

**ExxonMobil Canada Properties**

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September 18, 2019

Mr. Mike Atkinson  
Regional Director-Atlantic  
Canadian Environmental Assessment Agency  
Suite 200, 1801 Hollis Street  
Halifax, NS  
Canada, A1C 6K3

File No.: 43350.14  
Exploration Licence (EL) 1151

Dear Mr. Atkinson:

Further to the Canadian Environmental Assessment Agency's (the "CEAA") August 9, 2019 correspondence to ExxonMobil Canada Ltd. ("ExxonMobil") requesting clarification/information with respect to its acquisition of a portion of Exploration Licence (EL) 1151 from Husky Oil Operations Limited ("Husky"), now known as EL1151a (Attachment 1- Land Overview). ExxonMobil appreciates the opportunity to respond and offers the following response.

**Background - ExxonMobil**

ExxonMobil and its Canadian affiliates are actively involved in on-going oil and gas production operations and petroleum exploration on Canada's East Coast, with interests that include Production Licenses, Significant Discovery Licenses and ELs in the Jeanne d'Arc, Flemish Pass, and Carson / Salar basins offshore eastern Newfoundland. In addition, ExxonMobil's global affiliates have extensive worldwide experience in drilling and production activities and ExxonMobil can rely upon this experience in its operations in Canada.

**Changes in Ownership Details**

EL1151a was acquired by ExxonMobil from Husky on June 19, 2019, (Attachment 2 – Project Area Map). ExxonMobil is the operator of EL 1151a with Husky remaining a joint owner of that portion of the EL. All steps required to effect this transfer pursuant to the Canada-Newfoundland and Labrador Atlantic Accord Implementation Act and the Canada-Newfoundland and Labrador Atlantic Accord

Implementation Newfoundland and Labrador Act have been completed. EL1151b remains 100% owned and operated by Husky.

### **Activities and Technology**

ExxonMobil confirms that the equipment and technology it intends to employ in EL1151a are substantially similar as those indicated in Husky's Environmental Impact Statement (EIS) including the use of a Mobile Offshore Drilling Unit (MODU), logistic support (i.e., the St. John's supply base), use of offshore supply vessels and helicopter support.

Similarly, ExxonMobil's activities in EL1151a are substantially similar as those identified in Husky's EIS, including:

- Exploration Drilling;
- Well Site/Geohazard/Geotechnical surveys;
- Vertical Seismic Profiling (VSP);
- Well testing, well completions, workovers/data logging;
- Decommissioning and abandonment of wells; and
- Offshore supply vessel and helicopter operations.

In addition, the number of wells and location outlined within Husky's EIS are generally consistent with ExxonMobil's drilling plans for EL1151a.

### **Assessments, Predictions, Mitigation, Monitoring and Follow-up**

ExxonMobil has completed a review of Husky's Exploration Drilling Project Environmental Assessment (EA) and generally supports the effects assessments and predictions contained therein. Husky has determined that an unmitigated blowout event would have a significant effect on Commercial Fisheries, Indigenous People and Community Values (as defined in the Husky EA).

ExxonMobil agrees with Husky that adverse environmental effects would be significant in the event of an unmitigated blowout scenario; however, in consideration of ExxonMobil's spill prevention techniques, response strategies, and mitigation measures that will be incorporated into the design and operations of any exploration activities, ExxonMobil predicts that the likelihood of any significant impacts from such a scenario to be remote.

With respect to mitigations, monitoring and follow-up as it pertains to EL1151a ExxonMobil takes no exception to the information provided to CEAA by Husky.

ExxonMobil generally supports the effects assessments, models, and predictive results in Husky's EA.

### **ExxonMobil Safety Management System**

ExxonMobil will utilize its safety management system, Operations Integrity Management System (OIMS), which guides its operating decisions. OIMS consists of 11 elements that measure and mitigate safety, security, health and environmental risk to people, the environment and the communities in which we operate. In addition, it includes a variety of environmental policies, plans and procedures which pertain to ExxonMobil's activities. Furthermore, ExxonMobil is committed to conducting its business in a manner that is compatible with the balanced environmental and

economic needs of the communities in which it operates including compliance with all applicable laws, regulations and guidelines. OIMS will be used for the proposed activities in EL1151a and is similar to Husky's Operation Integrity Management System (HOIMS), which addresses similar elements, such as leadership commitment, environmental management, risk assessments, and emergency preparedness.

### **Collaboration**

ExxonMobil is in regular contact with Husky with respect to Project Reference Number – 80130 and intends on continuing to work collaboratively with Husky throughout the remainder of its application process. For example, Husky and Exxon will continue to collaborate to ensure any remaining requests for information or clarification from CEAA are addressed. ExxonMobil is committed to working with Husky to complete the EA for EL1151 in as efficient and thorough manner as possible in order to reduce duplication and ensure an effective use of stakeholder resources.

We appreciate CEAA providing ExxonMobil with the opportunity to provide clarity and further information. If you have any questions regarding the transmittal please contact the undersigned at your earliest convenience.

Respectfully,

<Original signed by>

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Cc: Central Files  
S. Hiscock  
G. Iglolorte

Attachment 1 – Land Overview

The legal description of EL 1151a is as follows:

**INTEREST**

TYPE NO.	EFFECTIVE DATE	TERM
EL1151 A	January 15, 2017	9 years

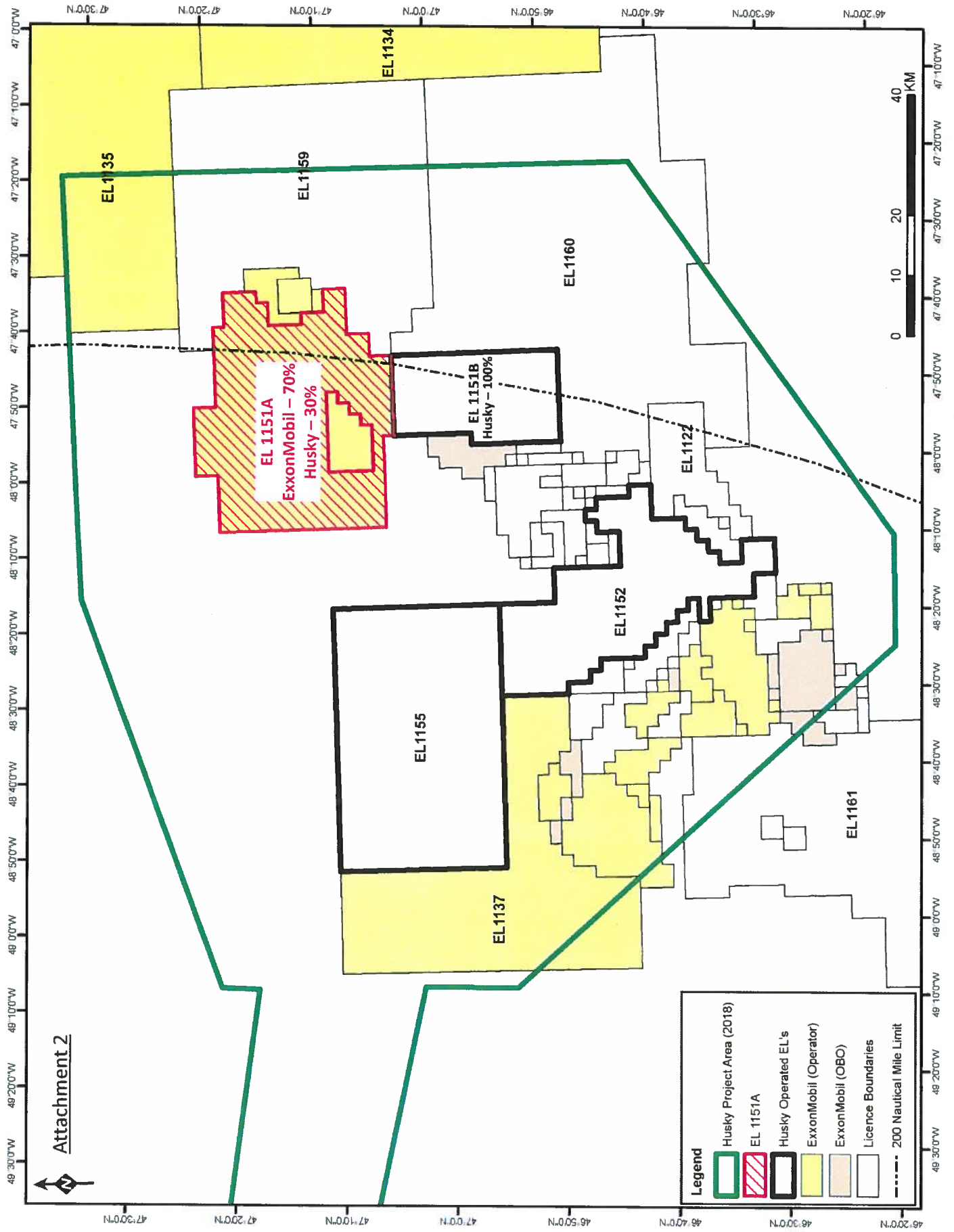
**LAND**

LATITUDE	LONGITUDE	SECTIONS
47°30'N	47°45'W	41, 42, 51, 52, 61, 62, 71, 72, 81, 82, 91, 92
47°20'N	47°30'W	47-49, 56-59, 61, 62, 66-69, 71-100
47°20'N	47°45'W	1-100
47°20'N	48°00'W	1-50
47°10'N	47°30'W	49, 50, 59, 60, 69, 70, 79, 80, 87- 90, 97-100
47°10'N	47°45'W	5-10, 15-20, 25-30, 35-39, 45-48, 55-57, 65-66, 76, 86, 96
47°10'N	48°00'W	6-10, 16-20, 26-30, 36-40, 46-50

**OWNERSHIP**

INTEREST HOLDER (S)	PARTICULAR%
ExxonMobil Canada Ltd.	70%
Husky Oil Operations Limited	30%
HECTARES	138 339
REPRESENTATIVE/OPERATOR	ExxonMobil Canada Ltd.

Attachment 2



**Legend**

- Husky Project Area (2018)
- EL 1151A
- Husky Operated EL's
- ExxonMobil (Operator)
- ExxonMobil (OBO)
- Licence Boundaries
- 200 Nautical Mile Limit

Attachment 1: Appendix B Proponent’s Proposed Mitigation and Follow-up

Valued Component	Mitigation	Follow-up
<p>Fish and Fish Habitat (Section 6.1)</p>	<ul style="list-style-type: none"> <li>• Design lighting on the MODU to comply with requirements stipulated in the <i>Petroleum Occupational Safety and Health Regulations</i> to ensure safe operations. Avoid extraneous lighting, and point all lighting except navigational lighting downward;</li> <li>• Comply with the <i>Fisheries Act</i>, including potential requirements for habitat offsetting, if required Fisheries Act, to mitigate the loss of fish habitat;</li> <li>• Implement an Environmental Protection and Compliance Monitoring Plan based on the following regulations and guidelines:               <ul style="list-style-type: none"> <li>○ screen all chemicals as per the <i>Offshore Chemical Selection Guidelines</i> and Husky’s chemical management system and chemical screening program;</li> <li>○ limit all routine discharges (i.e., deck drainage, bilge water, cooling water) in accordance with the <i>Offshore Waste Treatment Guidelines</i> and the C-NLOPB-approved Environmental Protection Plan, Regulations for the Prevention of Pollution from Ships and for Dangerous Chemicals under the Canada Shipping Act, 2001 and the International Conventions for the Prevention of Pollution from Ships (MARPOL);</li> <li>○ macerate sewage waste to a particle size of less than six millimetres and discharge as per the <i>Offshore Waste Treatment Guidelines</i>;</li> <li>○ transport to shore for disposal or recycle waste discharges and domestic garbage not meeting <i>Offshore Waste Treatment Guidelines</i> requirements, and segregate garbage as required and in compliance with waste disposal requirements and Husky’s Waste Management Plan;</li> <li>○ monitor concentration of synthetic-based mud on cuttings on the MODU for compliance with the <i>Offshore Waste Treatment Guidelines</i>; and</li> <li>○ comply with the Ballast Water Control and Management Regulations of the Canada Shipping Act, 2001 during ballasting and de-ballasting activities.</li> </ul> </li> <li>• Preference for severance of the wellhead will be mechanical means;</li> <li>• Adhere to <i>Canada Shipping Act</i>, industry best practices and marine traffic rules and regulations will be followed by all offshore supply vessels;</li> </ul>	<ul style="list-style-type: none"> <li>• Provide monthly compliance reports to the C-NLOPB, including volumes of liquid wastes discharged to the marine environment;</li> <li>• Conduct compliance monitoring and environmental effects monitoring as required;</li> <li>• Provide annual environmental updates to the C-NLOPB, detailing the specific activities to be conducted within the project area. The update would include changes (if any) to marine fish species at risk or species of conservation concern and critical habitat and discuss the potential effects of Project activities to marine fish species at risk or species of conservation and critical habitat; and</li> <li>• Publish annual updates on the C-NLOPB website; and provide notification to Indigenous groups.</li> </ul>

Valued Component	Mitigation	Follow-up
	<ul style="list-style-type: none"> <li>• Conduct a visual survey (using a remotely operated vehicle) of the seafloor prior the start of drilling to assess the presence of any aggregations of habitat-forming corals or sponges. Move the well site if sensitive environmental features are identified during the survey, to avoid affecting them if feasible to do so. If not feasible, consult with the C-NLOPB and DFO to determine an appropriate course of action; and</li> <li>• Prohibit the discharge of any substance, wastes, residues or discharges not identified in the EPCMP.</li> </ul>	
<p>Marine Mammals and Sea Turtles (Section 6.2)</p>	<ul style="list-style-type: none"> <li>• Follow all applicable mitigations measures from the <i>Statement of Canadian Practice with Respect to the Mitigation of Seismic Sound in the Marine Environment</i> (SOCP), as required in the C-NLOPB's Geophysical, Geological, Environmental and Geotechnical Program Guidelines, during geophysical surveys, including PAM as required;</li> <li>• Use Marine Mammal Observers (MMOs) to monitor and report on marine mammal and sea turtle sightings during VSP surveys;</li> <li>• Implement a ramp-up procedure (i.e. gradually increasing seismic source elements over a period of approximately 30 minutes until the operating level is achieved) before any VSP activity begins. This measure is aimed at reducing the potential for auditory injury to marine animals near the source at the onset of the activity. It assumes that the gradual increase in emitted sound levels will provide an opportunity for marine animals to move away from the sound source before potentially injurious sound levels are achieved close to the source;</li> <li>• Delay ramp-up if any marine mammal or sea turtle is sighted within the 500 metre safety zone around the wellsite;</li> <li>• Implement shutdown procedures (i.e. shutdown of source array) if any marine mammal or sea turtle is observed within the 500 metre safety zone around the wellsite<sup>1</sup>;</li> <li>• Have project-related vessel traffic avoid concentrations of marine mammals and sea turtles whenever possible;</li> <li>• Maintain a steady vessel course and safe vessel speed whenever possible, and have helicopters typically only reduce altitude on approach for landing;</li> </ul>	<ul style="list-style-type: none"> <li>• Provide copies of the marine mammal and sea turtle observer reports to DFO and C-NLOPB following the marine mammal observer program;</li> <li>• Report any vessel strikes involving marine mammals or sea turtles to the Marine Animal Response Society or the Canadian Coast Guard;</li> <li>• Provide an annual EA update to the C-NLOPB, detailing the specific activities that will be conducted within the Project Area in a given year. Include changes (if any) to marine mammal and sea turtle species at risk/SOCC and critical habitat and discuss the potential effects of project activities to marine mammal and sea turtle species at risk/SOCC and critical habitat; and</li> </ul>

<sup>1</sup> Husky IR-34 response

Valued Component	Mitigation	Follow-up
	<ul style="list-style-type: none"> <li>• Contact the Canadian Coast Guard through the nearest Marine Communications and Traffic Services if a vessel strikes a marine mammal or sea turtle; and</li> <li>• Inform DFO within 24 hours of marine mammal and sea turtle emergencies.</li> <li>• In the unlikely event that shape charges are required to remove the wellhead during well abandonment, a MMO will visually monitor marine mammals and sea turtles in the area of the wellhead and detonation will be delayed until there are no sighting for at least 45 minutes.</li> </ul> <p>Mitigation measures that apply to fish and fish habitat (Section 6.1) would also apply to marine mammals and sea turtles.</p>	<ul style="list-style-type: none"> <li>• Provide annual updates that would be made public on the C-NLOPB website; and provide notification to Indigenous groups.</li> </ul>
Migratory Birds (Section 6.3)	<ul style="list-style-type: none"> <li>• Utilize lighting on the MODU that is designed to comply with the requirements stipulated in the <i>Petroleum Occupational Safety and Health Regulations</i> to provide safe operations, use no extraneous lighting and all lighting except navigational lighting would be pointed downward;</li> <li>• Aim to avoid flaring from mid-September to mid-October, which has been identified as a period of vulnerability particularly for storm-petrels and plan flaring associated with well testing such that it would not commence during night-time or periods of poor visibility when birds may be more susceptible to attraction to the flare;</li> <li>• Restrict flaring to duration and amount necessary to characterize the well potential and as required maintain safe operations. Conduct flaring in accordance with the <i>Drilling and Production Guidelines</i> (C-NLOPB and CNSOPB) which requires a drill stem test not to start at night. Use a high pressure spray of seawater between the MODU and the flare to act as a deterrent to seabirds in the area;</li> <li>• Treat sanitary and domestic waste in accordance with MARPOL and the <i>Offshore Waste Treatment Guidelines</i> (i.e. to six-millimetre particle size);</li> <li>• Conduct routine searches for stranded birds on the platform and supply vessels and appropriate procedures for release. Use Environment and Climate Change Canada’s <i>Best Practices for Stranded Birds Encountered Offshore Atlantic Canada</i>, and <i>The Leach’s Storm Petrel: General Information and Handling Instructions</i> (Williams and Chardine, 1999), including appropriate CWS permits when stranded birds are found. Comply with requirements for documenting and reporting any stranded birds or bird mortalities to CWS during the drilling program;</li> </ul>	<ul style="list-style-type: none"> <li>• Conduct daily stationary platform surveys according to <i>Eastern Canada Seabirds at Sea</i> (ECSAS) protocol from the safety stand-by vessel by crew trained in the ECSAS protocol. Submit data annually to the C-NLOPB;</li> <li>• As per <i>Newfoundland Offshore Petroleum Drilling and Production Regulations</i> report seabird observations to the C-NLOPB within 90 days of well suspension or abandonment;</li> <li>• Include seabird stranding and recovery data in an annual report to the Canadian Wildlife Service, required as a condition of Husky’s Seabird Handling Permit;</li> <li>• Comply with requirements for documenting and reporting any stranded (or bird mortalities) to the Canadian Wildlife Service during the drilling program.</li> </ul>



Valued Component	Mitigation	Follow-up
	<ul style="list-style-type: none"> <li>• Implement ramp-up procedures (i.e. gradually increasing seismic source elements over a period of approximately 30 minutes until the operating level is achieved) before any wellsite and VSP activity begins;</li> <li>• Adhere to the <i>Procedures for Handling and Documenting Stranded Birds Encountered on Infrastructure Offshore Atlantic Canada</i>;</li> <li>• For support vessels, maintain a minimum distance of at least 300 m from Cape St. Francis and Witless Bay Islands Important Bird and Biodiversity areas, unless there is an emergency; and</li> <li>• For helicopters, maintain a minimum distance of at least 300 m vertically and 1000 horizontally from Cape St. Francis and Witless Bay Islands Important Bird and Biodiversity areas, except for approach, take-off and landing maneuvers and if not feasible for safety reasons; and</li> <li>• With respect to exhaust emissions, comply with the Newfoundland and Labrador <i>Air Pollution Control regulations, 2004</i>, Ambient Air Quality Objectives under the Canadian Environmental Protection Act, and any relevant regulations under MARPOL. Conduct flaring in accordance with the Drilling and Production Guidelines.</li> </ul> <p>Mitigation measures that apply to fish and fish habitat (above) would also apply to migratory birds.</p>	<p>Photos will be provided to the crew member trained to check for and handle stranded birds to aid in the differentiation between Wilson’s Storm-Petrel and Leach’s Storm-Petrel; and</p> <ul style="list-style-type: none"> <li>• Provide annual EA updates to the CNLOPB each year, detailing activities that will be conducted in the project area in a given year, and will include changes to migratory bird species at risk/ species of conservation concern and critical habitat and discuss potential effects of the project activities to migratory birds at risk / species of conservation concern and critical habitat.</li> <li>• Provide annual updates to be made public on the C-NLOPB website and notification to Indigenous groups;</li> <li>• Monitor daily the presence of marine birds from the drilling installation using trained observers following ECCC’s <i>Eastern Canada Seabird at Sea Standardized Protocol for Pelagic Seabird Surveys from Moving and Stationary Platforms</i> will help determine the effectiveness of these mitigation measures;</li> <li>• Submit to the C-NLOPB and Canadian Wildlife Service bird</li> </ul>

Valued Component	Mitigation	Follow-up
		stranding and mortality data collected to determine if there are any additional learnings which may be incorporated into future mitigation and monitoring programs.
Special Areas (Section 6.4)	<ul style="list-style-type: none"> <li>Proposed mitigation measures related to fish and fish habitat (Section 6.1), marine mammals and sea turtles (Section 6.2), and migratory birds (Section 6.3) (above) would mitigate potential effects on special areas.</li> </ul>	<ul style="list-style-type: none"> <li>Husky provides an annual EA Update to the C-NLOPB each year, detailing the specific activities that will be conducted within the Project Area in a given year. In that EA Update Husky will include changes (if any) to special areas and discuss the potential effects of Project activities to special areas.</li> <li>Annual updates would be made public on the C-NLOPB website; notification to Indigenous groups would be provided.</li> </ul>
Species at Risk (Section 6.5)	<ul style="list-style-type: none"> <li>Proposed mitigation measures related to fish and fish habitat (Section 6.1), marine mammals and sea turtles (Section 6.2), and migratory birds (Section 6.3) (above) would mitigate potential effects on species at risk.</li> </ul>	<ul style="list-style-type: none"> <li>Annual updates would be made public on the C-NLOPB website; notification to Indigenous groups would be provided.</li> </ul>
Commercial Fisheries (Section 6.6)	<ul style="list-style-type: none"> <li>Publish the details of the safety (exclusion) zone and the location of suspended wellheads in Notices to Shipping/Notice to Mariners; publish Notice to Mariners and Notice to Fishers via the Canadian Broadcasting Corporation radio program Fisheries Broadcast;</li> <li>Establish a safety zone, typically extending to 500 metres beyond the outermost physical footprint of a dynamically positioned MOUD or jack-up rig, or 50 metres around the anchors for a semi-submersible;</li> <li>Continue annual engagement of Indigenous and commercial fishers regarding project details as applicable and facilitation of coordination of information sharing;</li> <li>Implement a Vessel Traffic Management Standard, which would include procedures for the management and communication relevant to the movement of offshore supply</li> </ul>	<ul style="list-style-type: none"> <li>Following well abandonment, inspect the seabed using a remotely operated vehicle to confirm no equipment or obstructions are left in place;</li> <li>Annual updates would be made public on the C-NLOPB website; notification to Indigenous groups would be provided; and</li> <li>Husky provides an annual EA Update to the C-NLOPB each</li> </ul>

Valued Component	Mitigation	Follow-up
	<p>vessels, survey vessels, and the MODU during project related activities. All communication between Husky, operators and fishers will adhere to this Standard;</p> <ul style="list-style-type: none"> <li>• Determine, in accordance with the <i>Risk Management Matrix Guidelines</i> developed by One Ocean, if use of a Fisheries Liaison Officer during certain project activities, such as well site surveys, would be required. The Risk Management Matrix Guidelines provides guidance on the requirements for Fisheries Liaison Officers and/or Fisheries Guide Vessels based on the level of fishing activity in an area and the activity being undertaken by the oil and gas operator;</li> <li>• Compensate any project-related damage to fishing gear in accordance with the Compensation Guidelines Respecting Damages Related to Offshore Petroleum Activity. Husky has a gear/vessel damage compensation program, to promptly settle claims for loss and/or damage that may be caused by Project-related activities such as drilling-associated surveys or offshore supply vessel operations. The scope of the compensation program includes replacement costs for loss or damaged gear and any additional financial loss that is demonstrated to be associated with the incident. Procedures are in place so that any incidents of contact with fishing gear are clearly detected and documented (e.g., time, location of contact, loss of contact, and description of any identifying markings observed on affected gear); and</li> <li>• With respect to offshore supply vessels travelling between the project area and supply base follow established shipping routes; and</li> <li>• Directly issue Notice to Shipping to One Ocean, FFAW-Unifor, seafood harvesters operating offshore, the C-NLOPB, the Canadian Coast Guard and the Fisheries Broadcast prior to the tow of any MODU outside the White Rose Field.</li> </ul> <p>In addition, proposed mitigation measures related to fish and fish habitat (above) would also mitigate effects on commercial fisheries.</p>	<p>year, detailing the specific activities that will be conducted within the Project Area in a given year. In that EA Update Husky will include changes (if any) to commercial fisheries and discuss the potential effects of Project to commercial fisheries.</p>
<p>Current Use of Lands and Resources for Traditional Purposes and Health and Socioeconomic Conditions of Indigenous Peoples (Section 6.7)</p>	<ul style="list-style-type: none"> <li>• Develop an Indigenous Fisheries Communications Plan for engagement with Indigenous groups that describes processes for providing regular operational updates throughout the exploration drilling program and for informing Indigenous groups in the case of an emergency. Discuss the details of frequency with Indigenous groups, according to their preference, during engagement on the plan. The plan would also include an appropriate feedback mechanism to address the ongoing concerns of Indigenous groups, fishers, and other ocean users.</li> </ul>	<ul style="list-style-type: none"> <li>• No follow-up is proposed to be implemented for routine Project activities.</li> </ul>

Valued Component	Mitigation	Follow-up
	<p>Proposed mitigation measures related to fish and fish habitat (Section 6.1), migratory birds (Section 6.3) and commercial fisheries (Section 6.6) (above) would also serve to reduce the potential environmental effects of the Project on Indigenous peoples and community values.</p>	
<p>Effects of accidents and malfunctions (Section 7.1)</p>	<ul style="list-style-type: none"> <li>• Implement measures and preventative actions into daily operation and maintenance of a MODU to mitigate the risk of a hydrocarbon spill, including frequent maintenance, testing and inspection of all equipment, best practices, good communication, audits of facilities and equipment and regular employee training;</li> <li>• Implement established Incident Coordination and Response Management Plan and Oil Spill Response Procedure - East Coast Oil Spill Response Plan, which include options and contingencies for responding to emergency events, including potential spills and well control events, and response methods and strategies for different levels of oil spills. Response methods considered include offshore containment and recovery, surveillance and tracking of spills, dispersant application, and wildlife response measures. Submit all relevant plans to the C-NLOPB prior to the start of any drilling activities;</li> <li>• Conduct a Net Environmental Benefit Analysis to assess and compare the feasibility and environmental and socio-economic impacts of employing different oil spill response techniques (including but not limited to dispersant application) to prevent or reduce contact of the oil with resources most likely to be affected;</li> <li>• In the case of a subsea blowout, mobilize a capping stack from Norway to the wellsite within 13 to 24 days from initiation;</li> <li>• In the event of a risk to shorelines from a spill resulting from Project associated activities, initiate countermeasures to divert hydrocarbons from potentially impacting environmentally sensitive coastal shorelines and socio-economic sensitive coastal areas. If situations arise where Project associated hydrocarbon reach shorelines, initiate response countermeasures;</li> <li>• During oil spill response operations for all tiers, initiate seabird monitoring from the outset, with assigned, trained personnel on charter vessels conducting seabird surveys and documenting observations to determine population densities in the area and the potential risk. If warranted, engage specialized contractors to support oiled wildlife response efforts;</li> <li>• Compensate for spill-related gear loss or damage (such as fouling) in accordance with <i>Compensation Guidelines Respecting Damages Relating to Offshore Petroleum Activity</i>; and</li> <li>• Conduct frequent maintenance, testing and regular employee training to minimize the likelihood of an accident or malfunction.</li> </ul>	<ul style="list-style-type: none"> <li>• In the unlikely event of an accidental event such as a large spill or a blowout, specific monitoring programs (e.g., environmental effects monitoring and follow up) may be required for the Project. In such case, these programs will be developed and implemented in consultation with the appropriate regulatory agencies.</li> </ul>

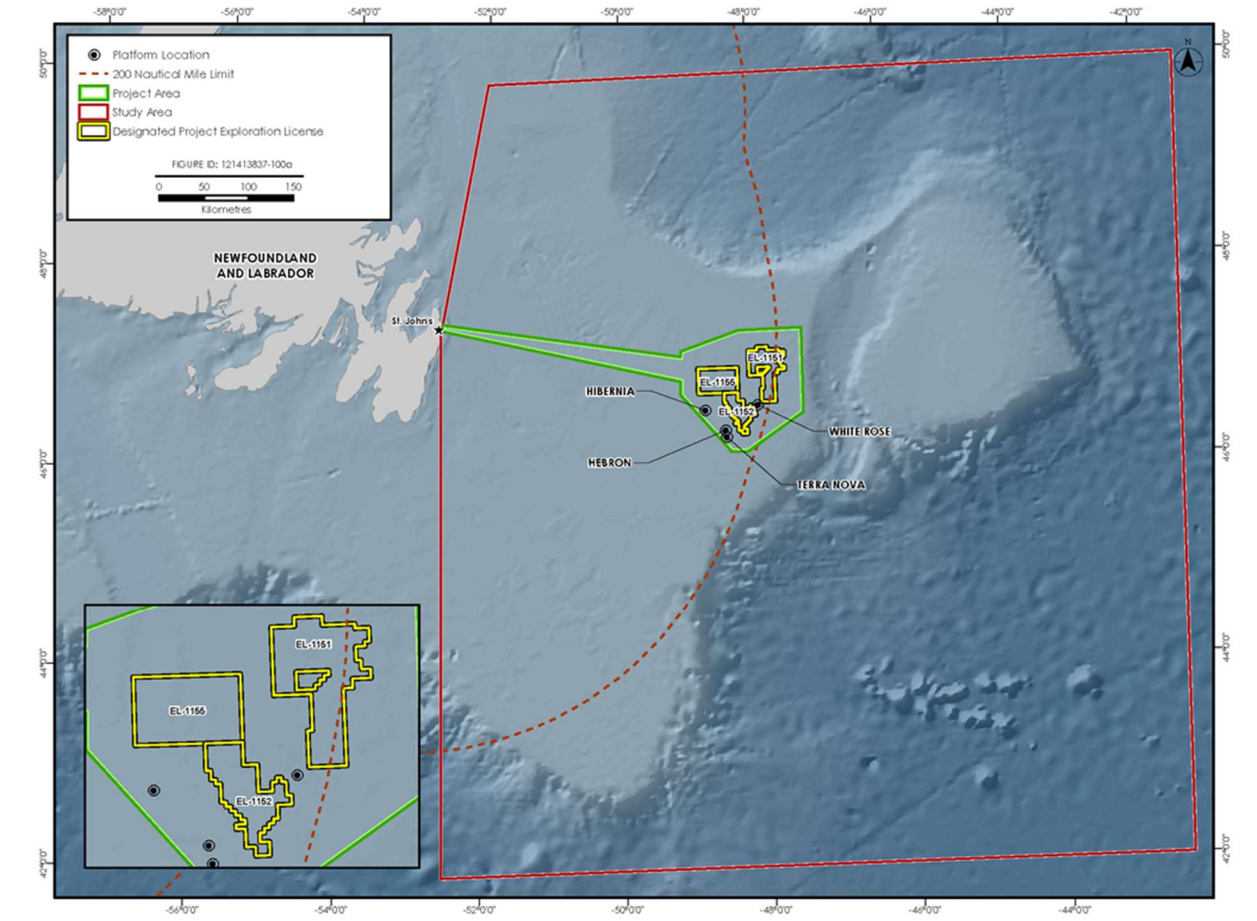
Valued Component	Mitigation	Follow-up
<p>Effects of the environment on the project (Section 7.2)</p>	<ul style="list-style-type: none"> <li>• Incorporate environmental criteria into engineering designs and sound planning, including testing (and treatment, if necessary) so that the physical conditions of the project area can be tolerated. All engineering design would adhere to national/international standards;</li> <li>• Adhere to regulatory design and fitness standards, including national and international standards which consider physical environmental criteria and the life of the expected design (i.e., choosing materials with sufficient durability and corrosion resistance);</li> <li>• Obtain a Certificate of Fitness from an independent, third-party certifying authority prior to the onset of drilling. The certifying authority may only issue a certificate of fitness in accordance with the <i>Newfoundland Offshore Certificate of Fitness Regulations</i> where it has verified that the installation is fit for purpose, can function as intended, and can remain in compliance with those regulations without compromising safety and polluting at the drill site or in the region in which the particular installation is to be operated. In addition, modifications or repairs to an installation that affect its strength, stability, integrity, operability, safety, or regulatory compliance would require review and acceptance by the certifying authority to ensure the continued validity of the certificate.</li> <li>• Conduct a site survey for each specific wellsite in advance to address shallow hazards, including bathymetry and potential for seabed instability;</li> <li>• Avoid, where possible, extreme weather conditions that are outside the operating limits of support vessels and helicopters;</li> <li>• Equip MODU and vessels with proper obstruction lighting, navigation lighting, and foghorns and maintain these in working condition;</li> <li>• Maintain properly functioning communication systems;</li> <li>• Monitor icing conditions on vessels and MODUs;</li> <li>• Conduct physical environment data observations, weather forecasting, and reporting in accordance with the <i>Offshore Physical Environmental Guidelines</i>;</li> <li>• Conduct analyses and model tests or simulations to determine behaviour of soils that support the installation of anchoring systems;</li> <li>• Develop and implement an Ice Management Plan, which would be comprised of: detection, monitoring and assessment, and physical management (e.g., towing or deflecting icebergs; breaking up sea ice);</li> <li>• Require the MODU to have the ability to disconnect the riser from the well in event of emergency in a matter of hours; and</li> </ul>	<ul style="list-style-type: none"> <li>• No follow-up in relation to potential effects of the environment on the Project.</li> </ul>

Valued Component	Mitigation	Follow-up
	<ul style="list-style-type: none"> <li>• Implement, standard operational procedures as appropriate to assist in offshore supply vessel and helicopter navigation during times of poor visibility. This includes reducing vessel or helicopter speed, adjusting flight altitude, and using appropriate sound and light signals. Navigational safety equipment will be kept in working condition at all times. Radio communication systems will be in working order for contacting other marine vessels, if necessary, as well as communication between the MODU, offshore supply vessels and shore; and</li> <li>• Mitigate the effects of severe weather through: <ul style="list-style-type: none"> <li>○ Careful and considered design in accordance with factors of safety, best engineering practice and adherence with standards and codes;</li> <li>○ Engineering design practices that will consider predictions for climate and climate change;</li> <li>○ Inspect and maintain programs that will reduce the deterioration of the infrastructure and will help to maintain compliance with applicable design criteria and reliability of the transmission system;</li> <li>○ Adopt an Ice Management Plan.</li> </ul> </li> <li>• Implement mitigation measures to reduce superstructure icing hazards on the offshore supply vessel including: <ul style="list-style-type: none"> <li>○ reducing vessel speed in heavy seas;</li> <li>○ placing gear below deck and covering deck machinery, if possible;</li> <li>○ moving objects that may prevent water drainage from the deck;</li> <li>○ making the ship as watertight as possible; and</li> <li>○ manual removal of ice if required under severe icing conditions.</li> </ul> </li> </ul>	
Cumulative effects	<ul style="list-style-type: none"> <li>• No additional mitigation measures were proposed to mitigate potential cumulative environmental effects; and</li> <li>• Proposed mitigation measures that apply for fish and fish habitat, marine mammals and sea turtles, migratory birds, special areas, commercial fisheries, accidents and malfunctions, and effects of the environment on the Project (above) would also apply to cumulative effects.</li> </ul>	<ul style="list-style-type: none"> <li>• No monitoring and follow-up requirements was proposed for potential cumulative effects of the Project.</li> </ul>

## Attachment 2

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FIGURE 1 PROJECT AREA AND ASSOCIATED LICENCES







**FIGURE 3 PROPOSED CRITICAL HABITAT FOR NORTHERN AND SPOTTED WOLFFISH**

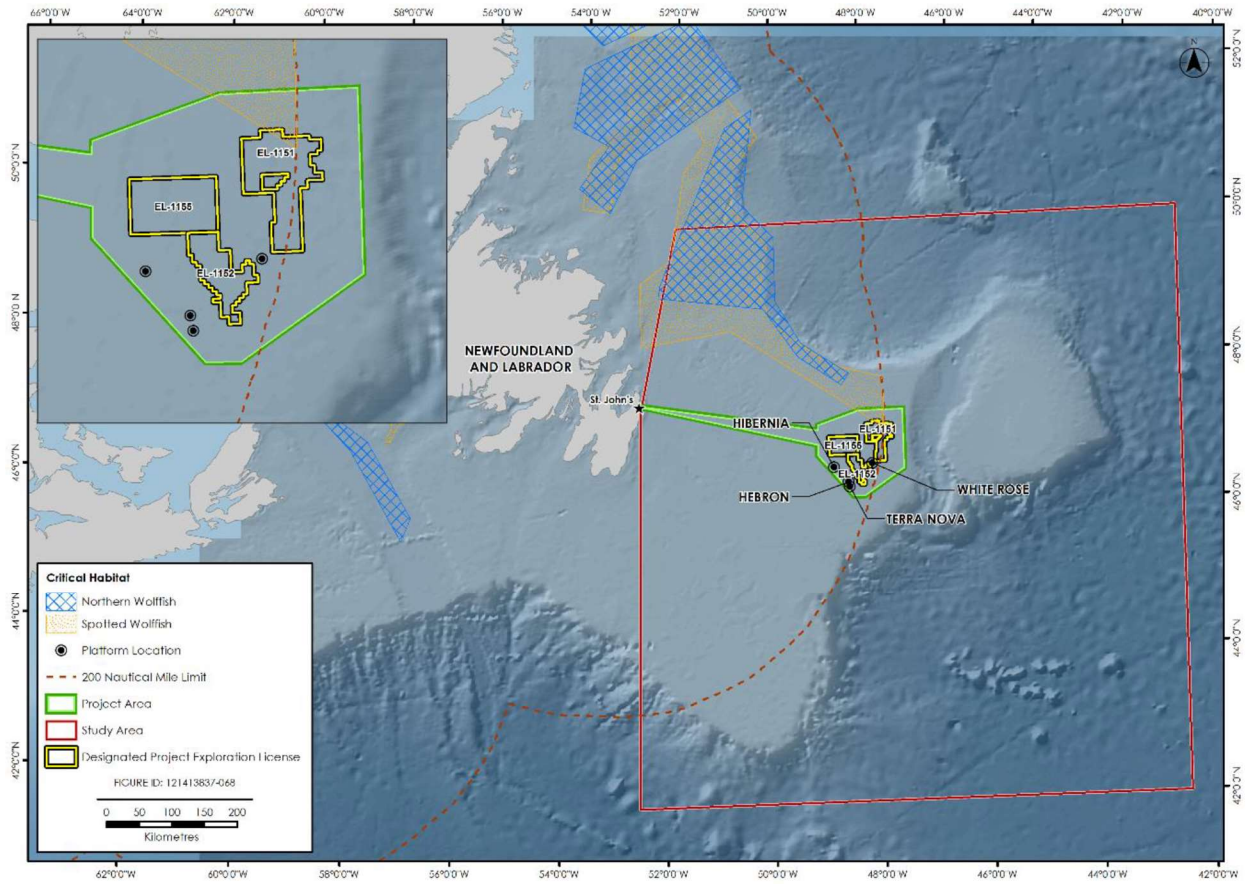


FIGURE 4 DOMESTIC (CANADIAN) HARVEST LOCATIONS, ALL SPECIES, 2012 TO 2016

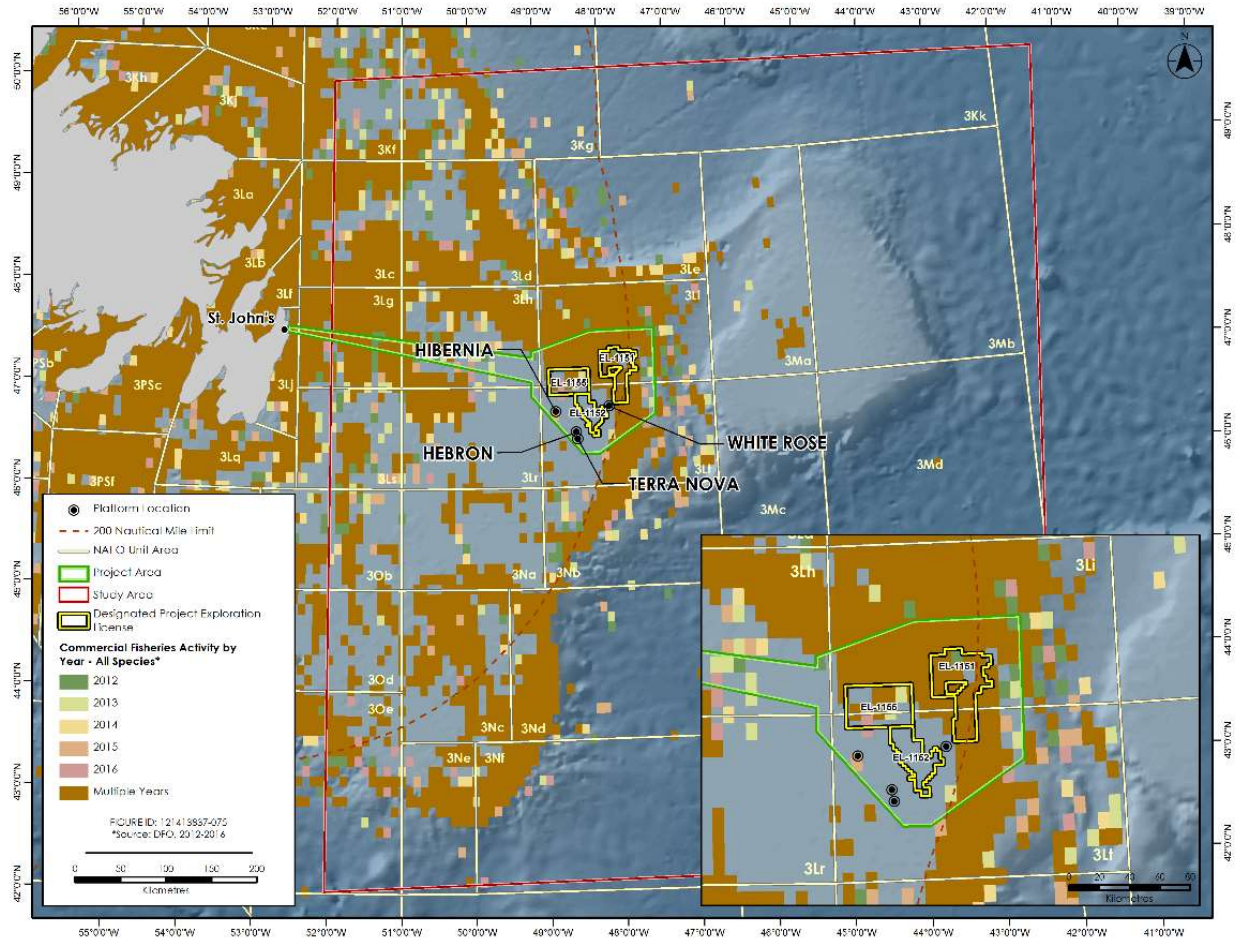




FIGURE 5 SNOW CRAB EXCLUSION ZONES AND THE PROJECT AND STUDY AREA

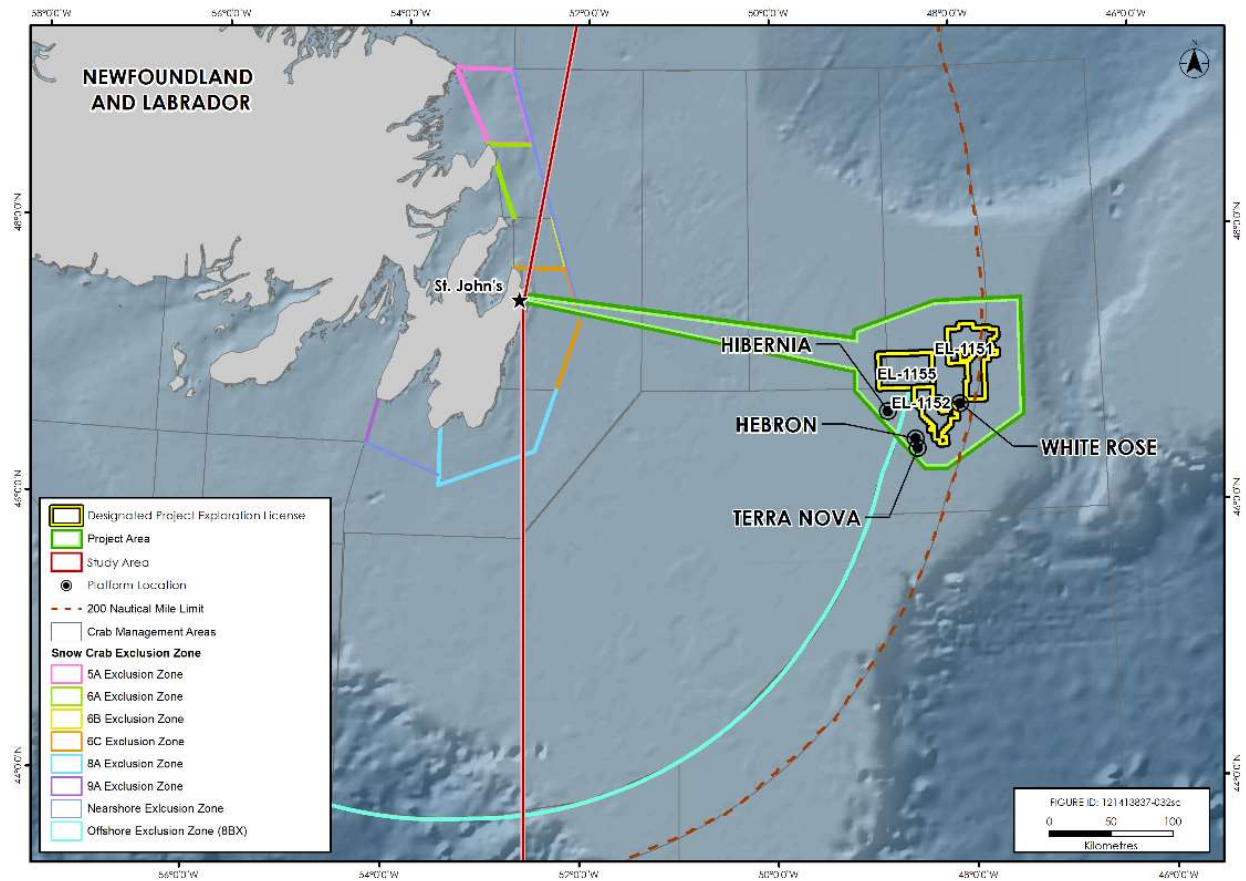


TABLE 1 SPECIAL AREAS WITHIN THE ZONE OF INFLUENCE OF ROUTINE PROJECT ACTIVITIES

Special Area	Distance from Closest Exploration Licence	Features of the Special Area
<b>Ecologically and Biologically Significant Areas<sup>1</sup></b>		
Northeast Slope (3L) [referred to as Northeast Slope in EIS]	Overlaps with exploration licence 1151	High aggregations of Greenland Halibut and Spotted Wolfish, which congregate in spring. Concentrations of cetaceans, pinnipeds and corals.
Eastern Avalon	Overlaps with transit route	Capelin spawning beaches, waterfowl areas and fish-eating seabird colonies. Cetaceans including Killer Whales and mysticetes, Leatherback Turtles and seals feed in the area from spring to fall.
<b>United Nations Convention on Biological Diversity Ecologically and Biologically Significant Areas</b>		
Slopes of the Flemish Cap and Grand Bank	27 kilometres from exploration licence 1151	Contains most of the aggregations of indicator species for Vulnerable Marine Ecosystems in the Northwest Atlantic Fisheries Organization (NAFO) regulatory area. Includes NAFO closures to protect corals and sponges and a component of Greenland halibut fishery grounds in international waters. Contains a high diversity of marine taxa, including threatened and listed species.
<b>NAFO Fisheries Closure Areas<sup>4</sup></b>		
Flemish Pass/Eastern Canyon (2)	47 kilometres from exploration licence 1151	Closed to protect extensive sponge grounds and large gorgonian corals (i.e., marine fish and fish habitat)
<b>NAFO Physical VME Indicator</b>		
Beothuk Knoll	60 km from exploration licence 1151	Cold water corals and aggregations of deep-sea fishes such as red fish.
<p><sup>1</sup> Under Canadian jurisdiction through pieces of legislation and other processes.</p> <p><sup>2</sup> Identified by BirdLife International to identify and protect critical bird habitats.</p> <p><sup>3</sup> Identified by United Nations Convention on Biological Diversity.</p> <p><sup>4</sup> Under mandate of Food and Agriculture Organization of the United Nations and NAFO.</p>		

**TABLE 2: PROJECTS AND ACTIVITIES CONSIDERED IN THE CUMULATIVE ENVIRONMENTAL EFFECTS ASSESSMENT**

Project / Activity	Overview
Hibernia Oilfield	<p>Located in the project area – south-western section and approximately 18.5 kilometers from the closest exploration licence (1155).</p> <p>Production activities at this oilfield are planned to extend throughout the temporal duration of the Project.</p>
Terra Nova Oilfield	<p>Located in the project area – southern section and approximately 17.1 kilometers from the closest exploration licence (1152).</p> <p>Production activities at this oilfield are planned to extend throughout the temporal duration of the Project.</p>
White Rose Oilfield and White Rose Extension Project	<p>Located in the project area – central/southern section and approximately 5.0 kilometers from the closest exploration licence (1152).</p> <p>Production activities at this oilfield are planned to extend throughout the temporal duration of the Project.</p>
Hebron Oilfield	<p>Located in the project area – southern section and approximately 13.2 kilometers from the closest exploration licence (1152).</p> <p>Production activities at this oilfield are planned to extend throughout the temporal duration of the Project.</p>
Bay du Nord Development Project (proposed)	<p>Located 99 kilometers northeast of the closest exploration licence (1151).</p> <p>If the proposed project is carried out, activities at this oilfield could partially overlap temporally with the Project.</p>
Offshore Petroleum Exploration - Drilling	<p>As of June 28, 2019, a total of 248 development wells, 60 exploration wells and 53 delineation wells had been drilled in the Jeanne d’Arc offshore area. The Jeanne d’Arc and eastern Newfoundland offshore area is also subject to on-going and planned offshore exploration drilling programs which have the potential to temporally overlap with the proposed project including:</p> <ul style="list-style-type: none"> <li>• Equinor Canada Limited Flemish Pass Exploration Drilling Project 2018-2028 (Equinor’s closest exploration licences 1142 is 150 kilometres from Husky’s exploration licence 1151);</li> <li>• ExxonMobil Canada Limited Eastern Newfoundland Offshore Exploration Drilling Project 2018-2030 (ExxonMobil’s closest exploration licence 1137 is adjacent to Husky’s exploration licence 1155);</li> <li>• CNOOC Petroleum North America ULC (formerly known as Nexen Energy ULC) Flemish Pass Exploration Drilling Project 2018-2028 (CNOOC’s closest exploration licences 1144 is 61 kilometres from Husky’s exploration licence 1151);</li> <li>• BP Canada Energy Group ULC Newfoundland Orphan Basin Exploration Drilling Project 2017-2026 (BP Canada’s closest exploration licence 1149 is 181 kilometres from Husky’s exploration licence 1151);</li> </ul>

Project / Activity	Overview
	<ul style="list-style-type: none"> <li>• ExxonMobil Canada Limited Southeastern Newfoundland Offshore Exploration Drilling Project 2020-2029 (ExxonMobil's closest exploration licences 1136 is 77 kilometres from Husky's exploration licence 1152);</li> <li>• Chevron Canada Limited West Flemish Pass Exploration Drilling Project 2021-2030 (Chevron's closest exploration licence 1138 is 69 kilometres from Husky's exploration licence 1151);</li> <li>• BHP Canada Exploration Drilling Project 2019-2028 (BHP's closest exploration licence 1158 is 89 kilometres from Husky's exploration licence 1151);</li> <li>• Equinor Canada Limited Central Ridge Exploration Drilling Project 2020-2029 (Equinor's exploration licences 1159 and 1160 are adjacent to Husky's exploration licence 1151); and</li> <li>• Suncor Energy Offshore Exploration Partnership Tilt Cove Exploration Drilling Project 2019-2018 (Suncor's exploration licence 1161 is 15 kilometres from Husky's exploration licence 1152).</li> </ul>
<p>Offshore Petroleum Exploration – Geophysical and Other Exploration Activities</p>	<p>Offshore geophysical surveys may include two-dimensional, three-dimensional, or four-dimensional geophysical data acquisition.</p> <p>There are offshore geophysical programs in the eastern Newfoundland and Jeanne d'Arc offshore areas in various stages of approval which have the potential to temporally overlap with the proposed project:</p> <ul style="list-style-type: none"> <li>• Husky Energy Jeanne d'Arc Basin/Flemish Pass Regional Seismic Program, 2012-2020;</li> <li>• Suncor Energy's Eastern Newfoundland Offshore Area 2D/3D/4D Seismic Program, 2014-2024;</li> <li>• WesternGeco Canada Southeastern Newfoundland Offshore Seismic Program, 2015 to 2024;</li> <li>• WesternGeco Canada Eastern Newfoundland Offshore Seismic Program, 2015 to 2024;</li> <li>• ExxonMobil Canada Eastern NL Geophysical Program 2015-2024;</li> <li>• CGG Services (Canada) Inc. Newfoundland Offshore 2D 3D 4D Seismic Program 2016-2025;</li> <li>• Seitel's East Coast Offshore 2D 3D 4D Seismic Program 2016-2025;</li> <li>• Fugro GeoSurveys Offshore Seafloor and Seep Sampling Program, 2017-2027;</li> <li>• Polarcus UK Ltd. Eastern Newfoundland Offshore 2D, 3D and 4D Seismic Program 2018-2028;</li> <li>• CNOOC Petroleum North American ULC Newfoundland and Labrador Offshore Geophysical, Geochemical, Environmental and Geotechnical Program, 2018-2023;</li> </ul>

Project / Activity	Overview
	<ul style="list-style-type: none"> <li>• Multiklient Invest AS Newfoundland Offshore Seismic Program, 2018-2023;</li> <li>• BP Canada Energy Group ULC – Ephesus Prospect ROV Survey 2019-2024; and</li> <li>• Capelin 3D Seismic Survey of EL 1138 Offshore Newfoundland and Labrador (2018-2021);</li> </ul>
Fishing Activity	Commercial fisheries within and around the project area are extensive and diverse. Commercial fishing activities are currently ongoing and will continue for the foreseeable future.
Other Marine Vessel Traffic	<p>Vessel traffic includes tanker traffic and supply vessels associated with the existing offshore oil developments, as well as cargo ships, navy ships, and fishing vessel traffic.</p> <p>Occurs through the study area, throughout the year.</p>
Hunting Activity	<p>Wildlife (especially seabird) populations off Newfoundland and Labrador are subject to hunting.</p> <p>Although little or no hunting is expected to occur in the project area, hunting activities do affect the bird and seal populations that occur in the regional study area.</p>