



MARINE MAMMAL COMMISSION

20 November 2015

Dr. Pat Roscigno
Gulf of Mexico Studies Chief
Bureau of Ocean Energy Management
1201 Elmwood Park Boulevard
New Orleans, Louisiana 70123

Dear Dr. Roscigno:

The Marine Mammal Commission (the Commission) provides the following research and monitoring recommendations for consideration in the development of the Bureau of Ocean Energy Management's (BOEM) Environmental Studies Plan for Fiscal Year 2017. In its letters and recommendations on a number of BOEM proposed actions for oil and gas and renewable energy development, the Commission often identifies research and monitoring needs pertaining to specific activities within the U.S. Outer Continental Shelf (OCS). The list of recommendations below and the supporting rationale were compiled from the Commission's letters to BOEM in 2015, and are specific to the Atlantic and Gulf of Mexico OCS planning areas. The focus of the original letter, its recipient within BOEM, and the date it was submitted are indicated with each recommendation. The original letters can be found on the Commission's website at www.mmc.gov.

The Atlantic

Letter to James Bennett regarding the draft Environmental Assessment (EA) for commercial wind lease issuance and site assessment activities off North Carolina, 23 February 2015:

In light of the considerable efforts underway to develop wind energy resources in several areas of the mid-Atlantic, and particularly the proposal to conduct wind energy activities in right whale critical habitat off North Carolina, an updated analysis of the current state of knowledge regarding impacts of wind energy activities is warranted. That analysis should consider the full life cycle of wind energy activities as well as the cumulative impact of those activities in the Atlantic OCS, in the context of other human uses of the marine environment and ambient sound levels (Masden et al. 2009, Thompson et al. 2013, Rice et al. 2014). Such an analysis could help identify key data gaps and more fully guide future research, mitigation, and monitoring. Accordingly, the Commission recommends that BOEM include in the EA an updated analysis regarding the potential effects of the full life cycle of all commercial wind energy activities (leasing, site assessment, construction, operation, and decommissioning) in the Atlantic OCS as a future reasonably foreseeable activity—that analysis should incorporate new information on the longer-term and cumulative effects of wind energy activities on marine mammals, their habitats, and their prey species.

Letter to Kelly Hammerle and Geoffrey Wiskel regarding the Draft Proposed Program for the 2017-2022 Outer Continental Shelf (OCS) oil and gas leasing program, 30 March 2015:

BOEM's Environmental Studies Program, in collaboration with the Navy, has provided multi-year funding to NMFS for the Atlantic Marine Assessment Program for Protected Species (AMAPPS). That program involves broad-scale, multi-year, seasonal collection of abundance and distribution data for marine mammals and other wildlife in the U.S. Atlantic, using aerial and shipboard surveys with towed passive acoustic arrays. The Commission is encouraged to learn that BOEM has recently committed to continue funding the program for an additional five years. The information from AMAPPS and AMAPPS II, once available, promises to contribute significantly to the quality of baseline information needed for marine mammal stock assessments in both coastal and offshore waters and to assessing impacts of energy development. Of particular importance for AMAPPS II would be a tissue sample collection component for genetic analyses to better understand stock structure.

The Gulf of Mexico

Letter to Kelly Hammerle and Geoffrey Wiskel regarding the Draft Proposed Program for the 2017-2022 Outer Continental Shelf (OCS) oil and gas leasing program, 30 March 2015:

The Gulf of Mexico is the most productive OCS planning area for oil and gas, and will likely remain so for many years to come. However, it is probably the least studied of all the OCS planning areas with respect to the presence and distribution of marine mammals. Despite decades of oil and gas development in the Gulf, there are no regularly planned surveys of the 22 marine mammal species/57 marine mammal stocks that reside in the inshore, coastal, and offshore waters of the Gulf of Mexico (Waring et al. 2014). As a result, baseline information is lacking on (1) abundance, stock structure, and trends of many bottlenose dolphin bay, sound, and estuary stocks, and (2) stock structure and trends for most oceanic marine mammal species. Without sufficient information on marine mammal abundance, distribution, stock structure, and trends in the Gulf, decision-makers have an inadequate basis for determining whether, where, and under what conditions to authorize or conduct activities that could have acute or long-term adverse effects on marine mammals and other marine species.

A long-term and consistent investment in collecting the data needed to generate stock assessments and to evaluate the impacts of oil and gas development on marine mammals in the Gulf would ensure that the decisions regarding proposed activities are guided by the best available scientific information. NMFS's guidelines for assessing marine mammal stocks suggest that surveys be conducted at least every eight years to enable detection of a 10 percent decline in abundance (NMFS 2005, Moore and Merrick 2011). BOEM is supporting broad-scale, multi-year collection of abundance and seasonal distribution data for marine mammals and other wildlife in the Atlantic (the AMAPPS), and the Commission believes a similar program, coupled with tissue sample collection to determine stock structure, is long overdue for the Gulf. To support decision-making for continued oil and gas activities in the Gulf, the Commission recommends 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.

In reference also to the Gulf of Mexico, the Commission would like to provide you with the enclosed summary report for the Gulf of Mexico Marine Mammal Research and Monitoring Meeting. The meeting was convened by the Commission and several other partners, including BOEM, in April 2015. The objectives of the meeting were to identify high priority marine mammal information needs for the next 5-15 years and to discuss existing and emerging funding opportunities in the Gulf of Mexico. Report highlights include an identification of information needs regarding marine mammal abundance, distribution, habitat use, and behavior to use in monitoring restoration of marine mammals post-Deepwater Horizon and to mitigate future impacts of human activities in the Gulf, including those associated with oil and gas exploration and development, commercial and recreational fishing, shipping, tourism, military operations, and pollution. Specific data collection needs identified by presenters and breakout groups are included in the report.

The Commission hopes that information presented at the April meeting and summarized in the report will assist BOEM in its environmental studies planning efforts and also help pave the way for additional collaboration in the Gulf region. More information regarding the meeting, as well as PDF versions of the presentations and posters, is available at: http://www.mmc.gov/gom/gom_meeting.shtml.

The Commission appreciates the opportunity to provide this compilation of its 2015 recommendations for marine mammal research and monitoring in conjunction with ocean energy development. Please contact me if you have questions concerning any of the Commission's recommendations.

Sincerely,



Rebecca J. Lent, Ph.D.
Executive Director

Enclosure

cc: Dr. Rodney Cluck, Chief, BOEM Division of Environmental Sciences

REFERENCES

- Masden, E.A., A.D. Fox, R.W. Furness, R. Bullmann, and D.T. Haydon. 2009. Cumulative impact assessments and bird/wind farm interactions: Developing a conceptual framework. *Environmental Impact Assessment Review* 30:1-7.
- Moore, J. E., and R. Merrick. 2011. Guidelines for Assessing Marine Mammal Stocks: Report of the GAMMS II Workshop, February 15-18, 2011, La Jolla, California. Department of Commerce, NOAA Technical Memorandum NMFS-OPR-47. 95 pages.
- NMFS. 2005. Revisions to Guidelines for Assessing Marine Mammal Stocks. 24 pages. Available at: www.nmfs.noaa.gov/pr/pdfs/sars/gamms2005.pdf

- Rice, A.N., J.T. Tielens, B.J. Estabrook, C.A. Muirhead, A. Rahaman, M. Guerra, and C.W. Clark. 2014. Variation of ocean acoustic environments along the western North Atlantic coast: A case study in context of the right whale migration route. *Ecological Informatics* 21:89-99.
- Thompson, P.M., G.D. Hastie, J. Nedwell, R. Barham, K.L. Brookes, L.S. Cordes, H. Bailey, and N. McLean. 2013. Framework for assessing impacts of pile-driving noise from offshore wind farm construction on a harbour seal population. *Environmental Impact Assessment Review* 43:73-85.
- Waring, G., E. Josephson, K. Maze-Foley, and P.E. Rosel (eds.). 2014. U.S. Atlantic and Gulf of Mexico Marine Mammal Stock Assessments – 2013. 464 pages.