# Committee on Resources

## Subcommittee on Fisheries Conservation, Wildlife and Oceans

## Statement

**TESTIMONY OF DICK JACOBSEN**

**Mayor, Aleutians East Borough**

The Aleutians East Borough

The Aleutians East Borough includes the westernmost portion of the Alaska Peninsula and the first few islands in the Aleutian Island Chain (**Figure 1**). The Borough includes the communities of Akutan, False Pass, King Cove, Cold Bay, Sand Point, and Nelson Lagoon. Nearly 2,400 people live within the Borough. A majority of the Borough's population is Native Alaskan, most are Eastern Aleuts.

Commercial fishing is the lifeblood of the Borough. Subsistence fishing and hunting is also important to the communities. Most local fishermen are combination fishermen. They fish a wide range of species including salmon, herring, cod, pollock, halibut and sablefish. Most of the local fleet is comprised of vessels under 60 feet in length. These vessels are restricted to the relatively protected waters near shore. The majority of the total personal income in the Borough comes from commercial fishing and related services. A 1987 survey conducted for the North Pacific Fishery Management Council and the Aleutians East Borough revealed that 87% of the employment in the City of Sand Point was attributable to the seafood industry. Reduced fishing opportunities and low prices for salmon in recent years have increased the importance of pollock, cod, and other groundfish species as a source of personal income.

The Aleutians East Borough government is almost entirely dependent on commercial fishing to provide funding for Borough services. Most of the Borough's tax revenue comes from a combination of a 2% Borough-wide raw fish tax and the Borough's share of the Alaska State raw fish tax **(Figure 2)**. For Fiscal Year 1999, 91% of the estimated $3.8 million in Borough revenues came from a combination of these taxes. Data from 1993-1997 show that groundfish, principally pollock, has become the most economically valuable species processed in the Borough **(Figure 3)**.

The majority of the Borough's raw fish tax revenue in 1997 came from groundfish species, principally pollock and cod. Borough and Alaska State fish taxes support a wide range of capital projects, including roads, harbors, buildings, and the Borough school district. The cities of Sand Point, King Cove, False Pass, and Akutan also impose a fish tax on fish processed in their communities, providing the primary source of revenue for these cities. The cities and villages of the Aleutians East Borough epitomize fishery dependent communities.

Our Concerns

Borough residents are deeply concerned about the measures that are being taken by the National Marine Fisheries Service (NMFS) in an attempt to conserve Steller sea lions under the Endangered Species Act (ESA). The western population of the Steller sea lion was listed as an endangered species in 1998. Residents are deeply committed to maintaining healthy fishery and marine mammal populations. However, they believe that the management measures taken by NMFS under the ESA are based on questionable scientific assumptions. These assumptions have led to management measures that severely restrict the pollock fishery and undermine the foundation of the fishery dependent communities of the Aleutians East Borough. These management measures may be irrelevant or counterproductive to sea lion recovery. The key concerns Borough residents have with the existing approach to Steller sea lion management are:

(1) A failure to consider the traditional knowledge of Native Alaskans.

(2) A failure to consider the full range of scientific knowledge available.

(3) A failure to accommodate the needs of fishery dependent communities.

Failure to Consider Traditional Knowledge of Native Alaskans

The Native Alaskan residents of the Borough have inhabited this region for nearly 9,000 years. Throughout that time, they have seen significant changes in populations of fish and marine mammals. As an example, the Eastern Aleut word for cod translates as "the fish that stops" or "the fish that is not there" a reflection of the cyclical nature of cod abundance. Recent scientific research on climate change in the Bering Sea supports these local observations of fish and marine mammal population cycles. Native Alaskan residents have observed Steller sea lion population changes for decades, long before a scientific research program was established. In fact, subsistence hunters in Akutan, the last Borough village that still hunts Steller sea lions, noted the current decline in sea lion population several years ago and responded by reducing their takes, a customary practice.

Traditional knowledge should be incorporated into the ESA management process. The Department of Commerce agrees. On June 5, 1997, Secretary Daley and the Secretary of the Interior signed the Secretarial Order *American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act*. This order states that during ESA Section 7 consultations, agencies in the Department of Commerce (NMFS) shall coordinate with affected Indian tribes and "make use [of] the best available scientific and commercial data by soliciting information, traditional knowledge, and utilizing the expertise of, affected tribes in addition to data provided by the action agency during the consultation process." The Secretarial Order also states that in "developing reasonable and prudent alternatives the Services [NMFS] shall give full consideration to all comments and information received from the affected tribes."

This order further states that "the Departments shall, within one year of the date of this Order [June 5, 1998], develop recommendations to the Secretaries to supplement or modify this Order and its Appendix, so as to guide the administration of the Act in Alaska. These recommendations shall be developed with the full cooperation and participation of Alaska tribes and natives." NMFS has not yet developed these recommendations. NMFS should have developed these recommendations by June 5, 1998, according to the Secretarial Order. Native Alaskans in the Aleutians East Borough have not yet been contacted to participate in forming these recommendations.

The listing of the Steller sea lion as an endangered species and the emergency regulations enacted to protect it profoundly affect Native Alaskans dependent on commercial fishing. Clearly, the knowledge of Native Alaskans needs to be thoroughly considered. Borough residents sincerely wish to work with NMFS to develop reasonable management measures for Steller sea lion conservation. Native Alaskan residents hope that NMFS will begin including Native Alaskans in the management process. The traditional knowledge of Native Alaskans could help provide NMFS with better information on the amount of subsistence harvests, the diets of sea lions, and the location of sea lions missed by the annual aerial surveys.

Failure to Consider the Full Range of Scientific Knowledge Available

Borough residents continue to be concerned by the numerous assumptions and assertions used by NMFS to support their finding that the pollock fishery jeopardizes Steller sea lion populations. This finding of "jeopardy" under the ESA has resulted in severe restrictions of the pollock fishery and strict management measures. NMFS is undertaking a peer review of the science used to support their management measures. This peer review may support some of NMFS' science. However, other scientists remain concerned with the scientific hypotheses used by NMFS to support their management measures.

The Scientific and Statistical Committee (SSC) of the North Pacific Fishery Management Council (council) has repeatedly raised concerns about the scientific process being used. The SSC is an independent advisory body of fishery and marine mammal scientists. At the April 1999 council meeting the SSC noted that the draft Environmental Assessment/Regulatory Impact Review (EA/RIR) prepared by NMFS:

presupposes that regulation of the pollock fishery through spatial and temporal dispersal will improve the condition of the Steller sea lion population, and parenthetically, the Bering Sea and Gulf of Alaska ecosystems. This point of view further assumes that the fishery impacts Steller sea lions through local depletion of food sources or some other mechanism. As noted in the past, the SSC found no compelling scientific information to support either of these two assumptions.

The number of assumptions that NMFS makes to link pollock fishing to the decline of the Steller sea lion requires extensive amounts of data, much of which is incomplete. At the December 1998 council meeting, the SSC stated that it "again shares the general discomfort over the large amount of uncertainty in the data and the large data gaps." With so much uncertainty, NMFS should carefully reconsider the ESA jeopardy finding for the pollock fishery.

In many cases, this lack of data has been offered as a reason to limit pollock fishery in the spirit of precautionary management. NMFS has advocated reducing the amount of pollock that can be harvested near Steller sea lions by creating 10 nautical mile closed areas around haulouts. These haulouts and the closed areas around them encompass near shore fishing grounds in the Gulf of Alaska **(Figure 4)**. Closing these areas severely limits the fishing grounds that are available to fishermen.

While the Aleutians East Borough supports efforts to reduce potential adverse impacts on Steller sea lion populations, the management measures proposed so far lack an effective way to measure their effect. Ten nautical mile closures around rookeries were imposed in 1991 after Steller sea lions were listed as threatened under the ESA. Nevertheless, the population has continued to decline. Unfortunately, there has been no scientific program to measure the potential effectiveness of these closed areas to improve the Steller sea lion population. It makes little sense to continue to close areas to pollock fishing if that approach is not effective.

NMFS should expand its existing research program and focus considerable effort on testing its management measures. The SSC has also supported testing the hypotheses used to explain the decline in Steller sea lion populations. The SSC supports testing the efficacy of existing management measures. Eight years after they were first put into place, NMFS has developed a new research plan to test the efficacy of no-trawl zones around Steller sea lion rookeries. This program begins research that members of the Gulf of Alaska fishing industry requested NMFS initiate in 1991 when these no-trawl zones were established. The limited research program that NMFS has

proposed may take years to arrive at any conclusion regarding the efficacy of these closed areas.

Borough residents have serious concerns that the existing management measures may be counterproductive and fail to address the root cause of the Steller sea lion population decline. NMFS and independent scientists have shown that capelin, eulachon, and other small fatty fish collectively known as forage fish are the preferred prey items for Steller sea lions. Independent scientists have shown that feeding Steller sea lions a diet of pollock alone fails to provide the animals with adequate nutrition for their long-term health.

Steller sea lions require a diverse diet and high calorie fatty forage fish. Stomach samples from Steller sea lions collected in the 1950's and 1960's show a much higher percentage of forage fish in the diets of Steller sea lions in the 50's and 60's than now. Scientists using survey data collected from Pavlof Bay, near King Cove, have shown that beginning in the mid-1970's capelin populations declined rapidly. There was no commercial capelin fishery during this period so the decline in population probably reflects natural changes in environmental conditions. This is the same period when the Steller sea lion population began to decline

rapidly. The Pavlof Bay survey continues to provide valuable data to scientists researching the sea lion population decline.

Borough residents believe that NMFS must incorporate the findings of these independent scientists into the Steller sea lion management process. Closing areas to pollock fishing will not increase the abundance of fatty forage. The fishing communities of Alaska recognize the importance of forage fish to Steller sea lions. In fact, in 1995 the Aleutians East Borough and representatives of the Kodiak fishing fleet sponsored an amendment to ban any future development of a commercial fishery for forage fish. This precludes the possibility of depleting this essential component of the Steller sea lion diet. Local fishermen believe that natural cycles in the abundance of forage fish are the root cause for the declining Steller sea lion population. Recent scientific analysis supports this belief.

An essential component of future research programs is accurate sea lion counts. The methodology that is being used to estimate the Steller sea lion population is not adequate to definitively answer many questions about population trends. Currently, NMFS estimates the Steller sea lion population by selecting specific trend sites that are sampled during each annual count. These trend sites are sampled using a combination of aerial photographs, aerial visual estimates, and vessel-based visual estimates. NMFS scientists also estimate the number of pups at rookery sites by spooking the adults off the site and counting remaining pups. In almost every year NMFS conducts these counts only once.

The Steller sea lion counts provide a snapshot of the population during a very specific time of year. This snapshot is useful for providing information about general trends in population. It is not useful for providing accurate seasonal information on the population of animals at specific sites. This type of information is critical to any program that attempts to estimate the efficacy of NMFS management measures in improving Steller sea lion populations. Regular year-round counts using mounted video cameras, observers, or other year-round monitoring technology are essential for future research.

The research program NMFS proposes is essential, and we sincerely hope that funding for this research is made available. Borough residents hope that independent research efforts, such as those being conducted by the North Pacific Universities Marine Mammal Research Consortium will continue to be supported.

Recently, Congress appropriated $6.6 million to the Dinkham Sands fund to conduct research on issues affecting the marine ecosystem off Alaska. This money has been passed to the University of Alaska at Fairbanks. These funds can be used to support a wide range of research programs by independent scientists that may answer many questions about Steller sea lions. These funds should pass directly into the hands of the researchers. The University of Alaska at Fairbanks should be able to provide these funds to researchers with a very low level of administrative overhead.

Failure to Accommodate the Needs of Fishery Dependent Communities

The Regulatory Flexibility Analysis prepared by NMFS in conjunction with the EA/RIR on Steller sea lions clearly recognizes the dependence of Borough communities on commercial fishing. NMFS recognizes that the communities of King Cove and Sand Point, home to most of the Borough's local fishing fleet, rely on commercial fishing. The Regulatory Flexibility Analysis states, "by any measure, these two communities are fundamentally dependent upon fishing and fish processing."

During the 1999 pollock season, NMFS established 10 nautical mile (nm) circular pollock trawl exclusion zones around Steller sea lion haulouts in the Gulf of Alaska. These trawl exclusion zones are in addition to existing rookery no trawl exclusion zones. NMFS established these pollock trawl exclusion zones in an attempt to reduce the amount of pollock harvests near haulouts. There is no clear scientific evidence to suggest that excluding pollock fishing near sea lion haulouts will increase the Steller sea lion population.

Under the emergency management measures proposed by the council and accepted by NMFS, eight pollock

trawl exclusion zones were exempted for closure: Cape Barnabus, Gull Point, Rugged Island, Point Elrington, Cape Ikolik, the Needles, Mitrofania, and Sea Lion Rocks. The areas around these haulouts were identified as critical fishing grounds by the Gulf of Alaska fishing fleet. Two of these areas, Sea Lion Rocks and Mitrofania are critical to fishermen in the Aleutians East Borough **(Figure 4)**. All of these exempted zones are scheduled for closure in 2000. Closing these areas will have serious long-term effects on the fishing fleets and fishing communities of Alaska.

The NMFS' Biological Opinion establishing the rookery and haulout closures stated that some of the Steller sea lion conservation principles "may be accomplished by an incremental or phased approach if the incremental approach does not jeopardize the continued existence of the western population of Steller sea lions." The areas around Sea Lion Rocks and Mitrofania could be left open without jeopardizing Steller sea lion conservation. Populations of Steller sea lions at these two locations have stabilized or increased in recent years, even in the presence of pollock fishing **(Figure 5)**. In fact, the Steller sea lion population in the western Gulf of Alaska has stabilized in recent years **(Figure 6)**.

The areas around both Sea Lion Rocks and Mitrofania are inshore areas relatively protected from dangerous weather, and are favored by the local trawl fleet. Analysis of State of Alaska fish ticket data indicates that a significant portion of the total catch in the western Gulf of Alaska comes from within the areas around Sea Lion Rocks and Mitrofania **(Table 1 and 2)**.

Closing near shore areas forces smaller local boats into the more dangerous weather conditions offshore. The weather in the western Gulf of Alaska is notoriously difficult to predict and conditions can change rapidly. Small local vessels that are fishing further offshore have less protection from the islands and bays that near shore fishing areas provide. Closing Sea Lion Rocks and Mitrofania and limits the near shore areas available to the local fleet. If few near shore areas are open, large vessels and small local vessels have fewer places available for safe fishing. This increases the competition among vessels and many small local boats cannot compete with the larger vessels unless they go offshore where fewer vessels fish. They risk their safety and lives in these less-protected waters.

Residents of the Aleutians East Borough have proposed several options to keep Sea Lion Rocks and Mitrofania open for the local fleet for the year 2000 and beyond. These proposals would limit the rate and total amount of pollock that could be taken from within these areas. These proposed measures are additional restrictions within 10 nautical miles of Sea Lion Rocks and Mitrofania, including:

- a 150,000 pound trip limit >
    - limiting the size of the trawl net >
    - a horsepower limit >
    - establishing a vessel size limit (e.g., under 60 feet) >
    - establishing catch limits within 10 nm of Sea Lion Rocks and Mitrofania. Fishing within these areas would close once the catch limit within a site is reached. >

All of these measures slow down the fishery and provide near shore fishing opportunities for small local vessels. The pollock fishermen in the Aleutians East Borough have made several offers to NMFS to improve the overall record-keeping and monitoring of catch in the Gulf of Alaska pollock fishery that these modified measures would require. Local fishermen are willing to cooperate with NMFS in establishing a monitoring program. NMFS has not begun working with local fishermen to establish monitoring programs as part of Steller sea lion management.

Clearly, the Borough will be profoundly affected by restrictions in pollock fishing. Although the emergency regulations do not require dramatic reductions in the overall total allowable catch in the western and central Gulf of Alaska, they do require a significant shift in the timing and location of the fishery.

These changes could limit the fishing opportunities available to local fishermen and reduce local tax

revenue. Redistributing the fishery spatially could prevent fishermen from fishing safe areas near shore and prevent them from targeting larger more valuable fish. Closing the areas around Sea Lion Rocks and Mitrofania is not likely to dramatically improve the Steller sea lion population overall, but it will severely limit the local fleet.

Future of the Fishery and Steller Sea Lions

The residents of the Aleutians East Borough are committed to sustainable fisheries, healthy Steller sea lion populations, and successful fishing communities. Borough residents are willing to work with NMFS, independent scientists, and other fishermen to accomplish these goals. In return, they hope to share their traditional knowledge, improve the understanding of the causes behind the Steller sea lion population declines, and establish management alternatives that consider fishing communities. Borough residents hope that NMFS will include fishery dependent communities in their management plans.

**Table 1: Pollock Landings (metric tons) Inside 10nm of Proposed Sea Lion Rocks Haulout Closure in Area 610 (NMFS Western Gulf Groundfish Area)**

Year Sea Lion Rocks (610) Total Quota (610) Percentage in Area 610

1988 18 5,033 0.4%

1989 0 13,568 0.0%

1990 0 8,591 0.0%

1991 92 26,770 0.3%

1992 533 16,396 3.2%

1993 1,973 20,563 9.6%

1995 1,297 29,743 4.4%

1996 3,493 24,047 14.5%

1997 2,500 26,422 9.5%

1998 3,822 29,869 12.8%

Note: Due to a lack of observer and logbook data, precise haul information is unavailable. As a proxy, landings from inside ADF&G Statistical Areas 605503 and 605504 were labeled as "inside Sea Lion Rocks." All other 610 pollock landings were considered "outside" this haulout zone. Source: NMFS

**Table 2: Pollock Landings (metric tons) Inside 10 nm of Proposed Mitrofania Haulout Closure in Area 620 (NMFS Central Gulf Groundfish Area)**

Year Mitrofania (620) Total Quota (620) Percentage in Area 620

1988 0 3,749 0.0%

1989 0 13,175 0.0%

1990 0 4,574 0.0%

1991 0 5,474 0.0%

1992 12 15,364 0.1%

1993 0 24,161 0.0%

1995 717 11,762 6.1%

1996 184 11,723 1.6%

1997 4,510 31,640 14.3%

1998 6,759 52,430 12.9%

Note: Due to a lack of observer and logbook data, precise haul information is unavailable. As a proxy, landings from inside ADF&G Statistical Area 585531 were labeled as "inside Mitrofania." All other 620 pollock landings were considered "outside" this haulout zone. Source: NMFS

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