December 17, 2018

Dr. Shannon Bettridge, Chief Marine Mammal and Sea Turtle Conservation Division Office of Protected Resources National Marine Fisheries Service 1315 East-West Highway Silver Spring, MD 20910-3226

Dear Dr. Bettridge:

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) 2018 draft stock assessment reports (SARs) for marine mammals occurring in U.S. waters (83 Fed. Reg. 47131). These reports provide valuable information needed to understand and address important marine mammal conservation issues. The Commission appreciates NMFS's efforts to update and improve these reports, as well as the opportunity to review them, provide comments, and recommend further improvements. The Commission is providing general comments on meeting the Marine Mammal Protection Act (MMPA) requirements pertaining to preparing SARs, including a need to improve the consistency of reports among regions, as well as comments specific to different regions and stocks.

GENERAL COMMENTS

Requirements of section 117

Minimum population estimates—In recent years, the Commission has reviewed¹ NMFS's performance in meeting several of the requirements of Section 117 of the MMPA. That provision requires inclusion of a minimum population estimate (N_{min}), a key factor for effective management of marine mammal stocks using potential biological removal (PBR). Without an N_{min} derived from recent² data, PBR cannot be calculated and an "undetermined" value results, which is useless for management purposes. Including the revised 2018 draft SARs, an N_{min} estimate is lacking for 91 of the 251 identified stocks (or 36%). While the lack of data sufficient to provide this basic metric for over one third of the stocks recognized³ by NMFS is unacceptable, the Commission understands that the primary reason for this shortcoming is a lack of resources (mainly access to vessel and plane platforms from which surveys are conducted) to collect the necessary information. The Commission appreciates the efforts NMFS has made to address this shortcoming by setting priorities across regions, coordinating requests for vessel time, and maximizing the data collected during these surveys (e.g. Ballance et al. 2017). The Commission recommends that NMFS continue its efforts to

¹ Full 2016 report, summary 2016 report, and updated 2018 report

² NMFS's Guidelines for Assessing Marine Mammal Stocks defines recent as within the last eight years.

³ There are additional stocks, primarily in the Pacific Islands, for which information is lacking and SARs have yet to be created.

prioritize and coordinate requests to secure the necessary survey resources across regions. In addition to these internal efforts, the Commission acknowledges and encourages NMFS's continued engagement and collaboration with other federal agencies that also require basic information on marine mammal stocks, through programs like the Atlantic Marine Assessment Program for Protected Species⁴ and similar programs in the Gulf of Mexico⁵ and the Pacific⁶. Further, the Commission recommends that these marine assessment programs continue to include appropriate personnel, logistical capability, and vessel time to allow for photo-identification, biopsy sampling, satellite tagging and other efforts to augment and increase the value of the core line-transect survey data collected. These additional efforts will assist in delineating stock structure, confirming at-sea identification of cryptic species, and furthering understanding of marine mammal distribution, habitat use, and behavior; all important to the overall management goals of NMFS under the MMPA.

Fisheries observer coverage—Adequate observer coverage continues to be an issue for many fisheries in most regions. In some cases, fisheries that have the potential to take marine mammals go unobserved entirely. For example, in Hawaii, several unobserved, state-managed line fisheries likely interact with endangered main Hawaiian Islands insular false killer whales. In Alaska, numerous unobserved, state-managed salmon gillnet fisheries pose a significant risk of interactions with harbor porpoises. In other cases, observed fisheries with known interactions with marine mammals have observer coverage but it is inadequate (e.g., less than 10 percent). Observer coverage in the—

- Category I Mid-Atlantic gillnet fishery, which is known to take significant numbers of common bottlenose dolphins, common dolphins, and harbor porpoises, averaged less than five percent from 2012 to 2016. On the positive side, annual coverage increased steadily from two to eight percent over that period; and
- Category II Mid-Atlantic bottom trawl fishery averaged under eight percent coverage over the same period, although once again annual coverage increased from five to ten percent during that period.

The Commission recommends that NMFS continue to increase observer coverage in all fisheries with significant marine mammal bycatch that lack adequate coverage to provide reliable estimates of incidental take levels, with increased efforts to develop collaborative observer programs for statemanaged fisheries, particularly in Alaska and Hawaii.

Review of SARs for strategic stocks—Section 117 of the MMPA directs NMFS to review at least annually, all stock assessment reports for strategic stocks. How NMFS addresses this requirement varies by region. For example, the 2018 draft reports for Alaska include proposed revisions, some minor, to the reports for all strategic stocks. While the other regions may have reviewed each strategic stock in 2018, not every strategic stock was revised and released for public comment. Some strategic stocks have SARs that have not been updated in more than five years, presumably because no significant new information has been published on abundance, distribution, human-caused serious injury and mortality, stock structure or habitat concerns for those stocks. To help ensure NMFS is aware of new information relevant to all strategic stocks, the Commission recommends that NMFS include in the Federal Register notice, published when revised SARs are released, a specific request for new

⁴ https://www.nefsc.noaa.gov/psb/AMAPPS/

⁵ https://www.boem.gov/GOMMAPPS/

⁶ https://swfsc.noaa.gov/textblock.aspx?Division=PRD&ParentMenuId=276&id=22316

⁷ The Commission assumes these SARs were also not provided to the SRG for review or discussion

information for strategic stocks that were not updated that year. New relevant information could include peer-reviewed information on human-caused serious injury and mortality, fishery interactions, abundance, distribution, stock structure and habitat concerns, which could be incorporated into SARs, and other information that might draw attention to emerging concerns for a strategic stock.

Reconciling distinct population segments (DPSs) and stocks

As noted in the 2018 draft SARs for humpback whale stocks in the Pacific, NMFS is in the process of reviewing the stock structure of humpback whales under the MMPA in light of the 14 DPSs identified under the Endangered Species Act (81 Fed. Reg. 62259). NMFS proposes to defer a complete revision of the humpback whale stock assessments pending completion of this review. This review has now been underway for two years with no timetable for its completion. The lack of reconciliation between humpback DPSs and humpback stocks has had effects on other management decisions undertaken by NMFS, such as those related to the proposed draft negligible impact determination for the California thresher shark/swordfish drift gillnet fishery (<14 inch mesh) and the Washington/Oregon/California sablefish pot fishery, and those related to its response to the increased number of humpback whale entanglements on the west coast since 2014. Therefore, the Commission recommends that NMFS take the necessary steps to conclude its review of humpback whale stock structure and revise the humpback whale SARs accordingly in the draft 2019 reports.

SPECIFIC COMMENTS

Atlantic

Public availability of information referenced in the SARs-The 2018 draft SARs for Bay, Sound, and Estuary bottlenose dolphin stocks include two new reports for the Terrebonne-Timbalier and West Bay stocks. Although the Commission is encouraged to see NMFS incorporating new data, it also is concerned about the references made to publications "in prep." or "in review" to support some of the key information in the new SARs. The Commission supports the use of the best available science and does not wish to delay publication of new or updated SARs unnecessarily but the information on which a draft SAR is based needs to be available to the public to enable informed review. Labelling a report as "in review" suggests that the underlying analysis has been completed and submitted for publication, while "in prep." suggests that the analyses are still ongoing and could be changed prior to publication. As such, reliance on such information might be premature and generally should not be considered the best available science. Therefore, the Commission recommends that, unless exceptional circumstances warrant otherwise, NMFS refrain from publishing draft SARs for public comment that rely on reports or analyses that are still "in prep." The Commission further recommends that NMFS carefully consider whether it should base draft revisions to the SARs being considered for public comment on analyses that are still "in review." At a minimum, NMFS should make every attempt to make the underlying reports/publications available to the public during the comment period.⁹

Gray and harbor seals—The 2018 draft SARs continue to lack reliable, up-to-date information on abundance, distribution, and movements between Canadian and U.S. waters for the western North

⁸ See the Commission's <u>13 February 2017 letter</u>.

⁹ For example, by hyperlinking the citation(s) to the document(s) in review.

Atlantic stocks of gray and harbor seals. The need for such information is becoming more pressing, especially for gray seals as their numbers and reports of conflicts with fisheries increase. These issues were discussed in depth at the Commission's 2017 annual meeting in Falmouth, Massachusetts. The Commission remains concerned that the outdated or incomplete abundance and bycatch estimates currently available hamper NMFS's ability to competently manage those stocks. Therefore, the Commission recommends that NMFS secure the necessary resources and strengthen existing collaborations to (1) plan and execute comprehensive aerial surveys, including collecting data necessary to estimate appropriate haul-out correction factors for both stocks, and (2) increase efforts to understand and reduce bycatch for gray seals in particular. Studies on seal diet, movement patterns and fisheries interactions will contribute additional information vital to successful management of these stocks.

Alaska

Alaska Native subsistence takes-Accurate information on the taking of marine mammals by Alaska Natives for subsistence and handicraft purposes is becoming increasingly important in light of the pace of climate changes occurring in the Arctic and sub-Arctic regions. Over the past several years, the Commission has repeatedly recommended that NMFS, in collaboration with its co-management partners, improve its monitoring and reporting of subsistence hunting in Alaska. The Commission appreciates the efforts made by NMFS in this regard with an increase in the 2018 draft SARs in the number of communities reporting hunting levels for bearded and ribbon seals (from 12 to 16 villages for the most recent five years). Nevertheless, this still represents only one-quarter of the 64 communities that may hunt ice seals. Therefore, the Commission continues to recommend that NMFS pursue additional mechanisms to gather reliable information on the numbers of marine mammals taken for subsistence and creating handicrafts, including by securing adequate funding for comprehensive surveys of subsistence use and Native hunting effort. The Commission encourages NMFS to continue to provide updated information whenever it becomes available, even if it pertains only to a limited number of villages or a subset of years. The Commission would welcome the opportunity to meet with NMFS to discuss progress, next steps, and any impediments to including more comprehensive data on take levels by Alaska Natives in future SARs.

Harbor porpoise, Southeast and other Alaska stocks—In the 2017 Southeast Alaska (SEAK) harbor porpoise SAR, NMFS estimated that, on average, 34 porpoises were killed or seriously injured per year in the SEAK salmon drift gillnet (SDG) fishery. That estimate was considered to be a minimum because the observations on which it was based did not cover the entire fishery. Overall mortality and serious injury (M&SI) levels from this stock are likely higher because the SDG estimate did not account for other gillnet fisheries with the potential to take harbor porpoises. This underestimated M&SI level is more than three times the PBR (8.9) for this stock. In 2017, NMFS designated the SEAK harbor porpoise stock as 'strategic' under the MMPA, based on its conclusion that estimated take in the salmon gillnet fishery alone is unsustainable. There remains appreciable uncertainty in the calculated PBR and estimated M&SI levels for this stock due to (1) low observer coverage, (2) biased population estimates, and (3) insufficient data on stock delineation. In its comments on the 2017 draft SARs, the Commission recommended that NMFS address these uncertainties and although the

¹⁰ Fisheries M&SI for gray seals is likely underestimated and reported as 873. Although it does not approach PBR, it is the highest fisheries M&SI reported for any of the 251 stocks.

¹¹ https://www.mmc.gov/events-meetings-and-workshops/marine-mammal-commission-annual-meetings/2017-annual-meeting/

Commission is aware that NMFS is working to understand and reduce the uncertainties, no significant changes were made in the 2018 draft SAR. The Commission urges NMFS to continue its efforts to address these issues.

There are two additional aspects on which the Commission believes NMFS should focus its research and conservation efforts for this species.

First, the MMPA requires NMFS to develop and implement take reduction plans (TRPs) for all strategic stocks (section 118(f)(1)) that interact with a Category I or II fishery, ¹² subject to the availability of funding (section 118(f)(3)). Further, the MMPA directs NMFS to give the highest priority to developing and implementing TRPs for stocks for which M&SI exceeds PBR, the population size is small, and/or the population is declining rapidly. Although, the SEAK stock of harbor porpoise meets the first two criteria, NMFS has not yet chosen to develop a TRP for this stock. Surveys in 1991-1993, 2006-2007, and 2010-2012 estimated the population size as 1,076, 604, and 975 porpoises, ¹³ respectively. Given the small size of the stock and the fact that it is experiencing an unsustainable level of take, the Commission recommends that NMFS apply the criteria under section 118(f)(3) to give this stock high priority, establish a take reduction team (TRT), and initiate the development of a TRP. The Commission recognizes that TRTs require a minimum of information regarding population size, status, fisheries interactions, and mitigation options to develop TRP recommendations. In this case, based on what is known about this and other harbor porpoise stocks, their interactions with gillnet fisheries in the eastern U.S. and Europe, and the availability of approaches to reduce bycatch numbers (e.g., Bjørge et al. 2013, Orphanides and Palka 2013, Read 2013, Reeves et al. 2013), the Commission believes NMFS has sufficient information to proceed.

Second, the information presented in the draft SAR amply demonstrates that salmon gillnet fisheries can take unsustainable numbers of SEAK harbor porpoises. In addition to the SEAK stock, NMFS recognizes separate harbor porpoise stocks in the Gulf of Alaska and the Bering Sea and adjacent waters (Aleutian Islands and Chukchi Sea). Salmon gillnet fisheries, both commercial and subsistence, occur throughout much of the range occupied by these two stocks, raising concerns by analogy with SEAK that taking elsewhere in Alaska could also be unsustainable. Much less is known about the status of those two stocks or their interactions with gillnet gear. Only portions of their ranges have been surveyed since 1990. The available data suggest that each stock is much larger than the SEAK stock, which is not surprising because they occupy much larger ranges. Observer data from 1990 to 2005 have documented by catch in four of the gillnet fisheries that operate in the Gulf of Alaska, but both population and bycatch data are geographically incomplete, do not cover most of the fisheries, and are largely out-of-date. In short, the available information raises concern that gillnet fisheries in Alaska may be adversely affecting these other harbor porpoise stocks but is insufficient to quantify the level of risk. As such, the Commission recommends that NMFS undertake analyses using harbor porpoise population data and state gillnet fisheries data from throughout the range of harbor porpoises in Alaska, and bycatch-rate data from comparable harbor porpoise populations from the full range of the species, to develop model-based estimates of the likely magnitude of harbor porpoise bycatch in the Gulf of Alaska and Bering Sea.

¹² Section 118(f)(3) of the MMPA allows NMFS to postpone developing and implementing a TRP if funding is insufficient and establishes criteria for setting priorities for such plans among stocks.

¹³ Those estimates likely are negatively biased.

Pacific

The Commission recognizes NMFS's responsiveness in addressing the recommendations it made on the 2017 draft SARs. ¹⁴ In particular the Commission acknowledges the inclusion of 2018 draft SARs for blue and humpback whales, including up-to-date estimates of M&SI and commends the SAR author(s) for making those revisions in such a timely manner.

The Commission appreciates the opportunity to provide comments and recommendations on the 2018 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

Peter o Thomas

cc: Erin Summers, Chair Atlantic Scientific Review Group Megan Peterson, Acting Chair Alaska Scientific Review Group John Calambokidis, Acting Chair Pacific Scientific Review Group

References

Ballance, L., M. Srinivasan, A. Henry, R. Angliss, L. Barre, J. Barlow, J. Bengtson, S. Bettridge, J. Bohnsack, S. K. Brown, P. Clapham, C. Fahy, M. Ford, L. Garrison, T. Gerrodette, N. LeBoeuf, J. Moore, E. Oleson, D. Palka, F. Parrish, J. Redfern, J. Simpkins, B. Taylor, and P. Wade. 2017. A strategic plan for conducting large geographic scale, ship-based surveys to support the U.S. Marine Mammal Protection and Endangered Species Acts. NOAA Tech. Memo. NMFS-F/SPO-169, 20 p.

Bjørge, A., M. Skern-Mauritzen, and M.C. Rossman. 2013. Estimated bycatch of harbour porpoise (*Phocoena phocoena*) in two coastal gillnet fisheries in Norway, 2006–2008. Mitigation and implications for conservation. Biological conservation 161:164-173.

Orphanides, C.D., and D.L. Palka DL. 2013. Analysis of harbor porpoise gillnet bycatch, compliance, and enforcement trends in the US northwestern Atlantic, January 1999 to May 2010. Endangered Species Research 20:251–269.

Read, A.J. 2013. Development of conservation strategies to mitigate the bycatch of harbor porpoises in the Gulf of Maine. Endangered Species Research 20:235–250.

Reeves RR, McClellan K, Werner TB (2013) Marine mammal bycatch in gillnet and other entangling net fisheries, 1990 to 2011. Endangered Species Research 20:71–97.

¹⁴ See the Commission's <u>19 March 2018 letter</u>.