20 June 2025

Dr. Zachary Schakner
Protected Species Science Branch
Office of Science and Technology
National Marine Fisheries Service
1315 East-West Highway
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ATTN: Stock Assessments, NOAA–NMFS–2025–0019

Dear Dr. Schakner:

The Marine Mammal Commission (the Commission), in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the National Marine Fisheries Service (NMFS) draft 2024 stock assessment reports (SARs) for marine mammals occurring in U.S. waters (90 Fed. Reg. 13344). These reports provide valuable information needed for NMFS to manage marine mammals effectively as valued and ecologically important natural resources of our nation. The Marine Mammal Protection Act (MMPA) requires that SARs include a calculation of each stock's potential biological removal (PBR) level, which is critical for identifying fishery interaction problems and guiding Take Reduction Teams that operate cooperatively with representatives from industry, fishery management councils, and conservation organizations under Section 118 of the Act. In addition, the SARs provide important information to support timely review of permits and incidental take authorizations for non-fisheries activities (e.g., military, oil and gas exploration and production, renewable energy and construction activities). The Commission recognizes the importance of the SARs and appreciates NMFS's efforts to update and improve them, as well as the opportunity to review them, provide comments, and make recommendations for further improvements.

GENERAL COMMENTS

Technologies and innovative approaches

In response to the release of the draft 2023 SARs, the Commission recommended[1] that NMFS direct resources to support the development of new technologies for monitoring stocks. NMFS has directed resources to support the development of new technologies and analytical methods for monitoring stocks and has made significant progress toward integrating emerging technologies, such as uncrewed aerial systems (UAS) to collect, and machine-learning algorithms to process, high-resolution aerial imagery. These technologies aid in assessing marine mammal stocks in remote or otherwise difficult-to-access locations. In addition, NMFS recently partnered with MITRE, a non-profit technology development organization, and has been developing and evaluating technologies for whale detection, vessel strike avoidance, and on-demand fishing gear. Collaborations with other agency programs, such as the Office of Naval Research's (ONR) Marine Mammals and Biology Program, have also strengthened and advanced research, particularly for new

[1] See Commission's 29 April 2024 letter

tag development[2], passive acoustic sampling and data analysis, and eDNA sampling. The Commission commends NMFS on its impressive collaborative efforts to incorporate new technologies and innovative approaches that improve the effectiveness and efficiency of the stock assessment process.

The Commission is concerned, however, about recently implemented and proposed budget cuts, many of which will negatively impact marine mammal and other protected species programs, as will the substantial loss of personnel within NMFS Science Centers, Regional Offices, and the Office of Protected Resources. Losing the experience, expertise, and resources that have driven the innovation and cutting-edge research to date jeopardizes the progress that has been made and threatens to stifle further innovation. The Commission believes that there is significant potential for more innovation and additional efficiencies within the stock assessment program, which could translate into easing regulatory burdens by improving the accuracy and precision of PBR and human-caused mortality/serious injury (M/SI) estimations. Given such potential benefits, the Commission once again recommends that NMFS prioritize funding marine mammal research and retaining personnel to continue developing and integrating new technologies and innovative approaches that will advance stock assessment methods.

Need for consistency across regions

The Commission has previously commented on inconsistencies in SAR formatting and reporting, particularly across regions.[3,4] In response to the Commission's comments on the 2023 draft SARs, NMFS stated that it continues to strive for greater consistency as it implements the updated Guidelines for Assessing Marine Mammal Stocks[5] (GAMMS), but is doing so on a stock-by-stock basis as revisions are made. The Commission supports this approach and was pleased to see expanded discussion in some of the SARs (e.g., Common Bottlenose Dolphin Biscayne Bay Stock) relating to unobserved mortalities and ways to account for underestimates of M/SI due to factors such as low or no observer coverage or low detection of strandings. However, some inconsistencies persist in the level of detail and formatting of SAR sections across regions, particularly with respect to M/SI estimates and the discussions of potential biases and the "Other Factors" sections[6]. The Commission is aware that these issues were on the agenda for the Joint Scientific Review Group (SRG) meeting planned for March 2025 that was subsequently canceled due to agency travel restrictions. The Commission recommends that NMFS make rescheduling the meeting a high priority.

REGION-SPECIFIC COMMENTS

Atlantic

NMFS revised 11 of the 116 Atlantic regional SARs, with four of the revised SARs providing new information on abundance and seven providing updated M/SI information.

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[2] See North Atlantic Right Whale Tagging Workshop Report
[3] See Commission's 24 January 2022 letter
[4] See Commission's 29 April 2024 letter
[5] NMFS. 2023. Guidelines for Preparing Stock Assessment Reports Pursuant to the Marine Mammal Protection Act
[6] In some SARs, this section is still referred to as "Habitat Issues".

Bottlenose Dolphin Biscayne Bay Stock – The first SAR for the Biscayne Bay stock of bottlenose dolphins was published in December 2009, but the population size—and therefore N_{min}—was unknown. The population estimate and N_{min} also remained unknown in the SAR that was revised in 2013. The draft 2024 SAR presents the first published abundance and N_{min} estimates for this stock. The Commission commends NMFS for the significant effort involved in collecting and analyzing the data needed to develop those estimates.

Stocks injured by the Deepwater Horizon (DWH) Oil Spill—Mean annual M/SI is provided in the SARs for fisheries, as well as other human activities including the DWH oil spill. Population models were developed as part of the DWH Natural Resource Damage Assessment (NRDA) to estimate injury and time to recovery for Gulf cetacean stocks that were affected by the spill (DWH MMIQT 2015, Schwacke et al. 2017). NMFS used the models to estimate excess mortality from the DWH spill for the affected stocks, and those estimates were included as human-caused M/SI in the appropriate SARs. However, many of the SARs have not been updated recently, which has led to outdated estimates from the population models that may not reflect best available science. For example, SARs for pelagic species in the Gulf have not been updated since 2020 and include DWH M/SI relative to 2014–2018. The DWH M/SI estimates are orders of magnitude greater than any other source of M/SI, therefore, those estimates should be updated and available to inform both fisheries- and non-fisheries-related negligible impact determinations. The Commission recommends that NMFS revise all relevant Gulf SARs to include DWH M/SI estimates projected for either 10 years or until the estimates are less than one. Refined population models have been developed since the NRDA (Schwacke et al. 2022, Marques et al. 2023), therefore, NMFS also should ensure that the current and projected DWH M/SI estimates are based on the most up-to-date model available.

Depleted status of all Tamanend's bottlenose dolphin coastal stocks – The revised SARs incorporate the finding that the long-recognized coastal morphotype of bottlenose dolphin found in estuarine, coastal, and shelf waters of the western North Atlantic belongs to a separate species, Tamanend's bottlenose dolphin (*Tursiops erebennus*), that is distinct from the more robust offshore morphotype of common bottlenose dolphin (*Tursiops truncatus truncatus*), found in deeper waters of the continental shelf and slope (Costa et al. 2022). The Commission commends NMFS for the years of collaborative research that have helped elucidate the complex structure of *Tursiops* spp. and stocks in the western North Atlantic, including the identification of Tamanend's bottlenose dolphin as a distinct species.

The revised SARs provide new abundance and M/SI estimates, and analyses of population trends for three coastal stocks of Tamanend's bottlenose dolphin: the Central Florida Coastal Stock, the Northern Florida Coastal Stock, and the South Carolina/Georgia Coastal Stock. The Commission commends NMFS for its efforts to conduct additional aerial surveys and synthesize multiple sources of M/SI information, including stranding data, to update SARs for these stocks.

All three of these stocks are designated as depleted and, as such, are strategic stocks. The depleted designations stem from the 1987-1988 Unusual Mortality Event (UME) and finding that the coastal migratory stock of bottlenose dolphin along the U.S. East Coast had likely declined by more than 50 percent, falling below its optimum sustainable population level[7]. At the time of the depleted designation, NMFS managed coastal morphotype bottlenose dolphin along the U.S. East Coast as a single stock, but additional scientific information has become available since to revise the stock structure. Ten resident estuarine stocks, two migratory coastal, and three resident coastal

[7] 58 Fed. Reg. 17789, April 6, 1993

stocks of coastal morphotype bottlenose dolphin are now recognized along the U.S. East Coast. The two migratory and three resident coastal stocks correctly retain the original depleted designation because they can be traced back to the original coastal migratory stock.

Twenty-seven years have passed since the 1987-1988 UME and substantial new scientific information is now available, which warrants a re-evaluation of the depleted designation for these stocks. Additional UME events, particularly the 2013-2015 Bottlenose Dolphin UME in the mid-Atlantic[8], likely impacted these stocks to varying degrees and should be considered in evaluating and possibly revising their current status. The Commission recommends that NMFS reanalyze available scientific data on population trends, potentially applying population risk assessment models that incorporate available information on both the 1987-1988 and 2013-2015 UMEs, to help determine if the two migratory coastal and three resident coastal stocks of Tamanend's bottlenose dolphins should retain their depleted designation. The Commission would be willing to assist on these analyses, as time and budget allow.

Gray Seal Western North Atlantic Stock – The rate of increase of the gray seal population in the United States is affected by pup production, juvenile and adult survival, and immigration from Canada. Immigration of female seals should boost the number of pups born in the United States. From 1988 to 2019, the very high rates of increase of pup production at some U.S. colonies suggest that immigration did contribute to growth of the population in the United States (Wood et al. 2020). Since 2016, however, pup production has been relatively stable, and the U.S. abundance estimate increased by only about 100 animals per year from 2016 to 2021 (Wood et al. 2022; Hayes et al. 2024). During this time, more than 1,200 seals were killed[9] annually on average by the Northeast sink gillnet fishery alone (Hayes et al. 2024). Because the combination of intrinsic growth plus immigration from Canada is resulting in very slow total growth, it is plausible that human-caused M/SI rates in the United States are sufficiently high that U.S. pup production would be declining if not for immigration from Canada. NMFS's determination that this stock is not strategic is merely stated, based upon the unsupported supposition that if total mortality and serious injury for the stock were known, it would not exceed PBR. The level of take of gray seals in the Northeast gillnet fishery (1) is by far the highest for a marine mammal in any commercial fishery in the United States (Benaka et al. 2019) and (2) may be preventing further growth of the U.S. population. Therefore, the Commission recommends that NMFS take measures to significantly reduce gray seal bycatch in the Northeast gillnet fishery.

Common Bottlenose Dolphin Barataria Bay Estuarine System Stock – The SAR for the Barataria Bay Estuarine System (BBES) Stock of common bottlenose dolphins (*Tursiops truncatus truncatus*) was not updated. The abundance of this strategic stock, which was substantially impacted by the DWH oil spill, has not been estimated since 2019. In comments on the 2023 SARs, the Commission raised concerns regarding the lack of monitoring and collection of data necessary to estimate abundance of the BBES stock. Similar concerns were expressed by the Atlantic SRG in its recommendations to the NMFS Assistant Administrator in both 2024[10] and 2025. Based on the abundance information collected via a capture-mark-recapture survey in 2019 (Garrison et al. 2020) and population modeling (Schwacke et al. 2022), the stock had declined by approximately half in the decade

[8] NOAA Fisheries. 2013–2015 Bottlenose Dolphin Unusual Mortality Event in the Mid-Atlantic. Available at: https://www.fisheries.noaa.gov/national/marine-life-distress/2013-2015-bottlenose-dolphin-unusual-mortality-event-mid-atlantic
[9] Not including live entangled gray seals that likely died.
[10] See ASRG Recommendations 2024.pdf

following the DWH spill, and the population may still be declining due to the poor health of many BBES dolphins. Furthermore, the stock is expected to be further diminished, likely substantially, by planned marsh restoration activities in the Barataria Basin (Thomas et al. 2022), specifically the Mid-Barataria Sediment Diversion (MBSD) Project.

The stock's strategic status, the observed decline, and the predicted future decline make this stock a high priority for enhanced monitoring. However, NMFS has conducted only one capture-mark-recapture survey since the DWH NRDA settlement, and the most recent (2023) BBES SAR acknowledges that there are insufficient data to determine a population trend. This lack of information on population status and trend is unacceptable given the magnitude of previous and likely future human-caused impacts on the stock. Presumably, at some point, the DWH Trustees will fully initiate bottlenose dolphin restoration projects using the $50M that was awarded in 2015 from the DWH NRDA settlement for marine mammals in Louisiana[11]. Without estimates of abundance of common bottlenose dolphins (the only marine mammal inhabiting Louisiana waters year-round) over multiple years, it will be impossible to determine and ascribe population changes – either negative or positive – to specific causes, or in the case of positive changes, to marine mammal restoration actions. The Commission acknowledges that Section 117 of the MMPA and the restoration projects may entail somewhat differing data needs with regard to the BBES stock's status (abundance, survival, reproduction, and/or overall health). However, there are certainly common goals, and it is in the public's best interest that NMFS coordinate resources needed to achieve these common goals. Therefore, the Commission strongly recommends that NMFS coordinate and leverage resources across the agency to develop a plan for an ongoing assessment of the BBES stock, and in the interest of transparency, the Commission recommends that NMFS share that plan with the public. The Commission further recommends that such a plan include a timely and appropriate assessment of the BBES stock to establish its current status and contribute to the analysis of population trend before crucial additional data points are lost.

Alaska

NMFS revised five of the 49 Alaska regional SARs, with three revised SARs providing new information on abundance and three providing updated M/SI information.

Northern Fur Seal Eastern Pacific Stock – The draft 2024 SAR highlights engagement with the Aleut Community of St. Paul Island Tribal Government and the Traditional Council of St. George Island to remove and prevent marine debris from entering habitat where it poses a risk to fur seals. The collaborative work was conducted with support from the NOAA Marine Debris Program. The Commission commends NMFS and its partners for supporting and incorporating collaborative, community-led initiatives that provide important context for evaluating these sources of human-caused M/SI to the stock.

Alaska Bering Sea Harbor Porpoise Stock – The Commission supports the use of the critical N_{min} approach (as outlined in the most recent GAMMS[12]) when applied with sufficient supporting data and on a case-by-case basis. However, the Commission remains cautious about using critical N_{min} to classify the Bering Sea harbor porpoise stock as non-strategic, given the very limited M/SI data and unresolved questions about stock structure. The most recently published Bering Sea harbor porpoise

[11] See www.gulfspillrestoration.noaa.gov/media/document/chapter-5restoring-natural-resources508pdf
[12] NMFS. 2023. Guidelines for Preparing Stock Assessment Reports Pursuant to the Marine Mammal Protection Act

SAR, from 2020,[13] considered this stock strategic based on the likelihood that M/SI would exceed PBR if more complete data on stock structure, abundance, and observer coverage were available. The most recent abundance estimate is much higher than the calculated critical N_{min}, which reflects the minimum abundance that would result in PBR being exceeded given observed M/SI. However, the current M/SI estimates are based solely on entanglements in subsistence salmon gillnet gear reported through the Alaska stranding network. Furthermore, there is very little discussion in the SAR regarding the extent to which these entanglement counts may underestimate the true degree of M/SI. The negative bias in the estimate of M/SI is likely substantial due to the low detection and reporting of stranded animals, and the data gaps across multiple fisheries and regions. The Commission recommends that NMFS investigate methods and additional sources of information to better determine and describe the degree of unobserved M/SI, and to the extent possible, expand the discussion of unobserved M/SI in the SAR. Over the longer term, the Commission reiterates its previous recommendation[14] that NMFS strengthen observer coverage and invest in new technologies, such as electronic monitoring, to improve detection and documentation of M/SI. Given that some fisheries are managed at the state level, the Commission also encourages NMFS to collaborate closely with state fisheries agencies to enhance monitoring efforts and data sharing. Robust and consistent M/SI data are critical to credible stock assessments and management decisions, and NMFS should prioritize investments in monitoring infrastructure and interagency partnerships to address the persistent data gaps.

Beluga Whale Kotzebue Sound – The extent to which beluga whales summering in Kotzebue Sound may represent a separate stock is currently under review, as noted in the Bristol Bay and Cook Inlet SARs. The Commission looks forward to the forthcoming report, *Evaluation of Kotzebue Sound beluga whales as a proposed demographically independent population (DIP)* and emphasizes the importance of prioritizing its publication by the Alaska Fisheries Science Center, followed by a timely stock evaluation by the Alaska Regional Office.

Pacific

NMFS revised five of the 87 Pacific regional SARs, with five revised SARs providing new information on abundance and four providing updated M/SI information.

Killer Whale Eastern North Pacific Southern Resident stock – Genetic, ecological, and behavioral evidence support the recognition of distinct lineages of resident and transient (Bigg's) killer whale ecotypes in the eastern North Pacific (Morin et al. 2010, 2024). These ecotypes have previously been identified as unnamed subspecies and, in its most recent update, the Society for Marine Mammalogy's Committee on Taxonomy has provisionally named them *Orcinus orca ater* (resident killer whale) and *O. orca rectipinnus* (Bigg's killer whale)[15]. Although Morin et al. (2024) recommended elevating these forms to full species status, the Committee determined that a subspecies designation is more appropriate at this time, citing the possibility of episodic gene flow and the need for a more comprehensive global analysis of killer whale diversity. In light of this updated taxonomic guidance, the Commission recommends that NMFS update the Eastern North Pacific Resident SAR to include the fact that the two ecotypes are no longer considered unnamed subspecies.

[13] www.fisheries.noaa.gov/s3/2024-03/HARBOR-PORPOISE-Phocoena-phocoena-Bering-Sea-Stock.pdf
[14] See Commission's 29 April 2024 letter
[15] www.marinemammalscience.org/science-and-publications/list-marine-mammal-species-subspecies

The Commission appreciates the opportunity to provide comments and recommendations on the 2024 draft SARs. Please contact me if you have any questions regarding the Commission's rationale or recommendations.

Sincerely,

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

cc: Francine Kershaw, Chair, Atlantic Scientific Review Group
Megan Peterson Williams, Acting Co-Chair, Alaska Scientific Review Group
Greg O'Corry-Crowe, Acting Co-Chair, Alaska Scientific Review Group
Doug DeMaster, Chair, Pacific Scientific Review Group

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