

MARINE MAMMAL COMMISSION  
4340 East-West Highway, Room 700  
Bethesda, MD 20814-4447

22 September 2008

Mr. Mark R. Millikin  
Office of Sustainable Fisheries  
National Marine Fisheries Service  
1315 East-West Highway, Room 13357  
Silver Spring, MD 20910

Re: Comments on Annual Catch Limits proposed rule

Dear Mr. Millikin:

The Marine Mammal Commission, in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the National Marine Fisheries Service's proposed rule to revise the guidelines for National Standard 1 of the Magnuson-Stevens Fishery Conservation and Management Act (73 Fed. Reg. 32526). If adequately implemented at the council level, the proposed revisions to National Standard 1 will provide needed improvements to the framework used to manage fisheries in the United States and should reduce the frequency with which overfishing occurs and the extent to which stocks are overfished. The incorporation of methods to address scientific and management uncertainties is a particularly welcome step to improve fisheries management. In addition, we commend the Office of Sustainable Fisheries' decision to withdraw the proposed guidelines published in 2005 and its efforts to develop a revised proposal that addresses concerns raised about the earlier version.

That being said, the Commission also believes that further revisions are needed to move fisheries management in the United States to the point where it is fully consistent with maintaining healthy and stable marine ecosystems. To that end, the Commission provides the following recommendations and comments.

## RECOMMENDATIONS

To continue development of an ecologically safe fisheries management framework under the Magnuson-Stevens Act, the Marine Mammal Commission recommends that the National Marine Fisheries Service—

- shift its focus to the development, evaluation, and implementation of measures that take into account the uncertainty regarding ecological effects of fishing, not only on fish stocks but on all potentially affected ecosystem components (e.g., marine mammals, seabirds, invertebrates);
- review the processes for setting catch limits and targets, identify all steps in those processes that involve discretion as to the level of precaution, and establish generally applicable standards for the level of precaution to be used in those cases;
- engage its quantitative experts in an investigation of the performance of using multi-year averages for managing highly variable fisheries with poor in-season data and use annual statistics for management of all fisheries, including those involving highly variable stocks or

- catch limits, until the unintended consequences of using multi-year averages have been identified and resolved;
- identify the various stock complexes that are taken in fisheries and eliminate the targeting of such complexes unless and until a suitably rigorous research program has been developed to affirm that all stocks taken within a complex are reasonably safe from being fished at an unsafe rate or reduced by fishing to an unsafe level; and
  - demonstrate international leadership by establishing and adhering to annual catch limits and accountability measures for international fisheries.

## **RATIONALE**

The Commission provides the following rationale for its recommendations.

### **Scientific, management, and ecological uncertainty**

The proposed revisions formalize, to a degree, mechanisms needed to address both scientific and management uncertainty in setting—and holding fisheries to—catch targets and limits. Implementation of such mechanisms is necessary to prevent fishing from occurring at excessive rates (i.e., overfishing) or at levels that reduce stocks to excessively low biomass (i.e., overfished). As stated above, these mechanisms are notable improvements over past practices in which both sources of uncertainty could be—and generally were—ignored.

Although these mechanisms represent a considerable improvement, they are based largely on target stocks and still fail to account for a third source of uncertainty, the uncertainty regarding the ecological effects of reducing by 60 percent or more the biomass of target stocks with multiple age classes vulnerable to fishing. The effort to identify certain other stocks as “ecosystem components” is a meaningful step toward addressing concerns related to stocks that are not targeted but are taken as bycatch. However, this step does not address concerns related to other ecologically related species (e.g., marine mammals, seabirds, invertebrates). Thus, the mechanisms proposed for addressing scientific and management uncertainty are still largely based on a single-species paradigm and, although progressive, are insufficient for protecting other important components of the ecosystem.

Fisheries research and theory have yet to address the ecological effects of fishing in a systematic and comprehensive manner. Even on a single-species basis, fisheries research has not yet validated many of the assumptions that underlie the current single-species management paradigm. For example, the concept of maximum sustainable yield (MSY)—which is central to the approach taken in the Magnuson-Stevens Act—is described largely from theory rather than empirical scientific data and has been estimated based on actual data for only a handful of fished stocks. The definition of optimum yield set forth in the Magnuson-Stevens Act recognizes the shortcomings of the MSY concept by allowing for suitable corrections for social, economic, and ecological factors. However, further efforts are needed to address the uncertainty regarding the ecological effects of fishing under an MSY paradigm if the concept of optimum yield is to have real bearing on management strategies. The allowances for scientific and management uncertainty proposed by the Service are useful steps

in the right direction, but additional steps are needed to achieve a safe and sustainable ecosystem-based approach to fisheries management. For these reasons, the Marine Mammal Commission recommends that the Service shift its focus to the development, evaluation, and implementation of measures that take into account the uncertainty regarding ecological effects of fishing, not only on fish stocks but on all potentially affected ecosystem components (e.g., marine mammals, seabirds, invertebrates). Doing so will require a more flexible, adaptive research approach to test the major assumptions of the existing MSY-based fishery management paradigm.

### **Setting and allocating catch levels**

The Magnuson-Stevens Act attempts to establish a science-based process for setting catch limits and targets while allowing the fishery management councils discretion over the allocation of that catch among fishery participants, sectors, or communities. To that end, the Service's proposed guidance more effectively accounts for scientific and management uncertainty in setting catch targets and limits. However, that guidance still provides considerable flexibility to the councils, and the line between establishing catch limits and allocating that catch may be blurred in some cases. Variation in fishery circumstances around the country precludes absolute consistency in setting catch levels. Nonetheless, the Service should be able to establish standards whenever those processes involve discretion regarding the appropriate level of precaution in the face of uncertainty. The Commission believes that the Service should set minimum standards to ensure that catch levels are determined in a consistent manner and therefore can be evaluated and adjusted when necessary. To that end, the Marine Mammal Commission recommends that the Service review the processes for setting catch limits and targets, identify all steps in those processes that involve discretion as to the level of precaution, and establish generally applicable standards for the level of precaution to be used in those cases.

### **Performance of control measures**

The control measures described in the proposed rule should reduce the occurrence of overfishing and overfished stocks. Nonetheless, these outcomes undoubtedly will continue at some level, and their rate of occurrence should be monitored so that management of the involved fisheries can be adjusted accordingly. The proposed rule suggests that control measures must be reexamined for fisheries that are overfished more than once in the previous four years. This approach sets a useful standard, although it remains to be seen whether that standard is sufficiently conservative (i.e., precautionary) or whether additional accountability measures are needed to prevent overfishing. However, the proposed rule also suggests that for certain fisheries with highly variable catches and poor in-season data, accountability measures can be implemented on the basis of three-year running averages of annual catches and annual catch limits. This presents a potential problem—the use of three-year running averages may conceal annual overages that need to be addressed. This is a particular concern for fisheries involving stocks that are highly variable in biomass and more vulnerable to adverse effects from overfishing. Such unintended, but ill-advised consequences of using multi-year averages could be easily explored with appropriate modeling exercises, and we believe such exercises will illustrate the shortcomings of this approach. For that reason, the Marine

Mammal Commission recommends that the Service engage its quantitative experts in an investigation of the performance of using multi-year averages for managing highly variable fisheries with poor in-season data and that, until such results are available, the Service use annual statistics for management of all fisheries, including those involving highly variable stocks or catch limits.

### **Stock complexes**

The Commission raised concerns about fishing directed at stock complexes when it commented on the 2005 proposed revisions to National Standard 1. The Commission remains concerned because such fishing constitutes a management convenience with potentially significant biological and ecological consequences. Pooling of stocks into a complex requires assumptions about various aspects of the subject stocks (e.g., similar geographic distribution, abundance, life history features, and vulnerability to fishing) that otherwise determine whether such stocks might be at risk—in essence, these stocks are simply assumed to be safe from such risks. The notion of an indicator stock also requires assumptions about the very factors that may place the associated stocks at risk. One stock cannot reasonably be assumed to be representative of others without some degree of scientific validation regarding their similarity with respect to key parameters or characteristics. Pooling to ensure accounting of stocks taken as bycatch may be reasonable, but the Commission believes that such stocks should not be targeted by fisheries. That is, if a fish stock is of sufficient value to allow a targeted fishery, then that fishery should be managed on the basis of a research program suitable for estimating the stock-specific parameters needed for making informed management decisions. For that reason, the Marine Mammal Commission recommends that the Service identify the various stock complexes that are taken in fisheries and eliminate the targeting of such complexes unless and until a suitably rigorous research program has been developed to affirm that all stocks taken within a complex are reasonably safe from being fished at an unsafe rate or reduced by fishing to an unsafe level.

### **International fisheries**

Section IX of the preamble to the Service's proposed rule indicates that allowable catch limits and accountability measures would not be set for fisheries that are managed under international agreements in which the United States participates. The justification for such an exemption is that applying catch limits or accountability measures only to the U.S. portion of the catch "would not affect rebuilding or end overfishing, would potentially disadvantage U.S. fishermen, and could weaken U.S. negotiating positions at international fora in which it participates." The Commission does not agree with these justifications and believes that the suggested approach fails to demonstrate the leadership that is needed in managing international fisheries. The assertion that U.S. observance of catch limits would not affect overfishing is based on the assumption that other countries would respond to constraints imposed by U.S. fishermen by increasing their own catch. The assertion that observance of catch limits would disadvantage U.S. fishermen is based on the notion that fishermen will benefit more by competing for an overfished stock than adhering to limits that maintain the health of the stock. The assertion that observance of such limits would weaken the U.S. negotiating positions suggests that our position would be stronger if we acted in an irresponsible manner consistent with the behavior of fishery participants

Mr. Mark R. Millikin  
22 September 2008  
Page 5

from other nations. To the contrary, the Commission believes that observance of appropriate limits would give the United States the “high ground” in international fora and demonstrate the kind of leadership needed to bring order to the management of international fisheries. For all these reasons, the Marine Mammal Commission recommends that the Service demonstrate international leadership by establishing and implementing annual catch limits and accountability measures for international fisheries.

Please contact me if you would like to discuss any of these comments or recommendations.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael L. Gork" followed by a flourish and the letters "for".

Timothy J. Ragen, Ph.D.  
Executive Director