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

THE DIRECTOR

OCT 22 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 2014 meeting of the Alaska Scientific Review Group (SRG). NOAA's National Marine Fisheries Service (NMFS) values the contributions of the SRG.

I am pleased to hear that presentations and other efforts of the NMFS staff were appreciated by the SRG and facilitated the group's review of the draft 2014 Alaska marine mammal stock assessment reports and other marine mammal science. The SRG has made a number of valuable comments and recommendations to our agency, which we have addressed in the enclosure.

I appreciate the continued service and contributions by 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 our continued partnership to improve the science supporting the conservation of marine mammals.

Sincerely,

Eileen Sobeck

Enclosure

THE ASSISTANT ADMINISTRATOR
FOR FISHERIES

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Responses to Recommendations of the
Alaska Regional Scientific Review Group

1) *NMFS should conduct an in-depth review of the Alaska harbor porpoise research program with the goal of improved conservation, reporting, and monitoring for this species. We continue to be concerned that careful study design and data analysis are taking a back seat to data collection, and that ineffective vessel surveys are being conducted instead of aerial surveys that are proven to be effective.*

NMFS agrees that a review of the Alaska harbor porpoise research program with the goal of improving conservation, reporting, and monitoring for all three stocks is desirable. Staff from NMFS's National Marine Mammal Laboratory (NMML) will present results of their recent Alaska harbor porpoise research and discuss with the SRG the Agency's vision of harbor porpoise research needs in Alaska at the 2015 Alaska SRG meeting.

NMFS's vessel surveys of harbor porpoises throughout the inland waters of Southeast Alaska are relatively low-cost and have been effective in obtaining both relative abundance and trend information for animals in this region. All available data from these surveys have been analyzed with the exception of the 2-day line-transect survey conducted in July 2014 in the Wrangell/Zarembo Islands area. Analysis of the line-transect data collected through 2012 are summarized in a manuscript currently in review by Fishery Bulletin. Submission of this manuscript was planned for 2012, but was delayed until May 2014 to include a new analysis recommended by an internal NMFS review, which improved our confidence in the results.

While the vessel cruises have provided useful information on the status of harbor porpoises in the inland waters of Southeast Alaska, NMFS acknowledges that they are not able to provide an estimate of abundance for the entire Southeast Alaska stock. Further, NMFS agrees with the SRG that new surveys are needed to sample the entire population range and to produce absolute estimates of abundance. Ideally, this would be accomplished by a combination of ship surveys to sample inshore/inland waters and aerial surveys to sample coastal habitats (from Dixon Entrance through the Bering Sea). These surveys will require optimized survey designs and will need to account for visibility bias.

In addition to new abundance estimates, a better understanding of the stock structure of harbor porpoises is needed. Current boundaries of the three management stocks were identified primarily based upon geography and perceived areas of low porpoise density, but to date there has been no genetic or individual movement analysis to assess the validity of these designations. NMML received a modest amount of funds directed at harbor porpoise in Southeast Alaska in FY14; while these funds were insufficient for a range-wide abundance survey of the stock, they were sufficient to initiate a genetic study of Alaska harbor porpoise and an exploratory survey to assess the feasibility of capturing harbor porpoises. Captures would improve our understanding of stock structure by enabling the collection of tissue samples for genetic analysis and allowing satellite tag deployment to monitor movements of individual porpoises.

NMFS agrees that robust observer and population assessment programs to assess the status of harbor porpoises in Alaska are needed because no abundance estimates have been collected since

the late 1990s and because we know of continued mortality and serious injury of harbor porpoise in Alaska commercial fisheries. We look forward to discussing the Alaska harbor porpoise research program in more depth with the SRG at its winter 2015 meeting.

2) *NMFS should modify its procedures for revising SARs to produce revised SARs only when significant new information is available that will allow stock status to be more accurately determined. This will reduce the workload on both the SRGs and on NMFS staff.*

The Marine Mammal Protection Act (MMPA) requires NMFS to review stock assessments annually for strategic stocks and every three years stocks classified as not strategic. Revisions to the SARs are made if the review "indicates that the status of the stock has changed or can be more accurately determined." Historically, this standard has been met frequently, even for stocks for which little information is available, so it has required that approximately 20-30 Alaska SARs be updated by NMFS and reviewed by the SRG each year. NMFS is willing to work with the SRG to develop a more efficient process for conducting their review that will be less time consuming and allow more focused discussion of those stocks with major revisions or other issues of concern to stock assessment while still meeting the requirements of the MMPA. NMFS is interested in discussing with the SRG whether a more clear definition of "can be more accurately determined" might limit the number of reviews necessary each year, as well as focusing the review on those sections of the SARs with major changes.

3) *Coefficients of variation need to be calculated for humpback whale population estimates.*

NMFS agrees that it is important to provide coefficients of variation (CVs) for the humpback whale abundance estimates from the Structure of Populations, Levels of Abundance, and Status of Humpbacks (SPLASH) project. The abundance estimates used in the SAR from the SPLASH final contract report (Calambokidis *et al.* 2008) did not include calculations of CVs. The researchers responsible for that analysis have not updated those calculations to provide CVs for those estimates. Therefore, NMML has recently undertaken its own analysis of those data. New abundance estimates with accompanying CVs are anticipated to be available for the 2015 SAR revisions.

4) *Information on fishery observer coverage should be more clearly presented in SARs. It often is difficult to evaluate the reliability of the reported fisheries take data because the level of observer effort (i.e., number of monitored fisheries) is unclear relative to the number of potentially interacting fisheries.*

NMFS will continue to explore options in order to more clearly present information on fishery observer coverage in the SAR. The Alaska Regional Office is currently preparing fisheries factsheets for the Category III fisheries in Alaska as a supplement to the MMPA List of Fisheries; factsheets already exist for Category II fisheries. These factsheets include information on historical takes of stocks from each fishery and will be used to draft clearer statements in the SARs regarding the number of monitored fisheries that could potentially overlap with each stock. A thorough analysis of temporal and spatial overlap of each fishery relative to distribution of each stock would require significant staff time; NMFS will continue to develop text presenting

information on fishery observer coverage in consultation with the SRG to improve assessment of observer coverage data presented in the SARs.

5) *NMFS should do a careful analysis of data collected by the Alaska Marine Mammal Observer Program in Southeast Alaska. The SRG recommends NMFS clarify and incorporate the original sampling stratification criteria into future efforts to extrapolate results of this abbreviated observer effort across the fishery*.

NMFS is currently analyzing data collected by the Alaska Marine Mammal Observer Program (AMMOP) in Southeast Alaska. The AMMOP observed drift gillnet fishing in Districts 6, 7, and 8 in 2012 and 2103, and we expect to release a summary report by the end of 2014. The initially proposed sampling stratification criteria was not practical as it assumed fishermen would fish in a specific district; however, fishermen tended to move around and fish in more than one strata in a day. Therefore, after considering several alternative sampling designs, a post-stratified sampling design was selected. Given limited resources for fishery observations of other districts, NMFS plans to extrapolate observed take data from Districts 6, 7, and 8 to the entire fishery. However, we recognize that the level of marine mammal interactions likely differs by district given habitat differences and other variables.

6) *NMFS should address problems with using old data on incidental takes in fisheries*.

NMFS agrees that there is an issue with using aged mortality and serious injury data in the SARs; this issue is not unique to the Alaska SARs. While the Guidelines for Assessing Marine Mammal Stocks provide guidance on the use of data greater than eight years old for estimating abundance of stocks, they do not provide clear guidance pertaining to the use of potentially outdated mortality and serious injury estimates. If it is believed that no significant changes have occurred in fishing effort or gear type or operations, and there is no obvious change in stock distribution, the use of old mortality and serious injury may be acceptable if those are the only data available on fishery impacts. Reporting on the level of mortality and serious injury in fishery that has been observed at some time in the past may provide a more accurate estimate than reporting that no information is available; however, caveats regarding the reliability of those data as an accurate reflection of current levels of mortality and serious injury should be considered.

NMFS will continue to address this issue nationally as the age of the most recently available data increases. NMFS agrees that guidance is needed to provide Science Centers and Regional Offices a consistent strategy as to when observer data is so outdated that they should be considered unreliable, and will solicit input from all three SRGs on this issue and endeavor to produce such guidance in the near future.

7) *NMFS should clarify the status of eastern Steller sea lions with regard to Optimum Sustainable Population (OSP).*

The decision to delist the eastern stock of Steller sea lion under the ESA has resulted in modifications to the status of the stock, which will be presented in the draft 2014 SAR. We appreciate the recommendation of the SRG pointing to scientific evidence, including a rate of

increase of 4.18% per year, suggesting the stock is well within OSP. NMFS anticipates designating the stock as no longer depleted and therefore as nonstrategic in the draft 2014 eastern stock of Steller sea lion SAR; a recovery factor of 1.0 would therefore be used to calculate PBR level.