UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
1315 East-West Highway
Silver Spring, Maryland 20910

THE DIRECTOR

MAR 13 2014

Mr. Lloyd F. Lowry
Chair, Alaska Scientific Review Group
University of Alaska Fairbanks
73-4388 Paiaha Street
Kailua Kona, HI 96740

Dear Mr. Lowry:

Thank you for your letter regarding recommendations from the March 2013 meeting of the Alaska Scientific Review Group (SRG).

I am pleased to hear that presentations and other efforts of the staff of NOAA's National Marine Fisheries Service (NMFS) facilitated review of the draft 2013 Alaska marine mammal stock assessment reports. The SRG makes a number of valuable comments and recommendations to guide NMFS science, which are addressed in the enclosure.

I appreciate your continued service and contributions as members of the Alaska SRG in providing advice and support to NMFS in accordance with the Marine Mammal Protection Act, and I look forward to your future recommendations to improve the science supporting the conservation of marine mammals.

Sincerely,

Eileen Sobeck

Enclosure

THE ASSISTANT ADMINISTRATOR
FOR FISHERIES

Responses to Recommendations of the
Alaska Regional Scientific Review Group

1. *The SRG recommends that NMFS complete comprehensive revisions of the eastern and western Steller sea lion SARs for 2014.* NMFS appreciates the SRG's thoughtful comments on the eastern and western Steller sea lion SARs. In 2014, NMFS will revise both SARs to focus on information relevant to stock assessment and consistent with the Guidelines for Assessing Marine Mammal Stocks (GAMMS II). With the decision to delist the eastern Steller sea lion stock under the Endangered Species Act (78 FR 66140, 04 November 2013) and the associated status review, significant changes will be made to the 2014 SARs. At the SRG's 2014 meeting, NMFS will ask the SRG to advise NMFS regarding two likely modifications to classifications of the eastern population of Steller sea lions under the Marine Mammal Protection Act (MMPA): from a "strategic stock" to a "non-strategic stock" and from a "depleted" species to "not depleted." NMFS will conduct biennial surveys of the Southeast Alaska portion of the stock (the next survey will be summer of 2015) and participate in a stock-wide survey every 5 years (occurred in 2013; next in 2017).

2. *The SRG recommends that NMFS evaluate all available data on killer whale stock structure and revise the killer whale SARs as appropriate.* At the 2013 Alaska SRG meeting, NMFS reported on the preliminary results of photo-identification and genetics studies suggesting that more fine-scale stock structure may exist for killer whale stocks occurring in Alaska, particularly in the western Bering Sea and Gulf of Alaska. NMFS is still examining the data available; and, while stock structure is not definitive as of yet, NMFS is considering a revision of killer whales stock structure that more closely reflects what is known to date. NMFS appreciates the SRG's support and concurrence on the need to revise killer whale stock structure based on these new findings, and will continue discussions with collaborators on stock revisions.

3. *The SRG recommends that NMFS analyze all available Alaska harbor porpoise genetics samples and determine whether there is sufficient information to revise the existing stock structure.* NMFS agrees that stock structure investigations are needed for harbor porpoises occurring in the U.S. EEZ off Alaska. The SRG commented that at least 50 genetic samples of harbor porpoises are available for analysis. NMFS's Southwest Fisheries Science Center has only 13 genetic samples from Southeast Alaska harbor porpoise plus another 69 archived Alaskan harbor porpoise samples. NMFS is compiling a complete list of these samples and associated data, including date, location, and source in order to assess the feasibility of conducting a stock structure analysis from these samples. NMFS' National Marine Mammal Laboratory (NMML) staff also recently submitted a research proposal, which is currently under consideration through an internal NMFS source of funds, to address Southeast Alaska harbor porpoise stock structure.

Data collected over a 22-year period in Southeast Alaska suggest harbor porpoises are concentrated in two major areas separated by approximately 400 km: Glacier Bay/Icy Strait and Wrangell and Zarembo Islands, including the adjacent waters of eastern Sumner Strait. These data could also contribute to a better understanding of harbor porpoise stock structure in Alaska, particularly if it is found that movements of porpoises within these two areas of concentration are restricted as is reported in other harbor porpoise stocks such as those off the California coast.

4. *The SRG recommends that NMFS analyze all available southeast Alaska harbor porpoise survey data and revise the SAR to include new information on abundance and trend. We also recommend an in-depth review of the NMFS harbor porpoise monitoring program to determine how it can be improved such that NMFS survey data can be analyzed and reported in a more timely manner.* NMML staff has completed an analysis of all available Southeast Alaska harbor porpoise survey data (1991 through 2012) and will update the 2014 SAR to include this new information. NMFS will provide the manuscript resulting from this analysis to the SRG before the 2014 meeting, and we expect it to be accepted for publication in a peer reviewed journal prior to the release of the final 2014 SARs.

Line-transect data collected in 2006, 2007, and 2010 were previously analyzed and compared to data from 1991–1993 surveys. Results from this earlier analysis suggested harbor porpoise abundance decreased throughout the inland waters of Southeast Alaska, particularly in the Wrangell/Zarembo Islands area. However, the inclusion of abundance data from the 2011 surveys resulted in a shift in the overall abundance trend, so NMFS delayed publishing on the trend until the 2012 survey data were analyzed to better understand long-term trend in population abundance. Additional survey data and further trend analyses indicated harbor porpoise abundance was increasing in the southern sector of Southeast Alaska in 2011 and 2012. At the time the 2013 SARs were developed, only the 2011 data had been analyzed. Therefore, NMFS opted to remove previous statements regarding a declining trend until the 2012 data were analyzed to determine whether this detection of a slight increasing trend would continue with additional data. This increase reflected in the 2011 and 2012 data suggests that if a decline had occurred previously, the population may be recovering. This previously reported decline does not necessarily mean an increase in mortality of porpoise or a decrease in reproduction has occurred; it could also be a reflection of shifts in distribution (e.g., from inland to coastal waters). Therefore, the current increase in numbers may suggest animals are returning to certain habitats in inland waters and not necessarily that the population is increasing. The 2014 SARs will be updated to report on the findings from additional survey data and further trend analyses.

While new information is available on abundance and trend of harbor porpoises in the inland waters of Southeast Alaska, the Southeast Alaska harbor porpoise stock includes all inland and coastal waters from Dixon Entrance to Cape Suckling. Therefore, the most recent stock-wide abundance estimate used to calculate N_{min} is based on data from 1997, which is outdated for calculating a Potential Biological Removal (PBR) level under the GAMMS II. Updated abundance estimates are still needed for the entire range of the Southeast Alaska stock. Collection of multi-species data on surveys is possible, and all cetacean sightings are recorded. However, the line-transect survey protocols cannot be combined with photo-identification survey protocols for killer whales and humpback whales, as the SRG suggested, due to a break in effort.

5. *The SRG recommends that all possible methods be used to identify areas, times, and gear types causing serious injury/mortality to harbor porpoises, and that NMFS work with fishermen to use deterrents (e.g., pingers) to reduce the number of entanglements where feasible.* NMFS includes in each annual SAR all known areas, times, and gear types causing serious injuries/mortalities to each stock of marine mammals. This information is consolidated from observer and stranding/entanglement program data, as well as fisher self-reports and anecdotal

reports. These sources, while not exhaustive, represent the most comprehensive collection of such information that can be obtained with current resources.

The MMPA established a zero mortality rate goal (ZMRG) for serious injury and mortality of marine mammals, incidental to commercial fisheries. Due to a lack of current population estimates for harbor porpoise stocks in Alaska, the PBRs for all Alaska harbor porpoise stocks are designated as unknown in accordance with GAMMS II, making it difficult to determine if ZMRG has been met for these stocks. Using the population estimates greater than eight years old to calculate PBRs for these stocks, we find that, while a few fisheries in Alaska have not met ZMRG for harbor porpoise, harbor porpoise serious injury and mortality estimates for those individual fisheries are all below 50 percent of a given stock's PBR. Therefore, NMFS has set as a high priority obtaining an updated stock structure and population estimate for Southeast Alaska harbor porpoise, which is expected to lead to a more accurate assessment on the relative impact of fishery-related serious injury and mortality on that harbor porpoise population. Updates for the other harbor porpoise stocks also would be completed as resources allow.

NMFS is interested in investigating the feasibility of various methods, including pingers, to deter harbor porpoise and potentially other marine mammals from fishing nets used in Alaska fisheries, as resources allow and as discussed below.

6. *The SRG recommends that NMFS and its collaborators begin major revisions of humpback whale SARs for the North Pacific.* NMFS recognizes the need for a thorough review of stock structure definitions of humpbacks in the North Pacific and appreciates the SRG's interest in moving forward on this stock review and possible revision. New photo-identification and genetics data were collected on humpback whales, analyzed, and published in various reports based on the Structure of Populations, Levels of Abundance, and Status of Humpbacks (SPLASH) project. Currently, a Biological Review Team is completing a global review of the status of humpback whales. Additionally, NMFS is in the process of reviewing a recent ESA petition to consider designating North Pacific humpback whales as a distinct population segment (DPS) and delisting that DPS. NMFS anticipates revisiting MMPA stock structure divisions if the final versions of these reviews indicate that this is appropriate.

7. *The SRG recommends that in each SAR, NMFS and the U.S. Fish and Wildlife Service (FWS) more clearly identify the number of fisheries potentially interacting with marine mammals, and the level of observer coverage of those fisheries.* NMFS summarizes the most recent data available, typically over a 5-year period, for all fisheries with known serious injury and mortality for each stock. Data reported in each SAR include year, percent observer coverage, observed take, estimated take, mean annual estimated mortality for each fishery, as well as a total mean annual mortality for all fisheries combined. SAR appendices provide additional data on Category II and Category III fisheries in Alaska, including historical information on marine mammal interactions, percent observer coverage, number of permits issued, and data on fishing season, soak time, or sets per day. There are no Category I fisheries in Alaska. Additional information is also provided in the annual List of Fisheries (LOF). The LOF includes fishery descriptions of all Category I and II fisheries (http://www.nmfs.noaa.gov/pr/interactions/lof/), and NMFS is currently developing fishery descriptions of all Category III fisheries. Reports prepared under the marine mammal injury

determination policy implemented in January 2012 will also provide more specific information on serious injuries and mortalities of marine mammal stocks in specific fisheries in cases that can be attributed to a specific fishery.

Detailed information is provided on the federal groundfish fisheries for which there is relatively good observer coverage. State fisheries in Alaska are observed through the Alaska Marine Mammal Observer Program (AMMOP). AMMOP has observed five out of 12 fisheries since 1999, most recently the Southeast Alaska drift gillnet fishery in districts 5 and 8. Unfortunately, NMFS currently does not have adequate funding to support this program at a level to adequately evaluate bycatch risk.

There is no requirement for the SARs to provide information on "interactions" between commercial fisheries and marine mammal stocks, just serious injury and mortality. The level of information currently provided in the SARs on known recent and historical injuries and mortalities of marine mammals incidental to commercial fisheries in Alaska sufficiently describes which fisheries are likely to cause serious injuries and mortalities of marine mammal stocks.

8. *The SRG recommends that, to the extent possible, NMFS should allow and encourage fishermen to use pingers to reduce the potential for entanglement of large whales. Studies should be designed and conducted to measure efficacy and potential effects of pingers.* Currently, humpback whale populations are increasing and known serious injury and mortality levels for the central and western North Pacific stocks do not exceed 50 percent of either stock's PBR, with most fisheries meeting ZMRG for these stocks. Two years of observer data collection in the Southeast Alaska drift gillnet fishery have been completed recently and analysis of these data will be available in mid-2014. NMFS will take those results into consideration when prioritizing allocation of limited resources for investigation of take reduction methods, including the potential development of studies on the feasibility of the use of pingers in Alaska fisheries. Empirical information on pinger effectiveness and the potential for adverse effects to threatened or endangered marine mammals, such as humpback whales feeding in narrow glacial fjords, would need to be obtained before a determination on their use could be made.

9. *The SRG recommends that NMFS and FWS review current methods for estimating subsistence takes of marine mammals by Alaska Natives, and work with their co-management partners to improve struck and lost estimates. The agencies also should provide clarification on the implications of accounting for subsistence takes in determining stock status using the PBR system.* NMFS and the Indigenous Peoples' Council on Marine Mammals (IPCoMM) hosted meetings in December 2010 and March 2011, in Anchorage, to discuss possible harvest monitoring methods for NMFS-managed species, and whether a statewide monitoring program was practical. The intent of the meeting was to begin discussions towards improving the frequency and reliability of subsistence harvest estimates. NMFS and IPCoMM invited subsistence hunters to describe what might work relative to what has or is currently being done to estimate subsistence harvest levels, rather than propose a federal "top-down" monitoring proposal. Attendees at the meeting included representatives of Alaska Native co-management organizations, local marine mammal hunters from across the state, FWS marine mammal management representatives, and State of Alaska representatives. Attendees gave presentations

describing the different marine mammal subsistence harvest monitoring programs implemented and the pros and cons of such programs from the hunters' and managers' perspectives. Although it might be easiest from the federal managers' perspective to have a single harvest monitoring method for all species, hunters felt one monitoring program for NMFS-managed species is unlikely to be implemented successfully across the state. Attendees agreed that it might be possible to develop a tiered framework for implementing marine mammal subsistence harvest monitoring programs of different intensity and frequency. Individual tribal support is necessary for hunters to represent tribes in future deliberations, and that delegation of tribal authority will be essential to any future progress towards consistency in NMFS subsistence harvest monitoring. The importance of funding, struck and lost data, bio-sampling, and reporting harvest estimates back to the tribes was also discussed. NMFS will continue the dialog with IPCoMM, individual co-management organizations, interested hunters, and tribal representatives to explore improving the marine mammal subsistence harvest estimates including estimates of struck and lost for NMFS-managed species.