



November 27, 2024

Shannon Bettridge, Ph.D., Chief
Marine Mammal and Sea Turtle Conservation Division
Office of Protected Resources, NMFS
1315 East-West Highway
Silver Spring, MD 20910

RE: NOAA-NMFS-2024-0037 – Proposed Changes to MMPA List of Fisheries for 2025

Dear Chief Bettridge:

Don't Cage Our Oceans is a nationwide coalition of over fifty-five organizations and businesses working to stop industrial-scale offshore finfish farming while uplifting values-based seafood

systems led by local communities.¹ We represent nearly 4.5 million people nationwide, and our members come from fishing, farming, Indigenous, environmental conservation, aquaculture, and seafood consumer communities.

Responsible forms of aquaculture are community-driven, thoughtfully-sited, and appropriately scaled, using low impact methods. Low impact methods typically include bivalve and seaweed farming. However, **our members are very concerned about the many ways that large-scale, commercial finfish aquaculture facilities harm marine mammals.** Our coalition can provide numerous examples of such harmful interactions between net pens in the ocean and marine mammals, along with resources for the agency to study.

We appreciate the agency reassessing its stance on industrial-scale net pens, as harms to marine mammals are an ongoing problem both domestically and worldwide. We support NOAA's proposal to classify certain aquaculture gear as "analogous" to gear used in commercial fisheries; indeed, a cluster of multiple net pens for finfish aquaculture, each possessing several mooring lines, do and will threaten the lives and behavior patterns of marine mammals.

Background and New Scientific Information

On September 13th, 2023, as part of its annual update of the List of Fisheries required by the MMPA, the National Marine Fisheries Service issued a request for public input on "Aquaculture Fishery Descriptions" to inform how the agency would evaluate the potential risk to marine mammals from aquaculture operations for future LOFs. In addition to requesting information on incidences of marine mammal interactions with aquaculture gear, the agency sought "practical ways of grouping different aquaculture gears into a single fishery, such as grouping according to regional differences and/or operational and/or gear characteristics."² Don't Cage Our Oceans previously submitted comments regarding the agency's intention to manage aquaculture's impacts to marine mammals via inclusion of aquaculture gear and infrastructure in the LOF.

Commercial finfish aquaculture is wholly distinct from other forms of aquaculture, such as nearshore bivalve and seaweed farming. The former has enormous detrimental impacts on the marine environment, including the open discharging of massive amounts of waste, the spread of diseases, fish escapes, dumping of toxic chemicals, and harms to marine mammals. These issues are simply either absent altogether or of a far smaller scale when considering other forms

¹ For examples of values-based seafood systems led by local communities, see Farr, E., Webb, S., Holdeman, S. & Tolley, B. Aquaculture Values Report: A Visioning Project of the North American Marine Alliance. (Aug 2023.) Available at: <https://namanet.org/wp-content/uploads/NAMA-Aquaculture-Visioning-Report.pdf>

² National Oceanic and Atmospheric Administration. Proposed Rule, Request for Comment. Available at: <https://www.federalregister.gov/documents/2023/09/13/2023-19721/list-of-fisheries-for-2024>

of marine aquaculture, such as the farming of bivalves or seaweed. **For more on the many problems with commercial finfish aquaculture, see the landmark collection of peer-reviewed articles from last month's Science Advances (vol 10, issue 42),** located at <https://www.science.org/toc/sciadv/10/42>.

While NOAA lacks the authority to *grant permits* for aquaculture in Federal waters, NOAA *does* have the authority and responsibility to regulate the impacts of any commercial activity in Federal waters on marine mammals and other protected species. NOAA already provides consultation in the environmental impact process (via biological opinions and other means), and has the general authority to determine which ocean-based activities might harm marine mammals, whether energy extraction, fishing, or aquaculture. We support the agency's effort to fully assess the significant harms that offshore fish farm facilities operations have on marine mammals.

Offshore Fish Farming Harms Marine Mammals

Offshore fish farming has already harmed the lives of marine mammals across North America. Entanglement from ropes, lines, and net pens may harm endangered species and other wildlife in the proposed areas, especially as the facilities often act as fish aggregating devices (FADs) further exacerbating risks of entanglements and vessel strikes as species are drawn to the facilities. Recently, NOAA has noted that industrial aquaculture may attract predators as a result of fish escapes, food drifting outside the pens, and other animals aggregating around the pens.³ The FAD effect may result in more frequent encounters with protected species, which could increase the likelihood of injury from structures or equipment associated with the facility.⁴

As there is little monitoring, other than self-monitoring of facilities, confidence in the accuracy of interaction reports is low. The August 2023 escape of over 50,000 juvenile salmon from two of Cooke Aquaculture's cages off Cross Island in Maine raised serious concerns about seal interactions and risks to wild fish.⁵ It is worth remembering that in 2017, this same company lied and notoriously undercounted its massive fish escape in Washington state.⁶

³ Luke T. Barrett, et al., *Impacts of marine and freshwater aquaculture on wildlife: a global meta-analysis*, *Reviews in Aquaculture* (2018). <https://doi.org/10.1111/raq.12277>.

⁴ *Id.*

⁵ French, Edward. *Salmon escape raises concerns about seals, risk to wild fish*. *Maine Monitor*, August 26, 2023. Available at: <https://themainemonitor.org/salmon-escape-raises-concerns-about-seals-risk-to-wild-fish/>

⁶ Mapes, Lynda V. *Fish farm caused Atlantic salmon spill near San Juans, then tried to hide how bad it was, state says*. *Seattle Times*, February 2, 2018. Available at: <https://www.seattletimes.com/seattle-news/fish-farm-caused-atlantic-salmon-spill-state-says-then-tried-to-hide-how-bad-it-was/>

In early 2023, Bottlenose Dolphins were found to increase their aggression toward Spinner Dolphins around an offshore fish farm in Hawai'i.⁷ These highly social animals have been found to be more solitary as they grow accustomed to interacting with and feeding directly from the farms. They also have been known to change their feeding patterns in favor of preying on the wild fish that often congregate around finfish farms. Since 1990, at least 24 dolphins have died from entanglement at these farms.⁸

A ten-year-old Hawaiian Monk Seal died after being trapped in the nets of the NOAA-funded Blue Ocean Mariculture fish farm off the coast of Hawaii.⁹ These rare seals are endangered, with only about 630 mature adults left in the wild.¹⁰ There have also been at least 33 documented California Sea Lion deaths due to entanglement in offshore fish farms in Washington State.¹¹

Whales have died because of entanglement with offshore fish farm infrastructure as well. In 2016, two Humpback Whales died after being caught in an offshore fish farm in British Columbia.¹² A Humpback Whale was trapped in a tuna farm for two days before being successfully released.¹³ A juvenile North Atlantic Right Whale, of which there are only 336 remaining individuals, died after being entangled in aquaculture gear in the Western North Atlantic Ocean.¹⁴

If Commercial Finfish Aquaculture Expands in the U.S., More Marine Mammals will be Harmed

The critically-endangered Rice's Whales, of which only 30-50 individuals remain,¹⁵ are under increasing risk of entanglement hazards due to the creation of so-called "Aquaculture Opportunity Areas" (AOAs) in the Gulf of Mexico, which is being spearheaded by another department at NOAA. Industrializing these areas with fish farms and diesel-powered feed

⁷ Harnish, A. E., Baird, R. W., Corsi, E., Gorgone, A. M., Perrine, D., Franco, A., Hankins, C., & Sepeta, E. (2023). Long-term associations of common bottlenose dolphins with a fish farm in Hawai'i and impacts on other protected species. *Marine Mammal Science*, 1–17. <https://doi.org/10.1111/mms.13010>

⁸ Bath, G. E., Price, C. A., Riley, K. L., & Morris, J. A. (2023). A global review of Protected Species Interactions with marine aquaculture. *Reviews in Aquaculture*. <https://doi.org/10.1111/raq.12811>

⁹ *Rare monk seal dies in fish farm off Hawaii*. (2017, March 17). USA Today. Retrieved September 11, 2023, from <https://www.usatoday.com/story/news/nation/2017/03/17/rare-monk-seal-dies-fish-farm-off-hawaii/99295396/>

¹⁰ *Id.*

¹¹ Bath, *supra* note 8.

¹² *Id.*

¹³ *Id.*

¹⁴ Price CS, Morris JA Jr, Keane E, Morin D, Vaccaro C, Bean D. *Protected Species and Marine Aquaculture Interactions: NOAA Technical Memorandum NOS NCCOS 211*. US National Oceanic and Atmospheric Administration; 2017.

¹⁵ *Rice's Whale | NOAA Fisheries*. (n.d.). NOAA Fisheries. Retrieved September 11, 2023, from <https://www.fisheries.noaa.gov/species/rices-whale>

barges would also create more ocean noise, which has terrible consequences for marine mammals like the Rice's whale.

Finfish farming disasters are a frequent and predictable occurrence. Leading countries in this space regularly discover that the companies they seek to regulate regularly experience mass death events, massive fish escapes, or other related disasters - all of which wreak havoc on the marine environment and threaten marine mammals in the affected areas. The U.S. government has been aware of this for some time now. Recognizing the regularity of fish escapes from ocean-based net pens, the U.S. Council on Environmental Quality has stated that it “must be assumed that escapes will occur” from net pens.”¹⁶

Learning about these disasters is as easy as conducting a Google news search, as it is becoming nearly a weekly occurrence. **To see a brief summary of just a few of these ongoing incidents, [please review this spreadsheet](#) of various finfish farm disasters around the world.**

Conclusion

We support the agency's effort to find “practical ways of grouping different aquaculture gears” in a way that would protect marine mammals, and taking the time to differentiate between the clear harm presented by industrial-scale commercial net pens for finfish aquaculture, and the otherwise more *de minimis* impacts of, for example, nearshore oyster cages that can be lifted by hand.

Our coalition and its many members remain available to provide additional information or guidance upon request, and we appreciate your consideration of these comments.

Sincerely,



James Mitchell
Legislative Director
Don't Cage Our Oceans

¹⁶ Council for Environment Quality & Office of Science and Technology Policy, Case Study No. 1: *Growth-Enhanced Salmon*, at 23 (2001), <https://clintonwhitehouse5.archives.gov/media/pdf/salmon.pdf>