

MARINE MAMMAL COMMISSION

9 March 2018

Ms. Kelly Hammerle, Chief National Oil and Gas Leasing Program Development and Coordination Branch Office of Strategic Resources Bureau of Ocean Energy Management (VAM-LD) 45600 Woodland Road Sterling, Virginia 20166-9216

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) Draft Proposed Program for the 2019-2014 National Outer Continental Shelf (OCS) Oil and Gas Leasing Program. The Commission has also reviewed BOEM's 8 January 2018 notice (83 Fed. Reg. 829) announcing its intention to prepare a programmatic environmental impact statement (EIS). The Commission provided comments to BOEM on the Request for Information (RFI) on the preparation of the 2019-2024 Draft Proposed Program (see the Commission's <u>17 August 2017</u> letter), including information on the need for a balanced approach to energy development, risks to marine mammals from oil and gas activities, planning areas and portions of planning areas that should be excluded from leasing, and the environmental and social costs of energy development. The following provides information on marine mammals that occur in each of the planning areas that BOEM has included as options in the 2019-2024 Draft Proposed Program.

Provisions of the 2019-2024 Draft Proposed Program

BOEM has included 47 lease sales in its 2019-2024 Draft Proposed Program. The proposed leases by region are as follows:

- 19 lease sales in 14 of the 15 planning areas of the Alaska Region
- 7 lease sales in all 4 of the planning areas of the Pacific Region
- 12 lease sales in all 3 of the planning areas of the Gulf of Mexico Region
- 9 lease sales in all 4 of the planning areas of the Atlantic Region.

BOEM is also considering additional options that would exclude portions of specific planning areas, the merits of which are discussed below.

The Commission understands that in the first stage of a new leasing program, in accordance with the Outer Continental Shelf Lands Act (OCSLA), BOEM should consider a broad range of leasing options. BOEM has clearly met that mandate by proposing to conduct lease sales in all OCS planning areas, with the exception of the North Aleutian Basin. The Draft Proposed Program is

unprecedented in scale, and as such, raises a number of basic concerns relative to the protection of marine mammals and the ecosystems they inhabit.

- 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 vulnerable marine mammal species and their habitats, 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 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 production and consumption would accelerate the production of 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).
- Marine mammal distribution is being affected by changing climatic conditions (Silber et al. 2017), with more pronounced shifts observed in Arctic waters (Stafford et al. 2007, Stirling and Derocher 2012, Brower et al. 2018).
- The climate is warming at an even faster pace in the Arctic than in the lower latitudes (Serreze et al. 2009). Accelerated loss of sea ice and unpredictable weather patterns are having significant impact on Alaska Native coastal communities and traditional marine mammal hunting patterns (Galginaitis 2013, Robards et al. 2013, Huntington et al. 2017).
- While previous leasing programs have involved extensive consultation with Arctic communities, expansion of leasing areas in Alaska outside of the Cook Inlet, Chukchi Sea, and Beaufort Sea planning areas will require communication and consultation with Alaska Native communities regarding potential impacts on the marine mammals, availability of marine mammals for subsistence use, and other marine resources that these communities rely on for food security.
- The number of proposed lease sales is ambitious. There does not appear to be enough capacity within BOEM to administer National Environmental Policy Act and other regulations associated with such a large number of proposed lease sales. Further, communities in Alaska in particular do not have the capacity to adequately review and comment on the necessary documents associated with the large number of sales.

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

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

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

The effects of increased offshore oil- and gas-related energy development on marine mammals, and the increased risk of oil spills from that development to them, other marine resources, Alaska Natives, and other coastal communities, as well as the effects of increased contributions to greenhouse gas emissions, must be fully accounted for under any proposed expansion to BOEM's current leasing program. Given these concerns, <u>the Commission reiterates its previous recommendation⁴</u> that BOEM maintain the lease sale schedule from the 2017-2022 Leasing Program, with the exception of the proposed lease sale in Cook Inlet and including the withdrawal areas that have been implemented by Congress and previous administrations.

Executive Order 13795, Implementing an America-First Offshore Energy Strategy⁵, directed the Department of the Interior to consider revising the schedule of proposed oil and gas lease sales to include annual lease sales in the OCS planning areas identified in Section 3 of that order, namely the Western and Central Gulf of Mexico, the Chukchi and Beaufort Seas, Cook Inlet, and the Midand South Atlantic. These were the same planning areas identified for potential leasing in both the 2017-2022 Draft Proposed Program and the Proposed Program. BOEM has included 18 additional OCS planning areas in the 2019-2024 Draft Proposed Program, the majority of which are areas that, according to BOEM's own assessments, have minimal to negligible amounts of technically recoverable oil and gas resources (BOEM 2016a). The Commission sees no benefit in spending time or resources conducting further analyses of planning areas for which there is likely to be little or no industry interest and for which very little current or relevant environmental or economic data exist. For these reasons, and recognizing the Administration's intention to expand the current leasing program and include additional planning areas, the Commission recommends that BOEM limit the planning areas in its 2019-2024 National Leasing Program to those specified in Executive Order 13795 (i.e., the Western and Central Gulf of Mexico, the Chukchi and Beaufort Sea, Cook Inlet, and the Mid- and South Atlantic).

With respect to the frequency of lease sales, the Commission is concerned that conducting annual lease sales in previously undeveloped or underdeveloped planning areas (essentially all planning areas except the Central and Western Gulf of Mexico) would be overly ambitious given the current state of knowledge regarding marine mammals (and other marine resources) in each of those areas, the availability and sufficiency of geological and geophysical data, market conditions and the feasibility of attracting fair market value bids, and the uncertainty of political support for leasing in 'frontier' areas. In Alaska, lease sales would require government-to-government consultation with Alaska Native tribal governments in accordance with Executive Order 13175. <u>The Commission therefore recommends</u> that, if BOEM includes 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.

⁴ Commission letter dated <u>17 August 2017</u>.

⁵ https://www.gpo.gov/fdsvs/pkg/FR-2017-05-03/pdf/2017-09087.pdf

Comments on specific planning areas

Cook Inlet

The Cook Inlet OCS planning area overlaps critical habitat of two endangered species: Cook Inlet beluga whales and northern sea otters. The Commission is concerned that oil and gas activities resulting from leasing in the Cook Inlet OCS, when added to other existing human activities in state and federal waters of Cook Inlet, will pose significant risks to the beluga whale population and adversely affect important habitat. Despite management of subsistence hunting since 1999 and the halting of hunting in 2005, the beluga whale population continues to decline and currently numbers 328 animals (Shelden et al. 2017). This is one of the smallest cetacean populations in the world and is at risk of extinction because of its low numbers. 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 the National Maine Fisheries Service (NMFS) as potential threats to the recovery of Cook Inlet beluga whales (NMFS 2016).

In its previous comments to BOEM on Lease Sale 244 (letter dated <u>6 September 2016</u>), 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. In the event that a lease sale for Cook Inlet were conducted, the Commission recommended that BOEM exclude from the lease sale any and all portions of beluga whale and sea otter critical habitat that overlap the Cook Inlet OCS planning area. BOEM excluded only a portion of sea otter critical habitat but none of the beluga whale critical habitat from Lease Sale 244; bids received did not overlap critical habitat for either species. Given the continued potential for disturbance of beluga whales from expanded oil and gas exploration and development in Cook Inlet, the Commission again recommends that if BOEM includes the Cook Inlet OCS planning area in its 2019-2024 Leasing Program, it exclude from the lease sale any and all portions of beluga whale and sea otter critical habitat that overlap the Cook Inlet OCS planning area (i.e., all waters north of 60°15' N latitude and offshore waters that overlap sea otter critical habitat on the western side of Cook Inlet north of Chinitna Bay and north of Augustine Island). To assess baseline conditions in Cook Inlet, the Commission further recommends that BOEM partner with NMFS, U.S. Fish and Wildlife Service (FWS), and other researchers in Cook Inlet to conduct yearround population monitoring to determine the abundance and distribution of beluga whales and sea otters-the monitoring data should provide information to assess impacts to those species in waters within and adjacent to any proposed lease sale area.

Arctic

The Chukchi and Beaufort Sea OCS planning areas are important habitat for ice-dependent and ice-associated species such as the walrus, ringed, ribbon, spotted, and bearded seals, the polar bear, and bowhead, beluga, and gray whales. Alaska Native communities are highly dependent on these species for subsistence and cultural purposes (Braund and Associates 2010). Increased research in recent years is enhancing our understanding of marine mammal movement patterns, foraging, prey species, and habitat use, and reinforcing the importance of the Arctic as habitat for bowhead whales (Citta et al. 2017), Pacific walruses (Schonberg et al. 2014, Young et al. 2017), beluga whales (Hauser et al. 2014, 2018), gray whales (Schonberg et al. 2014, Brower et al. 2017), polar bears (Wilson et al. 2014, Pilfold et al. 2017), bearded seals (Frouin-Mouy et al. 2015, MacIntyre et al.

2015), ringed seals (Von Duyke et al. 2017), and other ice seals. This new research, coupled with traditional/indigenous knowledge, will help determine how industrial activities and other perturbations could impact these species into the future. For example, a recent analysis of the potential impact of a large offshore oil spill in the Chukchi Sea concluded that a third of the polar bears in that region, and their denning habitat on Wrangel and Herald Island, could be exposed to oil (Wilson et al. 2018). Increased sightings of temperate-region baleen species such as humpback, fin, and minke whales in the eastern Chukchi Sea off Point Hope (Brower et al. 2018), and sightings of killer whales and harbor porpoises in the same area (Clarke et al. 2017), suggest that the risk of exposure to an oil spill in the Arctic could extend to "non-Arctic" species.

In its previous comments on lease sales for the Chukchi and Beaufort Seas planning areas (Chukchi Sea Lease Sale 237, dated <u>3 December 2013</u>) and 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, transit, or resting, or because the areas are essential for subsistence use. BOEM previously evaluated several of these recommended exclusion areas for its 2012-2017 and 2017-2022 Proposed Final Programs (BOEM 2012, BOEM 2016b, 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 areas that the Commission recommends for exclusion in the 2019-20124 Leasing Program is provided here, with updates to reflect new information.

Chukchi Sea planning area

Hanna Shoal – Hanna Shoal represents a highly productive, biologically diverse region of the northeastern Chukchi Sea of significant importance to higher trophic level megafauna (Schonberg et al. 2014, Hardison et al. 2017) including walrus, bearded seals, and ringed seals. In late summer, when other areas of the Chukchi Sea are typically ice-free, the presence of sea ice over the shallow continental shelf, combined with other environmental factors and processes, creates a "hot spot" of high benthic productivity that has persisted over four decades of sampling (Grebmeier et al. 2015). Bivalves and other benthic organisms, which are a primary food source for Pacific walrus and bearded seals, are found in high abundance in the Hanna Shoal area in the summer and are associated with a large number of walrus sightings (Kuletz et al. 2015, Young et al. 2017). Tagging studies show that a significant portion of the Pacific walrus population in the eastern Chukchi Sea uses Hanna Shoal and the Chukchi lead system for feeding and resting when sea ice is present, generally through August and to a lesser degree into September (Jay et al. 2012). Females, calves, and sub-adult walruses form large herds that haul out to rest on sea ice when it is available above shallow-water (less than 80 m) feeding areas (Fay and Burns 1988). The northeastern Chukchi Sea also provides important summer sea-ice habitat for threatened bearded and ringed seals (Cameron et al. 2010, Kelly et al. 2010). Both species tend to concentrate over Hanna Shoal and adjacent areas in the summer months (July to September), although bearded seals appear to be less dependent on sea ice for hauling out than walruses and ringed seals (Cameron et al. 2010). Bearded seals feed on benthic invertebrates and demersal fish (Cameron et al. 2010, Quakenbush 2011, Oxtoby et al. 2017); ringed seals have a more varied diet of ice-associated pelagic and demersal fish and crustaceans (Kelly et al. 2010). Smith (2011) defines Hanna Shoal as having a maximum depth of 40 m, and the 40-m

isobath was used by BOEM to delineate Hanna Shoal in its 2012-2017 Proposed Final Program (BOEM 2012). The Commission concurs with the use of the 40-m isobath as the boundary that encompasses the unique resources of Hanna Shoal.

- **Coastal Buffer Zone** The Chukchi Sea coast includes haul-outs and nearshore feeding areas of bearded seals, ringed seals, spotted seals, and walruses, and much of the barrier island critical habitat of polar bears (75 Fed. Reg. 76086). It also includes a summer core area of the Eastern Chukchi Sea stock of beluga whales, just offshore of a lagoon system centered on Kasegaluk Lagoon (Hauser et al. 2014). Large groups of belugas come into the lagoon area in June and July and consequently are an important subsistence and cultural resource for Point Lay and other Alaska Native communities (Huntington et al. 1999, Suydam et al. 2005). In its 2012-2017 Proposed Final Program, BOEM proposed to exclude a 25-mile buffer zone to eliminate potential environmental impacts on coastal resources from water and gaseous discharges, bottom disturbances, and anthropogenic sound (BOEM 2012). The buffer zone also would minimize disturbance of marine mammals and other fauna found close to shore and reduce interference with subsistence activities (BOEM 2012). Exclusion of the same 25-mile buffer zone is included as an option in the 2019-2024 Draft Proposed Program. The Commission believes that a coastal buffer zone extending the entire length of the Chukchi Sea planning area is still warranted, and should be expanded to 35 nmi, as recommended in previous comments (letter dated 3 December 2013). A 35-nmi buffer zone is consistent with FWS regulations that authorized the taking of marine mammals incidental to oil and gas exploration activities in the Chukchi Sea (78 Fed. Reg. 35423). Those regulations specified that no offshore exploration activities shall be conducted within a 64km (35-nmi) radius of the communities of Barrow, Wainwright, Point Lay, or Point Hope, and were intended to minimize interactions with subsistence hunters during the open-water season.
- **Barrow Canyon** Barrow Canyon is an area used frequently and intensively during the open-water season by bowhead, beluga, and gray whales, polar bears, bearded seals, and walruses (Quakenbush et al. 2010, Hauser et al. 2014, Clarke et al. 2017, Brower et al. 2017). Bowhead whales feed on copepods and euphasiids near Barrow in late summer, when zooplankton prey occurs in high densities due to local oceanographic conditions (Ashjian et al. 2010). Beluga whales are observed near Barrow Canyon from July through August; polar bears are seen from mid-July through mid-October (Clarke et al. 2017). Gray whales are observed primarily in waters within 70 km of shore from Icy Cape to Point Barrow from mid-June through late October, with the majority of whales observed north of Point Lay to east of Point Barrow, and during the months of July and August (Brower et al. 2017). These areas and times coincided with high benthic amphipod concentrations (Schonberg et al. 2014, Brower et al. 2017), a primary prey species for gray whales. Walruses feed predominantly in the Hanna Shoal area, but transit from there across Barrow Canyon to onshore haulouts (Grebmeier et al. 2017). In its 2012-2017 Proposed Final Program, BOEM proposed to exclude a 93-km (50-nmi) buffer zone north and west of Point Barrow to include areas of particular significance to Alaska Native communities for subsistence hunting of bowhead whales, bearded and ringed seals, and walruses (Braund and Associates 2010). This exclusion area was included by BOEM as an option in its 2019-2024 Proposed Final Program. The Commission supports the exclusion of Barrow Canyon from leasing to protect marine mammals in this important feeding and transit area. The exclusion area should include extend seaward to at least 50-nmi from the Seashore Islands to Point Barrow,

as proposed previously by BOEM and supported by traditional/indigenous knowledge, marine mammal sightings data, and oceanographic research (Braund and Associates 2010, Clarke et al. 2017, Grebmeier et al. 2017).

Beaufort Sea planning area

- **Barrow Canyon** Barrow Canyon extends from the Chukchi Sea into the Beaufort Sea as it wraps around 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).
- Buffer zones around Barrow, Kaktovik, and Cross Island subsistence use areas -Bowhead whales are hunted for subsistence and cultural purposes by Alaska Native communities as they travel west through the U.S. Beaufort Sea in late summer/fall. Primary whaling areas include Kaktovik, Cross Island, and Barrow (Huntington and Quakenbush 2009, Galginaitis 2014). Bowhead whale avoidance of ship noise and seismic and drilling activity has been well documented (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 their feeding patterns. Changes in migration patterns could result in whales traveling at greater distances from shore, with serious implications for subsistence whaling success and hunter safety. Recognizing the sensitivity of bowhead whales to industrial activity, BOEM proposed to exclude from leasing areas off Point Barrow extending east toward Admiralty Bay and areas north and east of Kaktovik in its 2012-2017 Proposed Final Program (BOEM 2012), 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 high use areas as documented by Clarke et al. (2017). 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 at least the Aichilik River and seaward to the 50-m isobath (Braund and Associates 2010, Clarke et al. 2017). The area west of Cross Island also warrants exclusion from leasing, as it was identified as a medium- to high-use subsistence area by Nuiqsut whalers (Braund and Associates 2010). Based on traditional/indigenous knowledge and sightings of bowhead whales, the Cross Island subsistence use area should extend east to Tigvariak Island and seaward out to the 50 m isobath (Braund and Associates 2010, Clarke et al. 2017).
- **Camden Bay** Traditional/indigenous knowledge indicates that Camden Bay is a consistently productive area used for feeding by bowhead, beluga, and gray whales, and ringed, bearded, and spotted seals (Huntington 2013). As such, Camden Bay should be excluded from leasing, with a buffer zone extending seaward to the 20-m isobath.

Given the risk to marine mammals and to the communities that depend on them for subsistence and cultural purposes, and the current lack of adequate oil spill response capability and proven technologies, the Commission believes the exclusion of key marine mammal foraging areas and areas used for subsistence hunting from future lease sales in the Arctic is warranted. Therefore, <u>the Commission recommends</u> that if BOEM includes the Chukchi and Beaufort Sea OCS planning areas in its 2019-2024 Leasing Program, that it exclude from leasing:

- Chukchi Sea planning area: (1) Hanna Shoal, out to the 40-m isobath, (2) a coastal buffer zone extending along the entire planning area and seaward out to 35 nmi, and (3) the Barrow Canyon area from the Seashore Islands to Point Barrow and extending out to at least 50 nmi;
- Beaufort Sea planning area: (1) the entirety of Barrow Canyon, as delineated by Ashjian et al. 2010 and others), (2) a subsistence use area west of Barrow extending eastward to the western edge of Smith Bay and seaward to the 20-m isobath, (3) a subsistence use area west of Kaktovik extending eastward to at least the Aichilik River and seaward to the 50-m isobath, (4) a subsistence use area off Cross Island extending east to Tigvariak Island and seaward out to the 50 m isobaths, and (5) a coastal buffer zone off Camden Bay extending seaward to the 20-m isobaths.

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 regarding the inclusion and delineation of areas used for subsistence hunting.

Other Alaska planning areas

Other Alaska OCS planning areas included in the Draft Proposed Program appear to have minimal to negligible oil and gas resource potential (BOEM 2016a), but are important resources to Alaska Native communities that hunt marine mammals for subsistence and cultural purposes. Therefore, the Commission recommends that BOEM exclude the other 11 Alaska planning areas from the 2019-2024 Leasing Program (i.e., Hope Basin, Norton Basin, St. Matthew-Hall, Navarin Basin, Aleutian Basin, St. George Basin, Bowers Basin, Aleutian Arc, Shumagin, Kodiak, and Gulf of Alaska). The Commission further recommends that if BOEM includes any of these 11 Alaska planning areas in the 2019-2024 Leasing Program, it work with other federal and state agencies and Alaska Native tribes to expand the collection of baseline physical and biological data and traditional/indigenous knowledge on subsistence use patterns in these planning areas to evaluate potential effects of oil and gas development and other human activities prior to leasing.

Pacific

As noted in previous comments to BOEM on the 2019-2024 Leasing Program, the Pacific planning areas were subject to a series of Congressional moratoria and Presidential withdrawals that were in effect until 2008. In addition, portions of the Pacific planning areas designated as National Marine Sanctuaries prior to 14 July 2008 continue to be subject to Presidential withdrawal under the current administration⁶. Those sanctuaries provide tangible conservation benefits to a variety of

⁶ In accordance with Executive Order 13795.

marine life, including marine mammals, as noted in the Commission's <u>15 August 2017</u> letter to the National Oceanic and Atmospheric Administration (NOAA) requesting input on a review of National Marine Sanctuaries and Marine National Monuments⁷. The Commission understands that there continues to be no support at the state level for future lease sales in the Pacific. <u>The Commission therefore continues to recommend</u> that BOEM exclude all Pacific OCS planning areas from the 2019-2024 leasing program.

Gulf of Mexico

The proposal to include the Eastern Gulf of Mexico planning area in the 2019-2024 Leasing Program raises significant concerns. This area includes the only known habitat for Gulf of Mexico Bryde's whales, a distinct population of approximately 33 whales that occurs year-round along the northeastern edge of the DeSoto Canyon area off Florida. This area, along with other portions of the Eastern and Central planning areas, is currently subject to a moratorium on leasing until 30 June 2022, under the Gulf of Mexico Energy Security Act of 2006 (GOMESA; Public Law 109-432). It is not known to what extent this population of whales will be affected by oil and gas development activities, but baleen whales in general are more likely than most other cetaceans to be affected by seismic surveys because of their sensitivity to low-frequency sounds (Southall et al. 2007). Bryde's whales and other marine mammals in the Gulf were significantly affected by the Deepwater Horizon oil spill. The Deepwater Horizon Trustees estimated that 17 percent of the population was lost during the spill (DWH Trustees 2016). The National Marine Fisheries Service (NMFS) is currently reviewing the status of this population to determine whether it is warranted for listing under the Endangered Species Act (ESA). If the listing is warranted, the ESA requires that NMFS designate critical habitat for the species. That listing would be informed by ongoing research led by the NMFS Southeast Fisheries Science Center, Florida International University, and the Scripps Institution of Oceanography on trophic interactions and habitat use.⁸

BOEM has identified two separate options in the Gulf of Mexico as areas to be analyzed for potential exclusion in the 2019-2024 Proposed Program (Figure 4 in the Draft Proposed Program):

- A range of coastal buffer zones off Florida (ranging in 25-mile increments from 50 to 125 miles) to accommodate military activities and nearshore uses; and
- A 15-mile buffer zone off Baldwin County, Alabama.

Of the range of buffer zones being considered off Florida, even the largest 125-mile buffer zone will be inadequate to prevent oil and gas-related disturbance of resident Bryde's whales. In addition, limited research conducted to date on Bryde's whale activity patterns suggests that whales rest at or near the water surface (Soldevilla et al. 2017), making them particularly vulnerable to strikes from increased vessel traffic accompanying increased oil and gas-related activities. Due to the small size of the Bryde's whale population in the Gulf and its potential vulnerability to multiple aspects of oil and gas development, <u>the Commission recommends</u> that BOEM continue to restrict leasing in the Eastern Gulf of Mexico planning area through the entirety of the 2019-2024 leasing program.

⁷ Also in accordance with Executive Order 13795.

⁸ <u>https://restoreactscienceprogram.noaa.gov/projects/brydes-whales</u>

Atlantic

The Atlantic OCS planning areas include a variety of marine mammal habitats and a multitude of species with a variety of distribution and movement patterns. The impact of exploration and production activities would likely depend on the location and timing of those activities. Areas of particular concern for potential overlap with oil- and gas-related activities are those that serve as important foraging, calving, or resting habitat for North Atlantic right whales and other marine mammals. With respect to right whales, important habitat includes designated critical habitat in the North and South Atlantic planning area⁹ and the migratory corridor in the Mid-Atlantic planning area. Other areas with high densities of marine mammals include the nutrient-rich shelf break and slope waters from Cape Hatteras northward, including the Atlantic canyons (Roberts et al. 2016, Lesage et al. 2017).

BOEM has identified two separate options in the Atlantic as areas to be analyzed for potential exclusion in the 2019-2024 Proposed Program (Figure 5 in the Draft Proposed Program):

- A 25-mile¹⁰ coastal buffer zone to accommodate concerns such as military use, fish and marine mammal migration, and other nearshore uses;
- Atlantic canyons in the North Atlantic and Mid-Atlantic program areas identified as having exceptional ecological values.

If BOEM includes the Atlantic planning areas in the 2019-2024 Leasing Program, exclusion zones should be expanded beyond those identified by BOEM as options. In the Mid-Atlantic planning area, the coastal buffer zone should be extended from 25 to 50 miles to ensure adequate protection for right whales. Data from whale sightings, tagging, and passive acoustic studies strongly indicate that waters within 50 miles of shore are used by migrating pregnant and nursing females and calves; also, other right whales overwinter in these areas (Knowlton et al. 2002, Schick et al. 2009, Whitt et al. 2013, Hodge et al. 2015, Salisbury et al. 2016). A similar 50-mile coastal buffer zone is warranted in the South Atlantic planning area to protect calving right whales in designated critical habitat (81 Fed. Reg. 4838).¹¹ In the North Atlantic planning area, the 50-mile coastal buffer zone should be expanded to include the entire planning area north of Cape Cod to provide adequate protection for feeding right whales in designated critical habitat (81 Fed. Reg. 4838); those exclusion areas would also provide protection for other large baleen whales that use the Gulf of Maine and the Great South Channel for feeding (LaBrecque et al. 2015, Roberts et al. 2016, Wang et al. 2016).

In both the Mid- and North Atlantic planning areas, the Atlantic canyons represent important habitat for many species of dolphins, beaked and pilot whales, and endangered sperm, fin, blue, and sei whales (Roberts et al. 2016, Lesage et al. 2017). Recent tagging studies have shown that blue whales use seamounts and other deep ocean structures along the Atlantic coast, from Canada to the Mid-Atlantic Bight, as feeding and possibly breeding habitat (Lesage et al. 2017). The ecological importance of the Atlantic canyons and canyon complexes, extending from Heezen Canyon off

⁹ http://www.nmfs.noaa.gov/pr/species/mammals/whales/north-atlantic-right-whale.html

¹⁰ A 50-mile coastal buffer zone was included as an alternative in the Draft Programmatic Environmental Impact Statement for the 2017-2022 OCS Oil and Gas Leasing Program (BOEM 2016c); the Atlantic Planning areas were subsequently omitted for the final leasing program.

¹¹ http://www.nmfs.noaa.gov/pr/species/mammals/whales/north-atlantic-right-whale.html

New England to Norfolk Canyon off the Chesapeake Bay, provided the impetus for their withdrawal from oil and gas leasing for a time period without specific expiration.¹² Other important areas previously withdrawn from leasing that have ecological importance for right whales and other marine mammals are the Stellwagen Bank and Gray's Reef National Marine Sanctuaries. These areas were designated as National Marine Sanctuaries prior to 14 July 2008 and as such, continue to be subject to Presidential withdrawal under the current administration.¹³

The Commission previously recommended that BOEM maintain the Presidential withdrawals of the North, Mid-, and South Atlantic planning areas for the 2019-2024 leasing program (letter dated <u>17 August 2017</u>). To address concerns raised previously regarding the potential impact of oil and gas development on Atlantic marine mammals and the lack of information on their vulnerability to various risk factors, <u>the Commission continues to recommend</u> that BOEM exclude all Atlantic OCS planning areas from the 2019-2024 leasing program. <u>The Commission further recommends</u> that if BOEM includes any of Atlantic planning areas in the 2019-2024 Leasing Program, it exclude: (1) a 50-mile coastal buffer zone in the North, Mid-, and South Atlantic planning areas from Cape Cod to south of Cape Canaveral, (2) the entire North Atlantic planning area north of Cape Cod, and (3) the Atlantic canyons and canyon complexes extending from Heezen Canyon off New England to Norfolk Canyon off the Chesapeake Bay.

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

References

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¹² https://obamawhitehouse.archives.gov/the-press-office/2016/12/20/presidential-memorandum-withdrawal-certainareas-atlantic-coast-outer

¹³ In accordance with Executive Order 13795.

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