



MARINE MAMMAL COMMISSION

29 August 2022

Rear Admiral John W. Mauger, Commander
First Coast Guard District
U.S. Coast Guard
408 Atlantic Avenue
Boston, Massachusetts 02110

Dear Rear Admiral Mauger:

The Marine Mammal Commission (the Commission), in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the U.S. Coast Guard's (USCG) 28 June 2022 request for additional information regarding the Approaches to Maine, New Hampshire, and Massachusetts Port Access Route Study (MNMPARS; 87 Fed. Reg. 38418).

The Commission is currently tracking several issues that could affect routing measures being considered by the USCG in the Gulf of Maine area and that should be addressed in the agency's port access route study. These include —

- A rapid decline of the North Atlantic right whale population and changes in that population's distribution that may increase its vulnerability to vessel strikes outside of currently protected areas within the Gulf of Maine;
- Proposed changes by NOAA's National Marine Fisheries (NMFS) in vessel routing and vessel speed measures applicable to certain areas along the U.S. East Coast designed to reduce the risk of vessels striking North Atlantic right whales and other large whales; and
- The planned construction of several large wind energy farms in offshore waters from Maine to North Carolina that will increase vessel traffic in habitats commonly used by North Atlantic right whales and other large whales.

Recent changes in North Atlantic right whale distribution and movements

The North Atlantic right whale is one of the world's most endangered species of large whale. Right whales occur almost exclusively along the east coasts of the United States and Canada. In 2010, the population entered a period of decline that appears to be accelerating due to high levels of human-caused mortality and declining calf production (Pace et al. 2017, Davies and Brillant 2019). Human-caused mortality and serious injury, caused primarily by entanglements in fishing gear and vessel strikes, are the greatest threats to the recovery of the species (Pettis et al. 2021). The current abundance estimate for the species is 336 animals, which is an 8 percent decline since 2019 (Pettis et al. 2021). The number of females in the population is declining more rapidly than males, and the corresponding loss of reproductive potential raises grave concerns about an increased risk of extinction.

Historically, North Atlantic right whales have migrated between their summer feeding grounds off the coast of the northeastern United States and Canada and their winter calving grounds off South Carolina, Georgia, and Florida. In recent years, however, an increasing portion of the population has remained in more northerly waters off southern New England, Cape Cod Bay, and Massachusetts Bay during the winter and spring, with movements north and east in the early spring across the southern Gulf of Maine to feeding grounds in the Gulf of St. Lawrence (Charif et al. 2019, Ganley et al. 2019, Quintano-Rizzo et al. 2021, O'Brien et al. 2022). These changes in seasonal movements may be increasing their vulnerability to vessel strikes in areas that may be considered under the MNMPARS, such as the Cape Cod Canal and off Boston Harbor (see Garrison et al. 2022 for more details). The northward shift in the distribution of right whales in recent years has been linked to altered prey distribution (Meyer-Gutbrod et al. 2021), and the whales' distribution may continue to change unpredictably in the future.

The recent changes in the distribution of right whales and uncertainty regarding the timing and duration of right whale presence in areas off southern Massachusetts, Cape Cod Bay, and throughout the Gulf of Maine raise concerns about changes in vessel routing being considered by the USCG as part of the MNMPARS, as the areas being considered overlap with both historical and more recent right whale feeding and resting areas. As such, the Commission recommends that the USCG work closely with NMFS and other agencies and organizations to understand recent changes in the seasonal and geographic distribution of North Atlantic right whales and how this may affect their vulnerability to vessel strikes¹. The Commission further recommends that the USCG take a precautionary approach to the evaluation of appropriate routing measures that incorporate sufficient flexibility to adapt those measures in response to future changes in right whale distribution and movements in the Gulf of Maine.

Proposed changes by NMFS in vessel routing and vessel speed along the east coast

On 1 August 2022, NMFS proposed a number of amendments to its North Atlantic right whale vessel strike reduction rule (87 Fed. Reg. 46921) to reduce vessel-related deaths and injuries. These included changes that would (1) modify the areas and times in which vessels must comply with vessel speed restrictions, (2) expand the sizes and types of vessels that must comply with vessel speed restrictions to include all vessels 35 feet and longer, (3) create a framework to allow speed restrictions to be implemented in additional areas when whales are known to be present, and (4) revise exemptions to the rule for navigational safety. NMFS proposed these regulatory changes in part as a response to an increase in whale mortality due to vessel strikes beginning in 2017, which along with an increase in entanglement-related deaths, prompted NMFS to declare an Unusual Mortality Event² for North Atlantic right whales and investigate the causes of the increase in mortality. The public comment period on NMFS's proposed vessel strike reduction measures remains open until 30 September 2022. The Commission recommends that the USCG work closely with NMFS in developing its proposed routing measures to ensure consistency between measures

¹ One example of this kind of public-private collaboration is WhaleMap (<https://whalemap.org/WhaleMap/>), which compiles and displays information on right whale sightings and acoustic detections for use by the scientific, regulatory, and industrial sectors to inform more effective, dynamic planning of research and conservation activities.

² <https://www.fisheries.noaa.gov/national/marine-life-distress/2017-2022-north-atlantic-right-whale-unusual-mortality-event>

NMFS implements as part of its vessel strike reduction final rule and those being contemplated under the MNMPARS.

Planned expansion of wind energy development on the U.S. East Coast

The Biden Administration has established a national goal to deploy 30 gigawatts (GW) of offshore wind power by 2030³. As agencies work to achieve that goal, care must be taken to minimize the impacts of wind energy development, and associated vessel traffic, on marine mammals and their habitat. The Bureau of Ocean Energy Management (BOEM) has issued or is evaluating lease sales for offshore wind energy development throughout much of the U.S. East Coast, from Maine to South Carolina. Development of the wind energy areas off Massachusetts and Rhode Island are furthest along, with no less than nine separate companies in the process of developing wind farms. Wind energy development is also advancing in both state and federal waters off Maine. Sites in state waters include the Gulf of Maine Floating Offshore Wind Research Array⁴ off Portland and the University of Maine Offshore Wind Test Site at Monhegan Island⁵. BOEM recently published a Request for Interest in wind energy leasing on the Gulf of Maine Outer Continental Shelf⁶ to determine whether there is sufficient interest in wind energy development in the Gulf of Maine to move forward with a lease sale. The Request for Interest is open for comment until 3 October 2022. Future development in some or all of these areas is likely to increase vessel traffic and may shift it into areas used by right whales and other large whales. The expected growth of offshore wind energy projects underscores the need for close coordination with BOEM and other agencies to track and anticipate changes in vessel traffic and to minimize the potential adverse impacts of increasing vessel traffic on large whales.

Interagency coordination on vessel routing measures

The extent to which the USCG has involved other federal agencies in the development of the MNMPARS is unclear, but interagency coordination and information sharing is critical as recreational and commercial vessel traffic in offshore waters of the Gulf of Maine increases. A good model of federal agency efforts to track vessel traffic and promote mariner outreach to reduce impacts of vessels on right whales and other large whales is that led by NOAA's Stellwagen Bank National Marine Sanctuary (SBNMS). SBNMS scientists play a key role in monitoring the distribution and behavior of right whales and other large whales within the sanctuary, along with vessel traffic patterns and associated vessel noise to identify measures that can be taken to reduce vessel strikes of large whales and impacts of vessel sound on whales. The SBNMS has implemented numerous programs to raise awareness among mariners regarding the presence of large whales and minimize the whales' vulnerability to vessel strikes and vessel noise. This has included working with the USCG and other agencies to re-route the Boston Traffic Separation Scheme (Wiley et al. 2013). Not only does SBNMS have an ongoing program to monitor and model vessel traffic and vessel speed through the sanctuary, it also promotes broader use of the WhaleAlert⁷ program to alert mariners of the presence of whales and engages the maritime industry to encourage best practices

³ <https://www.whitehouse.gov/briefing-room/statements-releases/2021/03/29/fact-sheet-biden-administration-jumpstarts-offshore-wind-energy-projects-to-create-jobs/>

⁴ <https://www.maine.gov/energy/initiatives/offshorewind/researcharray>

⁵ <https://umaine.edu/offshorewindtestsite/>

⁶ <https://www.boem.gov/renewable-energy/state-activities/maine/gulf-maine>

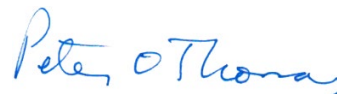
⁷ <https://www.whalealert.org/>

designed to reduce the risks of vessel strikes through the Right Whale Corporate Responsibility project⁸.

Considering the various ongoing efforts by NOAA, BOEM, and other federal agencies to monitor changes in North Atlantic right whale distribution, to change vessel routing off the U.S. East Coast to reduce the threat of vessel strikes to right whales and other large whales, and to guide expansion in wind energy development in offshore waters, the Commission recommends that the USCG ensure a collaborative, interagency approach to further the development of the MNMPARS that draws on federal agency expertise and knowledge, including that of the Marine Mammal Commission, regarding the distribution and movements of large whales and promotes coordinated action across agencies to address increasing vessel traffic in offshore waters and anticipates potential impacts on marine mammals and other marine resources.

The Commission appreciates the opportunity to provide comments on the USCG's MNMPARS. Please contact me if you have questions about the Commission's recommendations or comments.

Sincerely,



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

References

- Charif, R.A., Y. Shiu, C.A. Muirhead, C.W. Clark, S.E. Parks, and A.N. Rice. 2020. Phenological changes in North Atlantic right whale habitat use in Massachusetts Bay. *Global Change Biology*, 26(2), 734–745.
- Davies, K.T., and S.W. Brilliant. 2019. Mass human-caused mortality spurs federal action to protect endangered North Atlantic right whales in Canada. *Marine Policy* 104:157–162.
- Ganley, L.C., S. Brault, and C.A. Mayo. 2019. What we see is not what there is: estimating North Atlantic right whale *Eubalaena glacialis* local abundance. *Endangered Species Research* 38:101–113.
- Garrison, L.P., J. Adams, E.M. Patterson, and C.P. Good. 2022. Assessing the risk of vessel strike mortality in North Atlantic right whales along the U.S East Coast. NOAA Technical Memorandum NMFS-SEFSC-757. 36 pages. Available at: <https://repository.library.noaa.gov/view/noaa/44637>
- Meyer-Gutbrod, E.L., C.H. Greene, K.T.A. Davies, and D.G. Johns. 2021. Ocean regime shift is driving collapse of the North Atlantic right whale population. *Oceanography* 34(3):22–31.
- O'Brien, O., D.E. Pendleton, L.C. Ganley, K.R. McKenna, R.D. Kenney, E. Quintana-Rizzo, C.A. Mayo, S.D. Kraus and J.V. Redfern. 2022. Repatriation of a historical North Atlantic right whale habitat during an era of rapid climate change. *Scientific Reports* 12:12407.

⁸ <https://sanctuaries.noaa.gov/news/jun19/right-whale-corporate-responsibility-project-stellwagen-bank-national-marine-sanctuary.html>

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- Pace, R.M., P.J. Corkeron, and S.D. Kraus. 2017. State–space mark–recapture estimates reveal a recent decline in abundance of North Atlantic right whales. *Ecology and Evolution* 7:8730–8741.
- Pettis, H.M., R.M. Pace III, and P.K. Hamilton. 2021. North Atlantic Right Whale Consortium 2020 Annual Report Card. Report to the North Atlantic Right Whale Consortium. Available at: [https://www.narwhalconsortium.org/annual-report-card-2020](#)
- Wiley, D., L. Hatch, M. Thompson, K. Schwehr, and C. MacDonald. 2013. Marine sanctuaries and marine planning: Protecting endangered marine life. *Proceedings of the Marine Safety & Security Council: The Coast Guard Journal of Safety & Security at Sea* 70(3):10–15.