

Environment and Climate Change Canada – Comments on Regional Assessment of Offshore Oil and Gas Exploratory Drilling East of Newfoundland and Labrador – Draft Report January, 2020.

Suggested Text Changes:

| Original Text | Suggested Change | Rationale/Recommendation |
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| Wildlife Assessment | | |
| Section 4.2.1 – Marine Biota and their Habitats; 4.2.1.1 – Presence and Operation of Drill Rigs (pg. 102) | | |
| Quote (pg. 102) <i>“Any future exploratory activities within the Study Area itself will be situated at least 50 (and in most cases, several hundred) kilometers offshore, which is far from coastal breeding sites and other identified special and sensitive coastal areas for birds. This is also well beyond the ranges of most species that nest in Newfoundland and Labrador, and of migrating birds which tend to fly closer to land.”</i> | ECCC suggest the following be added to this statement: <u>However, tracking data of Leach’s Storm-petrel colonies from Atlantic Canada show that their foraging ranges overlap with the Study Area (Hedd et al. 2018), so these species are particularly vulnerable to attraction to artificial lighting on platforms or vessels in this area.”</u> | This statement does not consider Leach’s Storm-petrel, which is the most abundant seabird breeding in Newfoundland, and whose foraging range overlaps directly with the Study Area. Reference: Hedd, A., Pollet, I.L., Mauck, R.A., Burke, C.M., Mallory, M.L., McFarlane Tranquilla, L.A., Montevecchi, W.A., Robertson, G.J., Ronconi, R.A., Shutler, D., Wilhelm, S.I., and Burgess, N.M. (2018). Foraging areas, offshore habitat use, and colony overlap by incubating Leach’s storm-petrels <i>Oceanodroma leucorhoa</i> in the Northwest Atlantic. <i>PLoS One</i> . 13 (5): e0194389. |

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| <p>Quote (pg. 102) <i>“While attraction of birds to offshore platforms and resulting injury or mortality has been identified as an important area of concern, it is often noted in these EAs that the short-term nature of a drill rig’s presence and operation at a particular site, and the localized zone of visibility of such lighting (typically up to 5km, see Module 8), reduces the potential for interactions and resulting effects.”</i></p> | <p>ECCC notes that migratory birds can be attracted to sources of artificial lighting from up to 16 km away (with reference to Rodriguez et al. 2015). However, uncertainty remains as to the actual zone of influence of light, given the lack of studies to quantify attraction, maximum light detection distance of the eyes of migratory birds, or to conclude definitively how far away from a light source a migratory bird must be before artificial light affects its behaviour. As a result, operators are likely underestimating the potential for interactions and resulting effects of artificial light attraction on migratory birds.</p> | <p>The 5km range identified in this statement is inaccurate. Research has shown that migratory birds can be attracted to sources of artificial light from up to 16 km away (Rodriguez et al. 2015); however, it is important to note that considerable uncertainty remains as to the actual zone of influence of light.</p> <p>Reference: Rodriguez, A., Rodriguez, B., and Negro, J.J. (2015). GPS tracking for mapping seabird mortality induced by light pollution. <i>Scientific Reports (Nature)</i>. 5: 10670.</p> |
| <p>Section 4.2.2 Special Areas</p> | | |
| <p>Quote (pg. 104) <i>“Previous EAs have generally concluded however that the overall and defining features and characteristics of any special areas that overlap with or occur in the vicinity of a proposed drilling project will not be materially and adversely affected by such activities, as these activities are characterized by small footprints and are temporary in nature. In addition, the implementation of mitigation measures is intended to avoid or reduce any disturbances and resulting effects to overlapping or adjacent special areas.”</i></p> | <p>This statement should reflect the fact that some impacts (i.e. light, major accidental event) could have large footprints.</p> | <p>Not all of potential impacts have small footprints</p> |
| <p>Section 4.2.3 Indigenous Communities and Activities</p> | | |

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| <p>Quote (pg. 105) “These EAs have also concluded that few of the marine-associated migratory species that are known to be used by these Indigenous groups originate from or spend time within the Study Area. Of any species that do or may do so, these EAs have concluded that the potential is extremely remote for any degree of connection between individuals within the region and those which would be harvested by Indigenous communities for traditional purposes hundreds of kilometers away.”</p> | <p>This statement should reflect that some of the species used by Indigenous communities spend part of their time within the study area. As such, activities within the study area could impact the quality and availability of these species.</p> | <p>Recent telemetry work demonstrates that species harvested by Indigenous groups use the Study Area in winter, including species breeding at Labrador colonies (e.g., Common and Thick-billed Murres) (McFarlane-Tranquilla et al. 2014), and those migrating through the Study Area from European colonies (e.g. Dovekies) (Fort et al. 2013).</p> <p>Fort, J., Moe, B., Strom, H., Grémillet, D., Welcker, J., Schultner, J., Jerstad, K., Johansen, K.L., Phillips, R.A., and Mosbech, A. (2013). Multicolony tracking reveals potential threats to little auks wintering in the North Atlantic from marine pollution and shrinking ice cover. <i>Diversity and Distributions</i>. 19: 1322-1332.</p> <p>McFarlane-Tranquilla, L.A., Montevicchi, W.A., Fifield, D.A., Hedd, A., Gaston, A.J., Robertson, G.J., and Phillips, R.A. (2014). Individuals winter movement strategies in two species of murre (<i>Uria</i> spp.) in the Northwest Atlantic. <i>PLoS One</i>. 9: e90583.</p> |
| <p>Cumulative Effects 5.1.2 Marine and Migratory Birds</p> | | |
| <p>Note: there is no specific text reference here, but rather a key area that is missing.</p> | <p>ECCC requests that the Committee include additional information in this section to improve the assessment of cumulative effects of oil and gas activities in the Study Area on migratory birds. Specifically, ECCC recommends that the Committee include additional information about the cumulative effect of artificial light sources in the offshore environment as part of the cumulative effects assessment.</p> | <p>ECCC notes that the cumulative effects of artificial light in the offshore has created a significant footprint that did not exist until recently (i.e. a few decades). See the following website (https://www.lightpollutionmap) and associated research paper (Falchi et al. 2016) for a worldwide light pollution atlas that depicts the footprint created by all existing projects currently present in the offshore environment. The artificial light footprint will increase in the offshore environment as more exploration projects are added and will likely bleed into areas that are currently relatively free of artificial light sources. Low overlap with existing activities will increase the potential risk of attraction for migratory birds; adding a new source of artificial light in areas that are free from offshore oil and gas operations creates an increased footprint of total artificial lighting in the offshore environment as a whole.</p> <p>Reference:</p> |

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| | | Falchi, F., Cinzano, P., Duriscoe, D., Kyba, C.C.M., Elvidge, C.D., Baugh, K., Portnov, B.A., Rybnikova, N.A., and Furgoni, R. (2016). The new world atlas of artificial night sky brightness. <i>Environmental Protection</i> . 2(6): e1600377 |
| Quote (pg. 126) <i>“In general, the populations of most marine-associated bird species occurring off Eastern Newfoundland are considered stable overall (Section 3.2, Module 5), although Leach’s Storm-petrel, for example, has seen considerable decline in recent years (Wilhelm et al 2015).”</i> | ECCC requests that the Committee amend this statement to clarify that Thick-billed Murre, Black-legged Kittiwake, and Leach’s Storm-petrel have all been Red-Listed by the IUCN because of population declines. | This statement is not consistent with Section 3.2 of the Draft Report, as referenced. Although it is true that some seabird populations breeding in eastern Newfoundland are stable, the area also supports wintering and migrating populations from the eastern Atlantic that are not. Section 3.2 specifically states that Thick-billed Murre, Black-legged Kittiwake, and Leach’s Storm-petrel have all been Red-Listed by the IUCN because of population declines. |
| Quote (pg. 126) <i>“That species is thought to be particularly vulnerable to the effects of offshore activities through attraction to artificial light sources resulting in collision and strandings. In addition, because they may forage hundreds of kilometers from the nest site during the breeding season (Pollet et al 2014), there may be risk of exposure of adults and eggs to oil from spills and routine discharges (Morandin and O’Hara 2016).”</i> | ECCC recommends the text be changed to: <i>“That species is thought to be particularly vulnerable to the effects of offshore activities through attraction to artificial light sources resulting in collision and strandings. In addition, because they forage hundreds of kilometers from the nest site during the breeding season (Hedd et al. 2018), there may be risk of exposure of adults and eggs to oil from spills and routine discharges (Morandin and O’Hara 2016).”</i> | Tracking data and dietary studies have shown that Leach’s Storm-petrel forage hundreds of kilometers from their nest sites in deep waters offshore, so this is an established fact. The correct reference is Hedd et al. 2018, which is based on Leach’s Storm-petrel breeding in Newfoundland and shows the overlap with the offshore area. |

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| <p>Quote (pg. 126) <i>“There is no identified and designated critical habitat for avian species at risk within the Study Area, and Ivory Gull and Red-necked Phalarope are the only such species that have the potential to be found in the region on any regular basis. The Ivory Gull is generally associated with pack ice, and as such, it is more likely to occur in the northern portion of the Study Area.”</i></p> | <p>ECCC recommends that the Report include a statement to emphasize that the Atlantic Canada population of Leach’s Storm-petrel is currently undergoing assessment by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC), with a decision expected in November 2020.</p> | |
| <p>Wildlife Mitigation</p> | | |
| <p>4.5.1 Mitigation</p> | | |
| <p>P. 109 10) <i>“Avoiding or minimizing flaring and the use of high efficiency burners where flaring is required. Notification of the appropriate authorities of any plans to flare. Flaring as early as possible during daylight hours, and installation and operation of a water curtain around the flare.”</i></p> | <p>ECCC notes that some conditions related to flaring and lighting have evolved in the most recent project specific decision (Newfoundland Orphan Basin Exploration Drilling Project, Feb. 12, 2020) to include consideration of periods of migratory bird vulnerability and requests that these latest conditions be incorporated into the mitigation section of the Regional Study.</p> | |
| <p>Quote (pg. 109) <i>“15) Implementation of protocols for the collection and release of marine birds that become stranded on offshore installations, in accordance with associated regulatory guidance and permit requirements.”</i></p> | <p>ECCC suggest the mitigation be changed to: <u>“Implementation of protocols for the collection, release, and documentation of marine birds that become stranded on offshore installations, in accordance with associated regulatory guidance and permit requirements”</u>. ECCC notes that the development of protocols should include requirements for systematic searching.</p> | <p>Systematic searching is required to not only ensure that all stranded birds are found in a timely manner but also to allow proper documentation of identifying where birds are most likely to be found. This information is important to be able to identify potential adaptive management opportunities</p> |
| <p>Greenhouse Gases</p> | | |

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| 7.2.2 Climate Change | | |
| Note: there is no specific text reference here, but rather a key area that is missing. | The RA should mention that the draft Strategic Assessment of Climate Change (SACC) applies to offshore exploratory drilling projects that are subject to the <i>Impact Assessment Act</i> . The draft SACC provides guidance on how federal impact assessment consider a project’s GHG emissions and its resilience to climate change impacts. The draft SACC includes references and guidance on how proponents should develop their climate change resilience assessment. | The RA did not mention any mitigation requirements for greenhouse gases. Even projects that are exempt should be required to take appropriate measures to reduce GHGs. The Strategic Assessment of Climate Change states that the Agency or lifecycle regulators, with the support of expert federal authorities, will provide analysis, such as describing the project’s GHG emissions in the context of Canada’s emissions targets and forecasts. |
| 7.2.2 P. 175 “ These assessments have generally found that predicted GHG emissions from an individual project are low and insignificant in comparison to GHG targets” | ECCC asks the authors to not conclude that the GHG emissions are low and insignificant in comparison to GHG targets in Sections 4.2.5 and 7.2. Conclusion on GHG emissions from a project, or sum of projects in a region, should be done, in accordance with section 5.4 of the draft SACC, and consider emission projections. | The Regional Assessment should not make conclusions of whether a class of projects impacts Canada’s climate change commitments. The draft Strategic Assessment of Climate Change (SACC) states that the Agency or lifecycle regulators, with the support of expert federal authorities, will provide supplemental analysis such as describing the project’s GHG emissions in the context of Canadian’s emissions targets and forecasts. |
| Effects of the Environment on the Project – Meteorological, Oceanographic and Ice Conditions | | |
| 4.4 Effects of the Environment on Exploratory Drilling Activities in the Study Area | | |

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| <p>Note: there is no specific text reference here, but rather a key area that is missing.</p> | <p>Ensure that proponents consider their planned locations within the study area and the specific meteorological, oceanographic and ice conditions during their planning and decision-making.</p> | <p>ECCC notes the requirement for proponents to consider meteorological, oceanographic and ice conditions in their planning and decision making but would note that there can be variations within the study area that need to be taken into account, especially with respect to the presence of pack ice which is far more prevalent in the northwestern portion of the study area.</p> |
| <p>Note: there is no specific text reference here, but rather a key area that is missing.</p> | <p>The regional study GIS tool should incorporate up to date observations and forecast predictability requirements. These should be reviewed at least every 5 years.</p> | <p>While each exploration project is of relatively short duration and will not expected to be affected by climate change within its duration, climate change could result in changes in the meteorological, oceanographic and ice conditions over the longer time frame that the regional study will be used.</p> |