# Pacific Scientific Review Group

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

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30 December 2019

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Dear Assistant Administrator Oliver 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 the its 5-7 March 2019 meeting in Olympia, Washington. 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 liaison, Dr. Karin Forney.

### *Previous Recommendations*

The PSRG reviewed the results of its 2018 meeting and reiterates its 2018 recommendations that —

- NMFS and FWS streamline their processes for preparing stock assessment reports (SARs) to ensure that the information included in them is as up-to-date as possible. The PSRG recognizes that certain types of data and information may require extensive review before incorporation in SARs, but that is not always the case. For example, the PSRG believes that NMFS' SAR review process has been slow in including important information on fishery-humpback whale interactions and ship strikes, which could delay remedial actions. Managing marine mammal

interactions with human activities can take years, even decades, but should not be delayed by slow SAR processing and reporting.

- NMFS develop a long-needed strategy to manage threats to Distinct Population Segments (DPS) of migratory whales and other species when these units mix during migration or on feeding grounds. Such a strategy should recognize DPS and stock complexes based on their discreteness, significance, and status as set forth in the NMFS-FWS joint policy (Federal Register 61:4721-4725), but those considerations should also account for their demographic, genetic and ecological characteristics and the risks they face individually and collectively.
- NMFS reinvigorate its efforts to clear the Northwestern Hawai‘ian Islands of net and other marine debris accumulating on the islands and in the nearshore regions of the associated ecosystems. That debris poses a significant and unacceptable threat to many marine species that may become entangled in or ingest it.
- NMFS convene a Take Reduction Team (TRT) for fisheries that are known to entangle humpback whales along the U.S. West Coast and evaluate the large number of entanglements to determine if they constitute an Unusual Mortality Event (UME). The PSRG recognizes the important work on this issue by the different state working groups, especially California, and the value of related, new information that could inform a TRT. The current draft SAR, prepared after the 2018 PSRG meeting, only includes entanglements through 2016 but already reports anthropogenic mortality above potential biological removal (PBR) levels for the affected stocks. The reported five-year average of anthropogenic mortality will continue to increase as it incorporates more recent years with higher entanglement rates. Addressing this issue with a TRT should be an increasing priority.
- NMFS make every effort to sustain the multi-year, multi-region ship survey schedule established with the Bureau of Ocean Energy Management and the Navy, without compromising the obligation to collect information required for SARs.

***Procedural Requests***

The PSRG requests that —

- NMFS prepare a Draft 2019 SAR for CA/OR/WA humpback whales and eastern North Pacific blue whales for PSRG review during May 2019. Both of these stocks are experiencing increased rates of human interaction and warrant close, timely management. In the absence of up-to-date SARS, the PSRG was unable to discuss these stocks at its meeting.
- at the next meeting, NMFS provide an analysis of the 2018 CCES joint fish/marine mammal survey, with a focus on the positive and negative impacts of the survey’s dual mission on the quality of West Coast cetacean assessments. The PSRG believes it is important to know how the dual mission affects those surveys and what the long-term consequences might be for continuing with similar survey designs.

- three weeks before all following meetings, NMFS and the FWS provide summaries of the progress they have made on each of the PSRG recommendations from the previous meeting, along with an annotated agenda to preview what NMFS and the FWS will be presenting at the upcoming meeting. While NMFS provides a response to the PSRG recommendations after they are submitted there are often new developments that occur closer to the time of the next meeting that would be helpful for fine tuning the agenda and preparing PSRG members.

- NMFS provide regular updates regarding stocks that overlap with the U.S. Exclusive Economic Zone and that may be affected by the Marine Mammal Protection Act's Import Provision rule (Section 101(a)(2)). The PSRG appreciated the update provided by NMFS staff at the 2019 meeting and believes regular updates are necessary to ensure the PSRG has the information needed to meet its responsibilities.

***Southern Resident Killer Whales***

The PSRG recommends that NMFS (a) take urgent, bold, precautionary actions to manage the multiple factors posing risks to the southern resident killer whale (SRKW) population, and (b) consider the establishment of a science-based recovery team to provide the agency with objective guidance on the numerous scientific issues that the agency must contend with to promote SRKW recovery (e.g., the management of other marine predators that may compete with SRKWs for food, determining adequate setbacks for vessels in the vicinity of the whales). The SRKW population has been declining since 1995 and the existing evidence indicates that the decline is likely to continue into the foreseeable future: its reproductive and survival rates have fallen well below sustainable levels, its age structure is becoming distorted with a paucity of immature females, and numerous individuals in the population are in poor condition. The PSRG recognizes that the task force established by Washington's Governor Inslee has reviewed the status of, and risk factors affecting, the SRKW population and the outcome of that review would provide valuable information to be considered by a recovery team. At the same time, however, NMFS is the lead agency responsible for the protection and recovery of this highly endangered population and, as such, it must lead the recovery effort. A recovery team could provide valuable scientific advice to NMFS regarding the most important actions needed to investigate and recover this population.

***Hawai'ian False Killer Whales***

With regard to false killer whales, the PSRG recommends that NMFS—

(1) work with the False Killer Whale (FKW) Take Reduction Team to re-examine all FKW interactions with the longline fishery for the purpose of identifying and developing more effective and safe alternatives for releasing hooked whales unharmed and without trailing gear;

(2) fund additional research on the nature of fishery interactions with FKWs, the resulting injury and mortality rates, and the development of alternative mitigation measures to minimize injuries and deaths from those interactions.

(3) more rigorously test the branchline mitigation measure currently in use with different hook, line and leader combinations to better determine gear configurations that produce the desired result; those tests should specifically examine —

a. the bending strength of different circle hook types and sizes that meet regulatory standards for the fishery, and

b. the breaking test of commonly available monofilament branchline leader material used in the fishery.

To date, efforts to mitigate FKW interactions with the Hawai‘i longline fishery have not been effective. Alternative management strategies should be explored to ensure that the number of FKWs injured and killed by the fishery is reduced as required. The most effective way to identify such alternatives is likely to come from a re-examination of all the existing data on FKW-longline interactions. If potentially useful alternatives are identified, they will likely require research into their effectiveness, and NMFS should be prepared to provide the necessary funding for such research.

The current mitigation system is based on gear-related assumptions that, if suitably adjusted, circle hooks will straighten and branchlines and leader will hold when exposed to the high tension exerted by a FKW. Results to date indicate this approach is not as effective as anticipated. If NMFS is going to continue to rely on this system, then each of its main components should be tested systematically to ensure that the mitigation measure as a whole is working as intended.

Regulations implementing the current approach limit the maximum hook shank diameter to 2.5 mm or less and the monofilament branchline diameter to 2.0 mm or greater. However, hooks and line that meet these regulatory requirements may vary in actual bending or breaking strength, and further testing is required to determine what hooks and line satisfy the intent of the regulations.

This current mitigation approach also depends on the actions of the captain and crew. For that reason, the PSRG encourages NMFS to formally train both the captains and crews of longline fishing vessels in the safe use of this method for releasing bycaught marine mammals without trailing gear. To meet that objective safely, NMFS — with the assistance of the FKW Take Reduction Team — should develop, test, and document the procedures to be used and the data to be collected so that observers, captains and crew can be so trained and the resulting data used a basis for improving the system over time.

Finally, at its meeting, the PSRG discussed the longstanding concern over low reporting levels of KKW interactions from unobserved trips and the question of whether additional types of monitoring are needed. The group was informed that this issue is being considered by the FKW Take Reduction Team, and looks forward to learning about the Team’s deliberations.

***Hawai‘ian Monk Seals***

The PSRG commends the success of monk seal mitigation efforts, and recommends the NMFS continue to provide full support for its monk seal research and management programs. Such mitigation, rehabilitation, vaccination and research efforts have contributed substantially to the current status of the Hawai‘ian monk seal population,

which appears to have improved over the past several years. Given its value, such work must be continued to help recover this species.

The PSRG also recommends that the NMFS recognize toxoplasmosis as a source of anthropogenic mortality for Hawai‘ian monk seals, both in the SARs and more broadly, and continue to work with state and local agencies to reduce the negative impact of this additional source of mortality on the population. Toxoplasmosis is a result of environmental contamination from the feces of felids that have been introduced to the Hawai‘ian Islands, making the mortality caused by this disease a direct result of human actions. Effort should be made to reduce this anthropogenic source of mortality, especially as adult female monk seals appear to be most sensitive to the disease, putting the status of the monk seal population at risk.

***Hawai‘ian Spinner Dolphins***

The PSRG recommends that NMFS support the development and implementation of a spinner dolphin survey design that provides a stronger basis for characterizing the abundance, trend, and status of spinner dolphin stocks in Hawai‘i. The lack of such basic information has long undermined efforts to characterize and manage human impacts on those stocks. Scientists have provided clear evidence that human interactions have affected other dolphin stocks significantly and the PSRG is concerned with the lack of progress on the protection of spinner dolphins in Hawaii. The PSRG has provided recommendations to that effect in the past, but NMFS has made seemingly little progress in conducting the appropriate studies and implementing necessary management actions.

As a related matter, the PSRG reiterates its previous recommendation that NMFS use time and area closures to protect spinner dolphins rather than a 50-yard approach limit, and that the agency review the efficacy of the Dolphin SMART program. Interactions between humans and dolphins are generally very dynamic: both may be moving about and the distances between them changing rapidly, which means that those distances are difficult to measure and the interactions difficult to manage. The 50-yard approach limit is included in the NMFS' Dolphin Smart Program. However, the PSRG does not consider it to be sufficiently effective in protecting the dolphins and believes the 50-yard limit specifically and the Dolphin Smart Program generally warrant review. Other regions have recognized shortcomings in the Dolphin Smart program and are re-evaluating the approach, and such review also is warranted in Hawai‘i. Among other things, the review should consider the use of time-area measures to manage interactions, as they are much easier to detect, verify, and enforce.

***Hawai‘ian Spotted Dolphins***

The PSRG recommends that NMFS develop and implement a research strategy that will provide the basic information needed to complete an informative stock assessment for insular spotted dolphins in Hawai‘i. The existing information is sufficient to conclude that individuals from this stock interact with fisheries around the main Hawai‘ian Islands. NMFS should be assessing the nature and frequency of these interactions to determine and minimize their impact on the dolphins.

***Mariana Islands Cetacean Surveys and Beaked Whale Strandings***

The PSRG recommends that NMFS continue to collect marine mammal stock assessment information in the waters around Guam and the Commonwealth of the Northern Mariana Islands and develop SARs for those species even if certain information is incomplete. The PSRG welcomes NMFS' progress in collecting scientific information on cetaceans in the Mariana Archipelago, but more needs to be done. Completing these SARs would highlight what is known and what additional information is needed. Clearly, large-scale, ship-based visual and passive acoustic abundance surveys should be continued, with genetic sampling and photo-identification, to assess population structure, abundance and distribution of cetacean species in the region. In addition, further analyses of existing genetic sampling, tagging, photo-ID and acoustic datasets are needed and almost certainly will lead to new insights about the marine mammals in those waters and the potential impacts of human activities on them.

The PSRG also recommends that NMFS work with the U.S. Navy to establish an acoustic monitoring program that (a) quantifies long-term trends in the abundance of beaked whales in the waters of the Navy's Marianas Islands Range Complex and (b) includes aerial surveys of area shorelines following sonar exercises to document cetacean strandings or mortality that might otherwise not be recorded from remote areas of the islands. These recommendations are based, in large part, on the apparently high rate of beaked whale strandings coincident with use of mid-frequency active sonar during naval exercises in the Mariana Archipelago.

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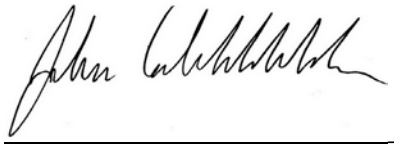
Minutes for this meeting are attached. Again, the PSRG gratefully acknowledges NMFS and FWS scientists and managers for their efforts to prepare present, and discuss marine mammal stock assessment reports.

Sincerely,



John Calambokidis, PSRG Chair

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