

## Pacific Scientific Review Group

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### A Regional Advisory Group for the National Marine Fisheries Service and Fish and Wildlife Service

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Paul Souza, Regional Director  
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Dear Assistant Administrator Coit and Regional Directors Thorson  
and Souza:

This letter conveys recommendations from the Pacific Scientific Review Group (PSRG) to the National Marine Fisheries Service (NMFS) and Fish and Wildlife Service (FWS) based on its virtual meeting on 16-19 March 2021. The meeting focused on science, management, and conservation of marine mammals along the U.S. West Coast and in the central North Pacific. The PSRG gratefully acknowledges NMFS and FWS scientists and managers who prepared stock assessment reports and participated in meeting presentations and discussions. The PSRG especially wishes to thank our NMFS liaisons, Laura McCue and Dr. Karin Forney (whose long time role in this capacity is coming to an end and which we deeply appreciate). Our recommendations are as follows:

**The Pacific SRG requests receipt of an overview of the NMFS preparation for the possible initiation of Makah subsistence whaling.** The Pacific SRG is aware that an Administrative Law Judge will likely soon rule on litigation concerning the request by the Makah Tribe for a waiver to resume subsistence hunting for the eastern stock of gray whale.

**The Pacific SRG requests an update at its next meeting on NMFS' effort to designate new Biologically Important Areas (BIAs) and its anticipated applications.** The original BIAs NOAA developed, while not having any specific regulatory powers, were used far more

extensively than had been anticipated and even became part of some mitigation settlement agreements. Given this, we support NOAA pursuing revising BIAs for all regions using new data and a more formal set of criteria applied more consistently among regions. As best as practical such BIAs should be made as consistent with other spatial protection frameworks, like critical habitat, to make them easier to use.

**The Pacific SRG requests an update on findings from newly funded FKW monitoring and management efforts in 2022 and recommends further development of other FKW bycatch mitigation measures.** In 2020, PSRG recommended continued attention to reducing the mortality and serious injury (M&SI) from False Killer Whales (FKWs) bycatch in and around the Hawaii EEZ. In June 2020, PSRG was asked to review draft NOAA Tech Memo titled “Abundance, Potential Biological Removal and Bycatch Estimates for Hawaii Pelagic False Killer Whales for 2015-2019,” which concluded that, although the FKW bycatch estimated from 5-year mortality and serious injury determinations (9.8) was less than PBR (16), the total fishery mortality and serious injury for the Hawaii pelagic stock of false killer whales warranted additional management attention in part due to the high M&SI outside of the Hawaii EEZ (28.8). This finding, as well as the limited progress from the TRT, supports the ongoing need for improved FKW bycatch mitigation measures to reduce M&SI risk to FKW both within and outside the Hawaii EEZ. The PSRG also notes the efforts of NMFS and the FKW TRT to reduce FKW interactions with the Hawaii deep-set longline fishery while recognizing the difficulty in reaching consensus on mitigation approaches. PSRG remains concerned that the hook straightening mitigation strategy causes stress to the animal and exposes crew to a dangerous situation with little observed benefit to releasing false killer whales to date. While waiting for results from an ongoing study to examine the impact of weaker hooks, the PSRG recommends development of other strategies to reduce acoustic attraction to vessels, test of technical options to reduce gear fly-back, removal of gear with minimal trailing gear and research to inform the post-release condition of released false killer whales under different scenarios. The PSRG looks forward to an update at the 2022 PSRG meeting on the outcome of interactions to date, results of the weak circle hook study, and a status summary of a new 2021 FKW funding allocation to inform FKW monitoring and management.

**The Pacific SRG recommends that the M&SI determination not be made fully automated but involve internal validation and input from the SRG and invited experts, especially given existing concerns detailed below.** The Pacific SRG was presented with a proposal to use machine learning to automate the process by which M&SI determinations are made. The SRG welcomed the analysis and its intent to update the existing criteria for defining M&SI and provide greater consistency across M&SI determinations. However, the following concerns were raised; 1) the potential biases in machine learning approaches (e.g., Mehrabi et al. 2019), 2) a mismatch between the binary outcome from the algorithm and the three M&SI categories defined under the MMPA, 3) the potential for individuals to bias determinations if they are aware of the key words most likely to lead to certain outcomes, and 4) using the algorithms’ results to standardize the language used in M&SI reports would then invalidate the continued use of the model to make M&SI determinations.

**The Pacific SRG reiterates its recommendations from 2018, 2019 and 2020 for implementing time-area closures of resting bays to protect spinner dolphins. The PSRG also reiterates that a 50-yard no approach rule within spinner dolphin resting bays is almost certainly going to prove ineffective given the significant amount of acoustic disturbance from motorized vessels that will still occur, coupled with the difficulty in enforcing such a rule.** These recommendations are consistent with efforts by IUCN Marine Mammal Protected Area Task Force which has designated the main four Hawaii Island spinner dolphin resting bays as “Important Marine Mammal Areas” (IMMAs). IMMAs are characterized

as “discrete portions of habitat, important to marine mammal species, that have the potential to be delineated and managed for conservation” and “consist of areas that may merit place-based protection and/or monitoring”. The recommendation is also in line with Governor Ige’s 30-by-30 Initiative “to effectively manage 30% of Hawaii’s nearshore waters by the year 2030”. The PSRG requests an intersessional meeting with NOAA’s PIRO to learn about their efforts and most recent updates on the spinner dolphin ruling.

**The PSRG requests a presentation by Pacific Islands Regional Office (PIRO) during the 2022 PSRG meeting overviewing a synopsis of their science-based management priorities and plans for a) false killer whales, b) monk seals, as well as spinner dolphins and on issues pertaining to aquaculture and marine mammals.**

**The Pacific SRG recommends that NMFS include survey schedules in its planning for all stocks of marine mammals that occur in waters off the US west coast, where the information required to provide reliable estimates of minimum abundance would be available at an interval of no more than eight years.** The Pacific SRG was provided with detailed information regarding the survey schedule for California sea lions, eastern population of Steller sea lions, and cetacean populations along the west coast at our most recent meeting in March 2021. This information was very helpful to the Pacific SRG in understanding NMFS commitment to updating marine mammal stock assessment reports in a timely manner. It was noted that two species, harbor seal and harbor porpoise, are likely to have the highest interaction rate with commercial fisheries in U.S. waters and should therefore be a priority. Also, stocks that have their most recent abundance estimates from 2012 or earlier should also be considered a priority by NMFS for future surveys to determine abundance

**The Pacific SRG recommends that NMFS inform the SRG regarding its current strategy for the recovery of Hawaiian monk seals in light of the reduction of available pupping and resting habitat in the NWHI.** The Pacific SRG was informed that loss of beach habitat at French Frigate Shoals resulted in significant loss of pupping habitat (see background text below from NMFS Hawaiian monk seal website). This has been driven by a combination of factors including climate change and storm-related events. We encourage NMFS to clarify its approaches to responding to this emerging threat, which might include increasing recovery efforts for monk seals in the main Hawaiian Islands (e.g. increasing efforts to address emerging issues such as Toxoplasmosis or disturbance) or performing viability analyses to evaluate the stock-level impacts of breeding habitat loss in the NWHI. It was further noted that the most current management plan was completed in January 2016, based on years 2016-2020, and that none of the key action items in that version of the Plan address concerns related to the impact of habitat loss in the NWHI. At a minimum, the Pacific SRG **recommends** that NMFS commit to updating the Hawaiian monk seal 5-year Action Plan within the next 18 months, and include in the Plan a description of efforts that will be undertaken to address the loss of pupping and resting beaches in the NWHI, including modeling efforts to allow for a comprehensive understanding of the impacts of habitat loss on the population over the next few decades.

**The Pacific SRG supports some of the progress NMFS is making on guidelines for non-lethal deterrence methods but also has some concerns about exemptions from the policy and requests an update on how it is working in the next 5 years.** We were concerned about some of the limitations the plan operates under including the fact it excludes activities if they are not conducted for the purpose of deterrence. We know NMFS is operating under limitations in this regard but would like to ensure there are not other actions the Pacific SRG can recommend to help deal with those limitations if they end up allowing such a large loophole that it prevents effective implementation of guidelines on some of these activities.

**The Pacific SRG recommends NMFS actively foster communication and encourage collaborations between incidental take authorization applicants and researchers to better take advantage of opportunities to study the impacts of human activities.** There is a lack of information on the impacts of many human activities and sometimes the initiation of some of these activities in new areas provides unique opportunities to advance the understanding of the impact of those activities. NMFS is often consulted or issues permits for these activities and can play a positive role requesting that local researchers be informed of new activities and encourage collaborations to take advantage of those opportunities. A recent case in point is a planned large-scale seismic survey planned for 2021 off Oregon and Washington, an area where that has not been conducted for many years.

**The Pacific SRG recommends NMFS try to investigate and include in their entanglement reports information on how reporting biases may be playing a role in the trends reported.** From studies on the U.S. East Coast it is known the vast majority of entanglements go unreported and that under-reporting is likely even a bigger issue on the U.S. West Coast. Observed trends in documented entanglements could therefore easily reflect changes in reporting (including factors like COVID) rather than in numbers of entanglements occurring. Given the increased reliance on entanglement reports to track progress and even in decisions on operations of some fisheries it is important to acknowledge and investigate factors that could influence reporting. Examination for changes in the proportion of confirmed versus unconfirmed reports, those assigned or not assigned to a specific fishery, or those contributed by different types of reporting parties could all be used to evaluate whether there have been potential changes in reporting.

**The Pacific SRG supports the use of DASBRs to survey elusive cetaceans but recommends that further evaluations are conducted in the use of DASBRs to address duty cycling and investigate how drift patterns may be influenced by oceanographic features.** Drifting acoustic spar buoy recorders (DASBRs) to survey elusive beaked whale species acoustically over broad spatial and temporal scales have been shown to be highly successful in informing management and stock assessments. We are concerned with the approach on two aspects. Duty cycling has been shown to bias estimation of presence, increasingly so with rare occurrence of a species and longer off-effort periods (e.g., Stanistreet et al 2016). We suggest subsampling of existing continuous data to test for this possible caveat. A second concern is related to the question of whether drifters become entrained into dynamic oceanographic features (e.g., eddies and fronts) and hence are not sampling the study area completely at random. This may possibly be addressed through simulations with ocean models.

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The PSRG gratefully acknowledges NMFS and FWS scientists and managers for their efforts to prepare present, and discuss marine mammal stock assessment reports.

Sincerely,



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John Calambokidis, PSRG Chair

CC:

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