

Flemish Pass Exploration Drilling Program 2018-2027

2024 Drilling Campaign Environmental Assessment Update

Equinor Canada Ltd.

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1 INTRODUCTION

Equinor Canada Ltd. (Equinor) will be undertaking a drilling campaign in 2024 in the Flemish Pass area of the Canada-Newfoundland and Labrador Offshore Area (the Project).

The scope of this Project is addressed in the approved environmental assessment "Flemish Pass Exploration Drilling Program Environmental Impact Statement" (Statoil 2017).

The Canada-Newfoundland and Labrador Offshore Petroleum Board (C-NLOPB) requires that operators, when applying for various program authorizations, 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. This EA update provides the following information:

- Overview of planned Project activities for 2024 (Section 2)
- Information on consultation and engagement activities undertaken (Section 3.5)
- Update applicable baseline information for key environmental components that has become available since the EA was produced, specifically regarding:
 - Commercial fisheries (Section 3.1)
 - Species at risk, or of conservation concern (Section 3.2)
 - Special Areas (Section 3.2)

EA reference:

 Evaluation and confirmation that the nature and scope of the proposed activities are within the scope of the approved EA, including the appropriateness and adequate of the associated environmental effects predictions and mitigation measures (Section 4)

The scope of the planned Project were assessed under the approved EA as summarised in Table 1.1.

Table 1.1 Environmental Assessment Summary

EA reference:						
 Flemish Pass Exp 	Flemish Pass Exploration Drilling Program Environmental Impact Statement (EIS) (Statoil 2017)					
Responses to Infor	Responses to Information Requirements (Statoil 2018, Statoil and ExxonMobil 2018, Equinor and ExxonMobil					
2018a, 2018b)	2018a, 2018b)					
EA Decision Stater	ment – Flemish Pass Exploration Drilling Project (Environment and Climate Change Canada					
[ECCC] 2019)						
Reference No.	Canadian Impact Assessment Registry (CIAR) 80129					
Temporal Scope	Year-round, 2019 to 2027, inclusive					
Geographic Scope	Flemish Pass area (see Figure 2-1; Appendix A for a listing of geographical coordinates)					
	Licenses: Exploration Licence (EL) 1156 and Significant Discovery Licence (SDL) 1059					
	Drilling operations:					
	- Up to two wells, includes potential sidetracks					
Planned 2024	- Laying of transponders					
Activities	- Environmental monitoring and inspections, as required					
7.00.7.0.00	- Retrieval and redeployment of acoustic monitoring devices					
	- Supply and Servicing					
	- Follow-up monitoring and observations, as required					
- Vertical Seismic Profiling (VSP) program(s), if required						



2 Proposed Activities for 2024

Equinor's 2024 drilling plans include the drilling of one (1) firm and one (1) optional well offshore Newfoundland and Labrador in the Flemish Pass area. Sitka C-02 on EL 1156 is firm, and depending on the success of this well a sidetrack may be drilled, or a second optional well may be drilled on SDL 1059, Cappahayden C-85. An optional sidetrack on Cappahayden, may also be drilled in a success case. The MODU Hercules is expected to arrive in Canada July 2024. Drilling operations are estimated to commence on or around July 7, 2024. An anticipated drilling schedule is provided in Figure 2-1. Well locations are identified in Table 2.1. The 2024 Program Area is illustrated in Figure 2-2.

Table 2.1 Well Surface Location Coordinates

Well Location	Latitude (NAD83)	Longitude (NAD83)	Northing U23 (NAD 83, CM 45°W)	Easting U23 (NAD 83, CM 45°W)
Sitka C-02	47°51'13.7586" N	46°45'46.5154" W	5301557.80	368125.00
Cappahayden C-85	47°54'12.39890" N	46° 42'48.7245" W	5306989.60	371941.60

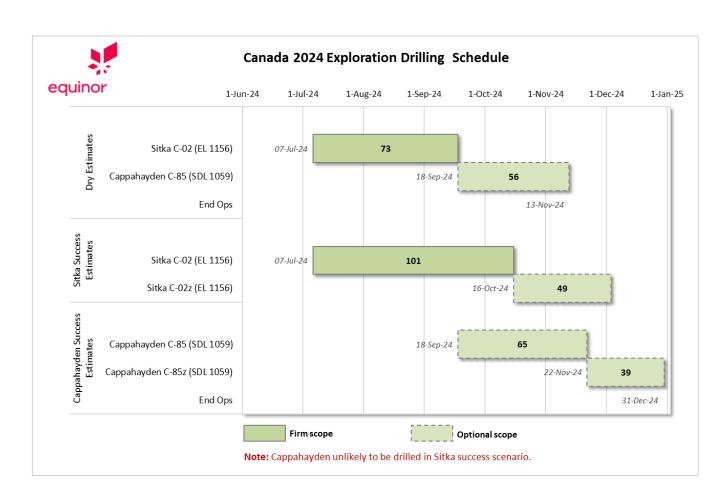


Figure 2-1 Estimated 2024 Schedule of Activities



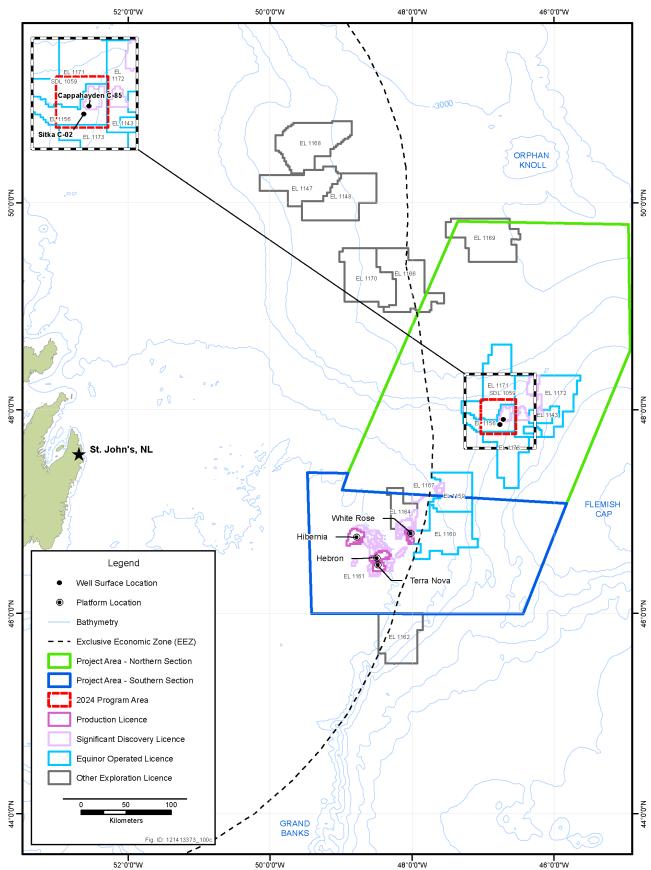


Figure 2-2 Flemish Pass Project Areas and 2024 Program Area



Water depths at well locations range from approximately 840 to 910 m. Due to water depths in the well locations, the mobile offshore drilling unit (MODU), Hercules, will maintain position using a dynamic positioning (DP) system rather than anchoring / mooring systems.

In addition to the activities outlined above, the following may be completed to support the 2024 drilling program:

- Vessel and helicopter support for supply and servicing
- Acceptance Test Program activity as per rig intake requirements (e.g., DP system test, Remotely Operated Vehicle (ROV) test, and cement unit testing where cement slurry could be discharged overboard)
- ROV placement of transponders on the seafloor
- Deployment of metocean equipment
- Wellsite surveys (may include shallow hazard survey, as-found and as-left surveys using ROV, geotechnical surveys and environmental surveys)
- Vertical seismic profile (VSP) surveys
- Well testing using formation testing while tripping, and/or flaring that has been deemed acceptable by the C-NLOPB
- Retrieval of existing marine acoustic sound recording devices and deployment of replacement units in the Flemish Pass area
- Post-drill seabed survey coral and sponge and drill cuttings deposition

3 Environmental Aspects

This section addresses the environmental aspects associated with the activities outlined in Section 2.

3.1 Commercial Fisheries

Figure 3-1 illustrates the pattern of fishing activity between 2015 to 2021 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 2023. 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 2023.

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; 2023). 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 2024). The proposed 2024 activities fall within NAFO Division 3L, as a result there is no directed fishing activity for northern shrimp overlapping with the 2024 Program Area (Figure 3-2).



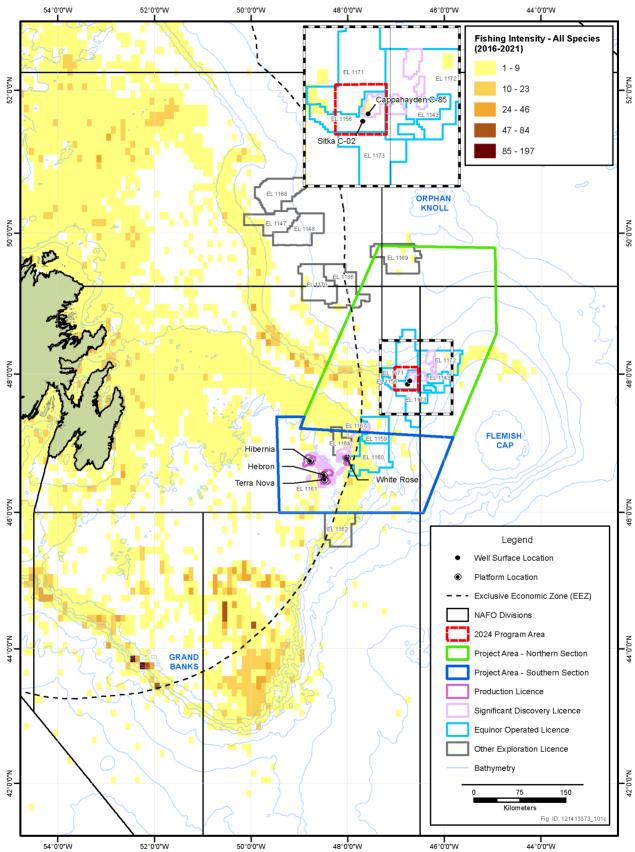
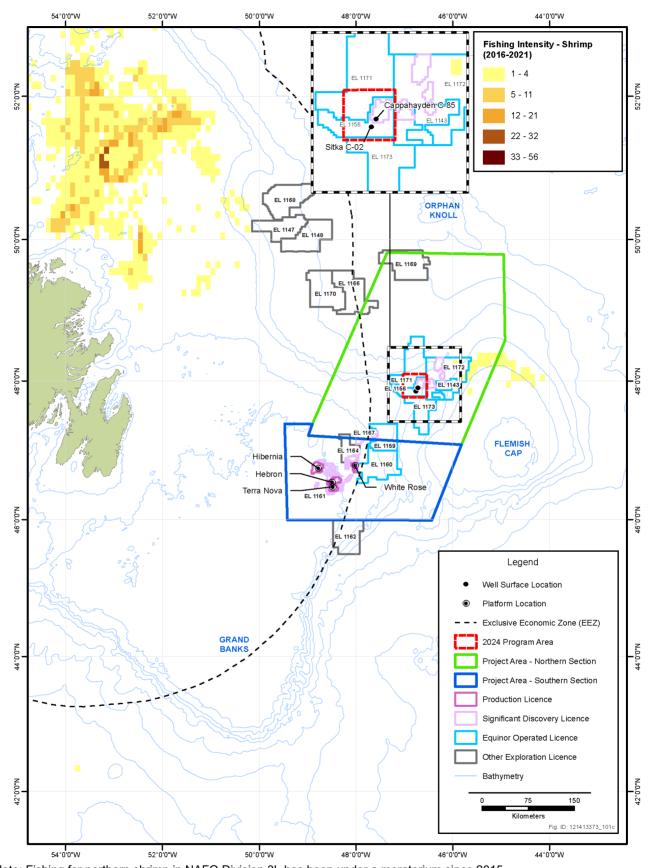


Figure 3-1 Pattern of Canadian Fishing Activity (2016 to 2021) for Commercial Species in Relation to the Project Areas (Canadian data only)





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 2021 (Canadian data only)



DFO's fishing activity information for commercial species of interest (i.e., halibut [Reinhardtius hippoglossoides] 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 and SDLs. Figure 3-4 shows the 2015 to 2021 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 2024 activities as compared to the previously approved EA.

The fisheries quotas allocated to NAFO vessels for 2024 are described in NAFO/COM Doc. 24-01 (NAFO 2024). This document indicates a total allowable catch (TAC) of 11,228 tonnes (t) for Greenland halibut and 55,603 t for redfish. Of these amounts, 1,684 t of Greenland halibut TAC and 14,210 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 2023 fishing season in NAFO Divisions 3LNO at 36,403 t (DFO 2024), which is an increase compared to the 2023 season (32,224 t).

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 2024 Program Area.

Given the location of commercial fishing activities, nature of drill cuttings deposition (to settle south of the wellsite), and 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.

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.

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.

Given the location of critical habitat associated with northern and spotted wolffish, North Atlantic right whale, and the Scotian Shelf population of northern bottlenose whale, nature of drill cuttings deposition (to settle south of the wellsite), the lack of seismic-related activities, and 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.



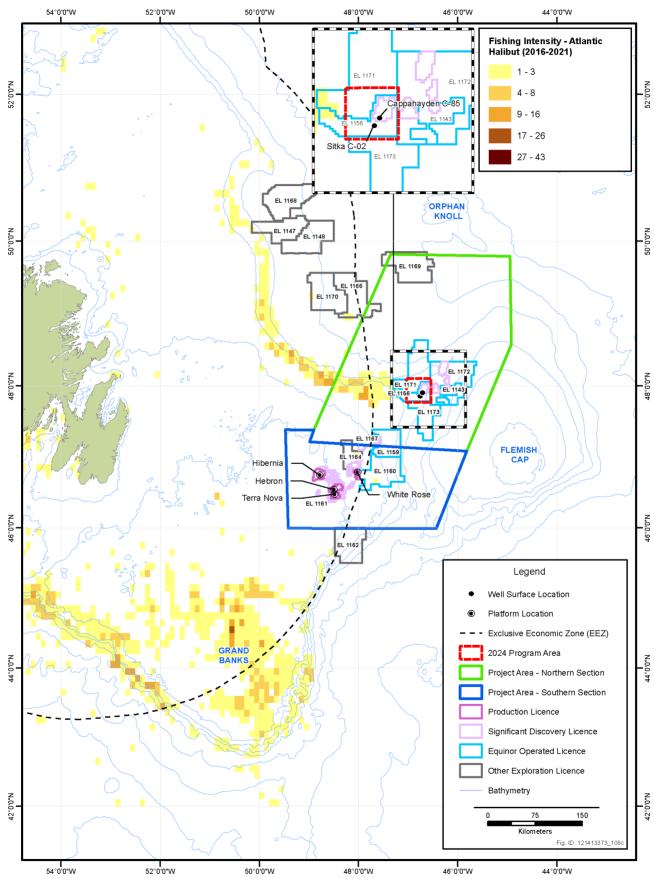


Figure 3-3 Pattern of Halibut Fishery, 2016 to 2021 (Canadian data only)



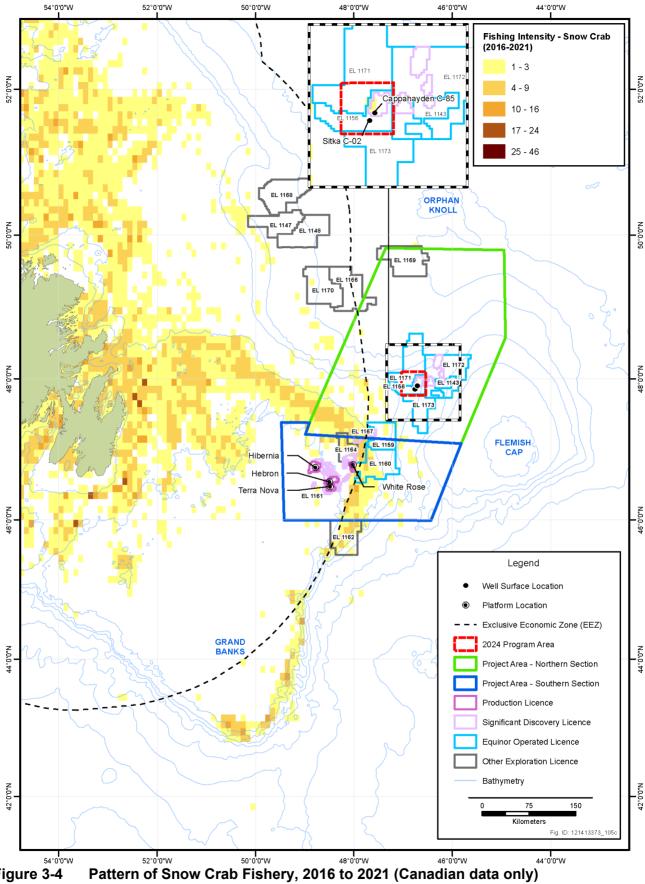


Figure 3-4



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 August 2023 have been along the United States eastern seaboard, southwest of Nova Scotia and east of New Brunswick (NOAA NEFSC 2023). No observations occurred off NL between January and August 2023 (Whale Map 2023). A few observations were 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, which is not listed under SARA and is assessed as special concern by COSEWIC (Statoil 2017; DFO 2016, 2017; Equinor 2020c). Seismic activities for 2024 are limited to VSP, 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 2024 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 2024 drilling activities overlap with 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. A small VME of large gorgonian coral is also within the 2024 Program Area.



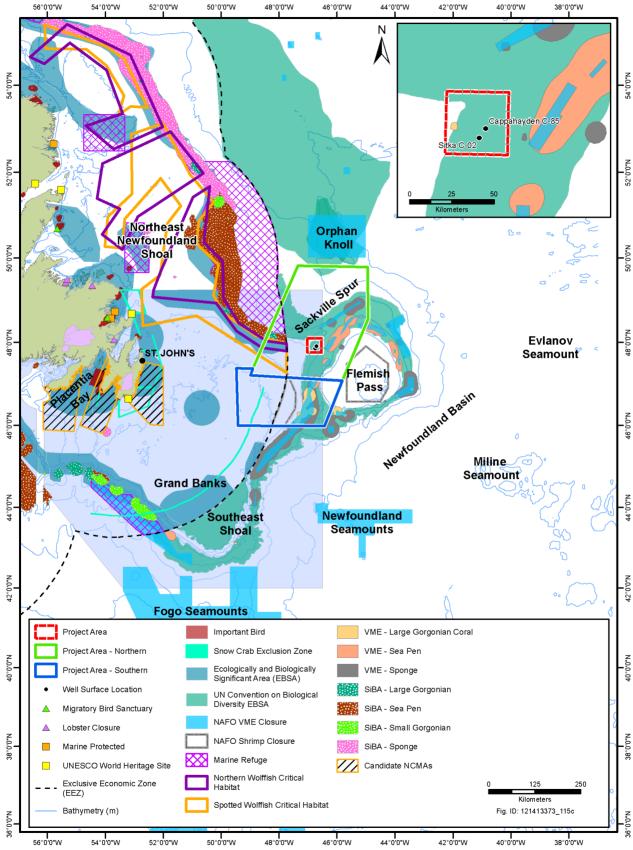


Figure 3-5 Locations of Special Areas within and near the Project Areas and 2024 Program Area



Equinor completed pre-drill coral and sponge surveys at the proposed well locations in 2023. For the pre-drill coral and sponge survey, Equinor submitted a coral and sponge survey plan (WSP 2023) to C-NLOPB and Fisheries and Oceans Canada (DFO) for review and acceptance prior to commencing the survey. Based on Equinor's Coral and Sponge Results Report (WSP 2024), DFO provided advice to the C-NLOPB indicating that both well sites are sensitive fish habitat. As a result, Equinor examined mitigation options and determined, in consultation with the CNLOPB, that the only technically and feasible mitigation option was to move the Cappahayden C-85 well location. In addition, Equinor will undertake a post-drilling seabed survey, addressing Condition 3.12.2 of the EA Decision Statement (ECCC 2019) to verify cuttings dispersion model predictions and undertake a coral and sponge survey to verify the effectiveness of mitigation measures.

With the above information and 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 remain valid.

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 2024. Mitigation measures to be implemented for the proposed 2024 activities, as outlined in the previously approved EA and amendments, include the following:

- Equinor completed pre-drill coral and sponge surveys at the proposed well locations in 2023
- Adherence to the C-NLOPB's Chemical Screening Guidelines (NEB et al. 2009)
- Adherence to the C-NLOPB's Offshore Waste Treatment Guidelines (NEB et al. 2010)
- Seabird observations, including protocols for observing and reporting during drilling activities
- · Handling and release of stranded seabirds including protocols for these activities
- Marine mammal observations during VSP surveys
- Communication with DND regarding planned offshore military activity
- Notification with Indigenous groups as per decision statement conditions and Indigenous Fisheries
 Communication Plan
- Ongoing communication and engagement with commercial fishers on planned activities
- Communicate according to approved Fishers Communication Plan (Equinor 2020b)
- Communication with One Ocean and NAFO (through DFO)
- Implementing a fishing gear and vessel compensation program
- SPOC for reporting potential fishing gear interactions during 2024 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 2024 activities
- Communication with DFO regarding research vessel surveys
- As noted in the following plans, WR0239 Equinor Canada Offshore Newfoundland Marine Operations and WR2549 Equinor Canada Ltd. Offshore Newfoundland Helicopter Operations, vessels and helicopters will adhere to the requirements to maintain a set distance (300 m lateral for vessels and 300 m altitude/1000 m lateral for helicopters) from Cape St. Francis and Witless Bay Islands Important Bird and Biodiversity Areas unless not feasible for safety reasons or in emergency situations
- Marine vessels will reduce speed to a maximum of 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 Indigenous Groups

Indigenous groups have been provided notification of the intended scope of work associated with the 2024 exploration drilling program. Further consultation will be provided upon request. A SPOC has been established to provide consistent and accurate information.

If material changes are made that could 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.

Equinor updated its Indigenous Fisheries Communication Plan to align with our global management system for controlled documents. A draft copy was shared draft with Indigenous groups. No comments were received as of May 31, 2024.

3.5.2 Commercial Fishers

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 WR3059 Fisheries Communication Plan
- 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 2024 activities
- Establishing a single point of contact (SPOC) for reporting potential fishing gear interactions during 2024 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

For the 2024 Drilling Program, Equinor continues to engage with fisheries organizations.

Information regarding the proposed 2024 activities have been provided to the following organisations:

- 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 and its working group that includes representatives from the various operating oil and gas operators and the fishing sector.

Information regarding the 2024 drilling program was initially shared with commercial fisheries organisations at the October 2023 One Ocean Working group meeting. Since that time, ongoing updates have been provided, especially with regards to program start date and rig mobilisation dates



in Bay Bulls, NL. From these engagement sessions, through their representative members, no direct concerns were expressed, other than providing more up to date information as it became available. Updated information was shared with commercial fishers, specifically regarding timing of rig arrival in Bay Bulls and timing of commencement of drilling operations, as it became available. FFAW-Unifor expressed concern regarding potential impacts during rig transit to the currently ongoing crab fishery. After discussion with FFAW-Unifor and review of the OneOcean risk matrix, Equinor has agreed to the use of guide vessel and is currently engaged with the FFAW-Unifor regarding guide vessel requirements for the transit into and out of Bay Bulls, NL.

Equinor updated its Commercial Fisheries Communication Plan to align with our global management system for controlled documents. A draft copy was shared draft with the commercial fishing organizations. All comments received were addressed.

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 2024 activities. In addition, Equinor communicate NAVWARNs to the NAFO Secretariat via DFO, for activities inside the 200 nM economic zone.

3.5.3 Regulatory Agencies

3.5.3.1 C-NLOPB – EA Commitments and Conditions

Commitments and conditions applicable to the 2024 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 continues 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 2024 drilling program.

3.5.3.2 C-NLOPB – Follow-up and Monitoring Programs

Under the EA Decision Statement (ECCC 2019), Equinor is required to execute follow-up and monitoring programs. Compliance associated with these programs will be provided to the C-NLOPB and associated regulatory agencies within established timelines and reporting format. For the 2024 drilling program, Equinor will conduct a post-drilling seabed survey to determine the extent of drill cuttings deposition, in accordance with EA Condition 3.12.2, will undertake seabird observations during drilling operations, and will undertake marine mammal monitoring during VSP operations.

3.5.3.3 DFO – Research Vessel Surveys

DFO undertakes annual fisheries research surveys in the NL offshore area. Table 3.1 provides the schedule for DFO research surveys for 2024 (P. Upward, pers. comm. 2024). In addition, DFO will have an oceanographic charter from October 26 to November 23, 2024, which will include 3LMN. Equinor will coordinate with DFO prior to commencement of proposed 2024 activities described in Section 2.1.1 to determine if there are spatial or temporal conflicts.



Table 3.1 Proposed 2024 DFO Research Vessel Surveys

Vessel	Activity	NAFO Divisions	Planned Start	Planned End
RV Cabot	NL Multispecies Spring Survey	3LNOPs	April 9, 2024	June 23, 2024
RV Cabol	NL Multispecies Fall Survey	2HJ3K	October 2, 2024	December 16, 2024
	3KL Cod Tagging Summer	3K	June 25, 2024	July 8, 2024
	C&P Bonavista Bay	3L	July 9, 2024	July 14, 2024
	C&P Bonavista Bay Mission 2	3L	July 9, 2024	July 12, 2024
RV Vladykov	August 2024 Capelin Late Larval Survey	3L	August 13, 2024	August 21, 2024
	September 2024 Capelin Late Larval Survey	3L	September 19, 2024	September 27, 2024
	3KL Cod Tagging Fall	North East Coast	October 14, 2024	October 27, 2024
RV Cartier	NL Fall Multispecies Survey	2HJ3KL3LNO	October 2, 2024	December 21, 2024

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 2023 locations of the post-season survey. As of submission of this EA update, we have not received 2024 proposed locations. However, based on 2023 locations there should be no proposed overlap with planned 2024 drilling activities.

3.5.3.4 DND - Military Exercises

As part of Equinor's standard pre-drilling program, Equinor contacted the Department of National Defence to determine if there are planned military activities scheduled in 2024 that overlap spatially / temporally with the proposed drilling program.

4 Concluding Statement

The proposed 2024 exploration 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, one new species have been added to COSEWIC listings (ringed seal)
- 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 Additional Information

5.1 Abbreviations

AGC	Atlantic Groundfish Council		
ASP	Association of Seafood Producers		
AUV	Association of Searood Producers Autonomous Underwater Vehicle		
BdN	Bay du Nord		
CEAR			
CIAR	Canadian Environmental Assessment Registry 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		
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 (formerly the Canadian Environmental Assessment		
	Agency)		
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		
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		
	1		



5.2 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.
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Appendix A – Listing of Project-related Geographical Coordinates

 Table A.1
 Project Area – Northern Section Coordinates

Project Area	Coordinates – NAD83 UTM ZONE 22N					
Vertices	Longitude (DMS)	Latitude (DMS)	Easting (m)	Northing (m)		
Α	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		
1	47° 21' 04" W	49° 49' 18" N	762440	5525202		

 Table A.2
 Project Area – Southern Section Coordinates

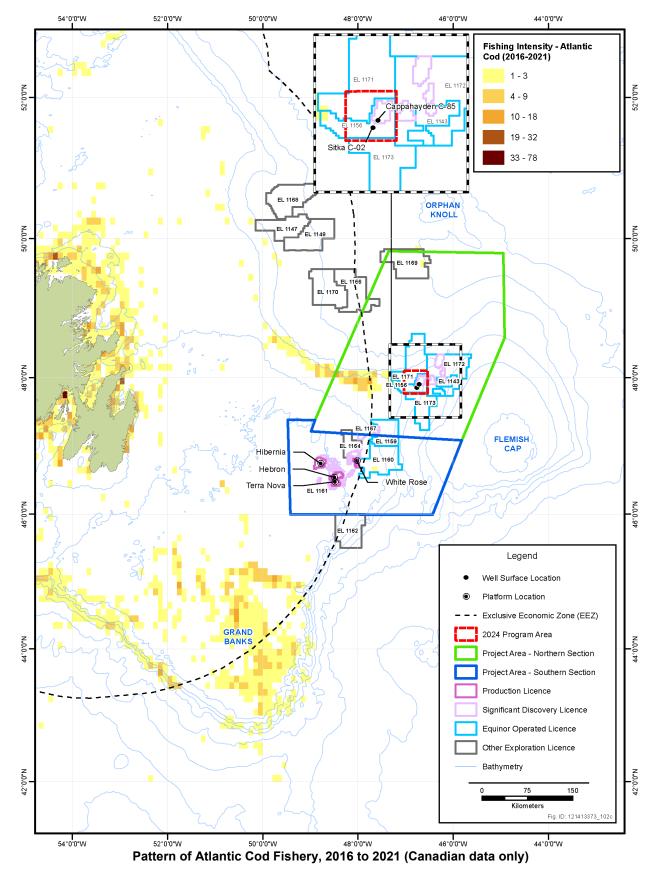
Project Area	Coordinates - NAD83 UTM ZONE 22N					
Vertices	Longitude (DMS)	Latitude (DMS)	Easting (m)	Northing (m)		
С	45° 49' 04" W	47° 04' 57" N	893344	5227380		
D	46° 26' 02" W	45° 59' 28" N	853605	5103218		
E	49° 25' 01" W	45° 59' 42" N	622584	5094695		
F	49° 28' 29" W	47° 23' 03" N	615122	5248990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

 Table A.3
 2024 Program Area Coordinates

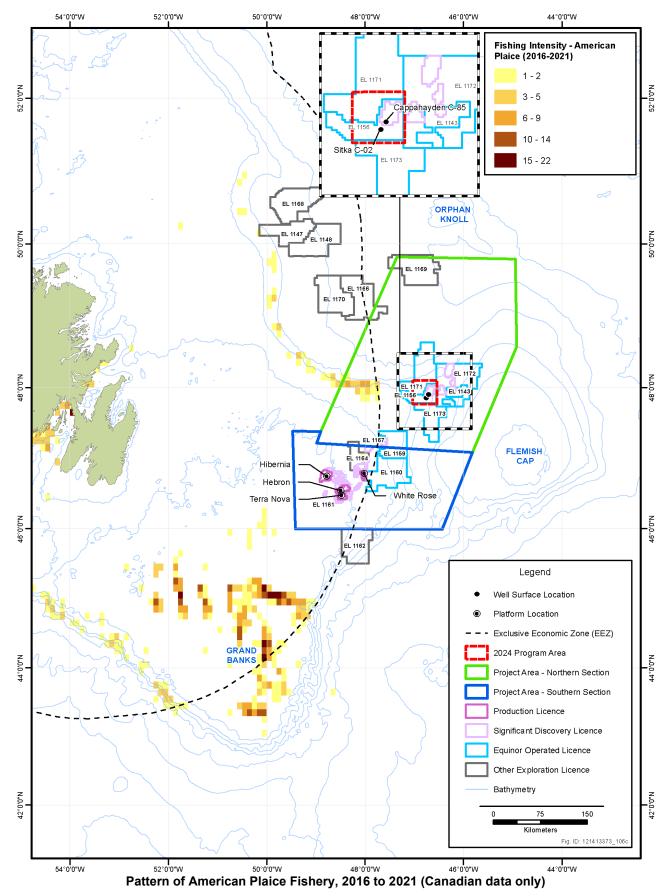
Longitude	Latitude	Easting U23 (NAD 83, CM 45°W)	Northing U23 (NAD 83, CM 45°W)
-47.0298	48.09734	348875.6	5329112
-46.537	48.09904	385569.1	5328450
-46.5377	47.76576	384780.3	5291411
-47.0298	47.76576	347906.0	5292261



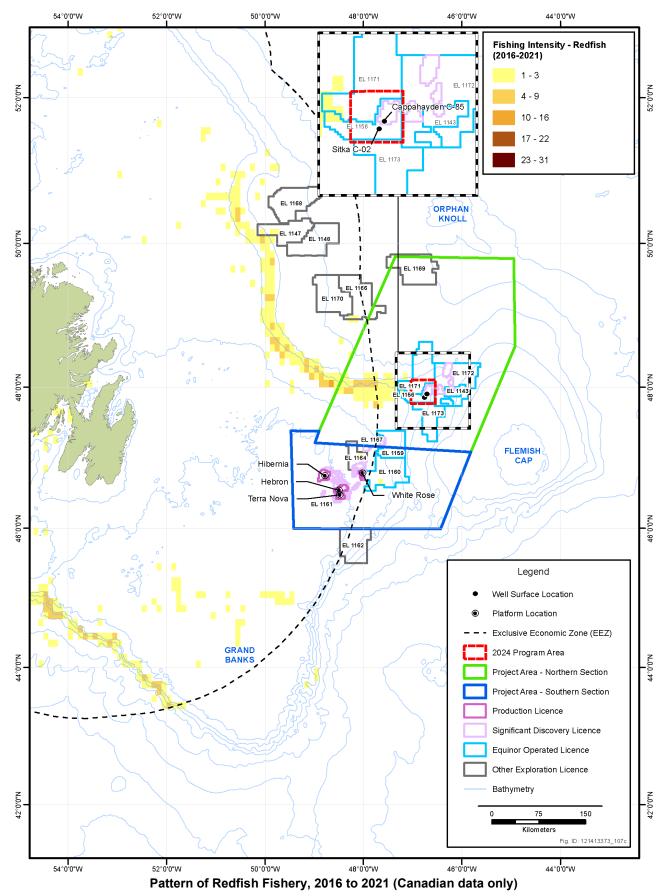
APPENDIX B - FISHING ACTIVITY MAPS FOR COD, AMERICAN PLAICE, AND REDFISH













APPENDIX C -SARA-LISTED AND COSEWIC-ASSESSED SPECIES IN THE PROJECT AREAS (as of August 2023)

	Species		Federal		Provincial
Family	Common Name	Scientific Name	SARA Status (Schedule 1) ¹	COSEWIC Designation	Designation
Marine Fish					•
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
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



	Species		Federal		Provincial		
Family	Common Name	Scientific Name	SARA Status (Schedule 1) ¹	COSEWIC Designation	Designation		
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		
Monodontidae	Beluga Whale (Eastern Hudson Bay population)	Delphinapterus leucas	Not listed	Threatened	Not listed		
Phocidae	Ringed Seal	Pusa hispida	Not listed	Special Concern	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 Management 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.registrelepsararegistry.gc.ca/virtual_sara/files/plans/rs_ivory_gull_e_final.pdf.



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- 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://wildlifespecies.canada.ca/species-risk-registry/virtual_sara/files/plans/Rs-TortueCaouanneLoggerhead-v00-2020Noveng.pdf



