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**Testimony on “NOAA’s Steller Sea Lion Science and Fishery Management Restrictions:  
Does the Science Support the Decisions?”**  
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Chairman Hastings, members of the House of Representatives Committee on Natural Resources, thank you for inviting me to testify before you on “NOAA’s Steller Sea Lion Science and Fishery Management Restrictions: Does the Science Support the Decisions?” I am Timothy Ragen, Executive Director of the Marine Mammal Commission. From 1998 to 2000, I served as the Steller Sea Lion Recovery Coordinator for the Alaska Region, National Marine Fisheries Service. In that position, I was responsible for drafting a number of biological opinions on fishery effects on sea lions under section 7 of the Endangered Species Act.

**Section 7 consultations**

Debates regarding the nature and quality of NOAA’s science are heightened during section 7 consultations concerning fishery management, as is evident from the number of law suits related to consultations over the past decade. The Marine Mammal Commission’s concerns regarding those consultations fall under three separate but related headings.

Information management: With regard to managing the information needed for section 7 consultations, the Commission believes that—

- Consultations should be based on the best scientific and commercial data available;
- All affected parties should be allowed to contribute information to the consultation process as long as it is related to the proposed activity and falls within the limits established by the Endangered Species Act;
- Such parties could include state agencies, fishery management councils, the industry, tribal governments or organizations, non-governmental conservation organizations, and the public;
- Information management should be transparent—that is, the information used in a section 7 consultation should be available for all to see (with some exceptions for certain classes of information, e.g., national security information); and
- The information involved in such consultations should be weighted by its relevance and quality, and clear standards are needed to do so.

Analysis of effects: For a variety of reasons, analysis-of-effects chapters of biological opinions often are the weakest elements of section 7 consultations. Here, the Commission believes that—

- Such analyses must be comprehensive, including assessment of cumulative effects;
- They must be clearly linked to the available information and describe important information that is needed but lacking;

- They must include measures of uncertainty or confidence in their results; and
- They must be described fully in the resulting biological opinion or in available references.

Decision-making: Conclusions regarding jeopardy to a species or destruction or adverse modification of critical habitat often are the most controversial elements of a section 7 consultation. The Commission’s main concerns with regard to such decision-making are that—

- Biological opinions resulting from section 7 consultations, and all decision-making therein, remain the responsibility of the expert or consulting agency. However, that agency should work closely with the action agency to ensure that all relevant information is considered in each consultation process;
- The consulting or expert agency must not have a conflict of interest with regard to the proposed action and the outcome of the consultation;
- The National Marine Fisheries Service is in a potentially conflicted position when one branch of the agency consults with another on fishery-related actions; maintaining the integrity of the consultation process is essential and in such cases the agency must impose strong measures and procedures to avoid such conflicts;
- Decisions regarding the two standards of jeopardy to a listed species and destruction or adverse modification of critical habitat must be clearly explained in biological opinions; and
- Decisions and supporting rationale must provide the basis for any reasonable and prudent alternatives needed to avoid jeopardy or adverse modification.
- Although other agencies or organizations may wish to, or may be invited to, conduct reviews of the same information, the expert or consulting agency alone remains responsible for final decisions in section 7 consultations and the accompanying biological opinions.

Under each of these headings, the Commission’s primary concern is with maintaining the integrity of the process as described in section 7 of the Endangered Species Act.

### **Role of the North Pacific Fishery Management Council**

Section 7 consultations on the management of Alaska groundfish fisheries clearly are relevant to the North Pacific Fishery Management Council. Given its important role in fishery management, the Council should have ample opportunity to provide information considered during section 7 consultations. The Council also may play a number of other important roles:

- It may serve as a conduit through which the industry can provide input;
- It may serve as a forum for helping to develop reasonable and prudent alternatives as long as the framework and/or standards for those measures are clearly articulated by the consulting agency—in this case, NOAA Fisheries’ Office of Protected Resources;
- It also may serve as a forum for developing and recommending research to address important uncertainties; and
- It may help foster cooperation between research organizations and the industry.

However, the Council is not part of the consulting or expert agency and should not assume the responsibilities of the consulting or expert agency because it is subject to potential conflicts of interest.

## Recovery Plan Criteria

Ultimately, the purpose of the recovery plan is the same as the purpose of the Endangered Species Act: "...to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species..." More specifically, the recovery plan should include reasoned criteria for determining when the species of concern is no longer at risk of extinction and when the protections provided under the Endangered Species Act are no longer needed. The Commission believes that the Steller Sea Lion Recovery Team and the National Marine Fisheries Service should have given more weight to the population viability analysis used to support the recovery criteria. Such analyses provide the best possible indication of the risk of extinction, which is the key measure of success in the management of endangered and threatened species under the Act. That being said, the recovery plan criteria were based on a reasoned analysis of the five listing factors set forth in the Endangered Species Act. In addition, the criteria gave appropriate emphasis to three important principles calling for—

- (1) Continued population monitoring and research on the key threats potentially impeding sea lion recovery;
- (2) Maintaining current or equivalent fishery conservation measures until new information indicates that changes are warranted; and
- (3) Designing and implementing an adaptive management program to evaluate fishery conservation measures.

In the Commission's view, the third principle has not been given adequate consideration in fisheries management. In the Alaska groundfish case, a disproportionate share of research has been focused on Steller sea lions, without adequate attention to assessing the ecological effects of fishing to obtain the optimum yield. The Magnuson-Stevens Fishery Conservation Act defines the optimum yield to be based on the maximum sustainable yield as reduced by any relevant social, economic, or ecological factors. However, NOAA Fisheries has yet to develop a robust research program to investigate the ecological effects of such fishing. This fundamental issue has been neglected for several decades and must be addressed if the United States is to assert with justification that its fishery management paradigm is ecosystem-based.

### The need for scientific information

The information used to manage fisheries is not what all parties would like it to be. In the case of the Alaska groundfish fisheries, the primary concern is that the fisheries severely out-compete sea lions for their prey. Such competition may occur in the form of fishery-induced localized depletion of prey, where fishing effort is concentrated in space and time and causes marked reductions in the availability of prey to sea lions. These types of depletions were clearly evident in fisheries data collected in the late 1990s. The other type of depletion results from the long-term effects of harvesting a fish stock year after year, causing intentional reductions of 60 percent or more in the total stock biomass. This type of effect has not been evaluated but is at the heart of the debate over the ecological effects of fishing.

Regarding the scientific information used to justify the fishery restrictions in the recent biological opinion, the Commission assumes that all parties would like to have better information to

guide the development and implementation of fishery management measures. However, the Commission would respectfully suggest that the issue should be rephrased to recognize that the burden for providing the necessary information appropriately lies with the action agency—in this case the Office of Sustainable Fisheries. Section 7(a)(2) of the Endangered Species Act clearly places that burden on the action agency, requiring it to “insure that any action authorized, funded, or carried out by such agency...is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of [critical] habitat of such species....”

Gathering the necessary information on the ecological effects of fishing will be a challenge, particularly if research budgets for fisheries-related research remain at current levels or are reduced in the foreseeable future. In the Commission’s view, the best approach for collecting the needed information would be through a long-term, well conceived, and well planned adaptive management approach aimed at investigating the ecological effects of fishing. To the Commission’s knowledge, NOAA Fisheries does not now have such a plan in place.

## **Conclusion**

The issue to be resolved here involves the ecological interactions between the Alaska groundfish fisheries and Steller sea lions. NOAA Fisheries has done an admirable job of reducing direct interactions between the fisheries and sea lions. However, it has not evaluated, in a suitably rigorous way, the ecological effects of fishing aimed at achieving, on an ongoing basis, the maximum sustainable yield from a single target fish stock. Unless and until it does so, the ecological consequences of fishing under this paradigm will be left for future generations to resolve.