

ALASKA SCIENTIFIC REVIEW GROUP

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Janet Coit
Assistant Administrator for Fisheries
National Marine Fisheries Service
1315 East-West Highway
Silver Spring, MD 20910
transmitted by electronic mail

August 15, 2023

Dear Ms. Coit:

The Alaska Regional Scientific Review Group (AKSRG) held its annual meeting April 4-5, 2023. Our agenda included review of draft 2023 marine mammal stock assessment reports (SARs), updates from the United States Fish and Wildlife Service (USFWS), and research and policy updates from the National Marine Fisheries Service (NMFS) staff on issues associated with the status and assessment of Alaska’s marine mammal stocks.

This letter addresses the following key topics for NMFS (and includes Appendix 1; AKSRG 2023 recommendations to the USFWS; pp. 5-7):

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Emerging issues for cetaceans

Emerging issues related to climate change and human activity (e.g., increased shipping traffic in the Arctic and Northern Bering Sea, regime shifts, increased fisheries bycatch, changing fisheries distribution, prey base changes, plastics ingestion) represent current or future threats to nearly all species of cetaceans, as well as pinnipeds, in the North Pacific Ocean. However, in comparison to many pinniped species in the Alaska region, many cetacean species have outdated abundance estimates or abundance estimates that cover only a small portion of their known range. **The AKSRG recommends that NMFS consider cetacean sensitivity and vulnerability to potential climate change impacts when prioritizing research and funding priorities for marine mammals.**

Determining the recovery factor when calculating Potential Biological Removal

The Potential Biological Removal (PBR) approach is a key tool for evaluating the numbers of animals that can be removed from a marine mammal stock without causing negative demographic effects. The choice of value used for the recovery factor (denoted F_R in the formula to calculate PBR) affects the PBR level with ramifications for management. Although general guidance exists on how to determine F_R , in practice the process is somewhat flexible and subjective. This has, at times, led to apparent inconsistencies among F_R values or uncertainty about how they were determined, especially when modifying the default values to account for additional uncertainty. **At the next meeting of the AKSRG, the group requests that NMFS provide examples of how recovery factors are determined and guidance for how they might be implemented more consistently going forward.**

Marine mammal bycatch

In the 2022 AKSRG Recommendations to NMFS, the AKSRG requested that AFSC and MML continue to work with the observer program to develop Electronic Monitoring (EM) protocols to ensure marine mammal interaction data collection continues to be a key component of fisheries monitoring. **Per NMFS's response, we look forward to hearing a presentation on this issue at the 2024 meeting that addresses how M&SI estimates are being adjusted as more vessels transition to EM, and how new EM-based marine mammal sightings/interaction data are being processed and incorporated into the SARs.**

At the 2023 meeting, the AKSRG received a presentation on progress towards developing a model-based approach to estimate marine mammal bycatch in Alaska fisheries. The current ratio-based approach to estimating marine mammal bycatch is problematic due to the risk of false zeros (or undetected bycatch events) and the inherent volatility of bycatch estimates associated with low coverage and/or documentation of rare events. **The AKSRG supports this model-based approach and notes that in addition to the advantages of reduced interannual volatility in marine mammal bycatch estimation, there may be other advantages as this method is further developed to explore longer-**

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term time series for certain fishery/marine mammal combinations, probabilities of exceeding PBR for vulnerable marine mammal species, and to incorporate interaction (presence/absence or distribution) data in the models to improve performance. The AKSRG also urges NMFS to evaluate ways to address rare events (such as years with high bycatch numbers) via simulations or other methods to best account for these interactions.

[SAR review process transparency](#)

The 2023 AKSRG meeting represented the first meeting where NMFS formally enacted a new process to review SARs annually for strategic stocks, stocks that have new information, and stocks that have not been reviewed in 3 years and to only revise other SARs when substantial new information becomes available and/or changes have occurred within M&SI estimates. The AKSRG previously agreed that this new approach will streamline the revision process overall but had requested that MML develop a document summarizing key information on the strategic stocks that were reviewed but not revised in each year. The AKSRG was able to review this list at the 2023 meeting but was unable to efficiently review the PBR relative to M&SI for all stocks. **Therefore, the AKSRG requests that in future years the document includes the stocks' PBR values to provide context for any updated M&SI information. The AKSRG also requests that a formal process be developed so that this list can be reviewed and approved ahead of the meeting (e.g., inter-sessional meeting or correspondence in the fall) to ensure that revisions to SARs can be requested if deemed necessary.**

[Collaboration with Russia on shared populations](#)

Marine mammal populations move freely between American and Russian waters in the Bering and Chukchi seas and surrounding regions where vessel transport and fishing has been increasing. In recent decades, collaboration between the U.S. and Russia has been critical for effective research, management, and conservation of these shared populations. The AKSRG recognizes that since 2022 political relations between the U.S. and Russia have made such collaboration difficult or impossible. **Given the potential for the longer-term lack of scientific collaboration between the U.S. and Russia, the AKSRG requests information on how NMFS is evaluating potential environmental risks that may occur disproportionately outside of US federal waters (on the Russian side) for assessed marine mammal stocks.**

[Consultation with Alaska Native co-management groups](#)

We applaud NMFS for reaching out and sending draft SARs to Alaska Native co-management organizations and seeking comment in 2023. We caution that emailing draft SARs to the representatives of Alaska Native co-management organizations may not be the best method for receiving meaningful input. More effective consultation may come from having NMFS staff present draft SARs at annual co-management meetings or setting up video-conference calls. We recognize that

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aligning the timing of SAR approval with the meeting schedule of co-management organizations may be difficult. **The AKSRG therefore suggests that NMFS broadly consider alternative methods (meetings or workshops, calls, etc.) for receiving meaningful input and extended review periods to allow for feedback from co-management groups.**

SAR for Bristol Bay belugas

NOAA did not update the SAR for Bristol Bay beluga whales in 2023. The primary reasons for this were because: 1) time constraints; 2) a stated desire to update the correction factor for Bristol Bay belugas. During the discussion, it was revealed that NOAA thought that the correction factor for Bristol Bay did not account for surface and dive intervals and was likely out-of-date (as much of the data for correction factors used in Bristol Bay was collected in the 1980s). During the meeting, it was suggested by NOAA that a workshop be conducted that reviewed survey methods for Bristol Bay.

We note that there are multiple correction factors available that are specific to Bristol Bay, that they do account for surface and dive intervals, and that these correction factors are generally as reliable as those available for other stocks of belugas in Alaska. A larger issue is how best to count belugas that are densely aggregated (as they often are in Cook Inlet). We agree with NOAA that these issues are complex and would welcome efforts to clarify them and to develop or apply improved survey techniques. However, these issues are unlikely to be resolved soon. Biologists have struggled with assessing abundance of belugas (and other marine mammals) for decades, and more information is available for Bristol Bay belugas than any other stock in Alaska, except Cook Inlet. **As such, although the AKSRG supports the collection of new data and the application of new methods, the AKSRG encourages NMFS to update the SAR for Bristol Bay belugas with the data available.**

The AKSRG thanks NMFS for their continued attention to marine mammal stock status, research and conservation.

Respectfully,

Megan J. Williams



Co-Chair, Alaska Scientific Review Group

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Appendix 1. Comments submitted via email to USFWS May 26, 2023.

Patrick Lemons
Chief
Marine Mammals Management
U.S. Fish and Wildlife Services
1011 East Tudor Rd, MS-341
Anchorage, AK 99503
transmitted by electronic mail

May 26, 2023

Dear Dr. Lemons,

The Alaska Regional Scientific Review Group (AKSRG) held its annual meeting on 4-5 April 2023 in Seattle, WA. Our agenda included review of draft 2023 marine mammal stock assessment reports (SARs), updates from the United States Fish and Wildlife Service (USFWS), and research and policy updates from the National Marine Fisheries Service (NMFS) staff on issues associated with the status and assessment of Alaska's marine mammal stocks.

The AKSRG appreciates the presentations we received on USFWS-managed marine mammal stocks in 2023. In light of the considerable research on sea otters, walruses, and polar bears in recent years, the importance of these species as a subsistence resource, and the potential impacts associated with changing environmental conditions, we look forward to continued research and updates on these species at future AKSRG meetings.

In April 2023, we reviewed four updated USFWS SARs on three stocks of sea otters and Pacific walrus. We would like to acknowledge the extensive work undertaken to complete the draft SARs and commend the USFWS for developing concise and informative documents that reflect the best available science for these stocks.

The Pacific walrus SAR includes a major new, collaborative survey between the U.S. and Russia that provides the best estimate of Pacific walrus abundance to date. As a result of this new information (Beatty et al. 2022), the N_{MIN} for this stock increased significantly (nearly doubling) in the 2023 draft SAR compared to the 2011 estimate (Speckman et al. 2011). However, the Pacific walrus stock is still designated as "strategic" even though estimated human-caused mortality and serious injury has remained relatively constant.

We note that even with the increase in N_{MIN} , the Pacific walrus stock remains categorized as "strategic" because the USFWS reduced the theoretical maximum population growth rate (R_{MAX}) from 8% to 6%,

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or ½ the default pinniped value. As stated in the SAR, data are currently lacking for estimating a stock specific R_{MAX} . However, we are concerned that using such a low value for R_{MAX} , and thereby designating the stock as “strategic,” signals that human-caused removals (which are predominantly subsistence harvest and struck and lost) may be unsustainable when the SAR itself states that “subsistence harvest rates are declining and appear to be within a sustainable range.” The recovery factor (F_R) of 0.5 used in the 2023 SAR was also held relatively low to account for “biases and uncertainties associated with human-caused mortality.” In the 2014 SAR, a recovery factor of 0.5 was used because Pacific walrus “were a candidate for listing under the U.S. Endangered Species Act”; however, the species was not ultimately listed. Moving forward, **the AKSRG requests additional clarification for why the values of R_{MAX} and F_R were chosen for Pacific walrus.**

The AKSRG also notes that the PBR method to calculate mortality limits for marine mammals reflects built-in management objectives and risk tolerances that seek to minimize unwanted mortality (generally resulting from fisheries bycatch). However, in some cases PBR is considerably lower than the level of removals that would be considered sustainable for subsistence harvest (e.g., polar bears in the Chukchi Sea; Regehr et al. 2021). This has been an ongoing discussion topic at recent SRG meetings, and we thank NMFS for highlighting the role of the Alaska Native exemption under the Marine Mammal Protection Act (Section 101(b)). **We also recommend the USFWS continue to work with co-managers, NMFS and the AKSRG to communicate the significance of “strategic” versus “depleted” stock status and how the PBR level relates to co-management of Pacific walrus and other relevant marine mammal stocks taken primarily for subsistence.**

We commend the USFWS for synthesizing new research and a wide variety of methods used over time across all sea otter stocks and management units. While there may be challenges associated with area-specific time-series or pre-existing terminology in each region, **we recommend increasing consistency across the sea otter SARs when possible, such as homogenizing terms like management units, regions, sub-regions, etc.**

The AKSRG recognizes that the NMFS guidelines for selecting and adjusting recovery factors cannot cover all possible situations and sources of uncertainty, but stress that “Values other than the defaults for any stock should usually not be used without consulting with the relevant SRG, and scientific justification for the change should be provided in the SAR.” At the 2023 meeting, the selection of F_R values in the draft 2023 SARs and how these values should account for uncertainties in human-caused mortality estimates generated a significant number of questions and related discussion. **Relevant to all 2023 draft and future SARs, we recommend the USFWS provide clear and consistent explanations of how F_R values were selected when calculating PBR and state directly whether or how F_R represents an expression of risk tolerance on the part of USFWS.**

At the 2022 AKSRG meeting, NMFS reported on procedural changes being made to streamline and improve the quality of the process for updating SARs by differentiating between SAR reviews versus revisions. **We recommend that the USFWS evaluate the feasibility of aligning their USFWS SAR**

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review and revision process with that of the updated NMFS process for revising and reviewing SARs.

The AKSRG thanks USFWS for their continued attention to marine mammal stock status, research and conservation.

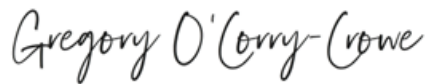
Respectfully,

Megan J. Williams



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Gregory O'Corry-Crowe



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