

Newfoundland Bay du Nord Development Project

Review and Comments on the Draft Environmental Impact Statement

Prepared by Miawpukek First Nation and Shared Value Solutions

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1.0 INTRODUCTION

Equinor Canada Ltd. (Equinor), in partnership with Husky Oil Operations Limited (Husky), is proposing to develop the Bay du Nord Project (the Project), an offshore oil and gas production facility approximately 500 kilometres (km) east of St. John's, Newfoundland and Labrador (Figure 1). The Project is comprised of two broad areas, the Core Bay du Nord Development (Core BdN Development) and Project Area Tiebacks (PATs). The Core BdN Development is the focus of the Project and includes the development of several significant discoveries, including Bay du Nord, Bay de Verde, and Baccalieu. PATs are within approximately 40 kilometres (km) of the Core BdN Development and have yet to be thoroughly explored. Equinor proposes to continue exploration in the PATs and will develop them if economically recoverable reserves that can be tied-back to the Core BdN production facility are discovered.

The Core BdN Development has an area of approximately 470 square kilometres (km²), with water depths ranging from approximately 1,000 metres (m) to 1,200 m. Seabed infrastructure would have a footprint of approximately 7km². The total potential well count for the Core BdN Development ranges from 10 to 40, depending on ongoing evaluations and delineation of reservoirs. Five to 20 of the wells would be for production, while the remaining five to 20 would be injections wells. The Core BdN Development has a proposed life of 12 to 20 years. Should Equinor develop PATs, production would be extended to 30 years. The entire Project Area, which encompasses PATs, is approximately 4,900 km² in size. Water depths within this area range from 340 m to 1,200 m. Up to 20 additional wells would be required to support development of the PATs. A conceptual illustration of how PATs may be configured is provided in Figure 2.

Equinor has prepared the Environmental Impact Statement (EIS) to cover a temporal and spatial scale that includes development of both the Core BdN Area and PATs. The scope of activities covered in the EIS include:

- Offshore construction, installation, hook up, and commissioning
- Production and maintenance operations
- Drilling activities
- Supply and servicing
 - Offshore supply vessels
 - Standby vessels
 - Helicopter support
- Crude oil shipping
- Supporting surveys
 - o Geohazard / wellsite and seabed surveys
 - Geophysical surveys
 - Geotechnical / geological surveys
 - Environmental surveys
 - Remotely operated vehicle (ROV) / autonomous underwater vehicle (AUV) / video surveys
- Decommissioning



It is anticipated that the work will begin as early as 2021, beginning with site surveys. Production is expected to commence as early as 2026.

Miawpukek First Nation (MFN) has reviewed the draft EIS with support from our environmental consultants, Shared Value Solutions Ltd (SVS). Comments on this document and the environmental assessment (EA) process, in general, are provided in this report. These comments build on previous communications from MFN sent to the Proponents and the Crown

The rights, values, and interests of MFN are the focus of these comments, and on this basis we focus on key issues of commercial and Aboriginal fisheries, species at risk, Atlantic salmon, the marine environment, socioeconomics and community well-being. This report summarizes the position of MFN regarding the Project and outlines, on behalf of our community, recommendations and requested accommodations.

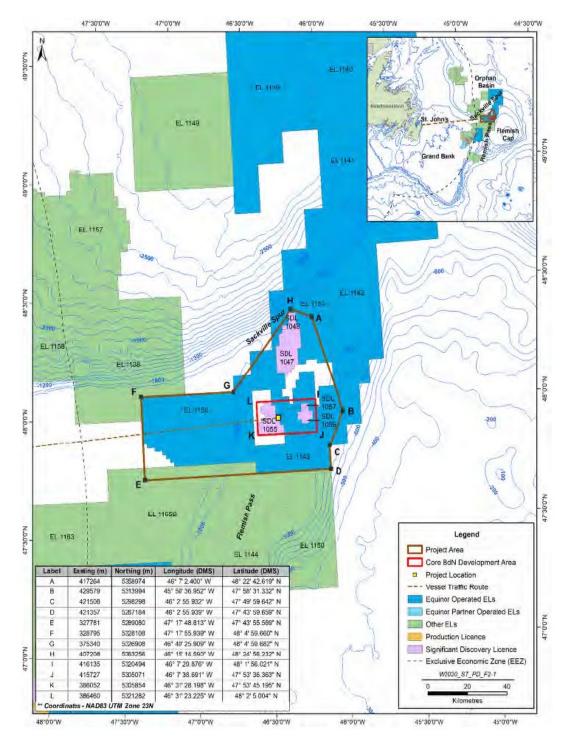


Figure 1. Location of the Project and Project Area (Source: Equinor Canada Ltd., 2020).



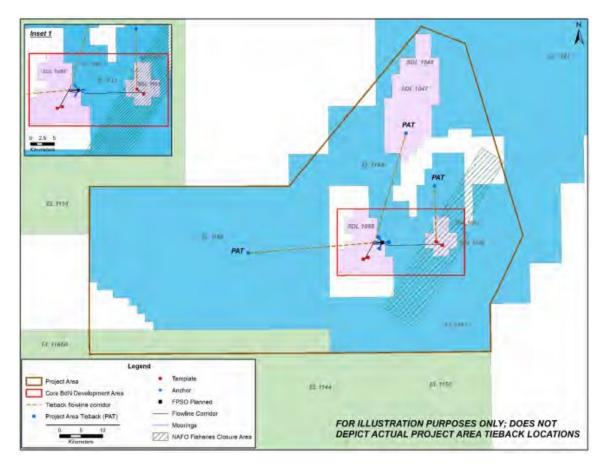


Figure 2. Conceptual layout of Project Area Tiebacks (PAT). The Core Bay du Nord Development Area is outlined in red (Source: Equinor Canada Ltd., 2020).

2.0 MIAWPUKEK FIRST NATION

Miawpukek Mi'kamawey Mawi'omi (also known as Miawpukek First Nation) is located on the south shore of Newfoundland along the Conne River at the confluence of the Bay D'Espoir. The community became a permanent settlement in the 1820s but was used long before that as one of the many semi-permanent seasonal camping grounds of the Mi'kmaq on the south shore of Newfoundland. Oral Tradition states that the community reserve lands were established in 1870. This reserve was given the name Samiajij Miawpukek Indian Reserve, which translates to "too small" reserve because the land is considered much too small to carry out traditional activities including hunting for caribou. This name was reportedly chosen partly in frustration and partly out of a sense of humour by the people of MFN.

The total on-reserve population of MFN was recorded as 956 in 2016 (Stats Canada, 2016). In 1987, the community of MFN was established as a reserve, and since that time has changed from an isolated community with almost 90% unemployment to a vibrant community with nearly 100% full or part-time employment.

2.1 HISTORIC OVERVIEW

Covering a vast area, the Mi'kmaq territory of Mi'kmaki stretches from the Gaspe Peninsula in Quebec, through New Brunswick to northern Maine, across Nova Scotia, Prince Edward Island and the Island of Newfoundland, which is known as Ktaqamkuk. The Mi'kmaq of Newfoundland have a shared ancestry with Mi'kmaq from across Mi'kmaki. Their relationship with the land, and the surrounding waters, stretches back over at least 10,000 years.

The earliest use of Ktaqamkuk by the Mi'kmaq is something that is still debated by Western scholars. It is known that Mi'kmaq hunters and fisherman would stay seasonally on the island from as early as the 1600s, although it is likely that this occurred much earlier (Pastore, 1998). French and English historical records suggest that the Mi'kmaq didn't establish permanent residences on Ktaqamkuk until the 1760s (Bartels and Janzen, 1990). However, the idea of permanent residence is rooted in the colonialist ideas and perceptions of the time. It does not account for the Mi'kmaq way of life, which at that time was seasonal and revolved around frequent travel throughout traditional territories to access resources. This would have included travel between Unamaki (Cape Breton) and Taqamkik for hundreds of years before the land became known as Canada. Thus, it is argued by many scholars that the island of Ktaqamkuk is part of the Traditional Territory of the Mi'kmaq.

The people of Miawpukek First Nation assert that the entire Island of Ktaqamkuk is included in their Traditional Territory. Oral history passed down through generations holds that the ancestors of Miawpukek First Nation have lived and travelled Ktaqamkuk since time immemorial. The Mi'kmaq hunted, fished and travelled back and forth along the coasts year-round. Mi'kmaq from the mainland travelled back and forth between Unamaki and Ktaqamkuk, thus maintaining constant connections between the island and the mainland. This occurred as recently as the 1760s when Chief Jeannot Pequidalouet led a group of Mi'kmaq across the Cabot Straight to avoid hostility and mistreatment at the hands of the British (Martijn, 1989). It should be noted that the Mi'kmaq have a long history as explorers, and similar trips likely occurred frequently before this time but were not documented by European colonizers. This history is best summarized by Frank Speck (1922) who completed ethnographic surveys on Newfoundland in the summer of 1914:

Throughout Newfoundland the [Mi'kmaq] Indians refer to their predecessors as Sa'qawedjkik 'the ancients,' speaking of them as though they were the first inhabitants of the island [...]. The Sa'qawedjkik families are said to have become completely merged with the later [Mi'kmaq] comers from Cape Breton and Labrador. (Speck, 1922, p. 123)

The Mi'kmaq of Ktaqamkuk/Newfoundland have continued to live, hunt, fish, trap and guide on the island over the centuries. During the later part of the 18th century through the 19th century, Mi'kmaq guides helped European explorers to visit and map the areas that were already being used by the Mi'kmaq. In 1822, William Cormack, the first European credited with crossing the island, was guided by Sylvester Joe, a Mi'kmaq traveller. During their journey, the two encountered several First Nations people in areas that were thought, by Europeans, to be uninhabited (Pastore, 1998). Ironically, to earn a wage and support themselves, the Mi'kmaq would go on to work on major projects such as the railroad, which ultimately facilitated the expansion of European colonizers who would fight for control over the natural resources upon which the Mi'kmaq traditional livelihood depended.



Where Newfoundland was not part of Confederation until 1949, the Mi'kmaq of Miawpukek were not included under the Indian Act of 1876. In many ways, this may have been beneficial because they were not subject to the harmful actions exerted by the federal government through this act. However, by being outside of the Indian Act they were also not afforded to the same Aboriginal rights granted to Indigenous Peoples across Canada. This lack of protection, combined with political, economic and religious pressure, led to the continuous erosion of traditional practices and ways of life.

In 1984, after years of fighting for recognition, the federal government granted status to the people of Miawpukek under the Indian Act. This was followed three years later by the allocation of a 500-hectare reserve in Conne River named by Council as the Samiajij Miawpukek Indian Reserve, which translates closely to "too small Indian Reserve." The larger Traditional Territory, known as Mimaju'nnulkwe'kati, covers an area greater than 17,000km² and has never been surrendered or ceded. This area has been used by the members and ancestors of Miawpukek First Nation since time immemorial. Despite repeated land claims and court battles, this area has never been formally recognized. However, the right has never been extinguished and the people of Miawpukek continue the struggle for recognition to this day.

From their earliest time on Ktaqamkuk, the ancestors of MFN relied on hunting and trapping for sustenance. Diet and preferred location changed with the seasons. Spring and summer were typically spent mostly along the coasts, while the Mi'kmaq returned inland, along rivers and lakes, during fall and winter.

The caribou played a special role for the Mi'kmaq of Ktaqamkuk/Newfoundland, due to their size and abundance. They provided nutritious food but also hide for clothing and construction. However, the expansion of European colonists throughout the eighteenth and nineteenth centuries pushed the Mi'kmaq further and further away from caribou herds, making it more difficult to rely on them for sustenance. Subsequently, large-scale caribou hunting resulted in catastrophic declines of the island population. This pressure nearly caused the extinction of the herd when it declined from an estimated 40,000 individuals in 1900 to approximately 2,000 in the 1930s (Bergerud, 1969). Adapting to the changing circumstances, the Mi'kmaq of Ktaqamkuk/Newfoundland were forced to shift their diets. While fish was always an important part of the Mi'kmaq diet, reduced access to the caribou caused fish, Atlantic salmon in particular, to become much more important.

2.2 RIGHTS AND INTERESTS

The Crown has a duty to consult and accommodate First Nations pursuant to section 35 of the *Constitution Act*, 1982. This is a legal requirement that has been repeatedly upheld by the Supreme Court of Canada. Moreover, the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), which has been adopted by Canada, requires that states cooperate in good faith with Indigenous Peoples so that they obtain free, prior and informed consent. According to UNDRIP Section (2) and (3) of Article 32:

2. States shall consult and cooperate in good faith with the indigenous peoples concerned through their own representative institutions in order to obtain their free and informed



consent prior to the approval of any project affecting their lands or territories and other resources, particularly in connection with the development, utilization or exploitation of mineral, water or other resources.

3. States shall provide effective mechanisms for just and fair redress for any such activities, and appropriate measures shall be taken to mitigate adverse environmental, economic, social, cultural or spiritual impact.

The proposed offshore drilling site is within fishing grounds that are part of the Traditional Territory of MFN currently used by community members. There are potential major environmental, cultural, and socio-economic risks associated with all phases of drilling and exploration that could impact MFN's rights and interests. The offshore drilling in Flemish Pass has the potential to cause direct and indirect impacts from all phases. Should the drilling program determine the presence of significant quantities of petroleum hydrocarbons and result in the development of industrial extraction, there will be additional direct and indirect impacts on MFN's rights and interests.

MFN fisheries (offshore, inshore, and land-based), traditional activities, and culture could be at risk from any potential spills, leaks, blowouts, or other releases of petroleum, cuttings, lubricant, or other products from the proposed drilling. MFN's rights to navigable waters may also be impacted from increased traffic in the region and in and around St. John's Harbour. These potential risks to the natural environment, navigation, and the community of MFN underscore the need for meaningful and ongoing consultation throughout the Environmental Assessment (EA) process and the need for mitigation and accommodation measures to address these potential impacts to MFN rights and interests.

MFN relies on hunting, fishing, and trapping for commercial, recreational, and Aboriginal fisheries. Species that are targeted include salmon, mackerel, cod, herring, redfish, brook trout, rainbow trout, eel, capelin, smelt, tuna, whelk, scallop, snow crab, lobster, and surf clam. MFN possesses several commercial licenses for fishing in NAFO fishing zones 3P, 3KL, and 3LN (Error! Reference source not found.Error! Reference source not found.). The community utilizes a Food, Social and Ceremonial licence to target species off the south shore in Zone 3P. Commercial fishing by MFN in zones 3KL and 3LN overlap with the Project. Impacts to any of the species listed above represent potential effects on the Aboriginal rights of MFN.



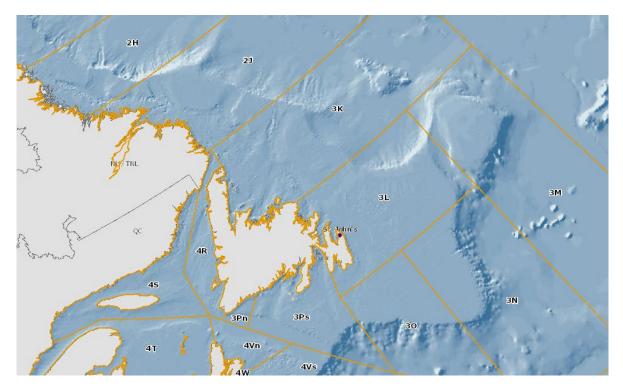


Figure 3. Northwest Atlantic Fisheries Organization (NAFO) Zones (DFO).

3.0 REVIEW FINDINGS

Comment 1: For the Project, Equinor indicates that a capping stack will be sourced through their membership with Oil Spill Response Limited (OSRL). The Proponent acknowledges that the location of the capping stack and resulting transportation times will be a factor in the time required to kill the well. Equinor provides a range for deployment of 18 to 36 days, the lower end of which is a scenario that includes sourcing the capping stack from Norway in the summer, favourable shipping conditions, and direct transport to the site. The longer scenario involves shipping the capping stack from Brazil in winter and non-direct transport to the site (i.e., inclusion of a port call for installation). It is apparent from the scenarios provided that a locally sourced capping stack would allow for more rapid deployment and, thus, a significant reduction in impacts to the marine environment.

Recommendation 1a: MFN asserts that it is critical to have a locally managed capping stack, deployment entity, and appropriate capacity for equipment modification and rapid staging and deployment situated in Newfoundland or Atlantic Canada to mitigate the risks associated with an uncontained blowout. This is important on a project-level basis, but also to account for the cumulative risks of all current and future exploratory and production oil and gas projects. We would also support the formation of a consortium, similar to the Marine Well Containment Company (https://marinewellcontainment.com/), whose purpose is to provide at-the-ready state-of-the-art well containment services and technology to operators in the U.S. Gulf of Mexico. Similar industry-led consortia exist in other geographies where offshore oil and gas drilling is commonplace, such as the Helix Well Containment Group (https://www.hwcg.org/) that also serves the Gulf of Mexico and WellCONTAINED (https://wildwell.com/well-control/wellcontained/), which has capping stacks in Scotland and Singapore. MFN's proposed locally managed entity may also be involved in the continual research and development of best available and safest technology (BAST). Whether this

effort is funded by a consortium of all offshore oil and gas proponents in Atlantic Canada and/or the Crown is of no consequence to MFN; someone must fund and ensure this critical risk mitigation measure to protect MFN's rights, and to reduce the inequitable burden of risk MFN bears in relation to the exercise of our rights.

Recommendation 1b: Equinor indicates that a Well Capping and Containment Plan will be developed for the Project. MFN requests that this plan be provided for review upon development.

Comment 2: The current approach being taken by proponents for the involvement and capacity support of Indigenous communities in Impact Assessments (IAs) for offshore exploration and development projects is seriously deficient. MFN is being inundated with requests for meetings, input, and document reviews. This includes requests for participation during the Impact Assessment process, after approval, and during exploration (e.g., EIS documents, communication plans, spill reports, etc.). With very limited staff capacity and funding, MFN is significantly challenged to participate effectively in the process. This situation is worsening as more projects are being proposed or moving forward in the exploration process, into Significant Discovery Licenses or Production Licenses. The current situation does not in any way represent meaningful consultation by the Crown—which ultimately bears the duty to consult, and where appropriate, accommodate—or by proponents, in discharging procedural aspects of the Crown's duty to consult and accommodate. The complex nature and longevity of these exploratory drilling projects warrant more meaningful consultation and involvement of MFN and other affected Mi'kmaq Nations throughout the entire lifecycle of the Project. Moreover, proponents should coordinate this involvement to mitigate the cumulative effects of the oil and gas industry on the health and socioeconomic conditions of Indigenous communities. Due to the complexity and number of projects and documents that must be reviewed, MFN requires adequate capacity funding and support to enable:

- a) effective understanding and evaluation of technical and regulatory documentation;
- b) community-based decision making, with specific attention to MFN's Aboriginal fishery, about MFN's response to offshore projects such as Central Ridge; and
- c) planning and preparation to enable MFN's involvement and participation in the regulatory process and the potential socioeconomic accommodations and opportunities MFN may wish to pursue associated with the projects.

Recommendation 2: MFN firmly believes that an environmental advisory committee (EAC) must be formed, as soon as possible, to provide a forum for ongoing consultation and oversight on potential impacts and mitigation/accommodation measures for MFN's rights and interests and those of and other affected Mi'kmaq Nations, for this Project and other offshore projects. Members of the EAC may include a representative from all potentially affected Mi'kmaq Nations, a representative from the Canada-Newfoundland and Labrador Offshore Petroleum Board (C-NLOPB), and/or the Impact Assessment Agency of Canada (IAAC). The mandate of the EAC should be guided by a Terms of Reference codeveloped by Indigenous Nations and the previously mentioned agencies. The Proponent, or a consortium of proponents, must provide sufficient funding to support the EAC in its endeavours. The EAC would act as a technical advisory committee and would be responsible for:

 Identifying common priorities (economic development opportunities, environmental research initiatives, knowledge gaps, mitigation measures, etc.) between Indigenous communities and provide a framework for exploration.



- Providing informed advice to the IAAC, C-NLOPB, and the industry on addressing concerns and impacts to Indigenous Rights and interests.
- Overseeing the continued collection and incorporation of Indigenous Knowledge through community-led Indigenous Knowledge studies.
- Reviewing and providing input on all monitoring programs, response plans, etc., including, but
 not limited to, the Fisheries Communication Plan, Spill Response Plan, Spill Impact Mitigation
 Assessment, seabed investigation survey results, and results from the various follow-up
 monitoring programs.
- Ensuring regional consultation and engagement with community leadership, Elders, and Indigenous monitors from impacted communities.
- Enabling Indigenous Nations to participate in the oversight of offshore oil and gas exploratory
 drilling projects. The EAC may enable and support Indigenous Monitors to work alongside
 Environmental Monitors (EMs), Marine Mammal Observers (MMOs), etc., during
 environmental effects monitoring and follow-up programs. This Indigenous Monitoring
 Program will help to build capacity within the C-NLOPB, IAAC, and industry to better
 understand and incorporate Indigenous Knowledge into the monitoring of offshore oil and
 gas infrastructure. It will also facilitate the sharing of capacity between the various
 environmental experts involved in the industry and Indigenous communities.
- Review and provide comments on the results from environmental effects monitoring and follow-up programs and provide input on adaptive management approaches.

Comment 3: For information pertaining to MFN Indigenous Knowledge (IK), Equinor has used information from face-to-face meetings and workshops, telephone conversations, emails and letter correspondence, publicly available land claim documents, government documents and data, the community website, and reports and studies completed for other projects. This is not a meaningful attempt by the Proponent to incorporate MFN's Indigenous Knowledge into the Project. To date, MFN has yet to complete a thorough community-led Traditional Knowledge and Land Use Study for the Project Area. The collection of this knowledge takes planning, time, coordination, and resources. IK is a living body of knowledge that is passed down through generations. Individuals grow in their knowledge throughout their entire lives by listening, observing, and doing. IK is also often rooted in the natural world and can be very specific and detailed when it comes to places and landscapes. This knowledge is incredibly valuable for informing design, mitigation, monitoring, impact assessment and accommodation. It is being omitted to the detriment of the EA process.

Thus far, there have been no meaningful attempts by the Proponent, or the Crown represented by the IAAC, to collect or integrate any IK from MFN. The Proponent has offered funding to complete a highly scoped, Atlantic-wide IK study which would then be used for all offshore projects going forward. As previously stated by MFN, this approach is not commensurate with the planned level of offshore activity that is currently happening, and which is planned in the future, and is not acceptable to MFN. This has been communicated to both the Crown and the Proponent on several occasions. Alternatively, proponents are seeking to fund an IK project through the ESRF; however, it is unclear at the time of writing whether that will become a reality.

Recommendation 3: IK is difficult to collect and document, and must be done with care and to appropriate standards to ensure it is authentic, verifiable, representative, and defensible. In addition,



sensitive information cannot just be handed over to the Proponent without ensuring that the proper protocols and protections for MFN and any participating community members' intellectual property (IP) and confidentiality are in place. MFN requires that sufficient resources for the collection of the information requested be provided. This should be completed in accordance with MFN's engagement protocol. Without this highly important baseline information (both in terms of the IA process and the process to determine potential impacts to MFN's S. 35 and other Aboriginal Rights), the IA must be considered incomplete. MFN has shared its Guidebook for the Collection of Aboriginal Traditional Knowledge with the Proponent. This detailed guide provides information on the formative steps and methodology necessary for a successful IK study that is protective of MFN's rights and interests. For the IA process to be completed such that the Honour of the Crown and the Crown's obligations are met, the Proponent and/or IAAC must provide accommodations in the form of resources to MFN for internal coordination, the collection of IK, and reporting. Although the proponent is delegated procedural aspects of the duty to consult and the environmental assessment process, it is ultimately the responsibility of the Crown to ensure that this IK is then meaningfully considered and incorporated into the IA process, the Crown consultation process, and any further Crown accommodations necessary.

Comment 4: The southern Newfoundland population of Atlantic salmon is considered threatened by the Committee on the Status of Endangered Species in Canada and already faces many risks. The people of MFN have witnessed the continual and alarming decline of this species because of a range of factors including aquaculture, overfishing, forestry, and at-sea mortality. Returns of adult salmon to the Conne River reached an estimated 398 individuals in 2019, a drop from approximately 454, 712, and 1,230 during the years of 2018, 2017, and 2016 respectively (Fisheries and Oceans Canada [DFO], 2019; pers. comm. Brian Dempson, DFO). This is down from an average of 2,432 from 1992-2016 and highs of 10,000 reached during the 1980s (Dempson, O'Connell, & Schwarz, 2004). The continued exploration in offshore Newfoundland will potentially exert direct impacts and cumulative effects on Atlantic salmon through seismic effects, changes to water quality, major accidents and malfunctions, and more. These effects may cause stress to migrating salmon, induce behavioural changes, reduce feeding efficiency and, in limited circumstances, direct mortality. Atlantic salmon migrate through the Project Area on their way to feeding grounds, and again on their return journey to Conne River and other rivers on the south shore of Newfoundland. The population of these salmon is already in such a poor condition that additional cumulative effects may further increase at-sea-mortality, resulting in the extirpation of salmon from rivers in MFN Traditional Territory, rivers that have had healthy salmon runs since time immemorial. Any negative effects to Atlantic salmon from the Project would represent a direct impact on the rights and interests of MFN.

Recommendation 4a: Due to the value of Atlantic salmon to the MFN community, the continual decline in numbers of returning adults, and the potential effects of the Project, it is necessary that the Proponent and Canada apply the precautionary principle to mitigate potential harm, especially given the already extremely fragile state of the stock. Moreover, any serious harm to fisheries must be offset through an Authorization under the Fisheries Act. This may be achieved, in part, through the delivery of funds to MFN for engaging in a feasibility study for evaluating potential recovery strategies of Atlantic salmon in southern Newfoundland. This research would benefit the local restoration priorities for Atlantic salmon. According to the Fisheries Productivity Investment Policy: Proponent Guide to Offsetting (DFO, 2013), providing funding for this type of research can be considered a Complimentary Measure. The results of this feasibility study would be used to inform recovery actions taken by MFN, the province of Newfoundland and Labrador, and DFO.

Recommendation 4b: Based on the outcome of the feasibility study described above (Recommendation 4a), MFN will identify preferred recovery strategies for Atlantic salmon on the south shore of Newfoundland. In order to undertake the recommendations from this study and the recovery of salmon, the Proponent should provide funding to MFN. In this way, the Proponent may be considered by Miawpukek to be a supporting partner in the recovery efforts.

Recommendation 4c: The Proponent has not completed any targeted baseline monitoring of salmon movement through the Project Area. As a result, baseline data on the migration and behaviour of Atlantic salmon while at sea is insufficient to adequately assess the effects of the Project. To better evaluate the potential effects of the Project on Atlantic salmon migrating through and near the Project Area, the Proponent should provide funding for tracking studies of Atlantic salmon (e.g. using satellite pop-up tags) to be completed before any exploration activities take place. These studies would improve knowledge of salmon movements during the post-smolt and adult stages of their life cycle. Once baseline data has been collected, it will be necessary for follow-up monitoring to occur during and after the exploration Project.

Rather than initiating new projects, the Proponent should provide funding to support ongoing research projects or programs. This would allow the research protocol for any study to be designed by established organizations and integrated with existing research. Organizations involved in the tracking of marine fishes include MFN, the Atlantic Salmon Federation, the Ocean Tracking Network, and DFO. These organizations are already engaged in projects aimed at understanding the movements of Atlantic salmon while at sea. In addition to supporting these studies, funding for capacity building and training of MFN community members should be provided directly to MFN. This funding should be in addition to any contributions made on behalf of the Proponent to the Environmental Studies Research Fund (ESRF).

Comment 5: The potential for a large spill, such as the recent Sea Rose spill event, is one of the most significant concerns for MFN related to the Project. The spill trajectory and fate modelling undertaken by the Proponent is complex in nature and requires specialized technical expertise to fully understand. Despite its complexity, MFN has a desire to understand the trajectory modelling that has been completed for the Project, including the inputs and assumptions of the model, to better determine the risks our community faces should a severe blowout or spill occur and to ensure the community is prepared and resilient should such an event occur.

Recommendation 5: MFN requests that Equinor provide an opportunity to meet one-on-one to discuss the oil spill trajectory and fate modelling completed for the Project. Understandably, the potential for a well blowout or large spill (e.g., during transportation) is a significant concern for the MFN community. To mitigate the risk of this, it is vital to understand how oil will be transported and where it will end up under different environmental conditions. By meeting with MFN to discuss how oil spill trajectory and fate modeling is completed, Equinor will assist the community in participating more meaningfully in environmental assessments for offshore oil and gas exploration and production. Alternately, Equinor should provide MFN with sufficient resources to retain a third-party specialist in such modeling, which is not currently feasible with the levels of funding provided by the Crown for review of the EIS.

Comment 6: Section 18.4 (Follow-up and Monitoring) provides a summary of the various environmental monitoring and follow-up programs the Proponent will be required to develop and implement. The results of these environmental monitoring and follow-up programs should be shared with the community. Also, as part of our accommodation measures, MFN requires that community



members be provided with equitable opportunities in employment, training, and resource provision associated with these programs for the entirety of the project. MFN members have lived in the area for time immemorial and their input, opinions, and experiences would be a valuable asset to project construction, operation, and follow up monitoring.

Recommendation 6: MFN requires that environmental monitoring programs be developed in consultation with MFN and other affected Mi'kmaq Nations. Included with this accommodation, MFN also requires participation of community monitors in monitoring programs for fish and fish habitat, marine mammals and sea turtles, and migratory birds. MFN requests that the Proponent and/or the Crown provide or fund the necessary training for community members to participate in the project as monitors and the resources required for an annual community meeting in MFN to share the results of monitoring activities and for the MFN monitor(s) to be able to participate in presenting such results to the community. If results from environmental monitoring show that additional mitigation measures are required, MFN's input should be considered in the development and implementation of these additional mitigation measures as part of ongoing consultation.

Comment 7: In Section 16.1.2.1 (Contingency Planning), Equinor indicates that contingency plans will be developed to provide guidelines for the operator's response to emergencies. MFN has serious concerns with the potential for spills, accidents, and malfunctions, especially those that may result in harm to the environment and impact the rights and interests of the community. The contingency plans will include important information that will provide MFN with assurance that, should an emergency occur, Equinor will minimize, or mitigate the issue and that all reasonable efforts will be made to ensure that marine and shoreline resources upon which MFN relies for traditional use and commercial purposes will be protected.

Recommendation 7: MFN requests that, upon development and prior to the commencement of operations, Equinor provide a copy of the contingency plans for review.

Comment 8: Equinor indicates in Section 2.7.4.5 (Drilling Waste Management) that disposal of drilling waste at an approved onshore facility was assessed as an alternative means, but was disregarded due to increased costs from transportation, increased greenhouse gas (GHG) emissions as a result of transportation requirements, and potential loss of terrestrial habitats. MFN prefers that drilling waste be disposed of onshore in an approved and regulated facility, as opposed to discharged to the water column, as this mitigates negative impacts to benthic organisms from smothering and reduces contaminant release into the environment. Currently, the Conception Bay South Drill Mud Processing Facility, a proposed drill mud processing facility in Newfoundland and Labrador, is undergoing a provincial environmental assessment (Registration Number: 2065). If this drill mud processing facility is developed, the economics of shipping drilling waste to shore would be more favourable for Equinor. The facility's proximity to the BdN Project would also help to reduce greenhouse gas emissions associated with increased shipping requirements. When the processing facility project was registered, an operational date of summer of 2020 was proposed, indicating a likelihood that the facility will be operational prior to the commencement of Equinor's operations at BdN.

Furthermore, while shipping drilling muds to shore will increase greenhouse gas emissions from the Project, Equinor has not quantified this increase. In Section 2.8.1 (Air Emissions), Equinor states that 85 % of CO2 emissions from the Project will result from operating the Floating Production Storage and Offloading Facility (FPSO). The remaining 15% will be from drilling and well operations, marine operations, flaring, vessel transport, helicopters, and the shuttle tankers. This information indicates



that any increase in greenhouse gas emissions from shipping drilling waste to shore is likely to be negligible relative to the entire Project.

Recommendation 8a: At the time of writing, there are four operating oil and gas production projects, not including the BdN Project, and ten proposed exploration programs off eastern Newfoundland. Due to the scope of proposed offshore oil and gas activities, including the existing offshore drilling production and proposed exploration, the Proponents must reconsider the status quo of discharging drilling waste to the water column. All cuttings from existing and proposed drilling could be directed to the Conception Bay South Drill Mud Processing Facility once it enters operations. Alternatively, all proponents operating off the shores of Newfoundland and Labrador could pool resources to develop a drill mud processing facility within the province. This will benefit the marine environment by reducing the loading of contaminants released and reduce transportation requirements, and it will benefit the local economy by creating local employment.

Recommendation 8b: Equinor must quantify the greenhouse gas emissions that would result from shipping drilling waste to shore and share this information with MFN.

Comment 9: In Section 5.5.3 (Marine Icing), Equinor states that icing potential for vessels in the Core BdN Development Area is greatest from January to March. During this period, Equinor's ability to complete environmental monitoring may be hindered due to health and safety concerns. Equinor has not indicated how they will meet their commitments to environmental monitoring should vessels become iced.

Recommendation 9: Equinor should provide information on how they will continue to complete environmental monitoring during periods of icing and other extreme weather (e.g., wind and waves).

Comment 10: In Section 9.3.2.1 (Presence of FPSO and Subsea Infrastructure), Equinor states that the anti-collision zone around the FPSO may provide a temporary refuge for fish due to their attraction to the installation (i.e., the reef effect), thereby resulting in a positive effect on fish. However, the reef effect resulting from the FPSO and other vessels in the Project Area may have a negative effect on MFN, who harvest in NAFO Division 3L, which is overlapped by the Project Area. The attraction of fish to the FPSO may result in fish migrating from NAFO Zone 3L, resulting in reduced catch rates for MFN. Equinor does not acknowledge this potential effect on MFN in Section 13.0 (Commercial Fisheries and Other Ocean Uses: Environmental Effects Assessment) or Section 14.0 (Indigenous Peoples: Environmental Effects Assessment).

Recommendation 10: Equinor must acknowledge that the reef effect resulting from the presence of the FPSO and other vessels may have an impact on licence holders for NAFO Divisions adjacent to the Project Area. This should include mitigation measures to reduce this effect or commercial compensation for those MFN licence holders as well as other accommodations to address the impact to a collective right.

Comment 11: Comment 1: Under section 6.2.1 Approach and Key Information Sources, the Proponent states the following in regards to the gaps in and quality of baseline marine and migratory bird data, "much of the available survey data were not collected in a systematic manner (e.g., from vessels of opportunity), the data do not provide a complete and specific representation of the fine-scale distribution and abundance" (pg. 6–148) and that "Within the RSA, data are relatively sparse for the fall months due to lack of survey coverage" (pg. 6-151). The Proponent makes no mention of possible ways in which the Project could contribute to the understanding of marine and migratory



bird abundance and distribution within the RSA. Project vessels will be present within the RSA during the fall months and could help contribute to filling these gaps.

Recommendation 11: The Proponent should commit to employing dedicated qualified Marine and Migratory Bird Observers that receive training in ECCC's Eastern Canada Seabirds at Sea (ECSAS) protocol (Canadian Wildlife Service, 2012) and perform these surveys daily from the Project vessels and drilling installations. The Proponent should provide these survey data in an annual report and submit this to ECCC-CWS and MFN, which would help to contribute to the understanding of the abundance and distribution of marine and migratory birds in the RSA.

Comment 12: Under Section 6.2.1 (Approach and Key Information Sources), the Proponent identifies sources used in the compilation of baseline data for marine mammals and sea turtles. The baseline data was taken from online resources, small-scoped data reviews, and opportunistic data received from: 1) previous projects in the area, 2) species assessments and status reports, and 3) relevant government reports. While these resources provide valuable general information regarding marine mammals and sea turtles, these data cannot replace data collected during focused baseline studies within the Project Area. Focused baseline studies provide increased accuracy when assessing species presence, abundance, and habitat use and provide a more robust base to perform accurate effects assessments.

Recommendation 12a: The Proponent should complete dedicated marine mammal and sea turtle baseline studies within the Project Area. Baseline surveys would be used to determine the distribution, occurrence, and abundance of species within the Project Area, many of which are species considered traditionally important to MFN. Little information is known about the movement and habitat use of many marine mammals and sea turtles; thus, performing dedicated marine mammal and sea turtle surveys within the project area prior to development would contribute to the bank of knowledge available about these species and could be used in drafting robust recovery and conservation plans.

Recommendation 12b: While completing baseline surveys, the Proponent should use Passive Acoustic Monitoring (PAM) in addition to Marine Mammal and Sea Turtle Observers. Surveyors should record detailed data including measures of survey effort, surveyor experience, timing of surveys, technology and models used and locations of surveys. Using PAM in addition to Marine Mammal and Sea Turtle Observers would provide increased accuracy through a multi-faceted approach for detecting and identifying marine mammals and sea turtles in the study area. Marine Mammal and Sea Turtle Observers should also receive standardized training on detection of marine mammals and sea turtles. These data and protocols from marine mammal and sea turtle baseline surveys should be repeatable for future surveys in the project area after project development is completed, as standardized survey methods would allow for a comprehensive effect's assessment of the Project.

Comment 13: In Section 10.1.1 (Spatial Boundaries), the Proponent states that the LSA "represents the predicted environmental zone of influence of the Project's planned components and activities, within which Project-related environmental changes to Marine and Migratory Birds may occur and can be assessed and evaluated." (pg. 10-3) and that "very few estimates have been attempted to determine the distance at which nocturnally active birds are attracted to artificial light" (pg. 10-3). The Proponent then bases their LSA, "a 15km area around the offshore Project Area and the vessel traffic route" (pg. 10-3), solely off of one study (Rodriguez, 2014), which investigated attraction of fledgling short-tailed shearwaters (*Puffinus tenuirostris*) along a road/bridge within a coastal



landscape in Australia and included a brief observation of fledgling standings at a coastal construction site. As well, the Proponent relies on this 15km as the maximum distance with which lighting attracts birds in other sections of the EIS, including with regards to area of effects. The Proponent's reliance on this one study and lack of any explanations as to how the species, life stage, and local landscape of the study are relevant to the Project are concerning to MFN, as the potential effects of the Project on marine and migratory bird species, especially Leach's storm petrel, could be significant.

Recommendation 13: The Proponent must provide a thorough rationale regarding how the Rodriguez et al. 2014 study is relevant to this Project. Specifically, the Proponent must provide the following:

- Rationale for the applicability of a coastal study to the offshore portion of the LSA for the Project;
- Rationale for the relevancy of fledgling bird behaviour around light sources to all life stages
 of birds found within the RSA; and
- Rationale for the applicability of short-tailed shearwater's behaviour around light sources to the behaviour of eastern North American marine and migratory bird species present within the RSA, including Leach's storm petrel.

This will allow MFN to have greater confidence in the scientific reasoning behind the size of the LSA, assertions regarding area of effects and the effectiveness of protections for marine and migratory bird species.

Comment 14: The Proponent states in Section 10.1.5.2 (Summary of Mitigation Measures) that, "Lighting on the FPSO will be reduced (reduces attraction of birds) to the extent that worker safety and safe operations, per regulatory requirements, are not compromised." (pg. 10-15). In Table 10.4 (Potential Project-VC Interactions and Associated Effects: Maine and Migratory Birds), the Proponent does not make any commitments to change lighting sources on any of the other vessels (i.e., supply and servicing vessels, drilling installation) during the various components/activities of the Project.

Regarding drilling installations specifically, the Proponent states that "drilling installations are chosen based on a competitive bid process and typically are existing installations built to international standards and requirements to operate in various jurisdictions. Options for lighting mitigations on drilling installations are not feasible" (pg. 2-70) and further states that their assessment of feasibility is based on one from a previous EIS by Statoil (Statoil, 2017). The feasibility assessment by Statoil only considered spectrally modified lighting, reduced lighting, and standard lighting in their assessment, for all lighting sources while maintaining worker safety (Statoil, 2017). Statoil did not consider shading light sources or directing lighting towards the deck of the drilling installation (Reed, 1985) within their assessment. Furthermore, they did not consider the use of spectrally modified lighting (Marquenie, 2014) for *some lighting* (not all) sources to the extent that worker safety, third-party safety, and safe operations are not compromised.

These lack of lighting change mitigations on other vessels involved in the Project is of serious concern to MFN, as effects of lighting on these other vessels could have an adverse impact on marine and migratory birds valued by the MFN. For instance, Leach's storm petrels, which are known to be attracted to offshore light sources, and are " by far the most numerous species stranding on drilling



and production installations and offshore supply vessels" (underline added, pg. 6-159), are experiencing significant population declines (BirdLife International, 2020), and have foraging areas that overlap with the Project Area (Hedd, 2018).

Recommendation 14a: The Proponent should implement lighting changes on all vessels / drilling installations involved with the project, not just the FPSO, in order to reduce adverse impacts on marine and migratory birds. These necessary mitigations will provide the MFN with greater confidence that marine and migratory birds are being adequately protected during the entire life of the Project.

Recommendation 14b: With regards to drilling installations specifically, the Proponent should perform their own feasibility assessment on whether shading, directing lighting towards the deck, and spectral modification of some lighting is possible on the drilling installation.

Recommendation 14c: The Proponent should discuss with potential drilling installation bidders options for potential modification of some lights (e.g., shading, directing lighting towards the deck, spectral modification, turning off unnecessary lighting) on the drilling installation to decrease attraction to marine and migratory birds, to the extent that worker safety, third-party safety, and safe operations are not compromised. These mitigation measures should be included in the bidding requirements.

Recommendation 4d: The Proponent should consult ECCC-CWS regarding possible data collection efforts to record changes made to lighting (e.g., duration, location), to assist in furthering the collective knowledge base on lighting mitigations and the effectiveness of individual mitigation technologies. The Proponent should compile these data into an annual report and share it with ECCC-CWS and MFN.

Comment 15: Under Section 10.1.5.2 (Summary of Mitigation Measures), the Proponent states that "routine systematic searches for stranded seabirds will be conducted on vessels engaged in construction and installation activities and HUC, the FPSO, drilling installation(s), stand-by vessels (SBVs), and during supporting surveys. Searches will be undertaken by vessel/installation crew, who have been trained in bird identification and handling" (pg. 10-16) and that " an annual report, including all occurrence data, will be submitted to ECCC that summarizes stranded and/or seabird handling occurrences" (pg. 10-16).

MFN appreciates that the Proponent is utilizing systemic searches for stranded seabird on vessels used during the project, but is concerned with the potentially quality, thoroughness, and consistency of these searches without dedicated qualified Marine and Migratory Bird Observers performing these searches nor general training and awareness programs that the Proponent has committed to for workers regarding seabird strandings and marine and migratory bird species. MFN requests these improvements to help to mitigate the adverse effects of the Project on these bird species. As well, MFN is also interested in seeing a commitment by the Proponent to communicating annual reports on the impact of construction and operations on sea birds, and the deployment and effectiveness of related mitigation and training measures.

Recommendation 15a: The Proponent must commit to employing dedicated qualified Marine and Migratory Bird Observers to perform stranded seabird searches on the Project vessels and installations and provide them with training in the relevant survey/monitoring protocols, which will be developed in collaboration with ECCC. This will provide MFN with greater confidence in the



quality, thoroughness, and consistency of these searches and that marine and migratory bird species are being adequately protected.

Recommendation 15b: The Proponent should provide all staff with general awareness training on seabird strandings and marine and migratory bird species. This training should include material recording incidental observations of marine and migratory birds and how to notify the qualified Marine and Migratory Observer(s) if a stranded bird is encountered.

Recommendation 15c: The Proponent should hire MFN community members as Marine and Migratory Bird Observers and provide them with industry-standard job training as needed. By hiring MFN community members to perform these systematic stranded seabird searches, the MFN will have greater confidence that the Proponent's search protocols are being followed correctly to mitigate the impacts on marine and migratory bird communities throughout the life of the Project.

Recommendation 15d: In addition to sharing the annual report ECCC, the Proponent should share these with MFN so that they can be kept up to date on marine and migratory monitoring activities and impacts on these bird communities throughout the Project's life and provide input to inform future monitoring efforts.

Comment 16: Within Section 10.1.5.2 (Summary of Mitigation Measures), the Proponent states that "flaring on the FPSO will not occur during routine operations" (pg. 10-16) and that " the option is available to flare from the drilling installation during well clean-up and/or well testing" (pg. 10-16). The only mitigations offer by the Proponent, besides systematic stranded seabird surveys, are to have flaring activities be of "short duration and will be governed by Equinor best practices to reduce overall flaring duration, thereby reducing light emissions from flaring" (pg. 10-16). The Proponent does not mention the use of water curtains during flaring events, or monitoring of marine and migratory bird behaviour during flaring activities by dedicated qualified Marine and Migratory Bird Observers. This is of serious concern to MFN as flaring can adversely affect valued marine and migratory birds and the Proponent has made no commitment to collecting monitoring data on bird interactions/behaviour with flares, which could provide a valuable contribution to the current understanding of this activity and its effect on marine and migratory bird species.

Recommendation 16a: The Proponent should implement the use of water curtains, which have been used as industry standard mitigation measures for potential adverse impacts on marine and migratory birds. This will provide MFN with greater confidence that every effort is being made to protect marine and migratory birds during flaring activities.

Recommendation 16b: The Proponent should commit to employing dedicated qualified Marine and Migratory Bird Observers who can be present during flaring activities and record data on presence/absence of marine and migratory birds, interactions with marine or migratory birds, behavioural observations and note the effectiveness of the water curtains at deterring marine and migratory birds.

Recommendation 16c: The Proponent should commit to providing these data in an annual report to share with ECCC and MFN. These data would contribute to the 1) knowledge base of interactions between marine and migratory birds and flaring activities and 2) the effectiveness of water curtains as mitigation measures.

Comment 17: Under Section 10.3.4.1 (Marine Vessels), the Proponent states that "at typical transiting speeds between the Project Area and shore, Leach's storm petrels are unlikely to overtake



the vessels and become stranded" (pg. 10-68) and that stranded seabird surveys would be undertaken on some vessels in the Core BDN Area, but not during transit.

This is concerning to MFN, as the Proponent does not provide details of typical transit speeds of marine vessels or how these compare to typical flight speeds of Leach's storm petrel and it is, therefore, difficult to verify this. As well, the Proponent does not consider non-pursuit-based collisions between Leach's storm petrel and marine vessels. These marine vessel transits have the potential to adversely affect Leach's storm petrel and other marine and migratory bird populations, especially since the proposed transit route passes through the Baccalieu Island Canadian Ecologically and Biologically Significant Areas (EBSA).

Recommendation 17: The Proponent must commit to employing dedicated qualified Marine and Migratory Bird Observers to perform stranded seabird searches on the Project vessels during Project activities and transit. These Marine and Migratory Bird Observers must be provided with training in the relevant survey/monitoring protocols, which will be developed in collaboration with ECCC. This will provide MFN with greater confidence in the quality, thoroughness, and consistency of these searches and that marine and migratory bird species are being adequately protected.

Comment 18: Under Section 11.3.4 (Supply and Servicing), the Proponent stated that, at a maximum, the supply and servicing vessel traffic associated with the Project phases would represent an "estimated 20 percent increase to offshore oil and gas related traffic or 12 percent of all traffic in the port of St. John's" (pg. 11-39) and under normal operations would represent "an estimated 10 percent increase in offshore oil and gas related traffic and 10 percent increase in all vessel traffic in the port of St. John's" (pg. 11-39). This notable increase in vessel traffic could increase marine mammal and sea turtle mortality as supply vessels travelling at high speeds limit the opportunity for ship personnel, and marine mammals or sea turtles, to take adaptive action and avoid collision. Vessel strikes can result in decreased survivability and lethal injury, and can account for 35% of premature causes of death in some species (Hazel, 2007; Vanderlaan, 2007; Gerstein, Blue, & Forsythe, 2005). Vessel strikes and the associated injury and mortality impacts can have negative effects on populations of marine mammals and sea turtles, which is especially significant if they are considered a species at risk.

MFN is concerned by the Proponent's stated approach for detection by relying on crew to detect marine mammals and sea turtles in supply and servicing vessels' travel path and having no commitment for crew-based detections during supporting surveys. Vessel crew members are unlikely to have appropriate experience, familiarity, or training to accurately detect the presence of marine mammals or sea turtles. As well, the ability of crew members to initiate adaptive measures and avoid collisions may also be influenced by their employment through the Proponent. The ability to detect marine mammals and sea turtles accurately and consistently is also highly dependent on the experience level of the observer and the weather conditions at the time. Without an accurate and reliable method of marine mammal and sea turtle detection, it is unclear to MFN how speed reduction or other adaptive maneuvers would be implemented and collisions avoided.

Recommendation 18a: The Proponent must set the vessel travelling speed and implement firm speed restriction upon detection of a marine mammal for supply and servicing vessels and survey vessels. In the Gulf of St Lawrence, Transport Canada has imposed a speed limit of a maximum of 10 knots for travelling speeds and reduction to 7 knots upon sighting a marine mammal within 500 meters to mitigate vessel strikes (Transport Canada, 2019). By implementing a more conservative speed limit, more time would be available for both the ship and the animal to avoid collision. If a collision were to



occur, the more conservative speed of the vessel would cause less damage to the animal and would be less likely to result in an acutely lethal injury.

Recommendation 18b: The Proponent must commit to employing dedicated qualified Marine Mammal and Sea Turtle Observers to perform effective and accurate detections of marine mammals and sea turtles in the vessels path and initiate slow down and adaptive maneuvers upon sightings. These Marine Mammal and Sea Turtle Observers must be present on all supply and servicing vessels and surveying vessels. This will provide MFN with greater confidence in the quality, thoroughness, and consistency of these searches and that marine and migratory bird species are being adequately protected.

Recommendation 18c: The Proponent should consider hiring MFN community members as Marine Mammal and Sea Turtle Observers and provide them with industry-standard job training as needed. By hiring MFN community members to perform these essential safe measures, MFN will have greater confidence that the Proponent's speed limits are being followed correctly to mitigate the impacts on marine mammals and sea turtles throughout the life of the Project.

Comment 19: Within Section 11.3.4 (Supply and Servicing), the Proponent states that a maximum of 15 helicopter trips will be required per week during overlapping Project activities and that helicopter trips during production will be limited to five trips per week, which translate to "an estimated 27 percent of annual helicopter traffic when activities are simultaneous and 11 percent of annual helicopter traffic during normal production timeframe" (pg. 11-39). The Proponent stated that in order to mitigate these effects that "low-level aircraft operations will be limited or avoided where it is not required per Transport Canada protocols" (pg. 11-46). However, this mitigation still means that there will be 3-6 minutes during each flight that represent a significant source of frequently reoccurring sound, the effects of which may be detrimental to marine mammals and sea turtles.

The volume of helicopter traffic in the offshore area east of Newfoundland will only increase as the offshore oil and gas sector expands in Atlantic Canada. A review and discussion on progress in the study of aircraft noise effects on marine mammals found that, in each of the studies reviewed, cetaceans reacted to aircraft noise to some extent, most often by diving (Luksenberg, 2009). Precautionary measures should be taken to mitigate the effects of all noise sources resulting from project activities.

Recommendation 19: As a precautionary measure, the Proponent should implement a visual watch 30 minutes prior to scheduled helicopter takeoff from the FPSO or other vessel. If a sea turtle or marine mammal is observed within the 500-metre safety zone, helicopter takeoff from the FPSO or other vessel should be restricted until the sea turtle or marine mammal has moved outside of the safety zone.

Comment 20: Under Section 11.3.5.3 (Underwater Sound Emissions from Geophysical Survey Equipment), the Proponent states that their mitigation measures during geophysical surveys will include "implementing shut downs of the air source array(s) when SAR listed as Endangered or Threatened on Schedule 1 of SARA (as well as all beaked whale species) are detected within the safety zone during anytime air sources are active, including ramp up" (pg. 11-49) and "shut-down of air source arrays for all beaked whales when detected within safety zone" (pg. 11-49).

In reviewing recent IAs, it has been noted that DFO often supports a higher standard for mitigating the effects of geophysical surveys on marine mammals or sea turtles, which requires the immediate shutdown of the air source array if any species of marine mammal or sea turtle is observed within a



500 m radius of the platform, regardless of whether or not it is designated as a SAR, or a beaked whale species.

Recommendation 10: The Proponent must voluntarily adopt this standard for mitigating the effects of geophysical surveys on marine mammals and sea turtles. This would require the immediate shutdown of the geophysical air source array if any marine mammal or sea turtle is observed within the safety zone, regardless if it is designated as a SAR.

Comment 21: Within Section 11.3.5.3 (Underwater Sound Emissions from Geophysical Survey Equipment), the Proponent indicates that a "marine mammal and sea turtle observation program" (pg. 11-61) will be implemented during geophysical surveys to initiate shutdowns when beaked whales or marine mammal SAR are observed in the safety zone. As well, the Proponent stated that this program "will be provided to Fisheries and Oceans Canada (DFO) for review and input" (pg. 11-19).

The lack of detail regarding this observation program is concerning to MFN, as programs that rely on visual observations by human observers have limitations under certain conditions. During times of low light, choppy waters, and inclement weather (e.g., rain and fog), the human observers are less likely to correctly detect and identify many species (Brillant, 2015). In addition, the accuracy with which human observers can detect species is dependent on their training, familiarity, and experience with marine mammals and sea turtles.

Recommendation 21a: The Proponent must share further details of the marine mammal observation program. Specifically, the standards, procedures, and protocols for the program during geophysical surveys. These standards must include dedicated qualified Marine Mammal and Sea Turtle Observers with training on marine mammal and sea turtle observation and identification. These procedures and protocols must consider the use of passive acoustic monitoring (PAM), and, ideally, Unmanned Aerial Vehicle (UAV) methodologies, alongside Marine Mammal and Sea Turtle Observers to provide additional coverage and more confidence in the identification and detection of marine mammals and sea turtles during and leading up to geophysical surveys.

Recommendation 21b: The Proponent must also commit to providing MFN with the marine mammal and sea turtle observation program so that they can also provide input and review the details of the program. This will provide the MFN with greater confidence that the Proponent's observation programs standards, protocols and procedures are able to mitigate the impacts on marine mammals and sea turtles effectively.

Comment 22: The Canadian Statement of Practice with Respect to the Mitigation of Sound in the Marine Environment requires that seismic surveys be planned to avoid diverting aggregations of fish from known migration routes or corridors if it is known there are no alternate migration routes or corridors, or if that by using those alternate migration routes or corridors, those fish would incur adverse effects. The information provided by Equinor in the EIS indicates that Atlantic salmon have been observed in the Project Area during spring, which coincides with fish migrating to their natal streams. Equinor has not indicated if they will mitigate the impacts of geophysical surveys on migrating Atlantic salmon by refraining from these activities during the spring when they may be migrating through the Project Area. This is of significant concern to the MFN based on our historic and ongoing traditional use and cultural connection with salmon, and given the precarious situation the Atlantic salmon population already finds itself in, locally felt in MFN territory as a continuing downward trend in escapement to dangerously low numbers.

Recommendation 22: To ensure that Atlantic salmon are not diverted from their natural migration routes, Equinor must commit to delaying geophysical surveys until late summer.

4.0 CONCLUSION

MFN has not asked for this Project; we currently see few, if any, meaningful benefits arising from it for our community, and we do not wish to bear the risks associated with it. These risks have been described by MFN on several occasions and highlighted by the spill and lack of clean up of 250,000 litres of oil from the SeaRose project. Despite these significant concerns, we have indicated our willingness and openness to engage with the Proponent to understand the Project, make our concerns known, and work with the Proponent to address those concerns and potentially reach a mutual understanding. However, the work that is required to get to a place of understanding for these large, complex projects is beyond the capacity of our community. Therefore, as we have described on several occasions, our community requires adequate resources to support our staff capacity, advice from independent experts, expenses (e.g., travel), and the gathering of Indigenous Ecological Knowledge and traditional use information from Elders and fishermen.

Legal Requirements for Meaningful Consultation

It is clear to MFN that a high level for the duty to consult and accommodate is triggered by the projects. The legal obligation for the duty is upheld by the Supreme Court of Canada and is a requirement of the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), which has been adopted by Canada. The requirements of UNDRIP are that states cooperate in good faith with Indigenous Peoples to obtain free, prior, and informed consent (FPIC), from Article 32 Sections (2) and (3):

- 2. States shall consult and cooperate in good faith with the indigenous peoples concerned through their own representative institutions in order to obtain their free and informed consent prior to the approval of any project affecting their lands or territories and other resources, particularly in connection with the development, utilization or exploitation of mineral, water or other resources.
- 3. States shall provide effective mechanisms for just and fair redress for any such activities, and appropriate measures shall be taken to mitigate adverse environmental, economic, social, cultural or spiritual impact.

Moreover, Sections 7(1)(c) and 7(1)(d) of the *Impact Assessment Act 2019* (IAA, 2019) requires that:

7 (1) Subject to subsection (3), the proponent of a designated project must not do any act or thing in connection with the carrying out of the designated project, in whole or in part, if that act or thing may cause any of the following effects:

(c) with respect to the Indigenous peoples of Canada, an impact — occurring in Canada and resulting from any change to the environment — on

(i) physical and cultural heritage,



(ii) the current use of lands and resources for traditional purposes, or

(iii) any structure, site or thing that is of historical, archaeological, paleontological or architectural significance;

(d) any change occurring in Canada to the health, social or economic conditions of the Indigenous peoples of Canada;

The requirements of IAA 2019 sections 7(1)(c) and 7(1)(d) are directly applicable to MFN for this Project. There are serious environmental, cultural, and socioeconomic risks from all phases of the Project that have the potential to severely negatively impact the community of MFN's health and socioeconomic conditions, current use of lands, waters, and resources for traditional purposes, and rights and interests. The proposed Project overlaps with the Traditional Territory of MFN where our ancestors have fished, hunted, gathered, lived on since time immemorial. MFN members currently use and rely upon the coastal and offshore area where the Project is proposed for subsistence, commercial, recreational fisheries and ceremonial practices to support traditional practices, jobs, and community well-being.

Our traditional activities and culture are in jeopardy due to the potential negative impacts associated with marine shipping, drilling, seismic surveys and associated noise, habitat loss, spills/leaks/releases and other environmental effects of the Project. Should the Project be approved by the Crown to proceed, Project activities may directly affect:

- Migratory fish (e.g., salmon and eels) that travel through the study area and into the rivers in our Traditional Territory. These species hold tremendous cultural value and we have spent hundreds of years stewarding them to ensure they prosper. Now, due to a range of known and unknown causes, these species are in decline. Atlantic salmon, in particular, are experiencing a dramatic drop off with adult returns to the Conne River dramatically reduced over time (DFO, 2019). The cumulative effects of this project may contribute further to this decline, a risk that is unacceptable to MFN.
- MFN's communal commercial fisheries. Our community holds commercial and communal
 licences for a variety of species including tuna, crab, herring, mackerel, cod, haddock,
 swordfish, scallop, capelin, seal, sea cucumber, whelk, and surf clam. We are constantly
 expanding these fisheries (in terms of volume and species fished), which support Miawpukek
 fishers, their families, and the community.
- Food, social, and ceremonial fisheries off southern Newfoundland for species including lobster, snow crab, scallop, brook trout, mackerel, capelin, cod, eel, surf clam and redfish.
- Health and socioeconomic conditions of fishers, their families, and community members who
 rely on the benefits (e.g., childcare, school programs) which our communal fisheries support.
 Impacts to fisheries will translate into lost jobs and lost income. This would harm the financial
 health, physical health and mental health of fishers and their families.

MFN members have a deep respect for the land and waters of Mi'kma'ki that would be directly impacted by this Project. These risks to the natural environment and the community of MFN



emphasize the need for meaningful and ongoing consultation throughout the IA process, and the need for mitigation and accommodation measures to address these potential impacts to MFN rights and interests.

Formal Request for Meaningful Consultation with Miawpukek First Nation

Given the potential impacts to our Aboriginal and asserted Rights, we expected that the Proponent and the Crown would meaningfully engage MFN early and often by providing information relevant to the Project in a timely manner and capacity funding to support engagement activities. Canadian civil courts and the Government of Canada's own guidance to civil servants and those delegated the duty to consult underline the need for these aspects of consultation for it to be considered meaningful. This has not occurred. Communication of information and engagement support from the Crown and the Proponent have been lacking during this process. MFN's capacity to properly review and engage adequately with the current process is limited. The large burden and amount of attention required by these projects has created stress and tension with the current situation and leaves the community leadership with serious doubt over the ability of the Crown to fulfil their legal requirements.

To date, the meagre participant funding provided by IAAC has been used to develop initial comments, engage in communication with IAAC and the Proponent, participate in some meetings and workshops, review relevant documentation and a diversity of other activities. However, the limited funding is not sufficient for MFN to adequately understand the Project, engage with community members, evaluate technical/environmental concerns, and provide deep and meaningful input on mitigation, monitoring, and follow-up measures. We strongly desire the ability to participate more fully, but our hands are tied by the lack of capacity funding.

We believe it is to our mutual benefit for the Crown/Proponent to develop a meaningful relationship, and related agreements, to engage with MFN in this process. This would include a commitment to providing capacity and funding support to MFN to be meaningfully engaged. We feel these are reasonable requests and yet they have been repeatedly rejected by the Proponent and the Crown.

Path Forward for Miawpukek First Nation

The members of MFN have not asked for this Project or other offshore developments. When projects like this are approved by the Crown, we are forced to inequitably bear the risks and suffer any negative consequences and environmental effects. MFN has never come to any agreement with the Proponent regarding accommodation for impacts to our rights from, or consent for, this project. Furthermore, we are of the opinion that no meaningful consultation has occurred to date—only information sharing. The poor planning and lack of consideration of our knowledge, rights and interests will only exacerbate the effects of the Project on our community. We continue to voice our concerns that the duty to consult has not been met, implementation of UNDRIP is not occurring and that the requirements of CEAA 2012 and the new Impact Assessment Act are not satisfied. Ultimately this means that the Crown and the Proponent are far from satisfying their obligations for consultation and engagement with MFN. This is not in line with the legal requirements for consultation, nor in the spirit of Truth and Reconciliation.



If the Proponent and the Crown are willing to engage with MFN in a meaningful and respectful manner, demonstrated by meeting our requests for reasonable accommodations in the form of capacity and engagement funding support, and commit to a defined engagement process which offers us certainty that our rights and interests will be respected and accommodated, then we are willing to engage in open and honest discussion. However, if this does not occur, the community of MFN will be forced to conclude that the Project poses too great a risk to our Aboriginal fishery, our Brother Salmon, our environment, and our way of life. For this reason, *MFN requests that the Crown take one of two actions*:

- 1. Determine that the Project poses a risk of significant environmental effects and recommend that the Minister reject the applications for approval, or
- 2. Make no decision nor proceed with any further steps toward approval of the Project until the requirements of meaningful consultation with MFN, and reasonable accommodations for MFN, are met.

Should the Crown recommend that the Project be approved, then the recommendations within this report (as described in Section 3.0) must be fully addressed though the final conditions of approval.

5.0 REFERENCES

- BirdLife International. (2020, August 21). *Species factsheet: Hydrobates leucorhous*. Retrieved from BirdLife International: http://datazone.birdlife.org/species/factsheet/leachs-storm-petrel-hydrobates-leucorhous
- Brillant, S. W. (2015). Quantitative estimates of the movement and distribution of North Atlantic Right Whales along the Northeast coast of North America. *Endangered Species Research*, (27): 141-154.
- Equinor Canada Ltd. (2020). Bay Du Nord Development Project Environmental Impact Statement. Prepared by Wood Environment & Infrastructure Solutions and Stantec Consulting. St. John's, Newfoundland.
- Gerstein, E. R., Blue, J. E., & Forsythe, S. E. (2005). The acoustics of vessel collisions with marine mammals. *Proceedings of OCEANS 2005 MTS/IEEE* (pp. 1190-1197). IEEE.
- Hazel, J. L. (2007). Vessel speed increases collision risk for the green sea turtle Chelonia mydas. *Endangered Species Research*, (3): 105-113.
- Hedd, A. I. (2018). Foraging areas, offshore habitat use, and colony overlap by incubating Leach's storm-petrels Oceanodroma leucorhoa in the Northwest Atlantic. *PLoS One*, 13:e0194389.
- Luksenberg, J. A. (2009). The effects of aircraft on cetaceans: implications for aerial whalewatching. *Scientific Committee at the 61st Meeting of the International Whaling Commission*, 31 May 12 June 2009. Madeira.
- Marquenie, J. M. (2014). Green lighting the Way: Managing Impacts From Offshore Platform Lighting on Migratory Birds. *Society of Petroleum Engineers*.
- Rodriguez, A. G. (2014). Fatal Attraction of Short-Tailed Shearwaters to Artificial Lights. *PLOS ONE*. doi:https://doi.org/10.1371/journal.pone.0110114
- Statoil. (2017). Flemish Pass Exploration Drilling Program Environmental Impact Statement. St. John's: Amec Foster Wheeler and Stantec Consulting.



Transport Canada. (2019). Protecting North Atantic right whales from collisions with ships in the Gulf of St. Lawrence. Retrieved August 20, 20202, from https://www.tc.gc.ca/en/services/marine/navigation-marine-conditions/protecting-north-atlantic-right-

Vanderlaan, A. S. (2007). Vessel collisions with whales: The probability of lethal injury based on vessel speed. *Marine Mammal Science*, 23(1): 144-156.

