

UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration Office of National Marine Sanctuaries Stellwagen Bank National Marine Sanctuary 175 Edward Foster Rd Scituate, Massachusetts 02066

April 6, 2023

Mr. Tom Nies Executive Director, NEFMC 50 Water Street, Mill 2 Newburyport, MA 01950

Dear Tom,

I am writing to ask that you consider including all of Stellwagen Bank National Marine Sanctuary (SBNMS) within any Inshore Midwater Trawl Restricted Area that may be re-established under Amendment 8 to the Atlantic Herring Fishery Management Plan.

While much of the sanctuary was included in the original closure, an analysis by our research team using information from the Data Matching and Imputation System (DMIS) from 2007-2020 shows that a substantial amount of herring and mackerel are caught within SBNMS just outside the previously attempted closure. This suggests that the original boundaries missed important inshore herring habitat that needs to be included in a future closure to ensure it can fully achieve important ecological goals. A map of our analysis is included in Figure 1.



Figure 1. Commercial fishery landings of Atlantic Herring, Atlantic Mackerel, and both species combined within Stellwagen Bank National Marine Sanctuary from 2007-2020. Landings are from NOAA Fisheries' Data Matching and Imputation System (DMIS). The red to green color scale represents high to low quantities of pounds landed. The purple line represents the former Inshore Midwater Trawl Restricted Area boundary. Black lines are Stellwagen Bank National Marine Sanctuary boundaries.



In addition to providing foraging habitat for numerous piscivorous fishes and 53 species of seabirds, the sanctuary is critical foraging and nursery habitat for over 10 species of marine mammals, including endangered and protected baleen whales.^{1,2,3,4,5} Humpback, fin, and minke whales feed on herring, mackerel, and sand lance in SBNMS for much of the year. Humpback whales exhibit high site fidelity to SBNMS in part due to its reliably abundant prey.

We are concerned that continued midwater trawling within SBNMS will exacerbate predicted declines in forage fish abundance due to climate change,⁶ leading to baleen whale distribution shifts and abandonment of SBNMS. We want to ensure that SBNMS remains prime foraging habitat for baleen whales and that we continue to benefit from ecosystem services provided by whales including carbon storage and a whale watching industry that generates over \$182M in economic activity per year.⁷ Other ecosystem services also benefit from forage fish abundance such as commercial and recreational fisheries conducted in the sanctuary valued at \$78M per year, supporting coastal communities in Massachusetts, New Hampshire and Maine.⁸

Thank you for the opportunity to provide these written comments. Should you have any further questions, Dr. Tammy Silva, of my staff, is a member of the Herring Advisory Panel and can provide any further information you may need. We appreciate the opportunity to bring attention to this issue early in the Council's process of revisiting the Amendment 8 Inshore Midwater Trawl Restricted Area.

Sincerely,

Captain Peter DeCola U.S. Coast Guard (retired) Superintendent, Stellwagen Bank National Marine Sanctuary

¹ National Oceanic and Atmospheric Administration, Office of National Marine Sanctuaries. 2021. Stellwagen Bank National Marine Sanctuary Draft Management Plan and Environmental Assessment. Silver Spring, MD.

² Office of National Marine Sanctuaries. 2020. 2020 Condition Report: Findings of Status and Trends for 2007-2018. U.S. Department of Commerce, National Oceanic and Atmospheric Administration, Office of National Marine Sanctuaries, Silver Spring,

MD. 263 pp.

³ Powers, K. D., Wiley, D. N., Robuck, A. R., Olson, Z. H., Welch, L. J., Thompson, M. A., & Kaufman, L. (2020). Spatiotemporal characterization of non-breeding great shearwaters Ardenna gravis within their wintering range. Marine Ornithology, 48(2), 215–229. ⁴ Silva, T. L., Wiley, D. N., Thompson, M. T., Hong, P. H., Kaufman, L., Suca, J. J., Llopiz, J. K., Baumann, H., & Fay, G. F. (2020). High collocation between sand lance and protected top predators: Implications for conservation and management. Conservation Science and Practice. e274; DOI: 10.1111/csp2.274

⁵ Wiley DN, Silva TL, Thompson MA, Baumann H, Kaufman L, Llopiz JK, Suca JJ, Valentine P. 2021. Assessing the biological and oceanographic processes that drive fisheries productivity in New England sand shoals and the potential for dredging-related disruption. Sterling (VA): U.S. Department of the Interior, Bureau of Ocean Energy Management. 267 p. Contract No.: IA M17PG00019/P00002. Report No.: BOEM 2022-041.

⁶ Suca, J. J., Wiley, D. N., Silva, T. L., Robuck, A. R., Richardson, D. E., Glancy, S. G., Clancey, E., Giandonato, T., Solow, A. R., Thompson, M. A., Hong, P., Baumann, H., Kaufman, L., & Llopiz, J. K. (2021). Sensitivity of sand lance to shifting prey and hydrography indicates forthcoming change to the northeast US shelf forage fish complex. ICES Journal of Marine Science fsaa251, https://doi.org/10.1093/icesjms/fsaa251

 ⁷ Schwarzmann, D., Shea, R. 2020. Whale Watching in Stellwagen Bank National Marine Sanctuary: Understanding Passengers and their Economic Contributions. National Marine Sanctuaries Conservation Series ONMS-20-12. U.S. Department of Commerce, National Oceanic and Atmospheric Administration, Office of National Marine Sanctuaries, Silver Spring, MD. 60 pp
⁸ Schwarzmann, D., Shea, R. Leeworthy, V.R., Steinbeck, S., Dato, C. 2020. Technical Methods of Estimating Commercial and Recreational Fishing Effort and Economic Contributions in Stellwagen Bank National Marine Sanctuary. Marine Sanctuaries Conservation Series ONMS-20-05. U.S. Department of Commerce, National Oceanic and Atmospheric Administration, Office of National Marine Sanctuaries, Silver Spring, MD. 195 pp.

cc: Mr. Eric Reid, Chair NEFMC Mrs. Cheri Patterson, Chief, Marine Fisheries, NHFGD Mr. Rick Bellavance, Vice Chair, NEMFC Mr. Michael Petony, Regional Administrator, GARFO Dr. Jon Hare, Science and Research Director, NEFSC Matt Brookhart, Eastern Regional Director, Office of National Marine Sanctuaries