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February 21, 2020 (VIA EMAIL)

Dear Regional Assessment Committee,

RE: Public Comments on Draft Regional Assessment Report for Offshore Oil and Gas Exploratory Drilling East of Newfoundland and Labrador

WWF-Canada thanks the Committee and the Impact Assessment Agency of Canada (IAAC) for the opportunity to provide comments on the Draft Regional Assessment Report for the Regional Assessment of Offshore Oil and Gas Exploratory Drilling East of Newfoundland and Labrador (reference number 80156), a process in which we have been an active participant. The World Wildlife Fund (WWF) is one of the largest independent conservation organizations in the world, with projects in more than 100 countries. WWF-Canada creates solutions to the environmental challenges that matter most for Canadians. We work in places that are unique and ecologically important, so that wildlife, nature and people thrive together. WWF-Canada believes healthy coastal communities depend on healthy oceans. We are working in partnership with coastal communities, Indigenous peoples and other groups to advocate for marine protected areas and sustainable oceans management, and to ensure the rules governing offshore oil and gas activities are consistent with international best practices for safety, accountability and environmental protection.

While WWF-Canada supports the impact assessment process, we have raised significant concerns throughout this Regional Assessment (RA) which, in our view, have not been meaningfully addressed. As this is the first RA to be completed under the new *Impact Assessment Act*, it sets a precedent for how future RAs could be conducted across the country. In reviewing the Draft Regional Assessment Report and recommendations of the Committee, it is clear that **the Report does not provide the Minister of Environment and Climate Change Canada with sufficient information or analysis to support the creation of a regulation to exempt exploration**



drilling projects from the need to conduct site-specific impact assessments within the Study Area. An appropriate science-based assessment of impacts, including cumulative impacts, has not been done nor has stakeholder feedback been meaningfully incorporated into the draft recommendations. The report does not recommend prohibiting exploratory drilling in sensitive protected areas and does not consider the climate impacts of decades of increased oil extraction and burning.

WWF-Canada recommends that the Minister of Environment and Climate Change commit to further research before exempting exploration drilling projects from impact assessments given the obvious shortcomings of this Report and the admitted data gaps, and set aside areas where development should not take place in order to protect sensitive habitats and wildlife.

We expand on our concerns below.

Regional Assessment Mandate and Terms of Reference

Regional Assessments should be used to address issues that are best considered at a regional level.¹ As noted in the *Impact Assessment Act* (IAA), Regional Assessments can have a range of goals and activities, which could include data gathering; trend analysis; better understanding the Study Area’s environmental, social and cultural context; identifying region-specific issues early on; setting thresholds and standard mitigations to help guide future planning and project development; regional development planning to assess future alternative development scenarios; and supporting the identification of regional development objectives. It was clear from the outset of this process that the Committee had one goal in mind – to create a regulation to remove the need for site specific impact assessments for exploration drilling projects in the Study Area. In the Report, the Committee stated that the purpose of the RA was to “help facilitate an adaptive management approach for future exploratory drilling projects in the Study Area” (page 89) and that “a considerable focus of the Committee’s analysis and engagement activities was on identifying and evaluating the various mitigation measures that have been and should be applied to exploratory drilling projects in the Study Area to help avoid or reduce adverse effects, as well as associated monitoring and follow-up initiatives” (page 113). This implies that the Committee started out with the assumption that this process was not about assessing impacts, rather it was about granting approvals. It was not *IF* the RA should be used to create a regulation to exempt projects from the need for project specific impact assessments, but *HOW* and under what conditions.

Given the terms of reference (TOR) and the new *Impact Assessment Act* (IAA), the objective of the RA should be to conduct a comprehensive evaluation of potential risks and threats to valued components that will be impacted by exploratory drilling at the

¹ <https://www.canada.ca/en/impact-assessment-agency/services/policy-guidance/regional-assessment-impact-assessment-act.html>



regional level. As per the TOR for the Committee, outlined in the Agreement to conduct the RA, the results of the RA are meant to meet or exceed the rigor and performance of the current impact assessment and regulatory review process used for the approval of exploratory drilling. The recommendations do not reflect that the RA has met the performance standard of existing impact assessment processes or Strategic Environmental Assessments (SEAs). The TOR also mandates the Committee to **conduct an assessment of the effects of existing and anticipated** exploratory drilling in the Study Area. No evidence is offered within the recommendations to demonstrate that this mandate has been met. As noted by the Committee, their focus has been on “planning rather than prediction, and on seeking to proactively manage issues through the identification and recommendation of mitigations and follow-up requirements for future projects, as well as suggested improvements in associated regulatory processes where required” (page 10). Planning, while important, does not constitute an assessment, which further confirms that the Committee has not met its mandate.

The new *Impact Assessment Act* is intended to improve meaningful engagement. Exempting exploration drilling projects from project specific impact assessments takes away the mechanism for impacted rightsholders, stakeholders and the general public to be aware of, consulted on or meaningfully engage on future projects.

The main objective and desired outcome of the RA should extend beyond “improving the effectiveness and efficiency of the impact assessment process”. We expected that it would consider and weigh the implications of oil and gas versus other types of development, establish clear development and sustainability goals and identify preferred direction, and future management strategies and priorities for the Study Area. Instead it outlined a process to fast-track oil and gas development in a world that needs to swiftly decarbonize.

Regional Assessment Scope and Timelines

The Study Area is a rich, complex and dynamic marine ecosystem that covers 735,000 square kilometers – larger than the province of Alberta. It includes both areas within Canada’s exclusive economic zone and out into international waters and covers a diverse array of ecosystem types home to sensitive habitats and species. There are also numerous human activities that occur within the area, particularly fishing and shipping, that may be impacted by future offshore oil and gas development, in addition to a considerable amount of offshore oil and gas activity. The Committee noted that the sheer size and diversity of the Study Area suggests that there is not necessarily always a ‘one size fits all’ approach to environmental protection (page 159). However, the Committee made generalized recommendations for the entire Study Area and did not put any areas off limits to development nor recommended any additional mitigation or follow-up measures for particularly sensitive areas or species. Given that the RA also highlights many inconsistencies with the amount, type, quality and scale of baseline

data, and numerous data gaps, WWF-Canada concludes that the recommendations are too general for the Study Area.

The RA timeline was too short. Engagement with stakeholders began in Spring of 2019, and the TOR guiding the RA stated that the Committee was to have work completed no later than Fall of 2019. While we recognize that the RA timeline was extended into early 2020, both SEAs and site-specific environmental assessments occur on timelines that significantly exceed the length of this RA. Given the scope of the assessment, the transboundary nature of the Study Area and the desired outcome of the Committee to recommend the exemption of exploration drilling from site specific impact assessments, the timeline was insufficient.

The Committee also noted in the report that timelines were short, and that they could have used more time (page xi), and that it was not within the timing and scope of the RA to fully gather all the data needed for the assessment (page 90). It is unclear why the Committee did not ask for sufficient time to complete the process, given that according to the agreement to conduct the RA, the Committee could seek amendments to the TOR, including adjusting timelines, upon request from the Minister.² Throughout the process, stakeholders, including WWF-Canada, felt they were not provided with enough time to review materials in advance of meetings, nor to provide written feedback. It was also unclear how (or if) feedback was incorporated into the assessment. WWF-Canada also takes issue with the fact that the draft report was released on January 23, but the GIS tool, which is referenced heavily in the report as containing pertinent supporting information to the RA, was not released until February 3. This shortened the amount of time reviewers had to dig into the information contained with the tool and provide feedback.

GIS Tool, Data Availability and Future Research

The Committee outlined their desire to create a geospatial (GIS) database that could be used to support decision-making. While we agree that a GIS database could be useful, this is only the case if it includes all pertinent information, identifies data gaps and if development is prohibited within data deficient areas until data gaps are filled.

Throughout the Report the Committee highlights key information gaps, the difficulty of studying offshore species and the complexity of offshore ecological systems and mention the paucity of data from the very deep, abyssal habitats in the Study Area. **WWF-Canada recommends that data deficient areas remain off limits until more scientific information has been collected.** While we appreciate that no small amount of work has gone into gathering data and presenting it in a GIS database, as it currently stands, the tool lacks decision support functionality (for example, triggering assessments for data deficient areas to determine if drilling is appropriate and what

² <https://www.cnlopb.ca/wp-content/uploads/regassess/draftagreement.pdf>



measures are necessary to mitigate impacts). While it does include a variety of datasets, it is still lacking pertinent information highlighted by the Committee and does not provide advice to decision-makers of the relative risks to support the approval or rejection of projects. It does not take the place of conducting an assessment.

A fundamental weakness of the RA process is that the work of the Committee was not fully supported by other federal departments. The Committee states that “**science expertise of the federal government was not available or accessible to support the work of the Committee.**” It is deeply concerning that the best available information was not sourced and considered for this RA. While many of the Committee recommendations are directed toward other government departments and agencies to improve the knowledge base and processes needed for future sustainable resource management, it still recommends the exemption of project specific impact assessments in the absence of such information.

WWF-Canada agrees that more data needs to be collected to inform decision-making, however, the RA recommendations put the onus on Government to do this work. During site-specific impact assessments, proponents are responsible for the data-gathering to inform their project assessment. WWF-Canada considers it unacceptable that costs associated with future science and data-collection are to be borne by Canadian taxpayers and not industry.

We do agree with Recommendation 8 to develop and implement a protocol for gathering, documenting and sharing information and knowledge. This would help further marine spatial planning in the region. However, the type of data gathering and sharing proposed does not take the place of an assessment.

The Report discusses the importance of Indigenous Knowledge and acknowledges that it has not been included in recent and on-going offshore exploratory drilling assessments in Canada. That said, the Report but does not incorporate Indigenous Knowledge.

WWF-Canada recommends that clarification be provided on how Indigenous Knowledge has or will inform the RA process.

Inadequate Accounting of the Impacts of Seismic Testing

Before exploratory drilling commences, seismic surveys will be necessary. An accounting of this type of activity has not been included in the cumulative effects section, nor were the impacts of vertical seismic profiling sufficiently considered. Site specific environmental assessments do not adequately account for cumulative effects, so a study at the regional level is the best venue for this type of accounting. We disagree with the Committee’s finding that offshore seismic surveys should be outside the scope of the assessment, as it has been noted on page 145 that predictive modeling of potential future seismic survey activity in the Study Area over the 2020-2028 period indicates



that a total of up to 136,140 km of 2D and 82,293 km² of 3D seismic data could be acquired during this period.

Underwater noise from seismic testing can travel thousands of kilometers under the right conditions and have wide-spread impacts on marine life.³ To date 130 species have been documented to be impacted by human-caused underwater noise pollution, including species present in the Study Area such as plankton, benthic organisms, whales and other marine mammals, invertebrates, some fish species, squid and shrimp, although more research is needed for these and many other species.⁴

The Committee recommends business as usual mitigations to reduce the impacts of noise from exploration drilling related activities. It should be noted that mitigation options that currently exist are largely unproven in their effectiveness. For instance, most whales are rarely visible at the surface, especially the deep divers, such as Northern bottlenose whales. Quantitative analysis has shown that mitigation monitoring detects fewer than 2 per cent of beaked whales even if the animals are directly in the path of the ship.⁵ Other species might be slightly easier to sight, but again monitoring cannot be relied upon to be satisfactorily effective. Marine Mammal Observers are often not sufficiently trained (specifically in the use of Passive Acoustic Monitoring) nor suitably rested, nor are they necessarily listened to when they claim to have sighted a marine mammal.⁶

In addition, ramp-ups or soft starts do not appear to be consistently and reliably effective in causing humpback whales to move away from the source vessel, a species that is found within the study area.⁷ There is large variation in whale behavior, with some groups swimming away from the sound source whereas others approached even relatively loud noise levels.⁹ Moreover, when animals have a strong motivation not to move away from their current location, ramp-ups are unlikely to be effective. **WWF-Canada recommends that the Committee update advice on how to mitigate underwater noise impacts on marine species using the recently released Canadian Science Advisory Secretariat Science Advisory Report “Review of**

³ Nieuwkirk, S.L., Mellinger, D.K., Moore, S.E., Klinck, K., Dziak, R.P. and Goslin, J., 2012. Sounds from airguns and fin whales recorded in the mid-Atlantic Ocean, 1999–2009. *The Journal of the Acoustical Society of America*, 131(2), pp.1102-1112.

⁴ Weilgart, L., 2018. The impact of ocean noise pollution on fish and invertebrates. *Report for OceanCare, Switzerland*. https://www.oceancare.org/wp-content/uploads/2017/10/OceanNoise_FishInvertebrates_May2018.pdf

⁵ Barlow, J. and Gisiner, R.

2006. Mitigating, monitoring and assessing the effects of anthropogenic sound on beaked whales. *Journal of Cetacean Research and Management*, 7(3), pp.239-249.

⁶ DFO. 2010. Guidance Related to the Efficacy of Measures Used to Mitigate Potential Impacts of Seismic Sound on Marine Mammals. DFO Can. Sci. Advis. Sec. Sci. Advis. Rep. 2010/043. <http://www.dfo-mpo.gc.ca/Library/341565.pdf>

⁷ Dunlop, R.A. et al. 2017. Response of humpback whales to ramp-up of a small experimental airgun array. *Marine Pollution Bulletin*. 103: 1-2.

⁸ Wensveen et al. 2017. Lack of behavioural responses of humpback whales indicate limited effectiveness of sonar mitigation. *Journal of Experimental Biology*. 220(22): 4150-4161.

⁹ Ibid.



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the Statement of Canadian Practice with Respect to the Mitigation of Seismic Sound in the Marine Environment.”¹⁰ This report documents new modifications and additions that should be incorporated into the Mitigation of Seismic Sound in the Marine Environment Statement of Canadian Practice based on the most updated scientific information. As this report states, business as usual mitigations are not sufficient to avoid unnecessary impacts on marine species and outlines ways to minimize negative effects.

Oil Spills and Other Unplanned Events

As the Committee highlights in the Executive Summary of the Draft Report, large oil spills could hinder Canada’s ability to meet its obligations to the United Nations Convention on Biological Diversity. It also goes on to say that “based on the history of the offshore exploration drilling, as well as numerous control mechanisms in place to prevent and respond to such incidents, this scenario is considered unlikely to occur as the risk has been reduced as low as reasonably practicable” (page xi). However, and as noted later in the report (page 105), “the number and magnitude of recent spills in the Study Area is a clear reminder that, despite best efforts, such accidents do occur.” Recent dangerous incidents in the Newfoundland and Labrador offshore highlight the risks of drilling in extreme northern environments, and that incidents have been occurring with alarming frequency. In November 2018 an estimated 250,000 liters of oil was spilled from the Huskey Energy’s SeaRose Platform, the largest spill in the province’s history. Some experts estimated that over 100,000 sea birds, may have been killed due to the spill.¹¹ This was the second serious incident by Husky Energy’s SeaRose floating, production, storage and offloading vessel over a relatively short time span. In May 2017, an iceberg came within 180 meters of the same vessel, so close that the crew were told to “brace for impact,” yet oil production was not halted. Two additional spills happened from the Hibernia platform in the summer of 2019, totaling over 14,000 liters. The frequency of such events is extremely concerning and highlights the hazards common in extreme environments. It also showcases the need for a higher level of caution with regards to avoiding sensitive areas and the need for more stringent regulation of the offshore oil and gas industry.

In terms of mitigating the risk of oil spills, it is worth noting that some of the conditions that can increase the risk of a well blowout are present in the Newfoundland and Labrador offshore, including deep water, extreme weather and the need for a significant amount of exploration drilling. It has been reported that of all the phases of offshore operations, exploration drilling entails the highest risk of

¹⁰ http://www.dfo-mpo.gc.ca/csas-sccs/Publications/SAR-AS/2020/2020_005-eng.pdf

¹¹ Stokes, C. Think few reported oiled seabirds is good news? Not so fast, says MUN biologist. *CBC News*. <https://www.cbc.ca/news/canada/newfoundland-labrador/searose-spill-seabird-threat-1.4914730>



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blowout.¹² Yet capping stacks, a device that has been proven effective in stopping well blowouts, are not required safety equipment. Documents filed to the Canadian Environmental Assessment Agency in relation to drilling projects in the Flemish Pass indicate that, if there were a well blowout, the capping stack would have to be shipped from Norway or Brazil, a process that could take between 14 and 36 days.¹³ Similarly, the Canada Nova Scotia Offshore Petroleum Board allowed British Petroleum to keep a capping stack in Norway for its drilling operations in the Scotian Basin.¹⁴ The Committee noted on page 110 that a capping stack is a standard mitigation measure in case of a blowout, yet one is not present in the region. **WWF-Canada recommends that a capping stack should be a necessary safety measure, especially given the desire by the province of Newfoundland and Labrador to double production by 2030.**

It is extremely difficult to clean up oil offshore or determine whether wildlife has been harmed. Oil spills, the most hazardous of all environmental risks associated with the offshore oil and gas industry, can be catastrophic for marine habitats and the whales, birds and fish that call them home. This is an unacceptable risk to take within sensitive areas, especially those counting towards or commitments to the Convention on Biological Diversity.

Protected and Sensitive Areas

While commitments under the Convention of Biological Diversity (CBD) for Canada to protect 10 per cent of its oceans by 2020 has been surpassed, new targets will be negotiated later this year. The consensus from the scientific community is that at least 30 per cent of our oceans needs to be protected by 2030 to help stem biodiversity loss. In fact, Prime Minister Trudeau committed Canada to protecting 25 per cent of its ocean by 2025, and 30 per cent by 2030, in his mandate letter to the Honourable Bernadette Jordan, Minister of Fisheries, Oceans and the Canadian Coast Guard.¹⁵

The International Union for Conservation of Nature (IUCN), which creates guidance for protected area practitioners that is used globally, states that management of marine protected areas and other effective-area based conservation measures (which have been renamed marine refuges in Canada) should not have environmentally-damaging industrial activities and infrastructure development occurring in them.¹⁶ This includes activities such as oil and gas extraction, consistent with IUCN Recommendation 102

¹² Officer of the Watch. August 6, 2013. *The Probability of an Offshore Accident*. <https://officerofthewatch.com/2013/08/06/the-probability-of-an-offshore-accident/>

¹³ CBC News Staff. Weeks to cap a subsea oil leak? It's industry standard, says official. <https://www.cbc.ca/news/canada/newfoundland-labrador/oil-capping-timelines-nl-1.4933106>

¹⁴ The Chronicle Herald. March 17, 2018. Opponents of ultra-deep BP well of NS coast speaking at SMU. <http://thechronicleherald.ca/novascotia/1553818-opponents-of-ultra-deep-bp-well-of-n.s.-coast-speaking-at-smu>

¹⁵ <https://pm.gc.ca/en/mandate-letters/2019/12/13/minister-fisheries-oceans-and-canadian-coast-guard-mandate-letter>

¹⁶ <https://portals.iucn.org/library/sites/library/files/documents/PATRS-003-En.pdf>

adopted at the 2016 World Conservation Congress, based on scientific evidence that this type of industrial activity and infrastructure development has adverse impacts on biodiversity and is never compatible with conservation.¹⁷ In 2019 the Minister of Fisheries, Oceans and the Canadian Coast Guard announced that all new federal marine protected areas would prohibit oil and gas activities in order to strengthen the conservation of our oceans.¹⁸ While this minimum standard does not currently apply to marine refuges, WWF-Canada attests that if oil and gas activities occur within parts of marine refuges, that area cannot count towards international protected area targets. As an example, the Northeast Newfoundland Slope Marine Refuge is 55,353 square kilometers and represents almost 1 per cent of what Canada reports as protected to the CBD.¹⁹ Parts of this marine refuge, a site which fish harvesters voluntarily agreed to stop fishing in to protect important fish habitat, has had oil and gas leases awarded within it since its creation in 2017. While the entire area remains off limits to fish harvesters, it is open for oil and gas development (see Figure 1). It is also important to note that if Canada-Newfoundland and Labrador Offshore Petroleum Board's (C-NLOPB) predicted drilling scenarios, put much of the future development within the Northeast Newfoundland Slope Marine Refuge (see Figure 2). If exploration proceeds as predicted, significant industrial pressure will be placed on this area, which negatively impacts Canada's ability to meet commitments under the CBD.

Allowing oil and gas activities to occur within marine refuges and other sensitive protected areas will make the path to 25 per cent by 2025 and 30 per cent protection by 2030 much more difficult, as the sites currently protected will no longer be able to count towards international targets. WWF-Canada fundamentally disagrees with the Committee's recommendation not to exclude portions of the Study Area from exploratory drilling activities. **WWF-Canada recommends that protected areas both within Canada's territorial waters and within International waters within the Study Area be off limits to development, in line with international guidance for the protection of biodiversity.**

¹⁷ https://portals.iucn.org/library/sites/library/files/resrecfiles/wcc_2016_rec_102_en.pdf

¹⁸ <https://www.canada.ca/en/fisheries-oceans/news/2019/04/background-new-standards-to-protect-canadas-oceans.html>

¹⁹ <http://www.dfo-mpo.gc.ca/oceans/oeabcm-amcepz/refuges/northeastnewfoundlandslope-talusnordestdeterrenewe-eng.html>

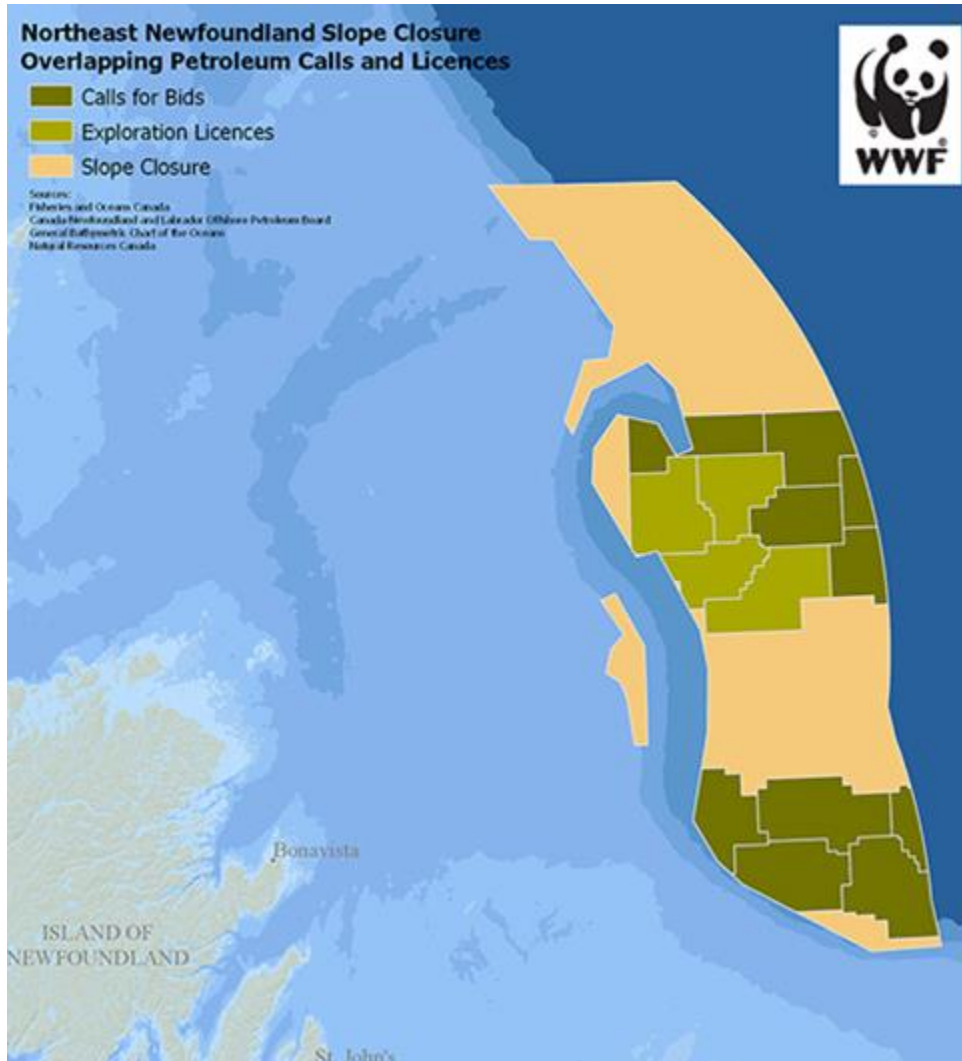


Figure 1: Northeast Newfoundland Slope Closure marine refuge overlapping with C-NLOPB Calls for Bids and exploration licenses in 2018. When exploration licenses are granted within marine refuges Fisheries and Oceans Canada will longer count these areas as protected towards international commitments (e.g. the areas with active exploration licenses within the marine refuge will no longer count towards our CBD targets).

While the Committee states that we and other stakeholders have not provided a supporting scientific basis for the identification of areas that should be off limits to oil and gas exploration (pages 114-115), the fact that sites have been legally protected within the Study Area demonstrates that several sites warrant protection. The supporting scientific basis for protection has already been provided and validated through completed MPA and marine refuge designation processes. Further, the Committee themselves noted that previous scientific processes identified areas of particular sensitivity and which warrant a precautionary approach (page 67, 114-115), and that “more needs to be done to ensure and demonstrate that sensitive areas area getting the

protection they require” (page 189). The report also notes that “deep sea ecosystems include species that exhibit low metabolic rates, late maturity, low levels of recruitment, slow growth rates and long life spans, characteristics that make recovery from disturbances relatively slow” (page 40), and that deep-sea corals and sponges are of particular interest and concern in the study area due to their important ecological role as complex habitat and that they are particularly sensitive to the effect of offshore oil and gas exploratory drilling. In addition, both Fisheries and Oceans Canada and the Northwest Atlantic Fisheries Organization use science-based processes to identify areas to be protected and would not curtail important activities such as fishing without due cause. **WWF-Canada recommends that site specific impact assessments be required in marine refuges in Canadian waters and NAFO’s vulnerable marine ecosystem closures, in addition to requiring enhanced mitigation and follow-up requirements.** Despite the mandate under the new IAA to follow the precautionary principle, and messaging from the Committee that this would be central to the RA process, the draft recommendations are wholly inconsistent with a precautionary approach.

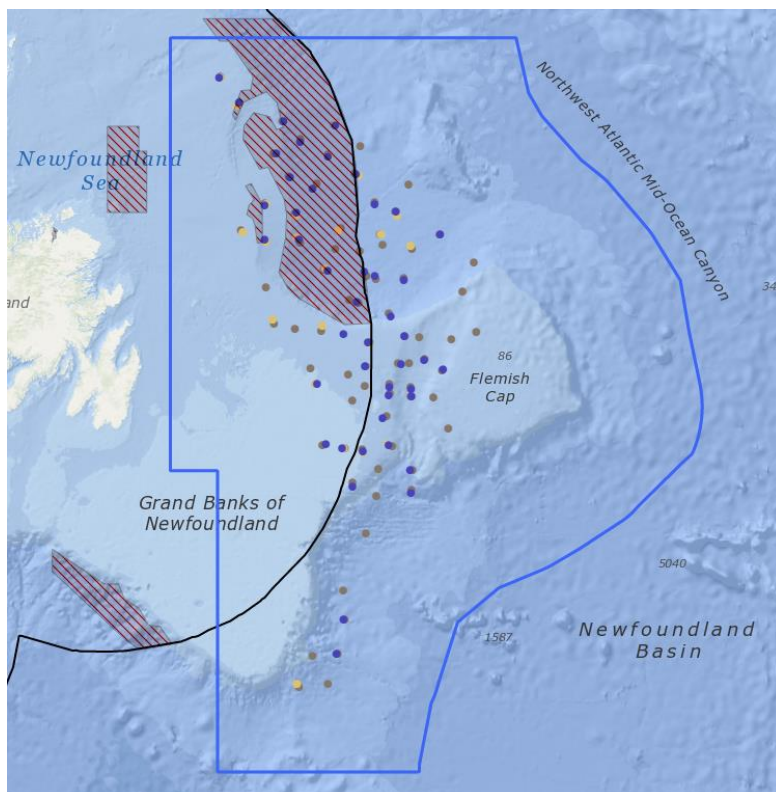


Figure 2: Marine refuges (red hatched lines) overlapping with predicted exploratory drilling well scenarios in the Study Area. It is noted that a significant amount of the proposed future wells overlaps with the Northeast Newfoundland Slope Closure marine refuge. Map created using Regional Assessment GIS tool.

The Committee also noted that a Canadian Science Advisory Secretariat (CSAS) Science Advisory Process was underway to determine Coral and Sponge Mitigations in Relation to Exploratory Drilling Programs in the Newfoundland and Labrador Region, and the findings of this process should be implemented during future exploratory drill programs.²⁰ At the time of report drafting the process had not taken place, but this meeting occurred on January 28-30, 2020. While the CSAS report will not be available for some months, **WWF-Canada recommends that a rapid technical advisory report be incorporated into Report findings before any regulations are drafted.** As is mentioned in the Report, this review will form the basis of specific guidance for the protection of corals and sponges, and time should be taken to ensure the most appropriate mitigation measures are put in place.

Climate Change

In 2015, Canada and 194 other nations committed to the Paris Climate Agreement. The signatories agreed to a substantial decline and a near phase-out of fossil fuels within 3 decades in an effort to limit global warming below 2 degrees Celsius (above pre-industrial levels) to substantially reduce the risks and effects of climate change.²¹ Further to that, the Intergovernmental Panel on Climate Change (IPCC) released a report in 2018, stating that the 2 degree target is insufficient, and that 1.5 degrees above pre-industrial levels is the desired goal to achieve clearer benefits for people and natural ecosystems.²² The Government of Canada also committed to achieve net-zero emissions by 2050 as outlined in the Ministerial Mandate Letter provided to the Honourable Jonathan Wilkinson, Minister of Environment and Climate Change Canada in December, 2019.²³

In our view, **section 7 of the Regional Assessment (Sustainability, Climate Change and Other Considerations) gives inadequate treatment to the full implications of a vastly expanded exploratory drilling program on national and provincial carbon reduction commitments.** We understand that the mandate of the Committee was limited to considering only the extent to which the effects of exploratory drilling projects hinder or contribute to the Government of Canada's ability to meet its environmental obligations and its commitments in respect of climate change. Viewed through this narrow lens, it is reasonable to conclude, as the Committee did, that the greenhouse gas emissions contributions from the proposed exploratory drilling program "are low and insignificant in comparison to (Canada's) greenhouse gas (GHG) targets, and any individual drilling program would

²⁰ http://www.dfo-mpo.gc.ca/csas-sccs/Schedule-Horraire/2020/01_28-30-eng.html

²¹ https://unfccc.int/sites/default/files/english_paris_agreement.pdf

²² <https://www.ipcc.ch/sr15/>

²³ <https://pm.gc.ca/en/mandate-letters/minister-environment-and-climate-change-mandate-letter>



have virtually no effect on current estimates of future global climate change” (page 175).

At the same time, the purpose of an exploratory drilling program is to discover new commercially significant resources that can be developed into full production operations. As the Committee acknowledges, the ultimate objective of exploration drilling is “finding commercially significant petroleum resources” (page 4) and that “exploratory drilling is the ‘thin edge of the wedge’ and successful exploration may lead to oil and gas production with concomitant GHG emissions” (page xi). There is never any guarantee of future production levels of course, but the potential for new oil and gas discoveries in the study area are known to be considerable. The government of Newfoundland and Labrador has already established a goal of doubling offshore oil production by 2030 in its *Advance 2030* report to 237 million barrels per year.²⁴ This goal is founded upon “excellent seismic coverage” from the results of over 133,000 square kilometers of three-dimensional seismic data accumulated over years of testing and studies estimating undiscovered resources of 37.5 billion barrels of oil and 133 trillion cubic feet of natural gas. It is therefore erroneous for the Committee to state in the draft final report that “any potential future development activities are not and cannot be defined, described or assessed in any degree of detail at this early stage, and so these are not included within the scope of the Regional Assessment,” for this is precisely what the government of Newfoundland and Labrador has already done. Moreover, whereas the Committee refused to consider the climate impacts of potential oil production activities in the future, there appears to be no such objection with considering the current and potential economic benefits of future oil production. “The 2018 NOIA Study forecasts royalty and tax revenue to Newfoundland and Labrador to exceed \$100 billion by 2045, with 56,000 jobs created in 2033. In 2033, the oil and gas sector has the potential to generate more revenue for the province than the entire economy currently does. Similarly, under the scenario studied, the future impacts are significant across the country” (page 165). Yet how can we take this estimate seriously if, as the Committee states, any potential future development activities “cannot be defined”?

If economic projections of offshore production activities are possible, then so too are the climate impacts. **WWF-Canada recommends the RA describe and assess the impacts of future development activity scenarios.** The RA will not be complete without duly considering these impacts alongside economic projections. It is not an especially difficult task as it only requires analyzing carbon emissions at current production levels and extrapolating the emissions associated with future production level targets. For example, in 2016, total carbon dioxide emissions in the province were 10.8 Mt, with oil and gas operations in Newfoundland and Labrador accounting for

²⁴ <https://www.gov.nl.ca/nr/files/advance30-pdf-oil-gas-sector-final-online.pdf>



25 per cent of the total, or 2.7 Mt.²⁵ Of this, 1.6Mt was attributed to offshore oil production and 1.1 Mt to refining. This was based on a production level of 77 million barrels in the same year. In 2018, the government announced a goal to more than triple oil production by 2030 to 237 million barrels. Consequently, barring a technological breakthrough in reducing emissions per barrel, we can assume that emissions from production operations will also roughly triple, rising from 1.6 Mt in 2016 to 4.9 Mt in 2030.

In 2018, the provincial government also set an aspirational target of reducing greenhouse gas emissions to 30 per cent below 2005 levels by 2030 or 6.9 Mt.²⁶ This means offshore oil production alone (4.9 Mt) would account for 71 per cent of the province's total emissions in 2030, making it virtually impossible to meet the 2030 target. Add in the increased emissions from refining, and the oil and gas sector alone may overshoot the target for the entire province before emissions from transportation are even considered (which was the largest emitting sector in the province in 2016). This calculation also does not include downstream emissions, which by some estimates would increase emissions from production by up to ten times, according to a 2017 analysis from the Climate Accountability Institute, which states that downstream emissions account for 90 per cent of a project's total lifecycle emissions.²⁷ We note again that the Committee *has* included the downstream economic impacts of future oil production including “indirect” and “induced” employment, which are known for being highly subjective measures, but has neglected to consider downstream climate impacts. The government's ‘Advance 2030’ report also establishes a goal of increasing oil production to 1 million barrels per day by 2050 (see Figure 3 below), which would amount to a quadrupling of 2016 production levels and corresponding greenhouse gas emissions by the same time that Canada has committed to being “carbon neutral.” Every megatonne of emissions must count for Canada to have any chance of meeting its ambitious carbon reduction commitments. A 3 Mt increase in emissions in one sector of the provincial economy by 2030 is not “low and insignificant in comparison to (Canada's) GHG targets” as stated by the Committee, and even less so in the context of the province's emissions targets, which are exceedingly likely to be surpassed should oil production objectives be realized.

²⁵ <https://www.cer-rec.gc.ca/nrg/ntgrtd/mrkt/nrgsstmprfls/nl-eng.html?=&wbdisable=true>

²⁶ https://www.exec.gov.nl.ca/exec/occ/publications/The_Way_Forward_Climate_Change.pdf

²⁷ Climate Accountability Institute. 2017. The Carbon Majors Database: CDP Carbon Majors Report 2017.

Potential NL Oil and Gas Production (Barrels of oil equivalent per day)

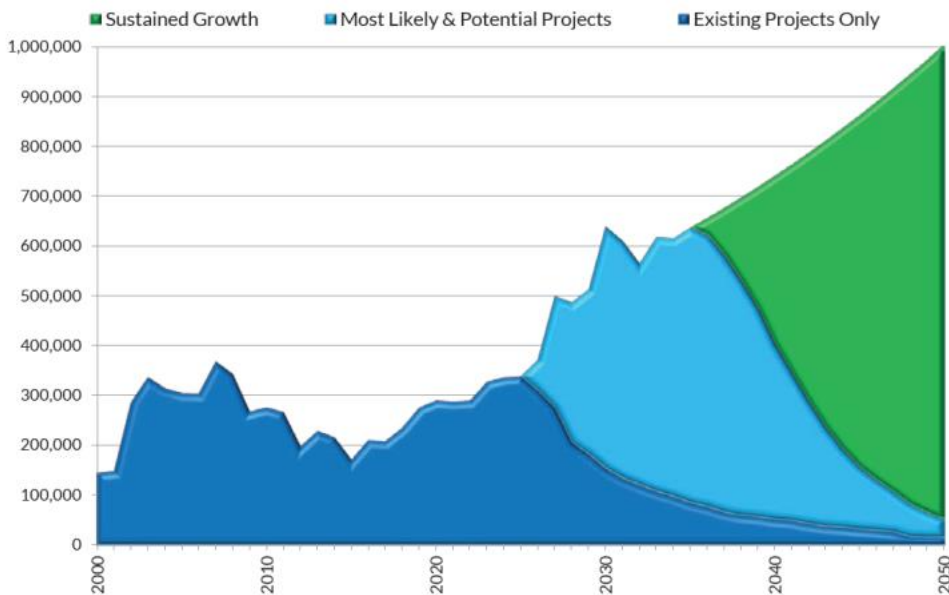


Figure 3: Potential Newfoundland and Labrador oil and gas production from 'Advance 2030'.

It is precisely the goal of the exploratory drilling program to be the first step toward a dramatic increase in offshore oil production. As stated by the government in 'Advance 2030', "We will leave no stone unturned, no action not taken, no effort undone, to achieve the success of this industry. The time is now to advance this opportunity." It is indisputable that this increased production will lead to a corresponding and significant increase in emissions. If the Committee continues to ignore this fact in the final version of its Report, it is incumbent upon them, at a minimum, to recommend that a climate analysis be required at some point before production drilling is approved. As the Committee states, we are "in a time of climate crisis", and the public deserves a clear and credible explanation from the government on how it plans to reconcile the province's competing emissions reduction and oil production goals.

Finally, although it is outside the purview of the Committee's mandate, it is interesting to note that growth in the offshore Newfoundland and Labrador oil and gas industry is predicated upon increasing demand for fossil fuels through 2040. The government confirms as much in the Global Outlook section of 'Advance 2030': "While the demand for oil is forecast to increase through to 2040, the global outlook for energy is changing. The U.S. Energy Information Administration forecasts fossil fuels will still



represent 77 per cent of global energy use.”²⁸ Thus, the government is basing its case for expanded offshore oil and gas on “forecasts” from the U.S. Energy Information Administration (EIA), despite the fact that the EIA clearly emphasizes in its report that it does not make forecasts.²⁹ Their reports are *projections*, not *predictions*, based on energy policies that are currently in place around the world. “Reference case projections in each edition of the IEO are not predictions of what is most likely to happen, but rather they are modeled projections under various alternative assumptions.” The RA does not include a low-carbon or Paris Agreement compliant assumption in their projections, something for which they have been roundly criticized.³⁰ In other words, the EIA does not include projections for a world that meets carbon reduction targets under the Paris Agreement because current policies around the world are not yet in place to meet these targets. *If* governments were to take their Paris commitments seriously and put in policies to ensure this happens, increasing global oil and gas demand until 2040 could not possibly take place and the case for offshore oil and gas in Newfoundland and Labrador is far less promising. Put another way, one could argue that the future success of the offshore industry in the province is predicated upon the global community NOT taking the actions necessary to limit warming sufficiently, as the demand for higher cost north Atlantic oil is likely to be significantly reduced in a low carbon world.³¹

Cumulative Effects Assessment

Cumulative effects (CE) assessments are often done poorly at the site-specific level, which is why it is so important that they are assessed at the regional level. The RA offered an invaluable opportunity to consider CE in a holistic manner; however, to date **the Committee has declined to do a full CE assessment due to “difficulties in modelling cumulative effects and their ecological outcomes” and because it had “neither the time nor the capacity to evaluate cumulative effects in a predictive/quantitative sense.”** If the Committee believes that CE assessments are too challenging or time consuming to assess adequately at the regional assessment stage, at what point will they be comprehensively evaluated? Without a fulsome and robust CE assessment, it is not reasonable for the Committee to conclude that there have not been and will likely not be “significant spatial and temporal concentrations of offshore activity and associated cumulative effects from exploratory drilling in the Study Area.”

We agree that cumulative effects are inherently difficult to assess and manage, especially at the project specific level, which is why they should be understood at the regional level. As acknowledged by the Committee, RAs are an opportunity to have a more

²⁸ <https://www.gov.nl.ca/nr/files/advance30-pdf-oil-gas-sector-final-online.pdf>

²⁹ <https://www.eia.gov/outlooks/ieo/pdf/ieo2019.pdf>

³⁰ <https://www.climatechangenews.com/2016/05/11/where-are-climate-goals-in-eia-energy-outlook-its-complicated/>

³¹ <https://www.carbontracker.org/reports/breaking-the-habit/>



comprehensive and proactive approach to considering the cumulative effects of multiple, independent activities and disturbances in a region by informing better planning and decision-making processes.

A cumulative effects assessment is a requirement for proponents during project specific impact assessments, yet the Committee recommends that CE be managed through planning, and that the Canada-Newfoundland and Labrador Offshore Petroleum Board should be responsible for CE assessment during the land tenure process. **It is inappropriate that the determination of CE be delegated to the industry regulator**, as it should be a public and transparent process based on science. We would also note that the current Call for Bids process has no mechanism for determining CE and that many of the proposed exploratory wells may be within the Northeast Slope Marine Refuge, which is a sensitive area.

Despite acknowledging that a CE assessment presented insurmountable capacity and modelling challenges, the Committee has nevertheless concluded that “the drilling project in question is not anticipated to disturb, displace, or otherwise affect marine fish, birds, mammals and sea turtles, Indigenous peoples, fisheries or other human components and activities in such a way that causes adverse, sustained and detectable effects to populations, species at risk or to the overall nature and value of human activities. Recent EAs submitted by operators, and associated EA decision statements by governments, have concluded that with the implementation of these mitigations, these exploratory drilling projects are not likely to result in adverse environmental effects” (page 167).

We again question the basis of this conclusion when a proper CE assessment has yet to be carried out in the Study Area. While a single exploratory drilling project may not have significant, adverse environmental consequences, multiple drilling operations may, and past and current stressors influence the overall sensitivity or resiliency of this environment to further disturbance. It is therefore critical that the CE assessment consider a range of exploratory drilling scenarios at different scales within the study area. If the historical average of just over three exploratory wells spudded per year is maintained, this will have dramatically different cumulative impacts compared with a program of dozens of wells within only a few years. The Committee has in fact acknowledged that drilling could increase in the future given various industry and governmental initiatives and the focus on new basins in the Study Area, and the provincial government has already announced its intention to see the drilling of 100 exploratory wells over the coming decade. In fact, the Committee has predicted that between 5.9-8.6 wells will be drilled each year. Factoring in the 45-160 days needed for each well would mean that there would be an estimated 3,604 to 5,236 total drilling days over a nine-year period depending on minimum and maximum scenarios, an outcome that could have important cumulative impacts within the study area.



We agree with the Committee’s assertion that “The widespread and migratory nature of marine mammals and sea turtles increases the potential for individuals and populations to be affected by multiple disturbances in various locations, and thus for cumulative effects to occur.” Moreover, the Committee has predicted that higher concentrations of drilling will occur within the sensitive Northeast Newfoundland Slope Marine Refuge and the slope of the Grand Banks, which is also cause for concern. **As such, WWF-Canada recommends conducting a thorough and transparent cumulative effects assessment of the region before any exploration licenses are granted.** The Committee has passed this responsibility on to the province by recommending that “government assume responsibility for offshore-related cumulative effects assessment and management through a planning process directed by a dedicated agency” (such as the Fisheries and Oceans Canada Marine Spatial Planning initiative). At this late stage of the RA process, deferring CE assessment to another federal regulator could be a reasonable approach provided that, again, the assessment and planning are transparent and public; they take place at a broadly regional scale; and they are undertaken prior to the issuance of exploration licenses.

Sustainability and the Precautionary Principle

The Regional Assessment Agreement requires consideration of the extent to which offshore exploratory drilling contributes to sustainability. The federal *Impact Assessment Act* defines sustainability as: *The ability to protect the environment, contribute to the social and economic well-being of the people of Canada and preserve their health in a manner that benefits present and future generations.* One of the key considerations and principles for assessing contributions to sustainability include applying the precautionary principle and considering uncertainty of risk and irreversible harm. The Committee focused on a very narrow lens of sustainability in terms of the socioeconomic benefits of the oil and gas industry but does not mention the potential negative socioeconomic implications to other industries should an oil spill happen or impacts to fisheries when exclusion zones need to be created around drilling projects. It does not mention the impacts to human health or the environment with a changing climate brought on by expanded oil and gas development and negates the impacts of drilling activities as not significant and largely manageable through mitigation and follow up measures because they neglected to take into account cumulative impacts. A precautionary approach would also avoid siting developments in sensitive and data poor areas.

Conclusion

This is the first RA undertaken under the new *Impact Assessment Act*, and as noted in the report, others will follow. WWF-Canada believes this RA process is insufficient and does not agree that the Committee has provided enough information to support the recommendations to create a regulation to exempt exploratory drilling projects from site



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specific impact assessments in the Study Region. The report clearly implies that more work needs to be done before more exploration drilling goes ahead in the Study Area.

Sigrid Kuehnemund

Sincerely,
Sigrid Kuehnemund
Vice President, Ocean Conservation
WWF-Canada