| ROV | Remotely Operated Vehicle |
| SAR | Species at Risk |
| SARA | Species at Risk Act |
| SDL | Significant Discovery Licence |
| SPOC | Single Point of Contact |
| Statoil | Statoil Canada Ltd. |
| t | tonne |
| TAC | Total Allowable Catch |
| VME | Vulnerable Marine Ecosystem |

5.2 Changes from Previous Version and Updates Required in Next Version

The 2023 post-season crab survey moveable survey locations were not available at time of preparing this Update (W. Coffey, DFO, pers. comm.) and will be included in the 2024 EA Update.

5.3 References

C-NLOPB and CNSOPB. 2017. Compensation Guidelines Respecting Damages Relating to Offshore Petroleum Activity. Available online: https://www.cnlopb.ca/wp-content/uploads/guidelines/compgle.pdf.

Coffey, W.A. Fisheries and Oceans Canada, (Industry-Crab Post-season Survey Locations), St. John's, NL. Email communication.



- COSEWIC. 2021. COSEWIC Assessment Results with Range of Occurrence (by province, territory, or ocean), November 2020. Available online: https://www.cosewic.ca/index.php/en-ca/assessment-process/range-of-occurrence-november-2020
- DFO. 2009. North Atlantic Right Whale in Canada: Critical Habitat Protection Statement. Available online: http://www.sararegistry.gc.ca/virtual_sara/files/chs_north_atlantic_right_whale_1209_e.pdf.
- DFO. 2010. Northern Bottlenose Whale, Scotian Shelf Population: Critical Habitat Protection Statement.

 Available online:
 http://www.sararegistry.gc.ca/virtual_sara/files/chs_northern_bottlenose_whale_1110_e.pdf.
- DFO. 2016. Recovery Strategy for the Northern Bottlenose Whale, (*Hyperoodan ampullatus*), Scotia Shelf population, in Atlantic Canadian Waters (Final). *Species at Risk Act* Recovery Strategy Services. Fisheries and Oceans Canada. vii + 70 pp. Available online: https://wildlife-species.canada.ca/species-risk-registry/virtual_sara/files/plans/RecoveryStrategy-NorthernBottlenoseWhale-v00-2016Jun07-Amended-Eng.pdf
- DFO. 2017. Action Plan for the Northern Bottlenose Whale (*Hyperoodon ampullatus*), Scotian Shelf population, in Atlantic Canadian waters. Species at Risk Act Action Plan Series. Fisheries and Oceans Canada, Ottawa, ON. iv + 37 pp. Available online: https://wildlife-species.canada.ca/species-risk-registry/virtual_sara/files/plans/Ap-Bottlenose-v00-2017Apr-Eng.pdf
- DFO. 2018. Northern shrimp and striped shrimp Shrimp fishing areas 0, 1, 4-7, the Eastern and Western Assessment Zones and North Atlantic Fisheries Organization (NAFO) Division 3M. Available online: http://www.dfo-mpo.gc.ca/fm-gp/peches-fisheries/ifmp-gmp/shrimp-crevette/shrimp-crevette-2018-002-eng.htm.
- DFO. 2020. Recovery Strategy for Northern Wolffish (*Anarhichas denticulatus*) and Spotted Wolffish (*Anarhichas minor*), and Management Plan for Atlantic Wolffish (*Anarhichas lupus*) in Canada. Fisheries and Oceans Canada, Ottawa, ON. vii + 81 pp. Available online: https://wildlifespecies.canada.ca/species-risk-registry/virtual_sara/files/plans/MpRs-3LoupsWolffish-v01-2020Feb-Eng.pdf
- DFO. 2021. Decisions for Atlantic Canada, Quebec, and the Arctic 2021: Northern Shrimp Shrimp Fishing Areas 0, 1 and 7. Available online: https://www.dfo-mpo.gc.ca/fisheries-peches/decisions/fm-2021-gp/atl-24-eng.html
- DFO. 2022. 2022 Snow crab fishery, Newfoundland and Labrador. Available online: https://www.dfo-mpo.gc.ca/fisheries-peches/decisions/fm-2022-gp/atl-06-eng.html
- ECCC. 2019. Environmental Assessment Decision Statement Flemish Pass Exploration Drilling Project. Available online: https://iaac-aeic.gc.ca/050/documents/p80129/129198E.pdf.
- Equinor. 2019. Newfoundland and Labrador Offshore Area 2019 Environmental Assessment Update.
- Equinor. 2020a. Newfoundland and Labrador Offshore Area 2020 Environmental Assessment Update.



- Equinor. 2020b. Coral and Sponge Wellsite Results Report.
- Equinor. 2020c. Bay du Nord Development Project Environmental Impact Statement.
- Equinor. 2022. 2022 Flemish Pass Exploration Drilling Project Fisheries Communication Plan. To be posted online prior to drilling program commencing.
- Equinor and ExxonMobil. 2018a. Responses to Information Requirements and Clarifications Round 2 for Flemish Pass Exploration Drilling Program (CEAR 80129) and Eastern Newfoundland Offshore Exploration Drilling Project (CEAR 80132) pursuant to the Canadian Environmental Assessment Act, 2012. October 2018. Available online: https://iaac-aeic.gc.ca/050/documents/p80129/125787E.pdf.
- Equinor and ExxonMobil. 2018b. Responses to Information Requirements and Clarifications Additional Round 2 Information Requirements for Flemish Pass Exploration Drilling Program (CEAR 80129) and Eastern Newfoundland Offshore Exploration Drilling Project (CEAR 80132) pursuant to the Canadian Environmental Assessment Act, 2012. November 2018. Available online: https://iaac-aeic.gc.ca/050/documents/p80129/126147E.pdf.
- Government of Canada. 2018. Critical Habitat of the Northern Bottlenose Whale (*Hyperoodon ampullatus*) Scotian Shelf Population Order. Canada Gazette Part II, July 25, 2018. Available online: https://wildlife-species.canada.ca/species-risk-registry/virtual sara/files/g2-152158.pdf
- Government of Canada. 2020a. Critical Habitat of the Northern Wolffish (*Anarhichas denticulatus*) Order (Part II, Volume 154, Number 19). Canada Gazette, Part II. Available online: https://wildlifespecies.canada.ca/species-risk-registry/virtual sara/files/g2-15419.pdf
- Government of Canada. 2020b. Critical Habitat of the Spotted Wolffish (*Anarhichas minor*) Order (Part II, Volume 154, Number 19) Canada Gazette, Part II. Available online: https://wildlifespecies.canada.ca/species-risk-registry/virtual_sara/files/g2-15419.pdf
- IAAC. 2019. Flemish Pass Exploration Drilling Project. Available online: https://www.ceaa.gc.ca/050/evaluations/proj/80129.
- NAFO. 2023. Conservation and Enforcement Measures NAFO/COM Doc. 23-01; Serial No. N7368. Available online: https://www.nafo.int/Portals/0/PDFs/COM/2023/comdoc23-01.pdf
- NEB, CNSOPB and C-NLOPB. 2009. Offshore Chemical Selection Guidelines for Drilling & Production Activities on Frontier Lands. Available online: https://www.neb-one.gc.ca/bts/ctrg/gnthr/2009ffshrchmclgd/2009ffshrchmclgd-eng.pdf.
- NEB, CNSOPB and C-NLOPB. 2010. Offshore Waste Treatment Guidelines. Available online: https://www.neb-one.gc.ca/bts/ctrg/gnthr/2010ffshrwstgd/2010ffshrwstgd-eng.pdf.
- NOAA NEFSC. 2023. Interactive North Atlantic Right Whale Sightings Map. Available online: https://www.nefsc.noaa.gov/psb/surveys/MapperiframeWithText.html.
- Statoil. 2017. Flemish Pass Exploration Drilling Program Environmental Impact Statement. Available online: https://iaac-aeic.gc.ca/050/documents/p80129/121317E.pdf.



- Statoil. 2018. Responses to Information Requirements and Clarifications Round 1 (Part 1) for Flemish Pass Exploration Drilling Program (CEAR 80129) pursuant to the *Canadian Environmental Assessment Act*, 2012. May 2018. Available online: https://iaac-aeic.gc.ca/050/documents/p80129/124279E.pdf.
- Statoil and ExxonMobil. 2018. Responses to Information Requirements and Clarifications Round 1 (Parts 1 and 2) for Flemish Pass Exploration Drilling Program (CEAR 80129) and Eastern Newfoundland Offshore Exploration Drilling Project (CEAR 80132) pursuant to the *Canadian Environmental Assessment Act*, 2012. July 2018. Available online: https://iaac-aeic.gc.ca/050/documents/p80129/124321E.pdf.
- Upward, P., Program Services and Planning, Science Branch, Fisheries and Oceans Canada, RV Surveys, St. John's, NL. Email communication
- WhaleMap. 2022. Whalemap [Johnson, HD (2018)]. Available at: https://whalemap.org. Accessed January 20, 2022.

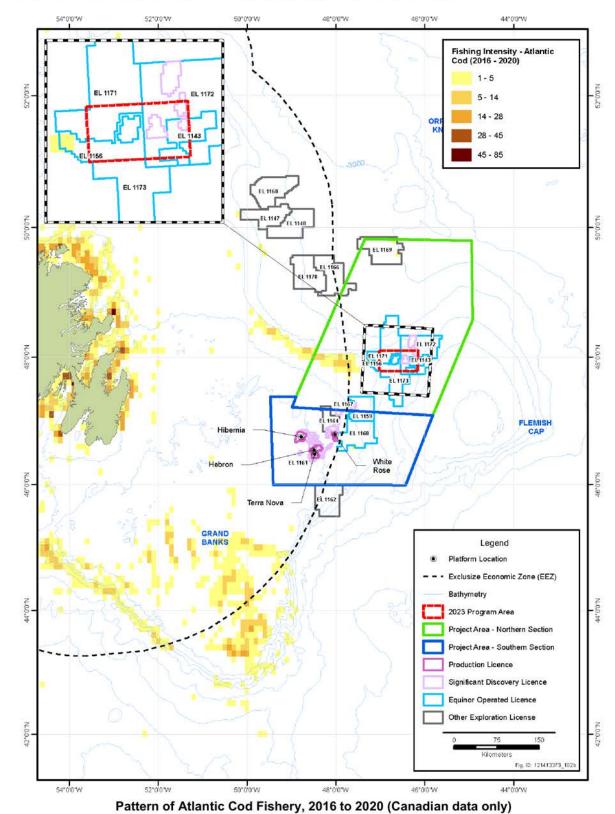


APPENDIX A – DISTRIBUTION LIST

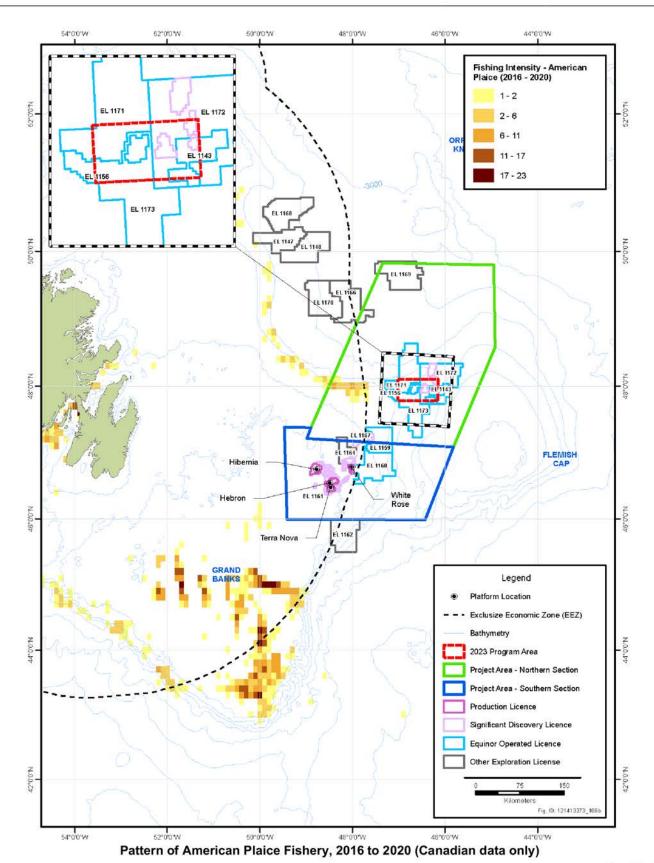
| Copy No. | Company | Position | Location | |
|----------|-----------|------------------------------------|------------------------------|--|
| | Equinor | SSU Manager | Equinor's Office, St. John's | |
| | Equinor | VP Operations | Equinor's Office, St. John's | |
| | Equinor | HSE & Regulatory Advisor | Equinor's Office, St. John's | |
| | C-NLOPB | N/A | St John's Office | |
| | FFAW | Industry Liaison | St John's Office | |
| | AGC | Executive Director Halifax Office | | |
| | ASP | Executive Director | St John's Office | |
| | OCI | Director, Fleet Operations | St. John's Office | |
| | One Ocean | Industry Board – Managing Director | St John's Office | |
| | Fugro | Project Lead | St. Johns Office | |



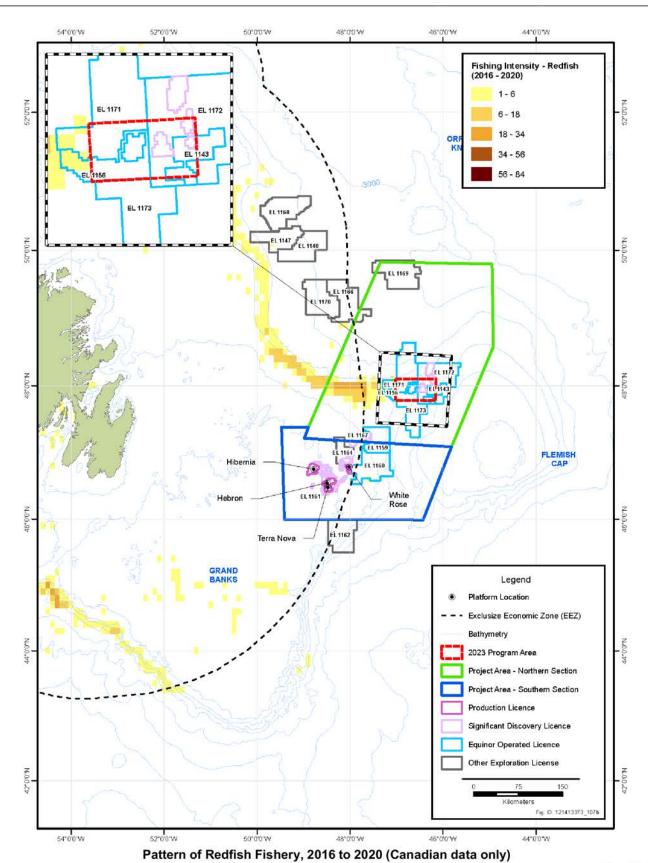
APPENDIX B - FISHING ACTIVITY MAPS FOR COD, AMERICAN PLAICE, AND REDFISH













APPENDIX C -SARA-LISTED AND COSEWIC-ASSESSED SPECIES IN THE PROJECT AREAS

| | Specie | es | Fed | Provincial | |
|----------------|---|------------------------------|--|---------------------|-------------|
| Family | Common Name | Scientific Name | SARA Status (Schedule 1) ¹ | COSEWIC Designation | Designation |
| Marine Fish | | | | Ex | |
| Anarhichadidae | Atlantic wolffish | Anarhichas lupus | Special Concern ² | Special Concern | Not listed |
| Anarhichadidae | Northern wolffish | Anarhichas denticulatus | Threatened ² | Threatened | Not listed |
| Anarhichadidae | Spotted wolffish | Anarhichas minor | Threatened ² | Threatened | Not listed |
| Anguillidae | American eel | Anguilla rostrata | Not listed | Threatened | Vulnerable |
| Cetorhinidae | Basking shark | Cetorhinus maximus | Not listed | Special Concern | Not listed |
| Cyclopteridae | Lumpfish | Cyclopterus lumpus | Not listed | Threatened | Not listed |
| Gadidae | Atlantic cod (Newfoundland and Labrador population) | Gadus morhua | Not listed | Endangered | Not listed |
| Gadidae | Cusk | Brosme brosme | Not listed | Endangered | Not listed |
| Lamnidae | Porbeagle | Lamna nasus | Not listed | Endangered | Not listed |
| Lamnidae | Shortfin mako | Isurus oxyrinchus | Not listed | Endangered | Not listed |
| Lamnidae | White shark | Carcharodon carcharias | Endangered | Endangered | Not listed |
| Macrouridae | Roundnose grenadier | Coryphaenoides rupestris | Not listed | Endangered | Not listed |
| Phycidae | White hake (Atlantic and Northern Gulf of St. Lawrence population) | Urophycis tenuis | Not listed | Threatened | Not listed |
| Pleuronectidae | American plaice (Newfoundland and Labrador population) | Hippoglossoides platessoides | Not listed | Threatened | Not listed |
| Rajidae | Smooth skate (Funk Island Deep population) | Malacoraja senta | Not listed | Endangered | Not listed |
| Rajidae | Thorny skate | Amblyraja radiata | Not listed | Special Concern | Not listed |
| Rajidae | Winter skate (Eastern Scotian Shelf and Newfoundland population) | Leucoraja ocellata | Not listed | Endangered | Not listed |
| Salmonidae | Atlantic salmon (South Newfoundland population) | Salmo salar | Not listed | Threatened | Not listed |



| Family | Species | | Federal | | Provincial |
|-----------------|---|--------------------------|--|---------------------|-------------|
| | Common Name | Scientific Name | SARA Status (Schedule 1) ¹ | COSEWIC Designation | Designation |
| Salmonidae | Atlantic salmon (Outer Bay of Fundy population) | Salmo salar | Not listed | Endangered | Not listed |
| Scombridae | Atlantic bluefin tuna | Thunnus thynnus | Not listed | Endangered | Not listed |
| Scorpaenidae | Acadian redfish (Atlantic population) | Sebastes fasciatus | Not listed | Threatened | Not listed |
| Scorpaenidae | Deepwater redfish (Northern population) | Sebastes mentella | Not listed | Endangered | Not listed |
| Squalidae | Spiny dogfish | Squalus acanthias | Not listed | Special Concern | Not listed |
| Marine Birds | | | | | |
| Laridae | Ivory Gull | Pagophila eburnea | Endangered ³ | Endangered | Endangered |
| Scolopacidae | Red-necked Phalarope | Phalaropus lobatus | Special Concern ⁴ | Special Concern | Not listed |
| Hydrobatidae | Leach's Storm-petrel (Atlantic population) | Oceanodroma leucorhoa | Not listed | Threatened | Not listed |
| Marine Mammals | and Sea Turtles | | | | |
| Balaenopteridae | Blue Whale (Atlantic population) | Balaenoptera musculus | Endangered ^{5,6} | Endangered | Not listed |
| Balaenopteridae | Fin Whale (Atlantic population) | Balaenoptera physalus | Special Concern ⁷ | Special Concern | Not listed |
| Balaenidae | North Atlantic Right Whale | Eubalaena glacialis | Endangered ^{8,9} | Endangered | Not listed |
| Ziphiidae | Northern Bottlenose Whale (Scotian Shelf population) | Hyperoodon ampullatus | Endangered ^{10,11} | Endangered | Not listed |
| Ziphiidae | Northern Bottlenose Whale (Davis Strait Baffin Bay, Labrador Sea population) | Hyperoodon ampullatus | Not listed | Special Concern | Not listed |
| Ziphiidae | Sowerby's Beaked Whale | Mesoplodon bidens | Special Concern ¹² | Special Concern | Not listed |
| Delphinidae | Killer Whale (Northwest Atlantic / Eastern Arctic population) | Orcinus orca | Not listed | Special Concern | Not listed |
| Phocoenidae | Harbour Porpoise (Northwest Atlantic population) [Threatened – SARA Schedule 2] | Phocoena phocoena | Not listed | Special Concern | Not listed |



| Family | Species | | Federal | | Provincial |
|----------------|--|--------------------------|--|---------------------|-------------|
| | Common Name | Scientific Name | SARA Status (Schedule 1) ¹ | COSEWIC Designation | Designation |
| Monodontidae | Beluga Whale (Eastern Hudson Bay population) | Delphinapterus leucas | Not listed | Threatened | Not listed |
| Dermochelyidae | Leatherback Sea Turtle (Atlantic population) | Dermochelys coriacea | Endangered ^{13,14} | Endangered | Not listed |
| Cheloniidae | Loggerhead Sea Turtle | Caretta caretta | Endangered ¹⁵ | Endangered | Not listed |

- 1. Blue shading means that Recovery Strategies, Action Plans and/or 5anagement Plans have been issued for the species.
- 2. DFO. 2020. Recovery Strategy for Northern Wolffish (*Anarhichas denticulatus*) and Spotted Wolffish (*Anarhichas minor*), and Management Plan for Atlantic Wolffish (*Anarhichas lupus*) in Canada. Fisheries and Oceans Canada, Ottawa, ON. vii + 81 pp. Available online: https://wildlife-species.canada.ca/species-risk-registry/virtual_sara/files/plans/MpRs-3LoupsWolffish-v01-2020Feb-Eng.pdf
- 3. Environment Canada. 2014. Recovery Strategy for the Ivory Gull (*Pagophila eburnea*) in Canada. *Species at Risk Act* Recovery Series. Environment Canada, Ottawa, ON. iv + 21 pp. Available online: http://www.registrelep-sararegistry.gc.ca/virtual_sara/files/plans/rs_ivory_gull_e_final.pdf.
- 4. Environment and Climate Change Canada. 2022. Management Plan for the Red-necked Phalarope (*Phalaropus lobatus*) in Canada [Proposed]. *Species at Risk Act* Management Plan Series. Environment and Climate Change Canada, Ottawa, ON. iv + 40 pp. Available online: https://wildlifespecies.canada.ca/species-risk-
- registry/virtual sara/files/plans/mp red necked phalarope e proposed.pdf
- 5. Beauchamp, J., H. Bouchard, P. de Margerie, N. Otis and J.-Y. Savaria. 2009. Recovery Strategy for the Blue Whale (*Balanoptera musculus*), Northwest Atlantic Population, in Canada. [FINAL]. *Species at Risk Act* Recovery Series, Fisheries and Oceans Canada, Ottawa, ON. 62 pp. Available online: http://www.registrelepsararegistry.gc.ca/virtual sara/files/plans/rs blue whale nw atlantic pop 0210 e.pdf.
- 6. DFO. 2020. Action Plan for the Blue Whale (*Balaenoptera musculus*), Northwest Atlantic Population, in Canada. *Species at Risk Act* Action Plan Series. Fisheries and Oceans Canada, Ottawa, ON. iv + 23 pp. Available online: https://wildlife-species.canada.ca/species-risk-registry/virtual_sara/files/plans/Ap-BlueWhaleNwRorqualBleu-v00-2020Juil-Eng.pdf
- 7. DFO. 2017. Management Plan for the fin whale (*Balaenoptera physalus*), Atlantic population in Canada, Species at Risk Act Management Plan Series, DFO, Ottawa, ON. iv +38 pp. Available online: https://wildlifespecies.canada.ca/species-risk-registry/virtual_sara/files/plans/Mp-FinWhaleAtlantic-v00-2017Jan24-Eng.pdf
- 8. DFO. 2014. Recovery Strategy for the North Atlantic Right Whale (*Eubalaena glacialis*) in Atlantic Canadian Waters [Final]. *Species at Risk Act* Recovery Strategy Series. Fisheries and Oceans Canada, Ottawa, ON. vii + 68 pp. Available online: http://www.registrelepsararegistry.gc.ca/virtual sara/files/plans/rs bnan narw am 0414 e.pdf.
- 9. DFO. 2021. Action Plan for the North Atlantic Right Whale (*Eubalaena glacialis*) in Canada. *Species at Risk Act* Action Plan Series. Fisheries and Oceans Canada, Ottawa, ON. v + 46 pp. Available online: https://wildlife-species.canada.ca/species-risk-registry/virtual_sara/files/plans/Ap-Bnan-Narw-v01-2021Mar-Eng.pdf



- 10. DFO. 2016. Recovery Strategy for the Northern Bottlenose Whale, (*Hyperoodan ampullatus*), Scotian Shelf population, in Atlantic Canadian Waters [Final]. *Species at Risk Act* Recovery Strategy Series. Fisheries and Oceans Canada, Ottawa, ON. vii + 70 pp. Available online: http://www.registrelepsararegistry.gc.ca/virtual_sara/files/plans/RecoveryStrategy-NorthernBottlenoseWhale-v00-2016Jun07-Amended-Eng.pdf.
- 11. DFO. 2017. Action Plan for the Northern Bottlenose Whale (*Hyperoodon ampullatus*), Scotian Shelf population, in Atlantic Canadian waters. *Species at Risk Act* Action Plan Series. Fisheries and Oceans Canada, Ottawa, ON. iv + 37 pp. Available online: http://www.registrelepsararegistry.gc.ca/virtual_sara/files/plans/Ap-Bottlenose-v00-2017Apr-Eng.pdf.
- 12. DFO. 2017. Management Plan for the Sowerby's Beaked Whale (*Mesoplodon bidens*) in Canada. *Species at Risk Act* Management Plan Series. Fisheries and Oceans Canada, Ottawa. iv + 46 pp. Available online: http://www.registrelep-sararegistry.gc.ca/virtual_sara/files/plans/Mp-Sowerbys-v00-2017Apr-Eng.pdf.
- 13. Atlantic Leatherback Turtle Recovery Team. 2006. Recovery Strategy for Leatherback Turtle (*Dermochelys coriacea*) in Atlantic Canada. *Species at Risk Act* Recovery Strategy Series. Fisheries and Oceans Canada, Ottawa, ON. vi + 45 pp. Available online: http://www.registrelepsararegistry.gc.ca/virtual sara/files/plans/rs Leatherback turtle Atlantic population 0207 e.pdf.
- 14. DFO. 2020. Action Plan for the Leatherback Sea Turtle (Dermochelys coriacea), Atlantic population, in Canada. Species at Risk Act Action Plan Series. Fisheries and Oceans Canada, Ottawa, ON. iv + 28 pp. Available online: https://wildlife-species.canada.ca/species-risk-registry/virtual_sara/files/plans/Ap-TortueLuthAtlLeatherback-v00-2020Mar-Eng.pdf
- 15. DFO. 2020. Recovery Strategy for the Loggerhead Sea Turtle (*Caretta caretta*) in Canada. Species at Risk Act Recovery Strategy Series. Fisheries and Oceans Canada, Ottawa, ON. vi + 35 pp. Available online: https://wildlife-species.canada.ca/species-risk-registry/virtual_sara/files/plans/Rs-

TortueCaouanneLoggerhead-v00-2020Nov-eng.pdf



