

**MARINE MAMMAL COMMISSION**  
4340 EAST-WEST HIGHWAY, ROOM 905  
BETHESDA, MD 20814

30 November 2007

William T. Hogarth, Ph.D.  
Assistant Administrator for Fisheries  
National Marine Fisheries Service  
1315 East-West Highway, Room 14564  
Silver Spring, MD 20910

Dear Dr. Hogarth:

On 28–30 August 2007 the Marine Mammal Commission and its Committee of Scientific Advisors met in Vancouver, Washington, to review information and issues related to the management of marine mammals and their ecosystems along the U.S. West Coast. During our meeting, National Marine Fisheries Service representatives provided exceptionally thorough and helpful presentations on research and management efforts for a wide range of species and topics. We are grateful for their participation in the meeting. In addition, we were impressed by the progress that is being made on several issues. In particular, the Marine Mammal Commission commends the Service for its efforts to promote the recovery of the southern resident killer whale stock.

Based on discussions at our meeting, the Commission believes that it needs additional information regarding stock assessment efforts and observer programs. For both of these topics we do not feel that we have enough information on the agency's process of allocating funding. Therefore, we request that the Service provide to the Commission a report on its stock assessment program that details (1) funding levels since the 1994 amendments to the Marine Mammal Protection Act, (2) allocation of current funds among regions, (3) allocation of funds within regions for each marine mammal stock, and (4) the process by which the Service sets priorities for stock assessment and decides on funding allocations among regions and stocks. Similarly with regard to the observer program, we request that the Service provide the Commission with a report on nationwide observer efforts, including (1) funding for observer efforts since 1994, (2) allocation of funds and resulting observer coverage by fishery, and (3) the process and criteria by which the Service sets priorities for observer coverage and decides on funding allocations for individual observer programs.

Consistent with these requests to the Service and based on other discussions at our meeting, we offer the following comments and recommendations.

## **RECOMMENDATIONS**

The Marine Mammal Commission recommends that the National Marine Fisheries Service—

- work with state fisheries management agencies and organizations and industry representatives to develop a strategy by which the fishing industry provides at least partial funding for observer programs;

- initiate steps to incorporate animal health-related information in stock assessments and bolster regional efforts to address health issues by establishing a marine mammal health coordinator in each of the Service's regions; and
- use the planned joint meeting of the regional scientific review groups to consider alternative methods for managing marine mammal/ human interactions that might be more effective in a data-poor environment.

## **RATIONALE**

### **Southern Resident Killer Whales**

The information on southern resident killer whales presented at our meeting indicates that the Service has made significant progress in identifying and initiating recovery efforts for this population since it was listed as endangered under the Endangered Species Act. Research and management activities appear to be well coordinated at all levels—within the Service, with Canada on trans-boundary issues, and with the state of Washington (e.g., the Puget Sound Partnership) on local issues. The Service is developing a proposed rule for mitigating potential effects of vessels on these whales, and we look forward to reviewing that proposal in the near future. Scientists also are conducting research on a number of important topics, including the whales' winter distribution, habitat-use patterns, and diet. Better understanding of the ecology of southern resident killer whales when they are outside Puget Sound will help ensure an effective recovery program, and we encourage the Service to continue its studies on this topic. We believe such excellent work should be recognized, and the Marine Mammal Commission commends the Service for its recent research and management efforts to promote recovery of southern resident killer whales.

### **Marine Mammal Stock Assessment Reports and Research**

The Service is now engaged in a multi-year process to improve stock assessments with the aim of satisfying requirements of the Marine Mammal Protection Act and informing management decisions at an ecosystem scale. The results of this process to date have been reported in the Service's 2004 technical memorandum entitled "A Requirements Plan for Improving the Understanding of the Status of U.S. Protected Marine Species" and its 2007 "Report of the Protected Species SAIP Tier III Workshop." These two documents identify a number of needed and important improvements, and the Commission encourages the Service to begin implementing them as soon as possible.

Although the Service has made considerable progress in its ability to assess and manage marine mammal stocks over the last few decades, the need for further improvements is clear. In its 26 October 2006 letter to the Service on the draft 2006 stock assessment reports, the Commission pointed out that estimates of minimum population size and potential biological removal (PBR) were not available or were outdated for more than 15 percent of known marine mammal stocks. A recent analysis by Taylor et al. (2007) indicates that, given the current stock assessment efforts, precipitous declines (defined as a 50 percent decline in abundance over 15 years) could not be detected for 72 percent of large whale stocks, 90 percent of beaked whales, 78 percent of dolphins and porpoises, 5 percent of pinnipeds that haul out on land, and 100 percent of pinnipeds that haul out on sea ice.

Addressing these shortcomings will require additional funding for stock assessment as well as a re-examination of how existing funds are allocated for this purpose.

To allow the Commission to provide useful advice to Congress and other decision makers regarding the amount of funding needed for improving stock assessment work and the allocation of stock assessment funds, the Marine Mammal Commission requests that the Service provide a report to the Commission that details (1) funding levels since the 1994 amendments to the Marine Mammal Protection Act, (2) allocation of current funds among regions, (3) allocation of funds within regions for each marine mammal stock, and (4) the process by which the Service sets priorities for stock assessment and decides on funding allocations among regions and stocks.

### **Observer Program Priorities and Funding Allocations**

Onboard observers provide one of the basic tools for assessing incidental takes of marine mammals in commercial fisheries. In many fisheries, observer coverage has been insufficient to allow rigorous quantitative assessment of incidental take levels. The Commission, regional scientific review groups, and take reduction teams have repeatedly called for a general increase in observer coverage as well as increases for specific fisheries. Although the Service has responded positively in some cases, important gaps in coverage remain, largely because the amount of funding available to support observer programs has been far too small. In previous letters (dated 25 January and 26 October 2006), the Commission stated its view that the fishing industry bears responsibility for demonstrating that its activities do not adversely affect marine mammals and other species and, therefore, also should bear at least partial responsibility for funding observer programs. To that end, the Marine Mammal Commission repeats a previous recommendation that the Service work with state fisheries management agencies and organizations and industry representatives to develop a strategy by which the fishing industry provides at least partial funding for observer programs.

The overall efficacy of observer programs in meeting incidental take management requirements specified in the Marine Mammal Protection Act is determined both by the amount of observation effort and its allocation among different fisheries. Observer coverage in different fisheries ranges from zero to 100 percent. Although the general purpose of such efforts is clear, the basis for allocation decisions often is not, and a number of fisheries that are known to or may take marine mammals have not been observed at all or have not been observed with sufficient effort to reliably estimate take levels. The Commission has written to the Service on numerous occasions recommending that observer coverage be reported in stock assessment reports for all fisheries that are known to or may take marine mammals. The reporting of such information would allow readers to judge the adequacy of observer efforts and, therefore, the reliability of estimated marine mammal take levels.

The Commission recognizes that the Service does not have complete control over the amount of funds available for observer programs. However, to our knowledge, the Service does have control over how the funds they receive for this purpose are allocated among observer programs. We have no doubt that the Service must attempt to address a broad range of competing priorities, but the basis for doing so is not clear, and we continue to be concerned about the inadequacy of observer efforts for fisheries that are known to or are likely to take marine mammals.

To allow us to better evaluate current observer efforts, the Marine Mammal Commission requests that the Service provide the Commission with a report on nationwide observer efforts, including (1) funding for observer efforts since 1994, (2) allocation of funds and resulting observer coverage by fishery, and (3) the process and criteria by which the Service sets priorities for observer coverage and decides on funding allocations for individual observer programs.

### **Marine Mammal Health Issues**

Several presentations at the Commission's annual meeting focused on threats to marine mammal health. In general, health-related information is not reported or considered in marine mammal stock assessment documents, despite its relevance to stock status. Any serious effort to incorporate health aspects will require collaboration and sharing of information among stock assessment personnel, stranding networks, and researchers who investigate health issues. In particular, samples and data from strandings may reveal health problems such as poor condition, injury, illness, reproductive failure, or death secondary to interactions with fishing gear, vessel strikes, disease, harmful algal blooms, noise, high contaminant burdens, or habitat degradation. The recent marked increase in harmful algal blooms on both the East and West Coasts serves as a reminder of the potential seriousness of health-related risk factors. These blooms have become a significant source of marine mammal mortality, and they appear to have progressed from rare and intermittent to regular, persistent, and growing.

In this time of remarkable environmental change, incorporating information on health into stock assessments will provide a stronger basis for judging status and how it might be changing. Over the past decade, the Service has devoted considerable effort to matters related to marine mammal health and stranding. The Service's three-tiered approach for improving stock assessment procedures is a significant step in the right direction and warrants continued development and implementation. Further progress might be achieved by adding a staff member to each of the regional offices for the purpose of promoting the integration of health information into stock assessments. That person could act as an on-site expert and liaison among regional health, stranding, and stock assessment groups. As a liaison, he or she could facilitate collection, archiving, and analysis of samples, assimilation and dissemination of laboratory results, and completion of health-related reports. The need for timely reporting is important for management purposes and, at present, reporting often lags far behind actual events. One staff person in each region focused on health issues could be responsible for completing those reports to ensure the pertinent information is available for research and management purposes. The end result would be a more informed basis for investigation and management of health-related issues. For all the above reasons, the Marine Mammal Commission recommends that the Service initiate steps to incorporate health-related information in marine mammal stock assessments and bolster regional efforts to address health issues by establishing a marine mammal health coordinator in each of the Service's regions.

### **Potential Biological Removal Level Calculations**

PBR levels for individual marine mammal stocks provide a useful basis for estimating tolerable levels of human-related mortality. For any given stock, the effectiveness of the PBR approach is limited when (1) existing data are insufficient for calculating a reliable PBR level, (2)

William T. Hogarth, Ph.D.  
30 November 2007  
Page 5

significant numbers of animals are taken, but the takes are not observed or recorded, (3) the stock is being affected by human-related factors other than direct takes (e.g., competition with fisheries for food, habitat degradation), or (4) the effects of human activities cannot be distinguished from those of natural events or conditions. Unfortunately, these situations are neither rare nor trivial. Furthermore, a review of the draft 2007 stock assessment reports reveals that many stocks do not have a PBR estimate (~ 30 stocks) or an estimate of serious injury and mortality due to human interactions (~ 20 stocks). Where serious injury and mortality are estimated, the estimates are often based on limited observer coverage and may be imprecise, inaccurate, and unreliable. The extent to which stocks may be affected by indirect takes is difficult to determine, but hypotheses about such effects have been at the center of several controversies involving endangered, threatened, and depleted stocks (e.g., Steller sea lions, Hawaiian monk seals, northern fur seals).

The Service appears to use two main approaches to address these types of situations. The first is to maintain current data collection procedures while trying to find the resources and mechanisms to apply them in a comprehensive manner. The second is to develop alternative ways of managing when all the data needed to evaluate status using the PBR process are not available. The Commission believes that continuing along the present course could put some populations and species at serious risk, as is particularly evident with cetacean populations in the Pacific Islands region and pinnipeds in the Arctic.

The upcoming joint meeting of the scientific review groups established under section 117 of the Marine Mammal Protection Act provides a forum for considering these issues. The Marine Mammal Commission recommends that the Service use the joint meeting of the regional scientific review groups to explore alternative methods for managing marine mammal/human interactions more effectively in a data-poor environment. The Commission will be participating in that meeting and would be pleased to assist the Service in preparing for such a discussion.

I hope these comments and recommendations are helpful. Please contact me if you or your staff has questions.

Sincerely,



Timothy J. Ragen, Ph.D.  
Executive Director

cc: Mr. David Cottingham  
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