14 June 2016

Ms. Kelly Hammerle
Five-Year Program Manager
Bureau of Ocean Energy Management
45600 Woodland Road VAM–LD
Sterling, Virginia 20166

Dear Ms. Hammerle:

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) 2017–2022 Outer Continental Shelf (OCS) Oil and Gas Leasing Proposed Program (Proposed Program) and Draft Programmatic Environmental Impact Statement (Programmatic EIS). The following provides comments regarding the planning areas that BOEM has included in the 2017–2022 Proposed Program and general comments on the information in the Programmatic EIS. The Commission will send further comments on planning area-specific EIS documents once those are available.

Provisions of the 2017–2022 Proposed Program

BOEM has included 13 lease sales in 6 OCS planning areas in its 2017–2022 Proposed Program. All proposed sales would be in planning areas where there are existing leases and known or anticipated hydrocarbon potential. The schedule and the areas to be included or excluded in each lease sale are as follows—

- One lease sale in Cook Inlet in 2021. This would be limited to the northern portion of the Cook Inlet OCS Planning Area. BOEM is considering potential mitigation or exclusion of beluga whale critical habitat, and other environmentally-sensitive areas.
- One lease sale in the Beaufort Sea in 2020, excluding areas withdrawn from leasing by Presidential order[1]. BOEM is considering whether other environmentally important areas that would be available for leasing merit additional mitigation or protection. The Proposed Program also analyzes an option to advance the Beaufort lease sale to 2019.
- One lease sale in the Chukchi Sea in 2022. BOEM is continuing to consider potential mitigation or exclusion areas, such as areas near Hanna Shoal that include a walrus foraging area and movement corridor.
- Ten lease sales in the Gulf of Mexico, offering all available acreage in all three planning areas. One lease sale would be scheduled for 2017 and 2022, and two each for 2018, 2019, 2020, and 2021. The proposed Gulf-wide lease sales would end the current practice of separate lease sales in each of the three Gulf OCS planning areas. BOEM is analyzing, as an

[1] Presidential withdrawal areas include whaling areas around Barrow and Kaktovik in the Beaufort Sea and Hanna Shoal (within the 40-m isobath) in the Chukchi Sea.

option, the traditional, separate planning area model, which includes five lease sales in the Western Gulf and five lease sales in the combined Central/Eastern Gulf, as well as a 15-mile no-leasing buffer south of Baldwin County, Alabama.

BOEM removed the proposed lease sale in the mid-Atlantic/South Atlantic OCS planning areas from the Proposed Program, citing strong local opposition, conflicts with other ocean users, and current market dynamics.[2]

Comments on specific planning areas in the Proposed Program

Cook Inlet

As noted in previous comments to BOEM, as well as to the National Marine Fisheries Service (NMFS), the Commission is concerned that expanded oil and gas leasing, when added to other existing human activities in state and federal waters of Cook Inlet, will pose significant risks to the endangered resident beluga whale population and adversely affect important habitat areas. Despite management of subsistence hunting since 1999, the beluga whale population continues to decline and currently numbers 340 animals (Shelden et al. 2015). Although the reasons for the continued decline of beluga whales are not known, anthropogenic noise, habitat loss and degradation, and cumulative and synergistic effects were cited by NMFS as potential threats to the recovery of beluga whales in Cook Inlet (NMFS 2015).

The Cook Inlet OCS planning area overlaps with portions of the southern extent of beluga whale critical habitat (76 Fed. Reg. 20180). The extent to which the southern portion of Cook Inlet is used by beluga whales appears to be limited in the summer (Rugh et al. 2010, Shelden et al. 2015). However, year-round acoustic monitoring in Cook Inlet suggests a broader distribution of beluga whales in the lower inlet during winter (Castellote et al. 2016), as far south as Tuxedni Bay on the western side of the inlet and the Kenai River on the east. Acoustic monitoring confirms visual reports of beluga whales south of Kalgin Island from photo-identification surveys (McGuire et al. 2014), industry-conducted monitoring of oil and gas activities (Owl Ridge Natural Resource Consultants 2014), and other opportunistic sightings (McGuire et al. 2014).

The Cook Inlet OCS planning area also overlaps with portions of critical habitat for the southwest Alaska distinct population segment of northern sea otters, as designated by the U.S. Fish and Wildlife Service (FWS; 74 Fed. Reg. 51988). Although sea otters typically inhabit shallow, nearshore waters, portions of critical habitat north of Chinitna Bay and north of Augustine Island (on the western side of the inlet) overlap with the western edge of the Cook Inlet OCS Planning Area. BOEM's Area Identification for Cook Inlet Lease Sale 244[3] excluded sea otter critical habitat north of Augustine Island to avoid disturbance of sea otters but did not exclude critical habitat north of Chinitna Bay.

[2] https://www.doi.gov/pressreleases/interior-department-announces-next-step-offshore-oil-and-gas-leasing-planning-process.
[3] http://www.boem.gov/uploadedFiles/BOEM/About_BOEM/BOEM_Regions/Alaska_Region/Leasing_and_Plans/Leasing/Lease_Sales/Sale_244_-_Cook_Inlet/Sale_244_Area_ID.pdf.

In its comments on the Draft Proposed Program (see the Commission's 30 March 2015 letter), the Commission recommended that BOEM defer leasing in Cook Inlet until the causes for the decline of the beluga whale population are better understood and addressed and until progress toward recovery of this population has been demonstrated. Given the potential for disturbance of both beluga whales and sea otters resulting from expanded oil and gas exploration and development in Cook Inlet, and the limited contribution of energy from Cook Inlet (approximately 2 percent of the total energy anticipated from the Proposed Program; BOEM 2016), the Commission again recommends that BOEM exclude lease sales in Cook Inlet from its Proposed Final Program, consistent with Alternative B(3)(a) in the Programmatic EIS.

In the event that a lease sale for Cook Inlet is included in the Proposed Final Program, the Commission recommends that BOEM exclude from the lease sale any and all portions of beluga whale and sea otter critical habitat that overlap with the Cook Inlet OCS Planning Area (i.e., all waters north of 60°15' N latitude and offshore waters that overlap with sea otter critical habitat on the western side of Cook Inlet north of Chinitna Bay and north of Augustine Island). To better assess baseline conditions in Cook Inlet, the Commission further recommends that BOEM partner with NMFS and other researchers in Cook Inlet to conduct year-round population monitoring to determine the abundance and distribution of beluga whales and sea otters—those data should yield better information to assess impacts to those species in waters within and adjacent to the lease sale area before, during, and after any oil and gas-related exploration or development activities.

The Arctic

The protection of marine mammals is critical in the Arctic OCS Planning Areas, where local communities are highly dependent on marine species for subsistence and cultural uses (Hovelsrud et al. 2008, Braund and Associates 2010) and access to food from other sources is limited and expensive. Changes in weather patterns, warming seas and air temperatures, and decreasing summer sea ice levels are having a profound effect on the distribution and movements of certain marine mammals (Kelly et al. 2010, Kovacs et al. 2010, Jay et al. 2012, MacIntyre et al. 2013, Bromaghin et al. 2015) and on their availability to Alaska Native communities for subsistence purposes. These changes are expected to increasingly impact food security, human health, and human safety (Ford 2009, Brubaker et al. 2011, Rode et al. 2015).

The Commission heard firsthand about the impacts of changing weather and ice conditions on the abundance and distribution of marine mammals and on subsistence opportunities/human health during its recent visit to several Alaska Native communities in the Arctic region.[4] At the Commission's listening sessions, several Chukchi Sea hunters noted that (1) sea ice is increasingly thin, unstable, and "dirty"; (2) break-up of the ice occurs earlier in the year and freeze-up occurs later; and (3) there are stronger, more variable winds and stronger currents, making travel across open water more dangerous. They also indicated that bearded seals and beluga whales are more difficult for hunters to find, resulting in limited hunting opportunities. Mammal-eating killer whales are more prevalent, and could be expanding their range north as the ice recedes. Seals have been found dead or sick with lesions, patches of hair loss, and breathing difficulties, causing NMFS to

[4] http://www.mmc.gov/events-meetings-and-workshops/marine-mammal-commission-annual-meetings/2016-annual-meeting/.

declare an unusual mortality event (UME) in 2011 for pinnipeds in Northern Alaska[5]. Sick seals are still being seen by local hunters, and concerns have been raised about the health risk associated with consumption of sick seals—many hunters do not take these animals due to apparent disease. The cause(s) for the UME have yet to be determined, but there is concern that it may be linked to warming waters and increased human presence in the Arctic region (i.e., shipping and other industrial activities).

Consideration of subsistence uses of marine mammals by Alaska Natives and the importance of preserving Arctic biodiversity for future generations were factors behind President Obama's permanent exclusion of certain areas of the Chukchi and Beaufort Sea from future lease sales, including Barrow Canyon, Hanna Shoal, a 25-mile coastal buffer zone along the shore of the Chukchi Sea, and subsistence hunting areas around Barrow and Kaktovik.[6] Although the excluded areas will provide marine mammals with protection against undue disturbance, and will minimize interference with hunting activities, they do little to minimize the risk and potential impacts of an oil spill in Arctic waters.

As noted in previous letters, there is considerable uncertainty regarding industry's ability to respond to oil spills in the Arctic environment. Oil spill response efforts in the Arctic would be hampered by ice and the inadequacy of in-ice response technologies, the remoteness, the extended periods of darkness and severe weather, the lack of trained personnel, and the insufficiency of equipment and infrastructure (Ebinger et al. 2014). In 2015, BOEM issued proposed regulations for exploratory drilling in the Arctic OCS Planning Areas with the intent of minimizing the probability and impact of an oil spill (80 Fed. Reg. 9916). The proposed regulations included requirements for companies to (1) submit integrated operations plans, (2) have a second oil rig available for drilling a relief well within 45 days, (3) test blowout preventer systems more frequently, (4) be able to deploy a capping stack within 24 hours in the event of a blowout, (5) capture all petroleum-based mud and associated cuttings, and (6) submit comprehensive oil spill response plans that address the unique challenges of responding to an oil spill in Arctic waters. However, these regulations have yet to be finalized. A recent review of oil spill response capabilities in the Arctic found that industry and regulators have had few opportunities to test oil spill response methods and technologies in Arctic conditions at operational scales (National Research Council (NRC) 2014).

BOEM has proposed two lease sales in the Arctic OCS—one in the Beaufort Sea in 2020 and one in the Chukchi Sea in 2022. Given the risk to marine mammals and to the communities that depend on marine mammals for subsistence and cultural purposes, and the current lack of adequate oil spill response capability and proven technologies, the Commission once again recommends that BOEM defer leasing in the Chukchi and Beaufort Sea Planning Areas in its 2017–2022 leasing program, consistent with Alternatives B(1)(a) and B(2)(a) in the Programmatic EIS.

In the event that lease sales in the Arctic are included in the Proposed Final Program, the Commission recommends that BOEM exclude from the lease sale the "environmentally important

[5] https://alaskafisheries.noaa.gov/node/3775.
[6] https://www.whitehouse.gov/the-press-office/2015/01/27/presidential-memorandum-withdrawal-certain-areas-united-states-outer-con.

areas"[7] that BOEM has identified in Alternatives B(1)(b) and B(2)(b) of the Programmatic EIS, including—

- a portion of Barrow Canyon, with a temporal closure of all geophysical exploration and exploratory drilling activities from June through October;
- Camden Bay, with a temporal closure from August through October;
- Cross Island, with a temporal closure from August through October;
- Kaktovik (Barter Island), with a temporal closure from August through October;
- the Hanna Shoal walrus foraging area, with a temporal closure from June through October; and
- the Hanna Shoal walrus migratory corridor, with a temporal closure from the time the ice moves off the shelf through October.

These exempted areas and closures are consistent to a large degree with exclusion areas recommended by the Commission in its 30 March 2015 letter to BOEM on its 2017–2022 Draft Proposed Program. In addition, the Commission recommends that BOEM consider exclusions for an expanded 64-km[8] coastal buffer zone off Kasegaluk Lagoon and Point Hope, consistent with FWS regulations (78 Fed. Reg. 35423) intended to minimize interactions with Alaska Native subsistence hunters during the open-water season.

The Gulf of Mexico

In its previous comments on the 2017–2022 Draft Proposed Program the Commission recommended that BOEM work with NMFS, the Department of Defense, and other relevant entities to design a multi-year, Gulf-wide assessment program to provide reliable information on abundance, distribution, and stock structure of marine mammals and other protected species. BOEM has since announced that it is partnering with the Bureau of Safety and Environmental Enforcement, NMFS, FWS, the U.S. Geological Survey, the Department of the Navy, the U.S. Air Force, and the Commission to design and implement the Gulf of Mexico Marine Assessment Program for Protected Species (GoMMAPPS). The Commission commends BOEM's commitment to improved data collection in the Gulf to obtain better information on the abundance, distribution, habitat use, and behavior of marine mammals and other protected species in the Gulf to properly mitigate and monitor for potential impacts of human activities, particularly oil and gas development.

The Atlantic

BOEM has proposed to remove the Atlantic OCS from the 2017–2022 Proposed Program under Alternative B(5)(a). The Commission supports this alternative, as recommended in its 30 March 2015 letter to BOEM. The Atlantic OCS includes various types of marine mammal habitat, including habitat for endangered North Atlantic right whales. Right whales migrate annually between calving grounds off Florida and Georgia to feeding grounds in the Gulf of Maine. Because a large

[7] Defined by BOEM as regions of important environmental value where there is potential for conflict between ecologically important or sensitive habitats; maintenance of social, cultural, and economic resources; and possible oil and gas development.
[8] 35-nmi.

part of their time is spent in coastal waters, they are particularly vulnerable to mortality and serious injury from vessel strikes and entanglement in fishing gear (Kraus and Rolland 2007).

I trust these comments will be helpful. Please let me know if you have any questions with regard to the Commission's recommendations.

Sincerely,

Rebecca J. Lent, Ph.D.
Executive Director

cc: Dr. Jill Lewandowski, BOEM Division of Environmental Assessment

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