

MARINE MAMMAL COMMISSION

23 April 2018

Mr. David Johnston Chief, Leasing Section Alaska Outer Continental Shelf Region Bureau of Ocean Energy Management 3801 Centerpoint Drive, Suite 500 Anchorage, Alaska 99503-5823

Dear Mr. Johnston:

The Marine Mammal Commission (the Commission), in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the Bureau of Ocean Energy Management's (BOEM) Call for Information and Nominations for the 2019 Proposed Oil and Gas Lease Sale for the Beaufort Sea Planning Area (83 Fed. Reg. 13778).

The Commission provided extensive comments to BOEM on the Draft Proposed Program for the 2019-2024 National Outer Continental Shelf (OCS) Oil and Gas Leasing Program (letter dated <u>9 March 2018</u>). The Commission noted that an expanded leasing program raises a number of basic concerns relative to the protection of marine mammals and the ecosystems they inhabit, many of which pertain directly to lease sales in the Arctic.

- Additional information is needed on the abundance, distribution, and habitat use of marine mammal species and stocks in many of the proposed planning areas so that adequate and appropriate mitigation measures can be implemented.
- There continue to be gaps in our understanding of how oil and gas development¹ affects marine mammal species and their habitat, thus mitigation measures may be too restrictive or not restrictive enough.
- Research and technology to prevent, prepare for, and respond to oil spills, particularly in icy conditions, remains fragmented and underfunded (Interagency Coordinating Committee on Oil Pollution Research; ICCOPR 2015).
- With respect to prevention of oil spills, the Bureau of Safety and Environmental Enforcement is currently reviewing, and possibly rescinding, regulations to improve the reliability of offshore drilling equipment, prevent 'loss of well-control' events², and ensure that exploratory drilling activities in the U.S. Arctic are conducted according to the highest safety and environmental standards³.
- From a broader environmental and human safety perspective, an increase in oil and gas development, and the subsequent combustion of extracted fossil fuels, would accelerate

¹ Reference to 'energy development' here and throughout this letter refers to all stages of energy exploration, development, production, transportation, and decommissioning.

² https://www.bsee.gov/guidance-and-regulations/regulations/well-control-rule

³ https://www.bsee.gov/guidance-and-regulations/regulations/arctic-rule

greenhouse gas emissions at a time when extreme weather events linked to a warming climate are increasing in both frequency and severity (Diffenbaugh et al. 2017).

• The Arctic climate is warming at twice the pace of lower latitudes⁴. Marine mammal distribution is being affected by changing climatic conditions (Silber et al. 2017), with pronounced shifts reported in Arctic waters (Stafford et al. 2007, Stirling and Derocher 2012, Brower et al. 2018). Rapid loss of sea ice and unpredictable weather are also having significant impacts on Alaska Native coastal communities and traditional marine mammal hunting practices (Galginaitis 2013 and 2014, Robards et al. 2013, Inuit Circumpolar Council (ICC)-Alaska 2015, Huntington et al. 2017, ICC 2017).

The letter recommended that BOEM maintain the lease sale schedule from the 2017-2022 Leasing Program, which did not include a lease sale in the Beaufort Sea. The Commission further recommended that, if BOEM decides to include leasing in undeveloped and underdeveloped (aka 'frontier') OCS planning areas in its 2019-2024 Leasing Program, it limit leasing to a single lease sale per planning area during the five years covered by the Leasing Program, with such sales to occur near the end of the five-year program. Limiting the number of lease sales in the Arctic and scheduling them at the end of the five-year schedule would allow for additional information to be collected to inform the development of effective marine mammal mitigation and monitoring measures, as required by section 101(a)(4) of the Marine Mammal Protection Act. It would also allow for continued outreach and information gathering to ensure timely and meaningful government-to-government consultation with Alaska Native tribal governments, in accordance with Executive Order 13175. However, the Call for Information appears to presume that a lease sale will occur in the Beaufort Sea in 2019, despite the fact that the 2019-2024 leasing program has yet to be finalized and approved.

The Beaufort Sea planning area contains a great deal of important habitat for ice-dependent and ice-associated species such as ringed, spotted, and bearded seals, polar bears, and bowhead and beluga whales. Research in recent years, funded in large part by BOEM, has enhanced our understanding of marine mammal abundance, movement patterns, and habitat use in the Arctic. That research has reinforced the importance of the Beaufort Sea as habitat for bowhead whales (Citta et al. 2017, Clarke et al. 2017), beluga whales (Hauser et al. 2014, 2018), polar bears (Wilson et al. 2014, Pilfold et al. 2017), bearded seals (MacIntyre et al. 2015), ringed seals (Von Duyke et al. 2017), and other ice seals, and the influence of variable oceanographic and sea ice conditions on marine mammal movements and habitat use. Alaska Native communities are highly dependent on marine mammals for subsistence and cultural purposes (ICC-Alaska 2015). BOEM-funded studies have contributed to the collection of traditional/indigenous knowledge regarding subsistence use patterns by Alaska Natives (Braund and Associates 2010, Galginaitis 2014, Kofinas et al. 2016). Continued research on marine mammals, coupled with continued collection of traditional/ indigenous knowledge, will help inform predictions of how industrial activities and other perturbations are likely to affect marine mammal abundance, movement patterns, habitat use, and the availability of marine mammals for subsistence use by Alaska Natives into the future.

In its comments on the Beaufort Sea Lease Sale 242, dated <u>18 September 2014</u>, the Commission recommended that several areas be excluded from leasing because of their importance to marine mammals for foraging, transiting, or resting, or because the areas are essential for

⁴ https://www.arctic.noaa.gov/Report-Card/Report-Card-2017/ArtMID/7798/ArticleID/685/Executive-Summary

subsistence use. BOEM previously evaluated several of these recommended exclusion areas for its 2012-2017 and 2017-2022 Proposed Final Programs (BOEM 2012, BOEM 2016, respectively). The areas identified for exclusion in the 2017-2022 Proposed Final Program were included as options to be analyzed for potential exclusion in the 2019-2024 Proposed Program (Figure 3 in the Draft Proposed Program). A summary of those and other additional areas that the Commission now recommends for exclusion from any future lease sales in the Beaufort Sea planning area is provided here, with updates to reflect new information (see enclosed map depicting the recommended exclusion areas).

- **Barrow Canyon bowhead whale feeding area** Barrow Canyon extends from the Chukchi Sea into the Beaufort Sea near Point Barrow. As such, BOEM should ensure that the exclusion area extending from Point Barrow encompasses the entirety of Barrow Canyon in both planning areas, rather than being sharply delineated at the border of the two planning areas as proposed by BOEM in its 2012-2017 Proposed Final Program (BOEM 2012) and in the program option identified for the 2019-2024 Leasing Program (Figure 3 in the Draft Proposed Program). Barrow Canyon represents important feeding habitat for bowhead whales. Wind-induced upwelling brings bowhead whale prey species (euphasiids and copepods) onto the Beaufort Sea shelf in late summer. These are retained and concentrated by the convergence of the Alaska Coastal Current and the Beaufort Sea shelf currents along the eastern edge of Barrow Canyon (Ashjian et al. 2010). These "krill trap" events coincide with observations of feeding bowhead whales in Barrow Canyon, on the Beaufort Sea shelf east of the canyon, and inside the 20-m isobath north of the Elson Lagoon barrier islands (Ashjian et al. 2010; Clarke et al. 2017).
- Barrow and Kaktovik subsistence use areas Bowhead whales are hunted for subsistence and cultural purposes by Alaska Native communities as they travel through the U.S. Chukchi and Beaufort Seas in summer and fall. Primary whaling areas in the Beaufort Sea include waters near Kaktovik, Cross Island, and Barrow (Huntington and Quakenbush 2009, Ashjian et al. 2010, Galginaitis 2014). Bowhead whale avoidance of ship noise and seismic and drilling activity has been well documented (sources cited in Reeves et al. 2014), and marine mammal avoidance of oil and gas development areas over time could alter the timing and distribution of their migrations and feeding patterns and affect the availability of those animals to subsistence hunters and communities. Changes in migration patterns could result in whales traveling at greater distances from shore, with serious implications for the safety of subsistence whalers and their success in catching whales. Recognizing the sensitivity of bowhead whales to industrial activity, BOEM proposed to exclude from leasing in its 2012-2017 Proposed Final Program (BOEM 2012) areas off Point Barrow extending east toward Admiralty Bay/Dease Inlet and areas north and east of Kaktovik, and has included those areas as options for exclusion in its 2019-2024 Draft Proposed Program. The Commission agrees that those exclusions are warranted; however, the areas proposed for exclusion appear considerably smaller in size than areas identified by Braund and Associates (2010) as medium- to high-use subsistence hunting areas for marine mammals and other species. They also do not encompass bowhead whale feeding habitat as documented by Ashjian et al. (2010) and Clarke et al. (2017). Areas to the east of the whaling areas are particularly important for protection from disturbance. Traditional knowledge indicates that if the leading whales migrating westward in the late summer from Canada into the U.S.

Beaufort Sea are deflected northward due to sound or other disturbance closer to shore, whales that come afterward will also deflect northward and out of the range of whalers (R. Suydam, pers. comm.). To ensure that subsistence whaling and bowhead feeding areas are protected adequately, the Barrow exclusion area should be extended eastward to the western edge of Smith Bay and seaward to the 20-m isobath, and the Kaktovik exclusion area should be extended eastward to 142° W longitude and seaward to the 50-m isobath (Ashjian et al. 2010, Braund and Associates 2010, Clarke et al. 2017).

- **Cross Island subsistence use area** The area east of Cross Island also warrants exclusion from leasing, as it has been identified as an important subsistence area by Nuiqsut whalers (Braund and Associates 2010, Galginaitis 2013, 2014). Based on traditional/indigenous knowledge and sightings of bowhead whales from aerial surveys, the Cross Island subsistence use area should encompass the area eastward to Tigvariak Island and seaward from the barrier islands out to the 40-m isobath to provide a sufficient buffer area around subsistence activities (Braund and Associates 2010, Galginaitis 2013, 2014, Clarke et al. 2017).
- **Camden Bay feeding and resting area** Traditional/indigenous knowledge indicates that Camden Bay is a consistently productive foraging and resting habitat for bowhead and beluga whales and ringed, bearded, and spotted seals; other marine mammals seen in the Camden Bay area include walrus, gray whales, and killer whales (Huntington 2013). This conclusion is also supported by aerial surveys for marine mammals (Clarke et al. 2017). Based on its importance as foraging and resting habitat for a variety of marine mammals that are also hunted by Alaska Natives for subsistence purposes, Camden Bay should be excluded from leasing, with a buffer area extending seaward to the 20-m isobath.

Given the risks to marine mammals and to the communities that depend on them for subsistence and cultural purposes, and the current lack of adequate capability and proven technologies for oil spill response, the Commission believes that the exclusion of key marine mammal foraging habitat and areas used for subsistence hunting from future lease sales in the Beaufort Sea is warranted. Therefore, <u>the Commission recommends</u> that BOEM exclude from leasing (1) the entirety of Barrow Canyon, (2) a subsistence use area east of Barrow extending to the western edge of Smith Bay and seaward to the 20-m isobath, (3) a subsistence use area east of Kaktovik extending to 142° W longitude and seaward to the 50-m isobath, (4) a subsistence use area east of Cross Island extending to Tigvariak Island and seaward from the barrier islands out to the 40-m isobath, and (5) a coastal buffer area off Camden Bay extending seaward to the 20-m isobath (see enclosed map).

These recommendations are based on best available scientific and traditional/indigenous knowledge as described above. However, the Commission defers to the Alaska Eskimo Whaling Commission and Alaska Native tribes/communities regarding the inclusion and delineation of areas used for subsistence hunting.

Tribal capacity for government-to-government consultation

The Commission commends BOEM for its continued efforts to conduct meaningful and timely consultation with Alaska Native tribes in the Arctic regarding BOEM actions with potential to affect tribal trust resources, in accordance with Executive Order 13175 "Consultation and Coordination with Indian Tribal Governments." Such consultation ensures that appropriate consideration is given to the views and perspectives of Alaska Native tribes regarding federal agency decisions that affect the resources and interests of the tribes, including decisions that affect marine mammal resources. Effective consultation is facilitated by building and maintaining trust relationships between federal agency and tribal council leadership, which BOEM has enhanced through numerous visits to Alaska Native communities in the Arctic. The Commission encourages BOEM to continue its frequent visits to these communities and to continue funding studies to enhance our understanding of subsistence use patterns and how those patterns might be affected by future oil and gas development.

It is important to note, however, that based on Commission discussions with Alaska Native Organizations and tribal leaders⁵, it is clear that tribal capacity for consulting with the numerous federal agencies operating in the Arctic is limited. That capacity will be stretched even further if BOEM adopts the annual lease sale schedule outlined for the Arctic planning areas in the 2019-2024 Draft Proposed Program. As already noted, the Commission has previously recommended that, if BOEM decides to include leasing in the Arctic and other 'frontier' program areas in its 2019-2024 Leasing Program, it limit leasing to a single lease sale per planning area during the five years covered by the Leasing Program. This would reduce the burden of consultation on Alaska Native tribes. The <u>Commission further recommends</u> that BOEM work with other federal agencies conducting activities in the Arctic to build tribal capacity for engagement in government-to-government consultation on federal actions that affect tribal resources. One example of a federally-sponsored tribal capacity-building program that could be supplemented by BOEM is the Environmental Protection Agency's Indian Environmental General Assistance Program (GAP)⁶. The GAP provides funding to tribes and intertribal consortia to build capacity to administer environmental regulatory programs and to develop multimedia programs to address environmental issues.

I trust these comments will be helpful. Please let me know if you have any questions.

Sincerely,

Peter o Thomas

Peter O. Thomas, Ph.D., Executive Director

Enclosure

⁵ http://www.mmc.gov/wp-content/uploads/Consultation_Meeting_2012_Summary.pdf, https://www.mmc.gov/events-meetings-and-workshops/marine-mammal-commission-annual-meetings/2016-annual-meeting/

⁶ https://www.epa.gov/tribal/indian-environmental-general-assistance-program-gap

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