Committee on Resources

Subcommittee on Fisheries Conservation, Wildlife and Oceans

Statement

TESTIMONY OF
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NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

U.S. DEPARTMENT OF COMMERCE

ON THE RECENT BIOLOGICAL OPINION ON

THE EFFECTS OF THE POLLOCK FISHERY ON STELLER SEA LIONS

BEFORE THE

SUBCOMMITTEE ON FISHERIES CONSERVATION, WILDLIFE AND OCEANS

COMMITTEE ON RESOURCES

U.S. HOUSE OF REPRESENTATIVES

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Mr. Chairman and members of the Subcommittee, thank you for inviting me to testify before the Subcommittee today on the science supporting NOAA Fisheries' recent Biological Opinion and the conservation measures to ensure protection for the endangered western population of Steller sea lions. I am Dr. Andrew Rosenberg, Deputy Assistant Administrator for Fisheries.

The National Oceanic and Atmospheric Administration is charged with and committed to the sustainable stewardship of marine fisheries, as well as the protection and recovery of endangered and threatened marine species. We at NOAA's National Marine Fisheries Service recognize that this dual commitment requires us to find a balance that ensures the protection of species listed under the Endangered Species Act (ESA) while ensuring the optimal utilization of fisheries for the U.S. fishing industry. In finding this balance, we must comply with a number of legal requirements, including those of the ESA, Marine Mammal Protection Act (MMPA), Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act), and the American Fisheries Act. Of particular concern to the Subcommittee today are the recent management measures developed with the North Pacific Fishery Management Council in response to our biological opinion to reduce the potential effects of groundfish fisheries off Alaska, particularly the pollock fisheries,

on Steller sea lions. Meeting these various requirements has been a complex task, as together they impose a number of competing responsibilities that must be met within a relatively short period of time. We believe we have fully complied with all of our statutory responsibilities in managing these fisheries, using the best scientific and commercial information available in the process. Furthermore, we have done this with a high level of public involvement for an ESA action, and we have provided substantial flexibility in the recommendations of the Biological Opinion to accommodate fishery concerns. Both of these features of the action, we believe, are innovative and helped us work through a very contentious issue.

Requirements of the Endangered Species Act

The ESA requires that each Federal agency shall 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 their habitat. Under the ESA, the term "jeopardize the continued existence of" means to engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species. The term "destruction or adverse modification" means a direct or indirect alteration that appreciably diminishes the value of critical habitat for both the survival and recovery of a listed species. Such alterations include, but are not limited to, alterations adversely modifying any of those physical or biological features that were the basis for determining the habitat to be critical.

When Federal actions may result in an adverse effect, either on these species or their habitat, the agency responsible for the action must consult with either the U.S. Fish and Wildlife Service or NOAA Fisheries and develop reasonable and prudent alternatives (RPAs) to minimize or eliminate the adverse effect. NOAA Fisheries, as the agency responsible for authorizing the pollock fisheries as well as for protecting Steller sea lions, is both the "action agency" and the "consulting" agency in this case.

On December 3, 1998, NOAA Fisheries completed an ESA Section 7 consultation on the pollock fisheries of the Gulf of Alaska and Eastern Bering Sea, and the Atka mackerel fisheries of the Bering Sea/Aleutian Islands region following an interactive process with the public and the North Pacific Fishery Management Council. The consultation considered the best scientific and commercial information available, including input received during two public meetings and a North Pacific Fishery Management Council meeting in the autumn of 1998 on possible alternatives to current fishing practices that would reduce the effects of the pollock fisheries on Steller sea lions. That consultation was summarized in a Biological Opinion, as directed by the ESA.

The Biological Opinion contained a description of the proposed fishery actions, a review of the status of western population of Steller sea lions, and an analysis of factors that either may have or are known to have contributed to the 80 percent decline of the western population of Steller sea lions over the past three to four decades. The Opinion recognized that commercial sea lion harvests, subsistence harvests, and incidental fisheries catch are known to have contributed to this decline. The Opinion also recognized that intentional shooting, ecosystem changes, killer whale predation, disease, and pollutants also have contributed to the decline. For example, considerable evidence developed by NOAA Fisheries and other scientists indicates that significant oceanographic changes have occurred in the Bering Sea and Gulf of Alaska ecosystems, with corresponding alteration of prey species available to Steller sea lions. As a result, the environment's carrying capacity for Steller sea lions may have been changed. In short, a number of factors have contributed to the decline of the western population of Steller sea lions.

However, the consultation NMFS conducted last year was concerned with the factors contributing to the continued decline of Steller sea lions, not the original cause of the decline. During the consultation on the 1999 pollock and mackerel fisheries, NMFS examined a number of phenomena that might explain the continued decline of the Steller sea lion. Direct and indirect interactions with fisheries are among those factors which may continue to have a significant impact on the western population of Steller sea lions. Our consultations focused on the groundfish fisheries because these fisheries and Steller sea lions target the same prey.

The potential for competition between the pollock and Atka mackerel fisheries and the western population of Steller sea lions is difficult to evaluate. The best available evidence suggests that Steller sea lions are nutritionally stressed. That evidence includes data on animal growth, condition, reproduction, and survival (particularly of juvenile sea lions). The evidence also indicates that pollock and Atka mackerel are major prey for Steller sea lions in both the Gulf of Alaska and the Bering Sea regions. In the majority of diet studies conducted to date, pollock or Atka mackerel have been the most frequently consumed prey.

The question, then, is whether the removal of potential prey by the commercial pollock and Atka mackerel fisheries, as proposed, could reduce the foraging success of Steller sea lions and compromise growth, condition, reproduction, and even survival of individuals to the point that the population continues to decline or fails to recover. Scientific analyses indicate that the pollock fisheries of the Gulf of Alaska and Bering Sea overlap with foraging Steller sea lions in at least four important ways.

First, the pollock fisheries and feeding Steller sea lions overlap spatially; that is, they occur in the same place. Since the mid to late 1980s, the proportion of the pollock harvested from Steller sea lion critical habitat in the Eastern Bering Sea has increased from 35 to 70 percent of the total Eastern Bering Sea pollock catch. The proportion of the pollock harvested from critical habitat in the Gulf of Alaska has remained high during the same period, at 50 to 90 percent of the total Gulf of Alaska pollock catch.

Second, the pollock fisheries overlap in time with feeding Steller sea lions. Since the mid to late 1980s, large roe fisheries have developed on pollock during the winter period, when Steller sea lions (particularly juveniles and lactating adult females) are thought to be particularly sensitive to changes in availability of prey. In addition, these fisheries have become concentrated in time, increasing the likelihood that they result in localized depletions of prey. For example, since 1990, the Bering Sea pollock fishery has become condensed from about 10 months to less than 3 months.

Third, the pollock fisheries and foraging Steller sea lions overlap in prey selection and prey size. As noted above, pollock is a major prey for sea lions. Furthermore, both adult and juvenile sea lions consume pollock of the same size as those taken by the fisheries.

Fourth, the pollock fisheries and foraging Steller sea lions overlap with respect to the depth of trawling and foraging. While much remains to be learned about the diving capabilities of sea lions, the available information is sufficient to show that their diving patterns overlap with the trawling depths of the fisheries. Furthermore, the pollock resource also moves in the water column, from deeper levels in the daytime to shallower depths at night.

Finally, analyses of prey biomass harvested from areas important to Steller sea lions indicate that the fisheries may remove 40 percent or more of the pollock available to Steller sea lions during some seasons. Essentially, the problem is not the total amount of pollock harvested from Alaska waters, rather the disproportionate amount harvested from critical habitat and the resultant potential for localized depletion.

This extensive removal of pollock from critical habitat, combined with the evidence that sea lions are nutritionally stressed, that pollock are important prey, and that fishing and sea lion foraging overlap extensively, all indicate that the fisheries are reasonably likely to compete with the western population of Steller sea lions and significantly reduce their available prey. Based on this information, the Biological Opinion concluded that the pollock fisheries in the Bering Sea and Gulf of Alaska, as proposed, are likely to jeopardize the continued existence of the western population of Steller sea lions and adversely modify its designated critical habitat.

Concerns about the Atka mackerel fishery were considered by the Council early in 1998. The fishery had become concentrated in both time and area, and evidence of resultant localized depletion of Atka mackerel was observed. In June, 1998, the Council recommended a regulatory amendment to spread the Atka mackerel fishery harvest over time and space to reduce the effects of competition between the Atka mackerel fishery and Steller sea lions. The Biological Opinion concluded that implementation of these conservation measures reduced the effects of the Atka mackerel fishery sufficiently to avoid jeopardy.

The Biological Opinion was based on the best available scientific and commercial data, as analyzed by scientists both inside and outside of our agency. These scientific data and analyses were only part, but an important part, of the Biological Opinion and resulting conclusions. The North Pacific Fishery Management Council recently convened a review of these data and analyses by a panel of internationally known experts in marine mammal biology.

Development of a reasonable and prudent alternative with public and Council input

Because Federal agencies cannot take actions that jeopardize a listed species or adversely modify critical habitat, the ESA requires that jeopardy and adverse modification be avoided through development of a reasonable and prudent alternative to the proposed action; in this case, authorization of the pollock fisheries. Development of the RPA was initiated in the fall of 1998, when the analyses of the Biological Opinion indicated that conclusions of jeopardy and adverse modification were likely. We drafted management measures and solicited public and Council input to ensure that the fisheries would be able to start in January 1999, as planned.

Early analyses in the Biological Opinion indicated problems with the spatial dispersion of the fisheries, their temporal dispersion, and their potential to compete with sea lions in the waters immediately adjacent to rookeries and haulouts. In the fall of 1998, NOAA Fisheries staff began development of RPAs that would increase spatial and temporal dispersion, and protect prey resources around rookeries and haulouts. It should be reiterated that changes in the total amount of pollock harvest allowed were considered, but not deemed necessary.

In October 1998, public workshops were held in Seattle and Anchorage. The purpose of these workshops was to enlist input from the public on measures to avoid jeopardy and adverse modification.

In November 1998, the RPA was further developed and presented to the North Pacific Fishery Management Council. Again, input from the Council and from the public was solicited on measures to avoid jeopardy and adverse modification.

In late November and early December 1998, NOAA Fisheries developed RPA "principles" to be included in the Biological Opinion, pending the final decision on jeopardy and adverse modification. These principles established the objectives to be met by the RPA as a framework, rather than specifying the exact measures

to achieve those objectives. This provided the Council and the industry much greater flexibility in developing solutions to this problem than is usual for ESA actions.

In December 1998, NOAA Fisheries took the framework RPA principles in the final Biological Opinion to the Council to seek their input on measures consistent with that framework that would avoid jeopardy to Steller sea lions and adverse modification of critical habitat. On December 13, 1998, the Council voted to approve a motion containing a number of conservation measures for the first half of the 1999 groundfish fisheries.

On December 16, 1998, NOAA Fisheries accepted the Council motion, with some modification, as part of the RPA. We also recognized that additional measures would be required during the latter half of the 1999 fisheries to avoid jeopardy and adverse modification.

These additional measures were discussed with the Council at its February meeting. Again, the Council and public were asked for input prior to the development of an environmental assessment for the Steller sea lions conservation measures needed for the latter half of 1999 and for the 2000 fisheries and beyond.

In April 1999, the Council was asked to review and release a draft environmental assessment on Steller sea lion measures so that final action could be taken in June 1999.

In summary, the RPA, as developed to date, disperses the pollock fisheries in time and space, and protects sea lions from competition in the waters adjacent to important rookeries and haulouts. The goals of temporal dispersion were to protect portions of the critical winter period by prohibiting fishing from 1 November to 19 January, and to disperse the fisheries during the remainder of the year to avoid large pulses of fishing. The goals of spatial dispersion were to spread the distribution of the catch in a manner that mirrored the actual distribution of the pollock stocks and, where the stock distribution is not known, place a cap on the amount of the catch that could be taken from Steller sea lion critical habitat. Zones within which pollock trawling is prohibited were also established to fully protect sea lions (particularly juveniles and lactating females)from the possibility of competition for pollock in the waters adjacent to important rookeries and haulouts. The combined set of RPA principles outlined in the Biological Opinion were developed to achieve these goals.

Related litigation

NOAA's management of the groundfish fisheries off Alaska is the subject of litigation in a Federal court. In that case, a number of environmental groups are challenging the environmental impact statement prepared for the Alaska groundfish fisheries, as well as the biological opinion addressing the effects of the pollock and Atka mackerel fisheries, and the biological opinion considering the effects of the other Alaska groundfish fisheries on Steller sea lions. Representatives of the groundfish fishing industry and Alaska fishing communities have intervened in the case and filed cross claims challenging, among other things, NMFS' emergency regulations under the Magnuson-Stevens Act that implement the reasonable and prudent alternatives identified in one of the biological opinions. Oral argument on some of the issues in this case was held on May 13th.

Steller sea lions and the American Fisheries Act

While the RPA was being developed, the American Fisheries Act (AFA) became public law. The AFA has changed the structure and nature of the pollock fishery in the Bering Sea. The AFA has only been in effect

since January 1999 and the full effects of its measures on the western population of Steller sea lions are not yet apparent. Based on the preliminary results, we are cautiously optimistic that some provisions of the Act will likely further our efforts to avoid jeopardy to the western population of sea lions and adverse modification of its critical habitat. In 1999, one sector of the pollock fleet, the catcher-processors, was able to establish a fishing cooperative which helped to avoid the "race for fish," reduce the daily catch rates, and better disperse the catch over a longer period of time. These are preliminary results from the activities of only one of the four fishery sectors fishing during the first four months of 1999, but they are positive and encouraging. We hope to see similar progress in the other sectors, given the shift in allocation of pollock away from the catcher-processors towards the inshore and Community Development Quota, or CDQ, fleets. Our Alaska Region is working with the North Pacific Fishery Management Council to facilitate the full implementation of the AFA as soon as possible.

Steller Sea Lion Recovery Plan

Our strategy for research and recovery of Steller sea lions is described in the Steller Sea Lion Recovery Plan (Recovery Plan). The first version of the Recovery Plan was completed in 1992 by NMFS and the Steller Sea Lion Recovery Team. This version provided important directions for research into the causes of the decline and general management measures for facilitating recovery. Considerable progress has been made since 1992, and the Recovery Plan is now ready for revision. The Recovery Team and NMFS have recently completed four peer-review workshops on different elements of the Steller sea lion research effort. The workshops and their recommendations will be used to revise and update the Recovery Plan. The revision is expected to be completed by the end of 1999.

The completion of the revised Recovery Plan is our most urgent objective for management efforts related to Steller sea lions. The revised Recovery Plan will not only update the information on the status of the western and eastern populations, but will also incorporate the extensive research results obtained since 1992. In addition to direction for future research, the Recovery Plan will incorporate explicit management strategies to facilitate recovery of the species. The Recovery Plan will guide and coordinate the research and management activities of the multiple agencies involved with Steller sea lion recovery efforts. Finally, the Recovery Plan will also define the criteria needed to determine when the eastern and western populations have recovered and can be removed from the lists of threatened and endangered species.

General research direction and anticipated budget

Specific research topics or themes will be identified and expanded during the revision of the Recovery Plan. Likely research themes will include research on population abundance and trends, life history, health foraging ecology, habitat, fisheries interactions, and environmental effects. NOAA Fisheries funding levels for Steller sea lion research in 1998 was $720,000. In 1999, NOAA Fisheries has a $590,000 base level of funding, plus $850,000 for studies on the effectiveness of current management measures, and an additional $234,000 for recovery studies. When combined with other funding sources, the total 1999 funding level for Steller sea lion research is $3,604,000.

Summary

In summary, NOAA Fisheries is making an effort to strike a balance between the needs of the Alaska groundfish fishery and the need to protect Steller sea lions while fulfilling the varying mandates of the Magnuson-Stevens Act, ESA, MMPA, and the American Fisheries Act. To achieve this balance, we considered the best available scientific information, and hold numerous public meetings to discuss possible

alternatives with the North Pacific Fishery Management Council (Council), the fishing industry, environmental organizations and the public. We have used a flexible, innovative approach to meeting the mandates of the ESA because of the complexity of the issue and the legal mandates and because of the importance of the fishery. Future research and management plans will improve our ability to respond to our complex mandates, and will allow all stakeholders to

better evaluate possible fishery management alternatives to minimize impacts on the western Steller sea lion population.

Thank you for the opportunity to testify before the subcommittee today. I am prepared to respond to questions members of the subcommittee may ask.

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