



DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

[RTID 0648-XF155]

Final 2024 Marine Mammal Stock Assessment Reports

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Notice; response to comments.

SUMMARY: As required by the Marine Mammal Protection Act (MMPA), NMFS has considered public comments for revisions of the 2024 marine mammal stock assessment reports (SARs). This notice announces the availability of 21 final 2024 SARs that were updated and finalized.

ADDRESSES: The 2024 final SARs are available in electronic form via the Internet at <https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-stock-assessments>.

FOR FURTHER INFORMATION CONTACT: Zachary Schakner, Office of Science and Technology, (301) 427-8106, Zachary.Schakner@noaa.gov; Nancy Young, Nancy.Young@noaa.gov, regarding Alaska regional stock assessments; Jessica McCordic, Jessica.McCordic@noaa.gov, regarding Atlantic, Gulf of America, and Caribbean regional stock assessments; or Amanda Bradford, Amanda.Bradford@noaa.gov, regarding Pacific regional stock assessments.

SUPPLEMENTARY INFORMATION:

Background

Section 117 of the MMPA (16 U.S.C. 1361 *et seq.*) requires NMFS and the U.S. Fish and Wildlife Service (USFWS) to prepare stock assessments for each stock of marine mammals occurring in waters under the jurisdiction of the United States. These

SARs must contain information regarding the distribution and abundance of the stock, population growth rates and trends, estimates of annual human-caused mortality and serious injury (M/SI) from all sources, descriptions of the fisheries with which the stock interacts, and the status of the stock. Initial SARs were completed in 1995.

The MMPA requires NMFS and USFWS to review the SARs at least annually for strategic stocks and stocks for which significant new information is available and at least once every three years for non-strategic stocks. The term “strategic stock” means a marine mammal stock: (A) for which the level of direct human-caused mortality exceeds the potential biological removal level or Potential Biological Removal (PBR); (B) which, based on the best available scientific information, is declining and is likely to be listed as a threatened species under the Endangered Species Act (ESA) within the foreseeable future; or (C) which is listed as a threatened species or endangered species under the ESA or is designated as depleted under the MMPA (*see* 16 U.S.C. 1362(19)-(20) (PBR is defined as the maximum number of animals, not including natural mortalities, that may be removed from a marine mammal stock while allowing that stock to reach or maintain its optimum sustainable population). NMFS and USFWS are required to revise a SAR if they determine the review indicates that the status of the stock has changed or can be more accurately determined.

In order to ensure that SARs constitute the best scientific information available, the updated SARs under NMFS’ jurisdiction are peer-reviewed within NMFS Science Centers and by members of three regional independent scientific review groups established under the MMPA to independently advise NMFS and the USFWS on marine mammals. As a result of the time involved in the assessment of new scientific information, revision, and peer-review of the SARs, the period covered by the 2024 final SARs is generally 2018 through 2022.

NMFS reviewed the status of all marine mammal strategic stocks and considered

whether significant new information was available for all other stocks under NMFS' jurisdiction. As a result of this review, NMFS revised or developed new reports for 21 stocks in the Alaska, Atlantic, and Pacific regions. The 2024 revisions to the SARs consist primarily of updated or revised human-caused M/SI estimates and updated abundance estimates.

Pursuant to Executive Order 14172 *Restoring Names that Honor American Greatness* (January 20, 2025), the Gulf of Mexico is renamed the Gulf of America. This notice announces updates to stock names consistent with renaming of the Gulf. Commercial fishery names will be updated in future SARs to reflect name changes on the MMPA List of Fisheries.

Comments and Responses

On March 21, 2025, NMFS published a Notice in the Federal Register soliciting public comments on the draft 2024 SARs (90 FR 13344). NMFS received comments from the Marine Mammal Commission (Commission) and an environmental non-governmental organization (Center for Biological Diversity (CBD)). Our responses to substantive comments are below. We have not responded to comments that failed to raise a significant point for us to consider (*e.g.*, comments that are out of scope of the draft SARs). We appreciate the Commission's program-level comments and will take them into consideration, as appropriate, in the future.

Comments on National Issues

Comment 1: CBD commented that fishing gear is the primary source of at-sea plastic pollution and claims the draft SARs fail to adequately address the impact of lost and derelict gear on stocks. CBD recommends that the SARs include estimates of gear loss from the 2024 Report to Congress on Derelict Fishing Gear, providing the Hawai'i and American Samoa pelagic longline fisheries as an example of significant annual gear loss, including problematic monofilament line. They also suggest gear loss information

should be used to help apportion entanglements from unknown fishing gear to specific marine mammal stocks. Furthermore, CBD expresses disappointment in the NMFS' "failure to provide reliable estimates of marine mammal serious injury and death from commercial fisheries, including both active and lost gear", emphasizing that the MMPA mandates such estimates through commercial fishery observer programs. They advocate for incorporating alternative data collection methods like satellite and drone imagery analysis to improve these estimates, which they claim would allow NMFS to better prioritize entanglement reduction efforts.

Response 1: The MMPA requires that SARs contain estimates of the annual human-caused mortality and serious injury (M/SI) of the stock by source, and for strategic stocks, the MMPA requires the SARs to identify other factors that might be causing population decline or hindering recovery, such as impacts on marine mammal habitat and prey (16 U.S.C. 1386(a)(3)).

When information confirms that lost or derelict fishing gear has led to the M/SI of a marine mammal from a specific stock, regardless of whether it can be attributed to a specific fishery, these data are incorporated into the SAR. We rely on all available data for this assessment, which can typically be found under the "Fisheries Information" subheading within the "Human-caused M/SI" section of the SAR.

NMFS will continue to review all known and confirmed human-caused M/SI data as the information relates to lost and derelict fishing gear and incorporate it into the SARs as appropriate and required by statute.

Comments on Alaska Issues

Comment 2: CBD expressed concern regarding the declining Eastern Pacific northern fur seal population on St. Paul Island, and commented that there is well-established information on the competition between fur seals and commercial fisheries, contrary to the draft SAR's statement that the threat of prey competition is "unclear."

CBD cited research (Divine *et al.*, 2022; Short *et al.*, 2021; Kuhn *et al.*, 2014; Benoit-Bird *et al.*, 2013) linking this decline to the pollock trawl fishery, particularly for the Pribilof Islands population. CBD noted research showing direct competition with seals for prey in the Eastern Bering Sea during breeding season, impacting lactating females (McHuron *et al.*, 2020, 2023), and indirect competition affecting Pribilof Islands seals (Short *et al.*, 2021).

Response 2: We have clarified statements in the Eastern Pacific northern fur seal final SAR regarding the “unclear” threat of prey competition between fur seals and commercial fisheries, acknowledging that while evidence suggests nutritional limitation impacts the fur seal population, the decline on the Pribilof Islands has not been definitively linked to commercial fisheries, particularly the pollock fishery. We recognize the potential for competition and that understanding these impacts is an ongoing research focus. We contend that CBD’s claim of “extensive scientific research” proving the link between the pollock trawl fishery and the fur seal decline overstates the findings. Most of the studies cited by CBD (Divine *et al.*, 2022; Short *et al.*, 2021; Kuhn *et al.*, 2014; Benoit-Bird *et al.*, 2013; McHuron *et al.*, 2020, 2023) only suggest potential competition or nutritional limitation, with only one study (Short *et al.*, 2021) directly implicating the pollock fishery. We have added language to the final SAR to address this Short *et al.* (2021), emphasizing the importance of continued research and scientific debate on the causes of the northern fur seal decline.

Comment 3: The Commission supports using the critical Nmin approach for stock classification but cautioned against its use for the Bering Sea harbor porpoise stock due to limited M/SI data and unresolved stock structure. They noted the 2020 SAR deemed this stock strategic and that M/SI is likely underestimated due to data gaps and low detection. The Commission recommends NMFS expand discussion in the SAR.

Response 3: NMFS agrees that the minimum M/SI recorded for this stock is very likely underestimated because the estimate is based solely on information reported through the Alaska stranding network and through self-reports. This and other important caveats are repeated in multiple sections of the SAR. However, the available information provides reasonable assurance that the actual range-wide stock abundance is very likely greater than the abundance threshold where human-caused M/SI would exceed a PBR based on that abundance (*i.e.*, the critical N_{min}). Although the stock's N_{min} is currently considered to be unknown, N_{mins} calculated from the 2008 partial-range ship-board survey and the 1999 aerial survey are 23 to 223 times greater than the critical N_{min} value. NMFS considers this sufficient to support a non-strategic determination despite the uncertainties and the Alaska SRG agreed. This is in contrast to the Gulf of Alaska harbor porpoise stock, where the outdated N_{min} was only 3.6 times greater than the critical N_{min} , which NMFS did not consider sufficient to support a non-strategic determination, again with agreement from the Alaska SRG.

Comment 4: CBD expressed concern that the draft Cook Inlet beluga whale SAR might misrepresent the population trend as increasing and recommended that NMFS explicitly state up front that no definitive trend can be determined, rather than suggesting that future data might confirm stabilization and increase. They commented that the draft SAR's statement that "additional data collection and analysis from future years are needed before population stabilization and increase can be confirmed" is an "overly-optimistic assessment of a very small population that lacks clear signs of population growth, especially given that significant threats—noise pollution, toxins, and prey availability— have not lessened."

Response 4: The draft SAR's section on trend indicated that a statistical analysis of the past 10 years of Cook Inlet beluga abundance data shows a trend of 0.2 percent and a confidence interval that includes both negative and positive trends (95 percent PI of -

1.8 - 2.6 percent), indicating that it is not statistically significant. This lack of significance in the 10-year trend has been clarified in the final SAR, and the description of the 10-year trend as an increase has been removed. We also revised the statement in the SAR to specify that additional data are needed to address the uncertainty in the trend. Regardless of the number of animals, the population is greatly reduced relative to the estimated abundance in the 1990s, and a slight recent increase in abundance does not eliminate or mitigate concern about threats to the population.

Comment 5: CBD noted disappointment that the 2024 draft SARs did not include a revision of the Eastern North Pacific Alaska Resident killer whale stock, citing NMFS' intention to initiate a review in 2025 to determine if multiple demographically independent populations exist within this stock (90 FR 12640, March 18, 2025).

Response 5: Per the process outlined in NMFS (2019), the first step in revising stock structure is to evaluate the best scientific information available on possible demographically independent populations within an existing stock. This process is separate from and occurs outside of the stock assessment process. NMFS began this process for the Eastern North Pacific Alaska resident killer whale stock in early 2025. This work remains a priority for NMFS and will be completed, as resources allow.

Comments on Atlantic Issues

Comment 6: The Commission provided comment on the SARs for stocks injured by the Deepwater Horizon (DWH) Oil Spill and noted that many of these SARs have not been updated recently, which has led to outdated estimates from the population models previously used (DWH MMIQT 2015 and Schwacke *et al.*, 2017). The Commission suggested that these SARs may not reflect best available science, citing the pelagic species in the Gulf (updated in 2020) as an example. The Commission commented that 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. They recommend 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, using refined population models that have been developed since the Natural Resource Damage Assessment (NRDA, Schwacke *et al.*, 2022; Marques *et al.*, 2023).

Response 6: The MMPA requires NMFS to review SARs at least annually for strategic stocks and stocks for which significant new information is available and at least once every three years for non-strategic stocks and to revise SARs if such review indicates the status of the stock has changed or can be more accurately determined (16 U.S.C. 1386(c)). In the case of estuarine and coastal bottlenose dolphin stocks, the Schwacke *et al.* (2022) models cited above serves as the best available scientific information on abundance. For the oceanic stocks, the most recent surveys to support updated abundance estimates were conducted during the summers of 2023 and 2024. We anticipate completion of the analyses of these data during 2025. There have been no additional aerial surveys of the continental shelf since 2017-2018. However, we anticipate conducting similar aerial surveys during 2026-2027 under a new interagency agreement with the Bureau of Ocean Energy Management (under review). During the appropriate SAR cycle, NMFS will review the best scientific information available for these stocks and determine whether a SAR revision is warranted consistent with Section 117(c) of the MMPA.

Comment 7: The Commission provided comment on the depleted status of all Tamanend's bottlenose dolphin coastal stocks. They commend NMFS for the collaborative research on the structure of *Tursiops spp.* and stocks in the western North Atlantic, including the identification of Tamanend's bottlenose dolphin as a distinct species; and new abundance, M/SI, and population trends for the Central Florida Coastal, the Northern Florida Coastal, and the South Carolina/Georgia Coastal Stocks in the Draft

SARs. The Commission commented on the “depleted” and “strategic” status of these three stocks, that resulted from the 1987-1988 Unusual Mortality Event (UME) which caused a significant population decline in the previously recognized single coastal migratory stock, and recognized that while the stock structure has since been refined into ten estuarine, two migratory coastal, and three resident coastal stocks, commented that the depleted designation correctly applies to the two migratory and three resident coastal stocks. Given that 27 years have passed since the initial UME and new scientific data, including impacts from subsequent UMEs like the 2013-2015 Mid-Atlantic Bottlenose Dolphin UME, are available, the Commission recommends that NMFS re-evaluate the depleted status of these five coastal Tamanend’s bottlenose dolphin stocks. This re-evaluation should involve reanalyzing population trends and potentially using risk assessment models that account for both the 1987-1988 and 2013-2015 UMEs, with the Commission offering assistance on these analyses as time and budget allow.

Response 7: NMFS acknowledges the Commission’s comment that the status of Tamanend’s bottlenose dolphin off the Atlantic coast may warrant further evaluation. However, in order to further assess the status of these stocks, we need to fully understand their population structure. As we presented at the recent Bottlenose Dolphin Management Workshop (held in person September 24-25, 2024), there are significant new genetic findings pertaining to this question that are currently in journal review. There also remain important data gaps, including the identification of which stocks occupy the Chesapeake Bay and a clear understanding of the southern boundary of the coastal stocks along the Florida coast. NMFS is assessing whether these new results warrant changes in stock structure and welcomes the support of the Commission.

Comment 8: The Commission commented on the Gray Seal Western North Atlantic SAR, stating that 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. The Commission noted that since 2016, 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 annually on average by the Northeast sink gillnet fishery alone (Hayes *et al.*, 2024). They noted that “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.” The Commission commented that NMFS's non-strategic designation for this stock is unsupported, as it relies on an unproven assumption that total M/SI would not exceed PBR.

Response 8: NMFS has endeavored to better understand the population dynamics of, and human impacts to, this transboundary stock for some time (Murray *et al.*, 2021; Heywood *et al.*, 2025) in part due to the concerns highlighted. We will continue to assess scientific information about the hypothesis that “U.S. pup production would be declining if not for immigration from Canada.” Nevertheless, when evaluating a stock's status, NMFS evaluates that status to the entire stock and what is known about its abundance (see NMFS, *Guidelines for Preparing Stock Assessment Reports Pursuant to the Marine Mammal Protection Act* (2023)).

Comments on Pacific Issues

Comment 9: The Commission recommends that NMFS update the Eastern North Pacific Southern Resident killer whale SAR to include the fact that the two ecotypes are no longer considered unnamed subspecies, following an update from the Society for Marine Mammalogy's Committee on Taxonomy, that has provisionally named them *Orcinus orca ater* (resident killer whale) and *O. orca rectipinnus* (Bigg's killer whale), although Morin *et al.* (2024) recommended elevating these forms to full species status.

Response 9: NMFS agrees that the Morin *et al.* (2024) reference represents the best available scientific information, and the 2024 SAR has been edited to include the new taxonomic information.

Comment 10: CBD comment recommended that the draft Southern Resident killer whale (SRKW) SAR include recent research that shows reducing threats could increase the population, following the integrated population modeling framework assessing SRKW population dynamics by Nelson *et al.* (2024). Given the delay in the SARs and the very small SRKW population, CBD urges NMFS to provide updated information. They recommend and request that NMFS include a reference to Williams *et al.* (2024) on SRKW's "bright extinction" in the section on Current Population Trend, and specifically, the baseline population dynamics model predicted a mean annual population decline of roughly 1 percent, which is consistent with the information in the draft SARs at the bottom of page 32, but notes that the average decline consists of gradual reduction followed by accelerating decline that presages extinction.

Response 10: The draft 2024 SAR was completed prior to the completion of the 2025 census, and thus, the abundance estimate presented in that draft represented the best available science at that time. However, for the final SAR, we have updated the abundance estimate with the best available scientific information from the 2025 census and include reference to Williams *et al.* (2024) and Nelson *et al.* (2024).

References

Benoit-Bird, K. J., B. C. Battaile, C. A. Nordstrom, and A. W. Trites. 2013. Foraging behavior of northern fur seals closely matches the hierarchical patch scales of prey. *Mar. Ecol. Prog. Ser.* 479: 283-302. <https://doi.org/10.3354/meps10209>.

Divine, L., M. J. Peterson Williams, J. Davies, M. LeVine, and B. Robson. 2022. A synthesis of Laaquadax (northern fur seal) community surveys and commercial fishery

data in the Pribilof Islands Marine Ecosystem, Alaska. *J. Mar. Sci. Eng.* 10(4): 467.

<https://doi.org/10.3390/jmse10040467>.

DWH MMIQT. 2015. Models and analyses for the quantification of injury to Gulf of Mexico cetaceans from the Deepwater Horizon Oil Spill. Available at

<https://www.fws.gov/doiddata/dwh-ar-documents/876/DWH-AR0105866.pdf>.

Hayes, S. A., E. Josephson, K. Maze-Foley, P. E. Rosel, and J. McCordic (eds.).

2024. U.S. Atlantic and Gulf of Mexico marine mammal stock assessments 2023. NOAA Tech. Memo. NMFS-NE-321. U.S. Dep. Commer., 375 p.

Heywood, E. I., K. T. Murray, L. Doughty, R. A. DiGiovanni, and D. B.

Sigourney. 2025. Postweaning horizontal movements and diving behavior of a recovering grey seal (*Halichoerus grypus atlantica*) population in the western North Atlantic. *Anim. Biotelem.* 13: 10. <https://doi.org/10.1186/s40317-025-00405-5>.

<https://doi.org/10.1186/s40317-025-00405-5>.

Kuhn, C. E., J. D. Baker, R. G. Towell, and R. R. Ream. 2014. Evidence of localized resource depletion following a natural colonization event by a large marine predator. *J. Anim. Ecol.* 83: 1169-1177. <https://doi.org/10.1111/1365-2656.12202>.

Marques, T. A., L. Thomas, C. G. Booth, L. P. Garrison, P. E. Rosel, R.

Takehita, K. D. Mullin, and L. Schwacke. 2023. Population consequences of the Deepwater Horizon oil spill on pelagic cetaceans. *Mar. Ecol. Prog. Ser.* 714: 1–14.

<https://doi.org/10.3354/meps14323>.

McHuron, E. A., J. T. Sterling, and M. Mangel. 2023. The influence of prey availability on behavioral decisions and reproductive success of a central-place forager during lactation. *J. Theor. Biol.* 560: 111392. <https://doi.org/10.1016/j.jtbi.2022.111392>.

McHuron, E. A., K. Luxa, N. A. Pelland, K. Holsman, R. Ream, T. Zeppelin, and J. T. Sterling, 2020. Practical application of a bioenergetic model to inform management of a declining fur seal population and their commercially important prey. *Front. Mar. Sci.* 7: 597973. <https://doi.org/10.3389/fmars.2020.597973>.

Morin, P. A., M. L. McCarthy, C. W. Fung, J. W. Durban, K. M. Parsons, W. F. Perrin, B. L. Tylor, T. A. Jefferson, and F. I. Archer. 2024. Revised taxonomy of eastern North Pacific killer whales (*Orcinus orca*): Bigg's and resident ecotypes deserve species status. *R. Soc. Open Sci.* 11: 231368. <https://doi.org/10.1098/rsos.231368>.

Murray, K. T., J. M. Hatch, R. A. DiGiovanni, Jr., and E. Josephson. 2021. Tracking young-of-the-year gray seals *Halichoerus grypus* to estimate fishery encounter risk. *Mar. Ecol. Prog. Ser.* 671: 235-245. <https://doi.org/10.3354/meps13765>.

Nelson, B. W., E. J. Ward, D. W. Linden, E. Ashe, and R. Williams. 2024. Identifying drivers of demographic rates in an at-risk population of marine mammals using integrated population models. *Ecosphere* 15(2): e4773. <https://doi.org/10.1002/ecs2.4773>.

NMFS (National Marine Fisheries Service). 2019. Reviewing and Designating Stocks and Issuing Stock Assessment Reports under the Marine Mammal Protection Act. NMFS Procedure 02-203-04. Available at: <https://www.fisheries.noaa.gov/national/laws-and-policies/policy-directive-system>.

Schwacke, L. H., L. Thomas, R. S. Wells, W. E. McFee, A. A. Hohn, K. D. Mullin, E. S. Zolman, B. M. Quigley, T. K. Rowles, and J. H. Schwacke. 2017. Quantifying injury to common bottlenose dolphins from the Deepwater Horizon oil spill using an age-, sex- and class-structured population model. *Endanger. Species Res.* 33: 265-279. <https://doi.org/10.3354/esr00777>.

Schwacke, L. H., T. A. Marques, L. Thomas, C. G. Booth, B. C. Balmer, A. Barratclough, K. Colegrove, S. De Guise, L. P. Garrison, F. M. Gomez, J. S. Morey, K. D. Mullin, B. M. Quigley, P. E. Rosel, T. K. Rowles, R. Takeshita, F. I. Townsend, T. R. Speakman, R. S. Wells, E. S. Zolman, and C. R. Smith. 2022. Modeling population effects of the Deepwater Horizon oil spill on a long-lived species. *Conserv. Biol.* 36(4): e13878. <https://doi.org/10.1111/cobi.13878>.

Short, J. W., H. J. Geiger, L. W. Fritz, and J. J. Warrenchuk. 2021. First-year survival of northern fur seals (*Callorhinus ursinus*) can be explained by pollock (*Gadus chalcogrammus*) catches in the Eastern Bering Sea. *J. Mar. Sci. Eng.* 9(9): 975. <https://doi.org/10.3390/jmse9090975>.

Williams, R. L., R. C. Lacy, E. Ashe, L. Barrett-Lennard, T. M. Brown, J. K. Gaydos, F. Gulland, M. MacDuffee, B. W. Nelson, K. A. Nielsen, H. Nollens, S. Raverty, S. Reiss, P. S. Ross, M. Salerno Collins, R. Stimmelmayer, and P. Paquet. 2024. Warning sign of an accelerating decline in critically endangered killer whales (*Orcinus orca*). *Commun. Earth Environ.* 5: 173. <https://doi.org/10.1038/s43247-024-01327-5>.

Wood, S.A., E. Josephson, K. Precoda, and K. T. Murray. 2022. Gray seal (*Halichoerus grypus*) pupping trends and 2021 population estimate in U.S. waters. NEFSC Reference Document 22-14. U.S. Dep.Commer., Northeast Fisheries Science Center, Woods Hole, MA, 16 p.

Dated: April 8, 2026.

David Detlor,

Acting Director, Office of Science and Technology,

National Marine Fisheries Service

[FR Doc. 2026-07791 Filed: 4/21/2026 8:45 am; Publication Date: 4/22/2026]