



# MARINE MAMMAL COMMISSION

2 September 2022

Ms. Tershara Matthews, Chief  
Office of Emerging Programs  
Bureau of Ocean Energy Management  
1201 Elmwood Park Boulevard  
New Orleans, Louisiana 70123

Dear Ms. Matthews:

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 environmental assessment (EA) for commercial wind energy leasing in the Gulf of Mexico (GOM). The draft EA considers potential environmental consequences of site characterization and site assessment activities associated with wind energy leasing in the entire Call Area in the GOM identified by BOEM in October 2021<sup>1</sup>. The Commission has provided comments to BOEM previously on wind energy leasing in the GOM, both on the Call for Information and Nominations<sup>2</sup> and on the Notice of Intent to prepare a draft EA<sup>3</sup>.

## **Alternatives considered for wind energy leasing**

BOEM analyzed environmental impacts associated with the issuance of up to 18 wind energy leases within the GOM Call Area, the issuance of potential project easements associated with each lease, and the issuance of grants for export cable corridors and associated offshore collector/converter platforms. The alternatives are as follows—

- Alternative A: No action;
- Alternative B: Wind energy OCS lease issuance in the GOM Call Area; and
- Alternative C: Wind energy OCS lease issuance in the GOM Call Area excluding the topographic features stipulation blocks.

## **Impacts on marine mammals from the proposed wind energy leasing and site assessment and site characterization activities**

BOEM has determined that Alternatives B and C, without the implementation of protective measures, would have moderate impacts on marine mammals from leasing and site assessment/site characterization activities resulting in noise, vessel strikes/collisions, and entanglement. With protective measures in place, BOEM has determined that those same impact-producing factors (noise, vessels strikes/collisions, and entanglement) would be minor to negligible. Sources of noise that have the potential to affect marine mammals include high-resolution geophysical (HRG) survey

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<sup>1</sup> <https://www.boem.gov/sites/default/files/documents/renewable-energy/state-activities/ReN-Call-Map.pdf>

<sup>2</sup> <https://www.mmc.gov/wp-content/uploads/21-12-16-Matthews-BOEM-CFI-for-GMX-wind-energy.pdf>

<sup>3</sup> <https://www.mmc.gov/wp-content/uploads/22-02-09-Matthews-BOEM-preparation-of-EA-for-GMX-wind-energy-leasing-with-enclosure.pdf>

equipment, vessel engines, and offshore construction, operations, and maintenance activities. Site assessment and characterization activities would also increase vessel traffic, with a corresponding increase in the risk of vessel strikes and entanglement in survey or monitoring equipment. BOEM has proposed to apply protective measures similar to those outlined in the National Marine Fisheries Service (NMFS) 2020 GOM Endangered Species Act biological opinion on oil and gas program activities<sup>4</sup> and the associated incidental take statement (as amended in April 2021)<sup>5</sup>. Those measures include, in part, (1) monitoring the sea surface for marine mammals, (2) delaying acoustic source activation when sound produced by those sources is determined to be within the hearing range of marine mammals that are detected nearby, and (3) equipment design and monitoring to minimize the risk of entanglement in survey equipment. BOEM concluded that other factors related to leasing or site assessment and characterization, including waste discharges and unintentional releases of fuel and crude oil into the environment, would have a negligible impact on marine mammals.

Although the Commission agrees, in general, with BOEM's evaluation, it has reservations about BOEM's determination that vessel-related waste and discharge events would have a negligible impact on marine mammals. BOEM noted in section 4.4.5.3.1 of the draft EA that "Entanglement in marine debris can lead to injury, infection, reduced mobility, increased susceptibility to predation, decreased feeding ability, fitness consequences, and death of marine mammals." The Commission agrees with that assessment but would expand it to include ingestion of marine debris. Dumping of trash and plastics at sea, although highly regulated under various U.S. laws and international agreements, is a persistent source of marine debris, and ingestion of debris presents a serious risk to cetaceans (Kühn and van Franeker 2020). For example, a small piece of plastic of unknown origin found in the stomach of an endangered Rice's whale in 2019 was determined to have led to the whale's stranding and subsequent death (Rosel et al. 2021). BOEM has indicated that it would require trash awareness programs as one of the protective measures required for vessels associated with wind energy activities. The Commission concurs that such programs are essential, especially when combined with programs to reduce land-based sources of trash and conduct cleanups in coastal areas. However, based on documented serious injuries and mortalities of cetaceans that ingest or become entangled in debris (Eisfeld-Pierantonion et al. 2022), the Commission believes that BOEM should re-evaluate its assessment of the impacts of waste and discharge events on marine mammals. BOEM determined that waste and discharge events would have a moderate impact on sea turtles. Studies suggest that cetaceans tend to ingest plastic debris less often than sea turtles, but still frequently enough to make it a significant conservation concern (Kühn and van Franeker 2020). The Commission recommends that BOEM revise its assessment of impacts from waste and discharge events associated with wind energy leasing and site assessment and characterization activities to reflect that these could have a moderate impact on marine mammals in the absence of protective measures.

### **Availability and incorporation of updated information on marine mammal abundance and distribution**

The draft EA includes only a brief paragraph on marine mammals as part of the affected environment in the GOM. That paragraph refers to marine mammal data that were compiled by

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<sup>4</sup> <https://www.fisheries.noaa.gov/resource/document/biological-opinion-federally-regulated-oil-and-gas-program-activities-gulf-mexico>

<sup>5</sup> <https://www.fisheries.noaa.gov/resource/document/amended-incidental-take-statement-and-revised-appendices>

BOEM in 2021 to “inform future potential impact assessments of BOEM’s programmatic activities prepared under the National Environmental Policy Act” (BOEM 2021), including, presumably, wind energy leasing and associated activities. However, that report did not include or reference recent information collected under the Gulf of Mexico Marine Assessment Program for Protected Species (GoMMAPPS)<sup>6</sup>. Under a BOEM interagency agreement, NMFS, U.S. Fish and Wildlife Service, and U.S. Geological Survey conducted aerial and vessel-based surveys under GoMMAPPS in 2017 and 2018 to provide region-wide data on abundance and distribution of marine mammals and other protected species, and to generate spatially explicit habitat density models. GoMMAPPS data have helped fill important population-level gaps in what is known about several offshore marine mammal species, including sperm whales and other cetaceans as well as seabirds and sea turtles that occur in the GOM Call Area. Although a final report from the GoMMAPPS 2017 and 2018 surveys has yet to be made available to the public, distribution maps and habitat density models for marine mammals, sea turtles, and seabirds generated using GoMMAPPS data have recently been incorporated into NOAA’s Aquaculture Atlas (Riley et al. 2021) for use in planning and evaluation of potential Aquaculture Opportunity Areas in the GOM. Data from the GoMMAPPS surveys and other more recent studies of marine mammals in the GOM may indicate changes or provide new information, compared to that in the BOEM 2021 report, concerning the abundance, distribution, and habitat use of certain marine mammal species in the GOM, including sperm whales and offshore delphinids (see, for example, Garrison and Dias 2020, Frasier et al. 2021, Li et al. 2021, and Soldevilla et al. 2022). The Commission recommends that BOEM and NMFS work cooperatively to expedite the final review *and publication* of the GoMMAPPS final report. The Commission further recommends that BOEM incorporate the findings from the GoMMAPPS report and other more recent studies on marine mammals in the GOM into the final EA on wind energy leasing in the GOM.

While data from the GoMMAPPS surveys contain the best available science presently, data from the 2017 and 2018 GoMMAPPS surveys may quickly become dated and may not represent the abundance and distribution of marine mammals in the GOM for anticipated future leasing, site assessment and characterization surveys, construction, and wind energy operations in the GOM. BOEM noted in the draft EA, at Section A.3.2.1.3, that “Regional-scale efforts to collect biological information in the GOM, including the National Oceanic and Atmospheric Administration (NOAA)/BOEM GOM Marine Assessment Program for Protected Species, may aid in providing data to support site characterization.” That statement underscores the value of region-wide, multi-species surveys in analyses of BOEM’s proposed offshore activities. The Commission has recently learned that the Deepwater Horizon Open Ocean Trustee Implementation Group (TIG) has approved funding for vessel surveys in offshore waters to establish a new reference point for GOM marine mammal stocks and seabirds to be able to evaluate the effectiveness of the TIG’s planned restoration projects<sup>7</sup>. However, those surveys will not occur in coastal waters identified by BOEM for wind energy development. Beyond the vessel surveys planned for in 2023 and 2024, the Commission is not aware of any plans by BOEM or NOAA to continue the types of region-wide, multi-species surveys conducted under the GoMMAPPS program. Updated abundance, distribution, and density data for marine mammals and other protected species are needed by BOEM to evaluate

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<sup>6</sup> <https://www.boem.gov/gommapps>

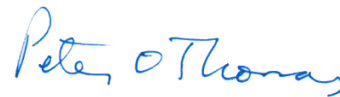
<sup>7</sup> [https://www.gulfspillrestoration.noaa.gov/2022/08/open-ocean-trustees-release-plan-sea-surveys-gulf-seabirds-and-marine-mammals?utm\\_medium=email&utm\\_source=govdelivery](https://www.gulfspillrestoration.noaa.gov/2022/08/open-ocean-trustees-release-plan-sea-surveys-gulf-seabirds-and-marine-mammals?utm_medium=email&utm_source=govdelivery)

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potential impacts from all stages of wind energy as well as oil and gas development<sup>8</sup> and by NMFS to authorize taking of marine mammals incidental to all stages of offshore energy development. The Commission has raised the need for continued GoMMAPPS surveys for marine mammals and other protected species in numerous letters, and notes that similar surveys are currently funded in part by BOEM in other Outer Continental Shelf areas with ongoing energy development regulated by BOEM<sup>9</sup>. Thus, the Commission again recommends that BOEM work with NMFS to initiate planning for continued, long-term GoMMAPPS or similar region-wide, multi-species monitoring of marine mammal abundance and distribution in the GOM to obtain current and accurate information that both BOEM and NMFS need for ongoing decisions related to offshore wind energy and oil and gas development.

The Commission hopes these additional comments will be helpful to BOEM in its assessment of wind energy leasing and site assessment and characterization activities in the GOM. Please let me know if you have any questions.

Sincerely,



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

cc: Mr. David Bernhart, NMFS Southeast Regional Office  
Dr. Mridula Srinivasan, NMFS Southeast Fisheries Science Center

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<sup>8</sup> Continued oil and gas leasing in the GOM was included as an alternative in BOEM's proposed National 2023–2028 oil and gas leasing program for the Outer Continental Shelf (87 Fed. Reg. 40859). Continued oil and gas lease sales are a requirement for future wind energy leasing under the recently passed [Inflation Reduction Act of 2022](#).

<sup>9</sup> Including the [Atlantic Marine Assessment Program for Protected Species](#), the [Pacific Marine Assessment Program for Protected Species](#), and the [Alaska Assessment for Cetaceans and Other Marine Mammals](#).

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