



MARINE MAMMAL COMMISSION

18 August 2025

Ms. Alice Garrett, Project Leader
U.S. Fish and Wildlife Service
Marine Mammals Management Office
1011 East Tudor Road
Anchorage, Alaska 99503

Dear Ms. Garrett:

The Marine Mammal Commission (the Commission), in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the Fish and Wildlife Service's (FWS) 18 July 2025 notice (90 Fed. Reg. 33982) and the application submitted by Narwhal LLC for authorization under section 101(a)(5)(D) of the Marine Mammal Protection Act (the MMPA) to take small numbers of polar bears and walruses. The taking would be incidental to Narwhal conducting shallow hazard surveys, preliminary field surveys, exploratory drilling operations, and summer cleanup activities in West Harrison Bay, Alaska. Narwhal would be required to implement various mitigation and monitoring measures and would notify the Native Alaskan communities that may be affected by the proposed activities of its upcoming activities—a plan of cooperation would be developed and implemented, if needed.

Level A harassment thresholds

The Level A harassment thresholds for permanent threshold shift (PTS)¹ that FWS used for the proposed authorization (Table 2; 90 Fed. Reg. 33990) are outdated and were based on National Marine Fisheries Service (NMFS; 2018) and Southall et al. (2019) rather than NMFS (2024) and Finneran (2024). This is particularly problematic because in NMFS's updated technical guidance (NMFS 2024) the in-water Level A harassment thresholds for polar bears and walruses² that are based on the cumulative sound exposure level metric are 20 dB lower for non-impulsive sources and 18 dB lower for impulsive sources than the outdated thresholds used by FWS. FWS specified that it was evaluating NMFS's new auditory injury criteria to determine whether they are appropriate for FWS-trust species and, pending the outcome of those evaluations, it would continue to use the previous version of the technical guidance (NMFS 2018) in its estimates of potential harassment via underwater sound (90 Fed. Reg. 33990). FWS did not acknowledge in the *Federal Register* notice that the in-air thresholds also had been updated, but it did similarly specify the outdated in-air PTS and TTS thresholds from Southall et al. (2019) in Table 1 of the notice (90 Fed. Reg. 33989). This is perplexing since Narwhal's application included the updated in-water and in-air Level A harassment thresholds and extents of the Level A harassment zones for underwater sound. In addition, FWS has been aware of the updated thresholds for more than two years. NMFS provided a draft version of NMFS (2024) in May 2023 for interagency review and provided briefings to all relevant federal

¹ As well as temporary threshold shift (TTS).

² The otariid thresholds are used for otariids, sea otters, polar bears, and walruses.

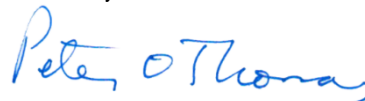
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agencies, including FWS. Another draft version of NMFS (2024) was provided for public comment in May 2024, which did not substantively change prior to its finalization in October. Concurrent with this process, the U.S. Navy provided FWS its draft environmental impact statements for Phase IV activities and accompanying tech memos that also included the updated PTS and TTS thresholds (Department of the Navy 2024, Finneran 2024), as the documents involved FWS-trust species.

The Commission did inquire about FWS using the updated thresholds in January 2025 and asked the agency again in July when FWS would be determining whether to use the updated thresholds but has yet to receive a response. None of the updated thresholds have changed for FWS species during the last two years. As such, it is unclear why FWS has yet to determine whether to implement the updated thresholds, or why, after implementing the technical guidance for more than 7 years, it has now questioned whether the thresholds and weighting functions are appropriate for polar bears, walruses, sea otters, and manatees. The derivation methods for the thresholds and weighting functions remain unchanged from NMFS (2016 and 2018) and Southall et al. (2019), which FWS still deems best available science. For all proposed incidental taking authorizations involving polar bears, walruses, sea otters, and manatees and the final incidental harassment authorization for Narwhal's proposed activities, the Commission recommends that FWS ensure that all Level A harassment zones, ensonified areas, and numbers of takes are based on the in-air and in-water thresholds and associated weighting functions from NMFS (2024) rather than NMFS (2018) and Southall et al. (2019).

The Commission hopes you find its letter useful. Please contact me if you have questions regarding the Commission's recommendation.

Sincerely,



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

cc: Anita Harrington, Ecological Services FWS

References

- Department of the Navy. 2024. Criteria and thresholds for U.S. Navy acoustic and explosive effects analysis (Phase 4). Naval Information Warfare Center Pacific, San Diego, California. 236 pages.
- Finneran, J.J. 2024. Marine mammal auditory weighting functions and exposure function for US Navy Phase 4 acoustic effects analyses. Naval Information Warfare Center Pacific, San Diego, California. 86 pages.
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- NMFS. 2018. 2018 revision to: Technical guidance for assessing the effects of anthropogenic sound on marine mammal hearing (Version 2): Underwater acoustic thresholds for onset of permanent and temporary threshold shifts. NOAA Technical Memorandum NMFS-OPR-59, National Marine Fisheries Service, Silver Spring, Maryland. 178 pages.
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- Southall, B.L., J.J. Finneran, C. Reichmuth, P.E. Nachtigall, D.R. Ketten, A.E. Bowles, W.T. Ellison, D.P. Nowacek, and P.L. Tyack. 2019. Marine mammal noise exposure criteria: updated scientific recommendations for residual hearing effects. *Aquatic Mammals* 45:125–232.