

MEMORANDUM

TO: Council, SSC and AP Members

FROM: Chris Oliver *Chris*
Executive Director

DATE: September 24, 2002

SUBJECT: Steller Sea Lion Management Measures

ESTIMATED TIME 4 HOURS

ACTION REQUIRED

- (a) Receive update on litigation
- (b) Final action on two trailing amendments
- (c) Final action on Cape Sarichef closure

BACKGROUND

Litigation

In October 2001, the Council adopted a suite of fishery and area specific measures to mitigate potential impacts of pollock, cod, and mackerel fisheries. This suite of measures was deemed to avoid jeopardy and adverse modification of critical habitat for Steller sea lions in the October 19, 2001 Biological Opinion, which is being challenged in US district court (*Greenpeace, American Oceans Campaign, and Sierra Club vs. NMFS*). The plaintiffs allege that the biological opinions do not "adequately discuss or address" key factors relevant to the Endangered Species Act's jeopardy and adverse modification of critical habitat standards, and that the biological opinions' determinations that the fisheries are sufficiently protective of Steller sea lions and their critical habitat are arbitrary and capricious, unlawful, and an abuse of discretion. A court hearing with Judge Zilly is scheduled for October 30.

Trailing Amendments

In October 2001, the Council adopted alternative 4 of the draft Supplemental Environmental Impact Statement (SEIS) as its final preferred alternative to protect Steller sea lions, with only minor modifications and clarifications. The Council also identified eight items to be analyzed in a trailing amendment, for possible implementation in the 2003 season (Item C-2(a)).

At the February meeting, the Council voted to move ahead with analysis of two trailing amendments, items #7 and #9 (the AI pollock fishery allowance, and the Board of Fisheries exemptions). All of the other items, with the exception of item # 4 (exemption for all vessels < 60') would be sent to the sea lion committee for their review and recommendations. In April, the Council requested that the sea lion committee also consider

possible season date changes for the GOA pollock and cod fisheries. The sea lion committee has not yet met to discuss possible tradeoffs that may be required to implement any of these options and still avoid jeopardy and adverse modification of Steller sea lion habitat.

In June, the AP reviewed the analysis for the two trailing amendments, and recommended adoption of Alternative 1 (no action on AI pollock) and Alternative 5 (exempt pot vessels). Their minutes are as follows:

The AP recommends Alternative 1 - no action. The analysis states "Alternative 1 would not jeopardize the continued existence of the SSL or adversely modify critical habitat." The AP believes that if there are concerns with the status of the pollock stocks, those should be dealt with under the annual TAC setting process, as has been done in the past. *Motion passed 13/1.* Additionally, the AP recommends the Council adopt Alternative 5, Exempt pot fishing vessels from sea lion closures from 0-3 nm around Canton Island and Cape Barnabas. *Motion passed 14/0*

At this meeting, the Council will make a final review of the analysis (executive summary attached as Item C-2(b)). The analysis examined five alternatives. Alternatives 1 to 3 are mutually exclusive and Alternatives 4 and 5 are mutually exclusive. However any of Alternatives 1 to 3 may be chosen in combination with either Alternative 4 or 5.

Aleutian Islands pollock

Alternative 1: Allow an AI pollock fishery with split season outside of critical habitat, with 40% of the TAC from January 20-June 10, and 60% of the TAC from June 10-November 1.

Alternative 2: Closure of the AI to pollock fishing.

Alternative 3: Allow an AI pollock fishery with a single season outside of critical habitat.

Caton Island-Cape Barnabas Pacific cod pot

Alternative 4: No exemption for vessels using pot gear.

Alternative 5: Exempt pot fishing vessels from sea lion closures from 0-3 nm around Caton Island and Cape Barnabas.

Cape Sarichef closure

NMFS has prepared an analysis of a regulatory amendment to close approximately 130 square miles of waters north of Unimak Pass to groundfish fishing during the last two weeks of March during the years 2003-2006 (executive summary attached as Item C-2(c)). The reason for this action is that NMFS Alaska Fishery Science Center is planning to conduct an experiment to test for measurable localized depletion of Pacific cod due to bottom trawling. Copies of the analysis were distributed in early September. Final action at this meeting is necessary to complete rulemaking in time for the experiment to be conducted this coming spring. Alternatives examined in the analysis are as follows.

Alternative 1: Status quo/no action.

Alternative 2: Close the treatment area to all trawling between March 15 and March 30.

Alternative 3: Close the treatment area to all trawling, longlining, and fishing with pots between March 15 and March 30.

NMFS staff will be on hand to discuss the experiment and the analysis of impacts.

Items for a trailing amendment:

1. Area 8 exemption: allow catcher vessels (of any LOA) using longline gear to fish 3-10 nm from haulouts of Reef-Lava and Bishop Point.
2. Area 4 exemption: allow vessels under 60 feet LOA using fixed gear to fish in waters of the Chignik area.
3. Stand down provisions between A/B and C/D seasons for pollock in the GOA
4. Exemption for all longline, pot, jig gear, and trawl catcher vessels and catcher processors under 60 ft. Identify as a preliminary preferred alternative that the exemption would only apply to catcher vessels.
5. Examine options for a Gulf of Alaska Pacific cod split other than the current 60/40 split.
6. For the BSAI Atka mackerel fishery, analyze options to change percentage inside/outside critical habitat of 50/50 and 70/30.
7. For the Aleutian Islands pollock fishery, examine three options:
 - a) closure;
 - b) a single season outside of critical habitat;
 - c) a split season (40/60 % of TAC).
8. In Area 9, analyze a range of caps for pot, longline and jig gear.
9. (December 2001 addition). The Board of Fisheries modifications.

Comparison of measures adopted by the Council and by the Board of Fisheries.

<u>Area</u>	<u>Council Action</u>	<u>Board Action</u>
Cape Barnabas	0-3 nm open to jig gear	0-3 nm open to jig gear
	0-3 nm closed to trawl & fixed gear	0-3 nm open to pot gear
Caton Island	0-3 nm open to jig gear	0-3 nm open to jig gear
	0-3 nm closed to trawl & fixed gear	0-3 nm open to pot gear
Chignik Area	Open State waters cod fishery seven days after closure of directed Federal season in Central Gulf	open state fishery on March 1

EXECUTIVE SUMMARY

Introduction

This EA/RIR/IRFA assesses the likely impacts of changing existing restrictions on the Aleutian Islands pollock fishery and modification of the Steller sea lion (SSL) protection measures around Caton Island and Cape Barnabas in the Gulf of Alaska (GOA) to mirror changes by the Alaska State Board of Fish (BOF). Without taking action for the Aleutian Islands pollock fishery, the current closure of this fishery would sunset on January 1, 2003, and the fishery would be authorized outside critical habitat with a 40/60 seasonal apportionment of total allowable catch (TAC). The Council intends to reconsider the allowance for an Aleutian Islands pollock fishery under a range of alternatives. Council response to the BOF action is important because federal and State regulations concerning Steller sea lion protection areas currently are in conflict.

Environmental Assessment

The objectives of this action are to provide for access to fisheries while: (1) maintaining protection for the western distinct population segment (DPS) of Steller sea lions (i.e., avoid jeopardy to the western DPS of Steller sea lions or result in the destruction or adverse modification of its critical habitat), (2) avoid unnecessary burdens on the fishing industry, and (3) avoid confusion and regulatory compliance issues by facilitating consistency between federal and state regulations. Any changes to the pollock, Pacific cod, or Atka mackerel fisheries must not erode Steller sea lion protection measures in order to provide economic benefits to the fishing industry without having reasonable mitigation measures such as other closure areas.

Alternatives 1-3 deal with the Aleutian Islands pollock fishery, while Alternatives 4 and 5 deal with Pacific cod pot fishing in the Gulf of Alaska. Alternatives 1-3 are mutually exclusive, as are Alternatives 4 and 5. However, either one of Alternatives 1-3 may be chosen in combination with either Alternative 4 or 5.

Alternative 1. No action alternative for the Aleutian Islands pollock fishery. Under this alternative, the Council's October 2001 recommendation to allow a directed fishery for pollock outside SSL critical habitat in 2003 and beyond would be implemented. The Aleutian Island total allowable catch (TAC) would be apportioned as follows: 40% to the A season and 60% to the B season.

Alternative 2. Continue to prohibit a directed fishery for pollock in the Aleutian Islands Subarea in 2003 and beyond. A directed fishery for pollock in the Aleutian Islands subarea has been prohibited since 1999.

Alternative 3. Similar to the no action alternative, allow a directed fishery for Aleutian Islands area pollock outside critical habitat. However, the annual TAC would not be seasonally apportioned, thus allowing for the full TAC to be harvested at anytime during the fishing year (likely in the winter time period).

Alternative 4. No action alternative for GOA haulouts. Federally permitted vessels using pot gear for Pacific cod directed fishing would continue to be prohibited from fishing within 3 nm of the Caton Island and Cape Barnabas haulouts.

Alternative 5. Allow federally permitted vessels using pot gear in a directed fishery for Pacific cod to fish within 3 nm of the Caton Island and Cape Barnabas haulouts. This action would provide consistency between federal and state regulations governing fishing restrictions within Steller seas lion protection areas.

NMFS has determined through the Steller sea lion protection measures supplemental environmental impact statement (SSL SEIS) (NMFS 2001a), the associated draft and final biological opinions, and subsequent informal consultation on the BOF action that the implementation of Alternatives 1 or 2, and 4 or 5 would fall under the umbrella of actions that have already been analyzed and comport with both the ESA and NEPA. Further analyses are not warranted. With the exception of Alternative 3, the alternatives considered in this EA would have incremental effects that are sufficiently minor on the spatial and temporal harvest of pollock, Pacific cod, or other groundfish so as to not deviate from the conclusions of the cumulative impact assessment presented in the SSL SEIS.

However, Alternative 3 falls outside of the scope of both the SSL SEIS and the associated biological opinion. NMFS has initially determined that this action may result in adverse effects to Steller sea lions not previously considered and would trigger formal consultation under the ESA. Alternative 3 could increase the intensity of the impacts associated with an Aleutian Islands pollock fishery by not providing for a seasonal distribution of catch outside critical habitat. If consultation resulted in a jeopardy or adverse modification determination, a mitigating reasonable and prudent alternative (RPA) would be included as required under the ESA. Such an RPA could be a seasonal apportionment of TAC as already adopted under the no action alternative (Alternative 1). Assuming these mitigating measures, neither the state nor federal fisheries would be likely to cause cumulative effects beyond those described in the SSL SEIS.

Regulatory Impact Review

Alternative 1 is the status quo/no action/baseline alternative. This would allow pollock fishing outside of critical habitat in the Aleutians Islands area. Fishing would be subject to a seasonal restriction - 40% of the TAC could be taken from January 20 to June 10, and 60% of the TAC could be taken between June 10 and November 1. Since this is the baseline alternative, impacts on the resource, benefits, and costs were not estimated separately for this alternative. The impacts on the resource, benefits and costs of Alternatives 2 and 3 were measured as differences from Alternative 1. Alternative 1 would not jeopardize the continued existence of the Steller sea lions or adversely modify critical habitat. It would not reduce the burden on the industry. This alternative would not trigger E.O. 12866 significance criteria.

Alternative 2 would close the directed pollock fishery in the Aleutian Islands. This would reduce the pollock harvest in the Aleutians, although harvests of pollock in the Bering Sea, or of other species in the Bering Sea and Aleutian Islands, might increase. The reduction in the harvest in the Aleutians may benefit the Steller sea lions there, however the benefits, if any, are likely to be small. There is no jeopardy or adverse modification now under the status quo. Moreover, the reduction may be offset by an increase in the harvest of another species in the BSAI, and this may offset the benefits. Total costs of a shutdown could reach \$16 million - the value of the TAC if fully taken under Alternative 1. However, costs are unlikely to be this high since they may be offset by increased harvests of pollock or other species elsewhere, and because, given critical habitat and seasonal limits on harvests under Alternative 1, fishermen might have trouble harvesting the full TAC. This alternative would not meet the program

objectives of reducing the burden on the industry and may not bring about any change in protection to Steller sea lions. This Alternative would not trigger E.O. 12866 significance criteria since the maximum revenue impact is likely to be \$16 million at the outside.

Alternative 3 would permit fishing for pollock outside of critical habitat and would lift the seasonal constraint on this fishing. Under this alternative, harvest is likely to become concentrated in the first part of the year. This would have a benefit to the industry because pollock have more value at that time. This benefit may be as large as \$5.9 million. On the other hand, Alternative 3 could increase the intensity of the impacts associated with an Aleutian Islands pollock fishery by not providing for a temporal dispersion of catch outside critical habitat. Implementation of this action would likely result in a re-initiation of formal section 7 consultation under the ESA. If any re-initiation of consultation resulted in a jeopardy determination, a mitigating reasonable and prudent alternative would be included as required by the ESA. Alternative 3 would achieve the objective of relieving the burden on the fishermen, but as noted, it might contribute to jeopardy and adverse modification. This alternative would not trigger E.O. 12866 significance criteria since the maximum revenue impact is likely to be \$5.9 million at the outside.

Alternative 4 is the status quo/no action/baseline alternative for GOA haulout restrictions. Under this alternative, Pacific cod pot fishermen in the GOA could not fish within three nautical miles of haulouts at Caton Island and Cape Barnabas. Since this is the baseline alternative, impacts on the resource, benefits, and costs were not estimated separately for this alternative. The impacts on the resource, benefits and costs of Alternative 5 were measured as a difference from Alternative 4. This alternative would not jeopardize the continued existence of the Steller sea lions or adversely modify critical habitat. It would not reduce the burden on the industry. This alternative would not trigger E.O. 12866 significance criteria.

Alternative 5 would allow federally permitted vessels used to participate in the GOA Pacific cod pot fishery to fish within three nautical miles of the haulouts at Caton Island and Cape Barnabas. This would reduce the Pacific cod revenues placed "at risk" by the restrictions of Alternative 4 by up to \$63,000. This in fact overstates the likely size of the net benefits, because the areas in question are small parts of larger fishing areas, and fishermen may currently be making up a large part of the harvest foreclosed by the restrictions by fishing elsewhere. Alternative 5 is not believed to create jeopardy for the Steller sea lions or adversely modify its critical habitat. This alternative would not trigger E.O. 12866 significance criteria since the maximum revenue impact is likely to be \$63,000 at the outside.

Initial Regulatory Flexibility Analysis

Alternatives 1 through 3 affect the Aleutian Islands pollock fishery. Many of the entities in this area have gross revenues large enough to make them large entities, or are affiliated with other entities (such as processors or AFA fishing cooperatives) that do. It was estimated that, of 140 entities, 12 were small. The small entities included one AFA catcher vessel delivering to a mothership only, five AFA catcher vessels delivering to catcher/processors, and six CDQ groups. Alternatives 4 and 5 affect Pacific cod pot vessels fishing within three miles of Caton Island and Cape Barnabas during the State's parallel groundfish fishery. It was estimated that there were six of these, and that they were all small for RFA purposes.

Aleutian Islands pollock Alternative 2 may adversely impact six catcher vessels and six CDQ groups in comparison with the "status quo/baseline/no action" Alternative 1. However, at its greatest, the Aleutian

TAC would be very small compared to the Eastern Bering Sea TAC, fishing operations precluded from fishing within critical habitat may not be able to harvest a large part of it if it is available, and closure of directed fishing may be offset by increased pollock TACs elsewhere. However, without more information on how the TAC freed up by eliminating directed pollock fishing in the Aleutians would be used under the BSAI optimal yield (OY) ceiling, it is impossible to know for sure if Alternative 2 would have a significant impact on small entities. If an adverse impact results, it likely would be small.

Aleutian Islands pollock Alternative 3 has no adverse impacts on small entities in comparison with the "status quo/baseline/no action" Alternative 1. Alternative 3 lifts seasonal restrictions on trawl fishing for pollock in the Aleutian Islands and is expected to result in the pollock harvest being taken during the high valued winter fishery.

The Caton Island/Cape Barnabas Alternative 5 has no adverse impacts on small entities in comparison with "status quo/baseline/no action" Alternative 4. Alternative 5 lifts restrictions on fishing with pots for Pacific cod and provides small entities somewhat more flexibility. It is not clear if lifting the restrictions will increase revenues or reduce costs for these operations significantly. These operations have other inshore areas nearby - including within the same State of Alaska statistical reporting areas - within which they could fish. The volumes of fish taken from these areas in the past are modest compared to overall harvests from other Alaska inshore waters in those areas.

The EA/RIR/IRFA analyzed two options that may be less burdensome for directly regulated small entities in the Aleutian Island pollock fishery. Under Alternative 3 the seasonal restriction on harvests from the pollock fishery would be lifted, and it is likely that almost all of the harvest would be taken in the first half of the year, and probably in February and March when the roe quality is highest. While this would increase the value of the TAC for the industry, it would increase the concentration of the fishery in time. This may impose important costs if it jeopardizes the continued survival of the western DPS of Steller sea lions. As noted in Section 2.8 of this EA/RIR/IRFA,

"Alternative 3 could increase the intensity of the impacts associated with an Aleutian Islands pollock fishery by not providing for a seasonal distribution of catch outside critical habitat. Implementation of this action would likely result in a re-initiation of formal section 7 consultation under the ESA ... if any re-initiation of consultation resulted in a jeopardy determination, a mitigating reasonable and prudent alternative would be included as required by the ESA "

Alternative 5 might be less burdensome for some small Pacific cod pot fishing vessels in the Gulf of Alaska. These would have somewhat more area to fish in during the State parallel fishery.

EXECUTIVE SUMMARY

This Environmental Assessment/Regulatory Impact Review/Initial Regulatory Flexibility Analysis (EA/RIR/IRFA) reviews the potential impacts of a regulatory amendment to permit a sea lion fishery interaction experiment on the north side of Unimak Pass in the eastern Aleutian Islands. This amendment will be proposed in September 2002. The experiment described in this document has been through initial design and feasibility stages without changes to fishing regulation. The regulatory amendment for this experiment will apply to the study area each March 15-31 from 2003-2006 and will expire after 2006.

Environmental Assessment (EA)

The goal of the experiment is to evaluate the effects of commercial trawl fishing on Pacific cod (*Gadus macrocephalus*), which aggregate over spawning grounds in the Aleutian Islands and eastern Bering Sea during winter months and form an important component of the winter diet of Steller sea lions. The main effort of the study is focused around an experiment designed to test the localized depletion hypothesis, that commercial fisheries may adversely affect Steller sea lions by localized depletion of sea lion prey. Coupled with this experiment are studies on cod spawning habitat, behaviors, and seasonal movement. Expanded knowledge of Pacific cod spawning habitat and behavior is needed to define potential interactions of cod fisheries with sea lions, and may also improve stock assessment modeling and management of this species.

The localized depletion study is designed as a comparison between sites within the area subject to intensive seasonal trawling and "control" sites within a nearby zone where trawling is prohibited. Current regulations prohibit directed trawling for walleye pollock or Pacific cod within 10 nautical miles (nm) of specified Steller sea lion rookery and haulout sites, including Cape Sarichef on the northeastern tip of Unimak Island. The study area selected for the local abundance experiment includes the outer portion of the Cape Sarichef no-trawl zone and the open trawling grounds just outside this boundary. A regulatory amendment is requested due to the incompatible nature of trawling and fixed-gear fisheries. NMFS will need to collect pot-fishing data within the trawled zone in March, after the most intensive part of the season. The proposed regulatory amendment would prohibit trawl fishing in an experimental area of approximately 130 square miles during March 15 to 31 of each year (2003 through 2006).

The purpose of this EA/RIR/IRFA is to assess the impacts of establishing a such a ban on trawl fishing in the study area north of Unimak pass. This EA addresses potential impacts of changes in the distribution of groundfish harvest on target groundfish species, higher trophic level species, Endangered Species Act (ESA) listed species, marine habitat, other predators and prey. In aggregate these impacts constitute an evaluation of the environmental impacts of the proposed regulatory amendment. This RIR/IRFA will also discuss potential socioeconomic impacts of the proposed action. The proposed action considered under this EA would not affect allowable groundfish harvest amounts, but may change trawl fishing patterns for the two-week duration of the closure.

Federal actions in the study area require consultation under section 7 of the Endangered Species Act (ESA). Feasibility and pilot stages of the study have been carried out under scientific research permit 2002-06, which concluded that these activities were not likely to have an adverse affect on Steller sea lions. The effects of the proposed action (closure) on listed species are discussed in section 3 of this EA.

Regulatory Impact Review (RIR)

The Regulatory Impact Review (RIR) provides a cost benefit analysis of this action, identifying and summarizing the tradeoffs associated with the alternatives. The RIR is required under Presidential Executive Order (E.O.) 12866 (58 *FR* 51735; October 4, 1993).

The most important fleet segment in this statistical area in the second half of March in recent years (1998-2001) has been medium sized (60-125 foot) bottom trawlers targeting Pacific cod and delivering them to shoreside processors. The relative size of this fleet decreased, however, during this period. Vessels of this description harvested 78% of the groundfish from the statistical area in 1998, but (although the largest number of active vessels remained bottom trawlers) their share declined to 31% of the harvest in 2001. This decline was paralleled by an overall decline in harvests from this area over the period. It was, in fact, the decline in the harvests by this class of vessel which accounted for most of the decline in overall harvest from the area.

The smaller numbers of vessels in 2000 and 2001, and potential confidentiality issues, make it difficult to characterize the changes in the fleet. However, as harvests by the vessels described above declined, harvests by vessels with other characteristics became relatively more important. Catcher-processors became more important in 2000 and 2001. Pot gear, in particular became important in 2001, accounting for a third of the harvest that year. Harvests from vessels targeting Pacific cod declined somewhat, but remained high.

The first wholesale value of production from this statistical area in the second half of March ranged between \$1.24 and \$2.67 million dollars per year over the period. Catcher vessels, which were the largest producing segment in the fishery, delivered their product to Akutan, Unalaska/Dutch Harbor, and King Cove. The first wholesale value of deliveries to these ports ranged between \$860,000 in 2001 and \$2.55 million in 1999. Most of the vessels active in the fishery were owned by persons in Washington and Oregon. Some were owned by persons in Alaska, California, and Maine.

Alternative 1 is the status quo and no action alternative. It is used here as the baseline against which to compare the other alternatives.

Alternative 2 will close the treatment area to all trawling between March 15 and March 31. This will protect the statistical power of the experiment. Results have a greater likelihood of being useful for management decision making. The cost of experimental pot losses due to trawl-pot conflicts may be lower. Vessels are expected to shift most of their fishing effort elsewhere. They may have increased costs due to the additional travel time required to fish somewhat further from Akutan, Dutch Harbor or King Cove. Revenue losses are expected to be minor. Community impacts, and impacts on minority and low income communities are also expected to be minor.

Alternative 3 will close the treatment area to all trawling, and to longlining and fishing with pots, between March 15 and March 31. This alternative has benefits similar to those for Alt 2. In addition, this alternative may prevent an influx of pot and longline gear into the treatment area while the trawl gear is restricted. An influx of pot, and particularly of longline, gear may distort the harvest rates obtained from the experimental pots. Large removals during the period could result in decreases in local abundance that would be interpreted as a trawl effect. This alternative has costs similar to those for trawlers under Alt 2. The potential for cost and revenue impacts is increased due to the restriction on pot

and longline gear. Total cost and revenues impacts are still expected to be small, as are community impacts, and impacts on minority and low income communities.

Initial Regulatory Flexibility Analysis (IRFA)

The Initial Regulatory Flexibility Analysis (IRFA) examines the adverse impacts on small entities of the regulatory action. This IRFA is responsive to the requirements of the Regulatory Flexibility Act (5 U.S.C. 601-612).

The small entities that would be impacted by this action include the catcher vessels and catcher-processors fishing in the treatment area between March 15 and March 31. An estimated 21 to 56 of these entities operated in Alaska statistical area 655430 (which contains the treatment area) between 1998 and 2001, depending on the year. These small entities had average annual gross revenues of between \$1.02 and \$1.63 millions of dollars a year between 1998 and 2001. Their average gross revenues from within statistical area 655430 in late March ranged from \$10,505 to \$18,850 during the same four year period. These statistical area 655430 revenue estimates provide high upper bounds for the actual expected impacts on these fishing operations.

The adverse impacts of the proposed action on these operations will be small. The average gross revenues from this statistical area are obviously small compared to overall gross revenues over the course of the year. The treatment area itself, which is the only area affected by the regulations, is only one part of the statistical area, and a significant amount of the fishing activity by these vessels appears to be taking place within the statistical area, but outside of the treatment area. It appears likely that these vessels will be able to alter their operations to continue their fishing activity elsewhere in late March. Thus, even if the average gross revenues reported above were averages for the treatment area, it is likely that they would overstate the total adverse impact of the rule on the small entities. These operations will have to fish elsewhere and this may increase their costs, or reduce their overall revenues. One likely potential fishing area, to the northeast of the treatment area, would involve increased traveling time to and from the support and delivery ports at Akutan, Unalaska, and King Cove. This would be associated with some increased costs.

This action does not change the projected reporting, record keeping and other compliance requirements for these entities. It does not duplicate, overlap, or conflict with other Federal rules.



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TO: James W. Balsiger, Administrator, Alaska Region
National Marine Fisheries Service
P.O. Box 21668
Juneau, Alaska 99802-1668

CC: David Benton, Chairman
North Pacific Fishery Management Council
605 West 4th Avenue, Suite 306
Anchorage, AK 99501-2252

September 24, 2002

RE: Aleutian Islands Pollock

Dear Dr. Balsiger:

This letter is to address NMFS responsibility to maintain existing closures for AI pollock fishing. Jim, it would be irresponsible to reopen these fisheries without a thorough analysis of the impact of such an action. We urge you to advise the Council on this matter and resolve to maintain the closures.

Oceana is writing in response to the draft EA/RIR/IRFA on the Sea lion trailing amendments, released on May 8, 2002, for public review. Specifically, we wish to address the proposed Alternatives 1, 2, and 3 for the Aleutian Islands pollock fishery. The Council voted to close the Aleutian pollock fishery to directed fishing in 1998, citing declining stock trends, large uncertainties in the available information, and indications of serial stock depletion in the pattern of fishing from east to west during the 1990s. We urge you to support the continued closure of the Aleutian pollock fishery to directed fishing as proposed in Alternative 2, pending better scientific information, clear indications of pollock stock rebuilding, and resolution of issues related to the ESA-required mitigation measures for Steller sea lions in the Aleutian Islands.

No new survey information on Aleutian Islands pollock was available for the 2002 stock assessment because there was no new survey information in 2001. Uncertainties about the discreteness of the Aleutian Islands pollock stock and its relation to the other pollock stocks abound. The stock assessment advice acknowledges that the status and dynamics of this stock are not well understood, that catch-age data is limited, and that reliable estimates do not exist for the Aleutian portion of the pollock stock.¹ We are very concerned about the arbitrary determination of F_{MSY} , B_{MSY} , $F_{40\%}$ or $B_{40\%}$ for Aleutian Island pollock stocks considering this high degree of uncertainty.

¹ Ianelli et al., 1999. BSAI SAFE Report for 2000, November 1999, pp. 115-116.


Jim Ayers, Oceana
September 24, 2002

I think we agree that there is no significant information that reopening would improve the Steller sea lion situation. In fact, I have not seen any scientific basis for recommending that the re-opening of the fishery as proposed will avoid jeopardy or adverse modification of critical habitat.

Finally, the temporal and spatial concentration of the Aleutian pollock fishery in Steller sea lion critical habitat during the 1990s must be addressed. Although pollock may not be the top-ranked sea lion prey in the Aleutians, it is an important component of prey diversity and has been a known food source of Steller sea lions and large cetaceans in the past. The ongoing litigation over the efficacy and legality of the mitigation measures recommended by the Council-appointed Steller sea lion RPA Committee in 2001 (as adopted by NMFS in the 2001 RPA Biological Opinion) should be clearly resolved before a decision is made to re-open the fishery.

For these reasons, we urge you to take a strong position disallowing the opening of directed fishing for AI pollock until there is far more information and scientific research to support such an action.

Sincerely,


Jim Ayers, Director
Oceana, North Pacific Office

**THE OCEAN CONSERVANCY
OCEANA
SIERRA CLUB
NATIONAL ENVIRONMENTAL TRUST**

TO: David Benton, Chairman
North Pacific Fishery Management Council
605 West 4th Avenue, Suite 306
Anchorage, AK 99501-2252

CC: James W. Balsiger, Administrator, Alaska Region
National Marine Fisheries Service
P.O. Box 21668
Juneau, Alaska 99802-1668

September 24, 2002

RE: Aleutian Islands Pollock

Mr. Chairman:

The purpose of this letter is to once again emphasize our support for continuing to maintain the closure of the Aleutian Islands to pollock fishing. This issue arose in the context of the Steller sea lion trailing amendments that were originally scheduled for final action at the Council's June meeting in Dutch Harbor. Since the Council was unable to take up the matter during the allotted time in the June meeting, we appreciate the opportunity to once again address this issue.

We write specifically in response to the draft EA/RIR/IRFA on the Sea lion trailing amendments, released on May 8, 2002, for public review. Specifically, we wish to address the proposed Alternatives 1, 2, and 3 for the Aleutian Islands pollock fishery. The Council voted to close the Aleutian pollock fishery to directed fishing in 1998, citing declining stock trends, large uncertainties in the available information, and indications of serial stock depletion in the pattern of fishing from east to west during the 1990s. We support the continued closure of the Aleutian pollock fishery to directed fishing as proposed in Alternative 2, pending better information, clear indications of pollock stock rebuilding, and resolution of issues related to the ESA-required mitigation measures for Steller sea lions in the Aleutian Islands.

No new survey information on Aleutian Islands pollock was available for the 2002 stock assessment because there was no new survey information in 2001. Uncertainties about the discreteness of the Aleutian Islands pollock stock and its relation to the other pollock stocks abound. The stock assessment advice acknowledges that the status and dynamics of this stock are not well understood, that catch-age data is limited, and that reliable estimates of F_{MSY} , B_{MSY} , $F_{40\%}$ or $B_{40\%}$ do not exist for the Aleutian portion of the pollock stock.¹ Therefore Aleutian Islands pollock falls into Tier 5 of the FMP overfishing definition (Amendment 56) and a fishing mortality rate is set arbitrarily at $F = .75$ of the estimated natural mortality rate (M) as a "conservatism," even though the addition of the fishing mortality nearly doubles the estimated

¹ Ianelli et al., 1999. BSAI SAFE Report for 2000, November 1999, pp. 115-116.

mortality rate for this stock. As a Tier 5 stock, it is not possible to determine whether Aleutian pollock is overfished or whether it is approaching an overfished condition.

Lacking new information and recognizing the uncertainties associated with this "stock," the Plan Team recommended no directed fishing in 2002 in keeping with the North Pacific Council moratorium on directed fishing that began in 1999 due to low stock size. The 2000 Aleutian triennial trawl survey pollock biomass estimate ranged from 20-50% of its value in the early 1980s, when systematic trawl surveys began. Results from the 2000 Aleutian Islands triennial groundfish survey indicated a 16% decline in revised Aleutian Islands/Unalaska-Umnak area (165W-170W longitude) biomass from 158,912 mt in 1997 to 133,366 mt in 2000, and an 11% increase in revised estimates for Aleutian Islands west of 170W long.² Even with the 11% increase in survey pollock biomass west of 170W longitude, however, the stock remained at only about 20% of its 1983 survey biomass.

Finally, the temporal and spatial concentration of the Aleutian pollock fishery in Steller sea lion critical habitat during the 1990s must be addressed. Although pollock is not the top-ranked sea lion prey in the Aleutians, it is an important component of prey diversity and has been a known food source not only of Steller sea lions but of large cetaceans in the past. NMFS has provided no clear scientific basis for concluding that the re-opening of the fishery as proposed will avoid jeopardy or adverse modification of critical habitat. The ongoing litigation over the efficacy and legality of the mitigation measures recommended by the Council-appointed Steller sea lion RPA Committee in 2001 (as adopted by NMFS in the 2001 RPA Biological Opinion) should be clearly resolved before a decision is made to re-open the fishery.

Sincerely,

Kris Balliet

Kris Balliet
Alaska Region Director
The Ocean Conservancy

Jim Ayers *by KB*

Jim Ayers
Director, North Pacific Office
Oceana, Inc. KB

Jack Hession *by KB*

Jack Hession
Alaska Representative
Sierra Club KB

Gerald B. Leape *by KB*

Gerald B. Leape
Director, Marine Conservation Program
National Environmental Trust KB

² Ianelli et al., 2000. Preliminary Draft BSAI Pollock Assessment for 2001 prepared for November Plan Team meeting, Table 1.19, p.87.

PUBLIC TESTIMONY SIGN-UP SHEET FOR
 AGENDA ITEM C-2 SSL Measures

PLEASE SIGN ON THE NEXT BLANK LINE.
 LINES LEFT BLANK WILL BE DELETED.

	NAME	AFFILIATION
1.	Ed Harrison	Political Conservation Cooperative
2.	Ben Enticknap	Alaska Marine Conservation Council
3.	Paul Mae Greger	Off-Shore Processors Assoc.
4.	Paul K...	Cons. of U.S. Fisheries
5.	BRENT PAINE	UCB
6.	Whit Sheard	The Ocean Conservancy
7.	Geoff Shasta	Oceana.
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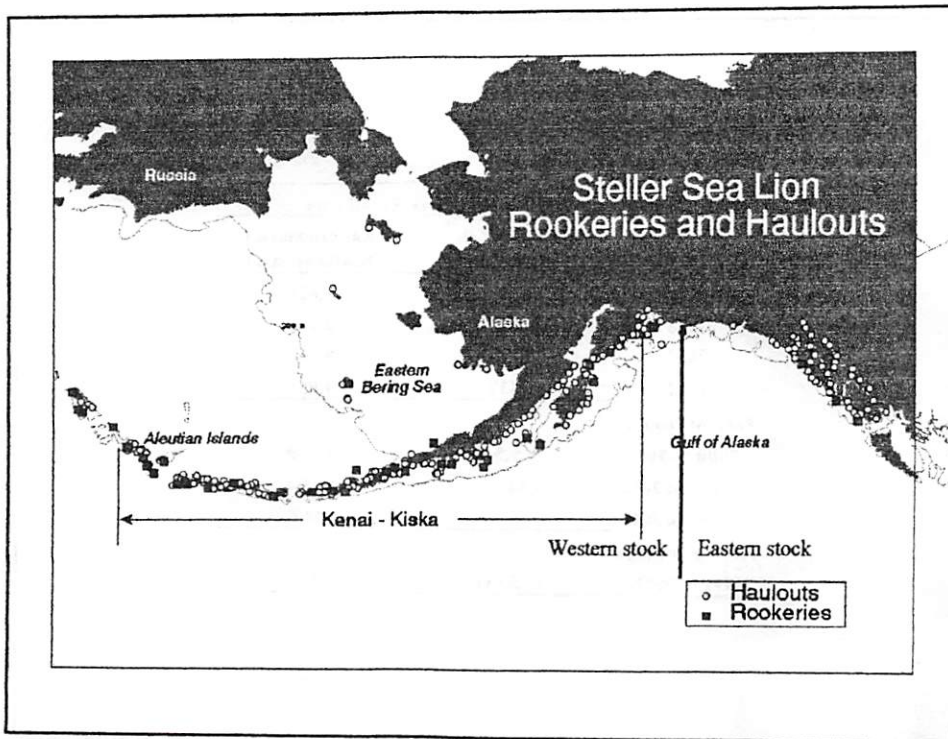
CHAIRS SET TO
 10/10/10
 BOARD
 THAT ARE
 Now.

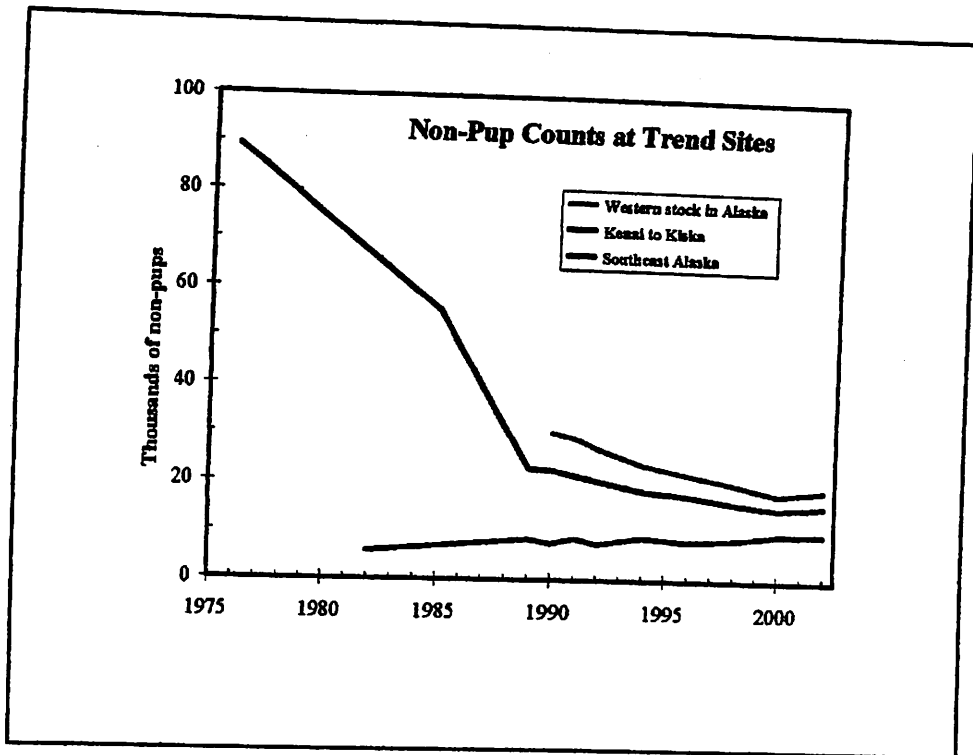
C-2
Dr. Demaster
Presentation

Aerial Survey of Non-Pup Steller Sea Lions - 2002

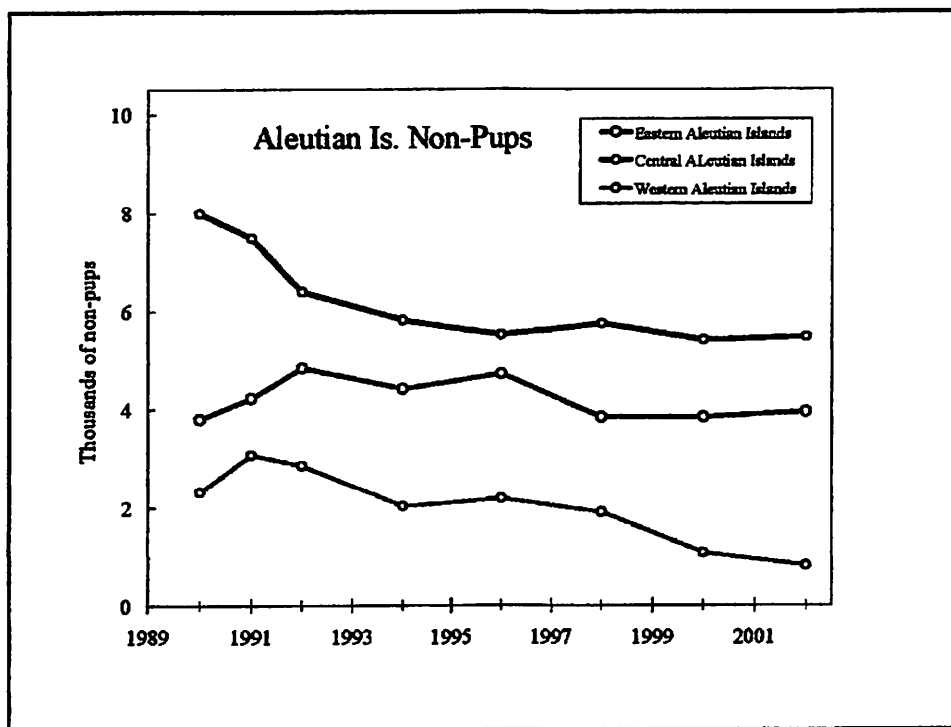
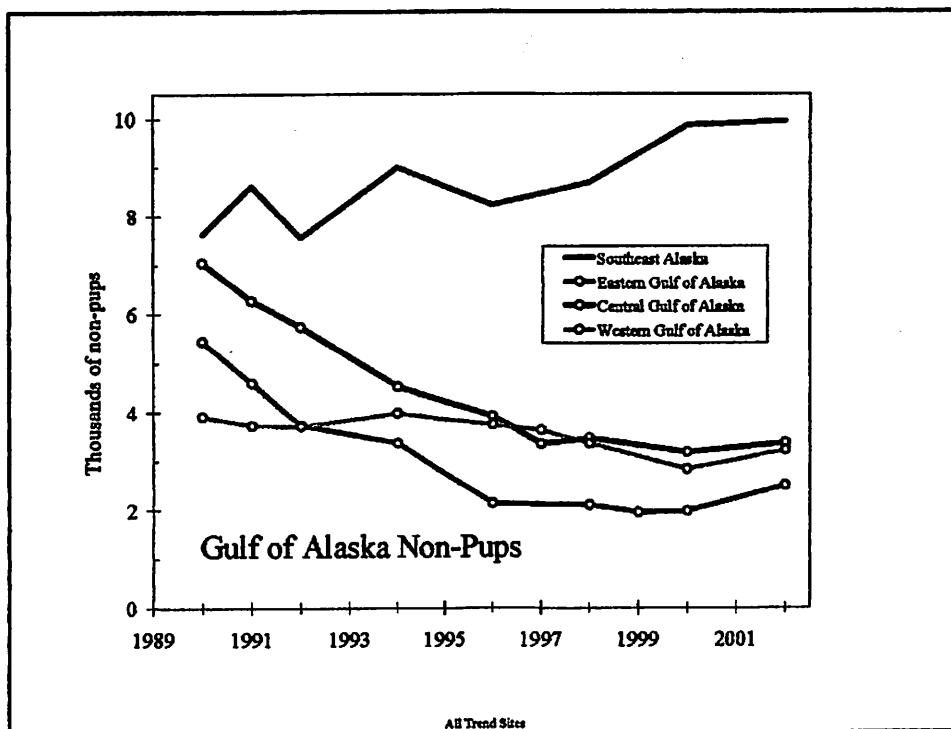
Western Stock (west of 144°W)
AFSC, NMML - 14-25 June

Eastern Stock (Southeast Alaska)
SWFSC - 4-6 July





Year	Non-Pups on Trend sites	
	Western stock in Alaska	Eastern stock (Southeast AK)
1991	29,485	8,621
1998	28,438	8,693
2000	18,325	9,862
2002	19,337	9,951
Percent change		
2000 to 2002	+ 5.5	+ 0.9
1991 to 2002	- 34.2	+ 15.4
1998 to 2002	-5.3	+14.6
Average change		
1991 to 2002	- 4.15 / yr	+ 1.8 / yr



Pup Counts - 2002

Western Stock - AFSC, NMML

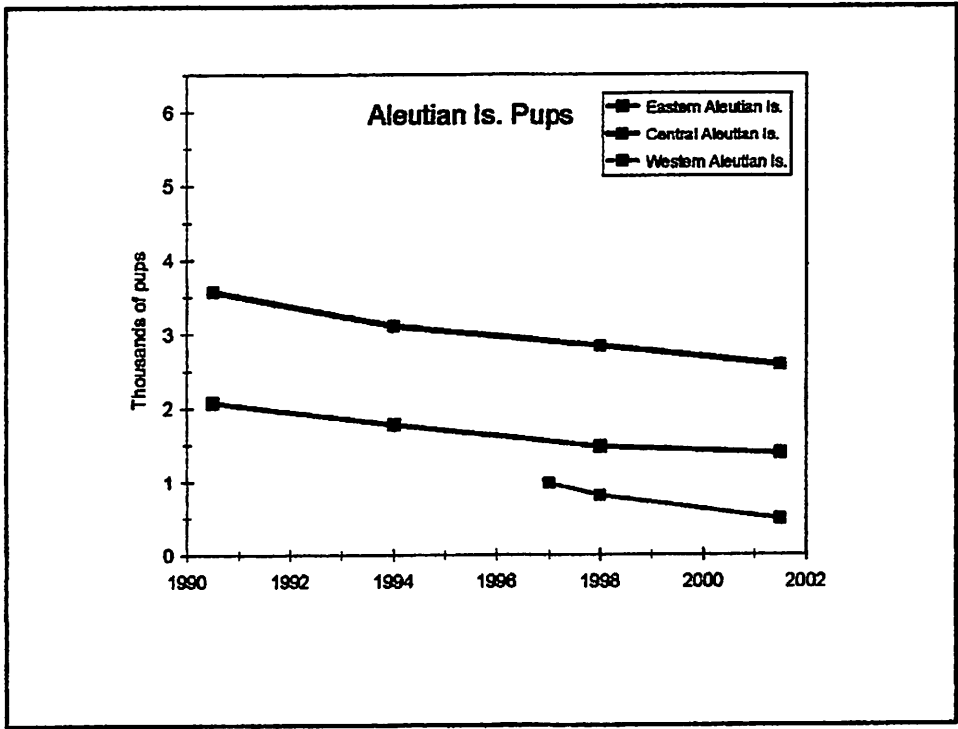
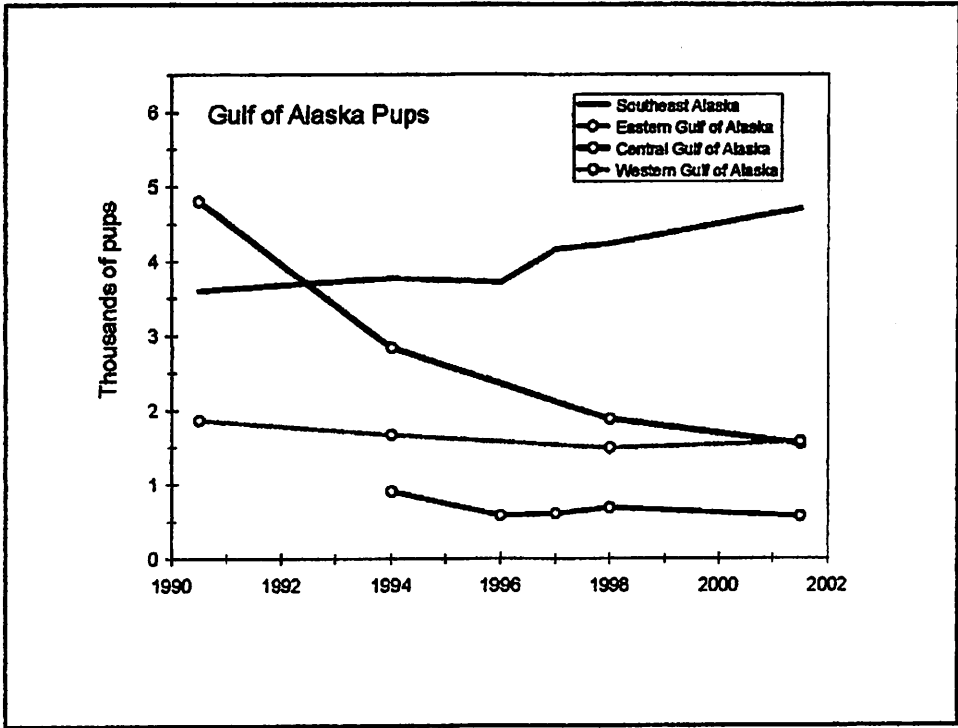
Aleutian Islands - 24 June to 10 July

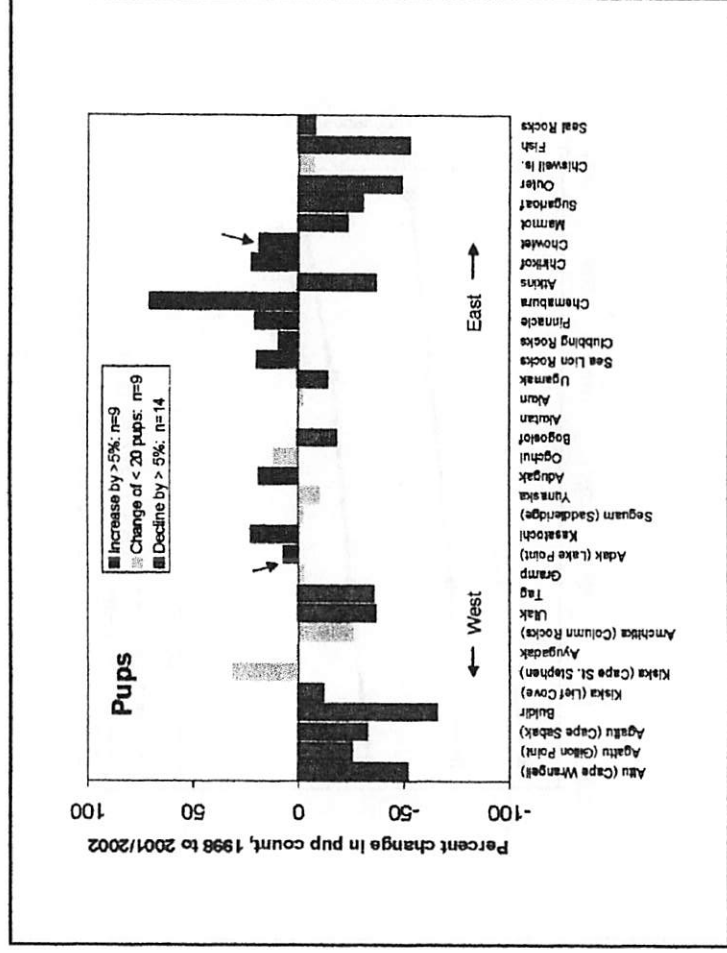
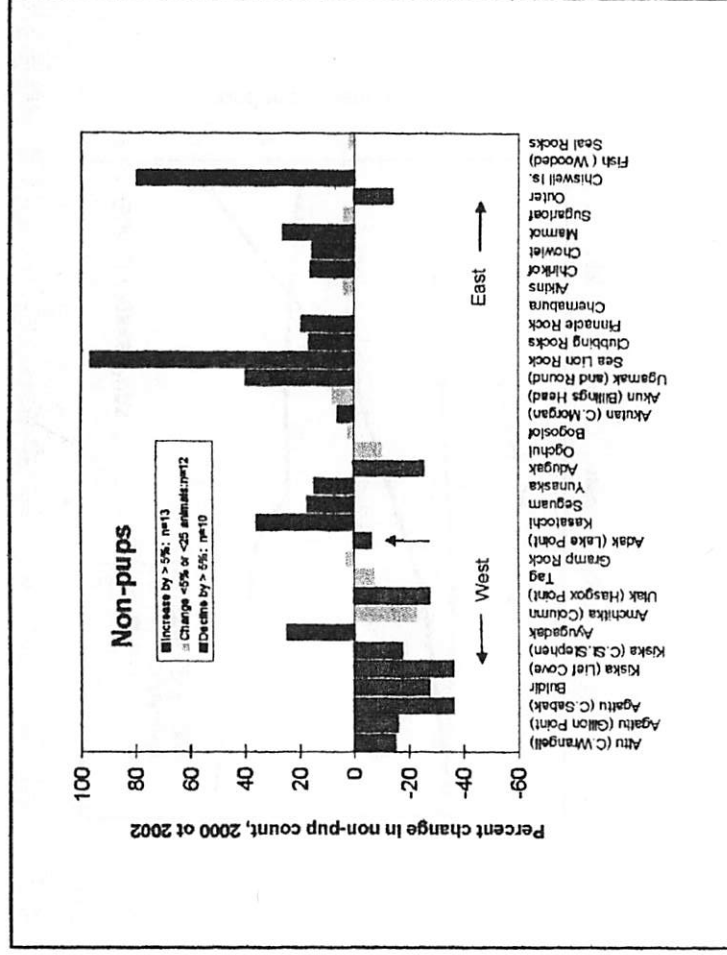
Gulf of Alaska - 24 June to 7 July

Eastern Stock - SWFSC

Southeast Alaska - 4-6 July

Pups	Southeast Alaska	Kenai to Kiska	Western Stock
1990/91	3,600	12,301	
1994	3,770	9,378	
1998	4,234	7,677	9,169
2001-02	4,706	7,080	8,138
Percent change			
1998-2002	+11.1	-7.8	-11.2
1994-2002	+24.8	-24.5	
1990-2001	+30.7	-42.4	
Average change			
1990 to 2002	+ 2.5 / yr	- 5.0 / yr	





**Proposed Trailing Steller
Sea Lion Amendments**

Presentation for the North
Pacific Fishery Management
Council
October 2002

Outline

- Review alternatives
- Summarized effects of Aleutian Islands pollock alternatives
- Summarize effects of the Caton Island and Cape Barnabas Pacific cod pot gear alternatives

Background

- April 2002 - Council initial review. Request NMFS address SSC concerns and do public release of analysis.
- June 2002 - SSC and AP recommendations - final consideration delayed

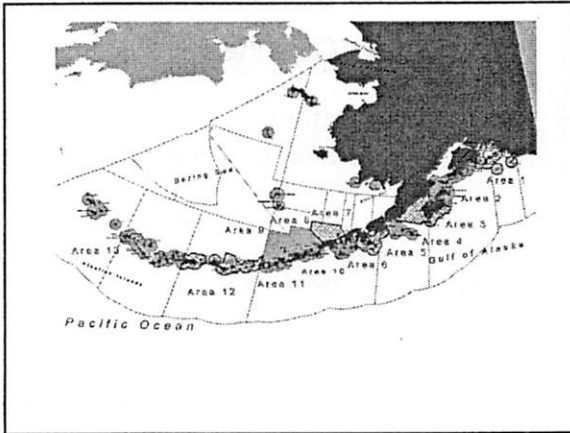
**Aleutian Islands Pollock
(Trailing amendment 7)**

Three Alternatives

- Alt #1 - No action - directed fishery outside critical habitat from 2003 on - 40% A season, 60% B season
- Alt #2 -prohibit directed pollock fishing in Aleutians
- Alt #3 - Allow directed fishery, but no seasonal apportionment of TAC

Annual specifications

- Alt 1 and Alt 3 would both open waters outside critical habitat to pollock fishing
- In each case actual annual OFL, ABC and TAC would have to be determined in the annual specifications process
- These could be set at zero



History of AI Pollock Closure

- Prior to 1999 AI pollock fishery was open
- Typical operations harvested most TAC during winter roe fishery
- Most of the harvest came from within critical habitat
- 1998 BiOp provided RPA framework for spatial and temporal dispersion of pollock fisheries

History of AI Pollock Closure

- Based on RPA, Council recommended and NMFS included closure of pollock fisheries in the AI as Steller sea lion protection measures.
- Implemented by ER 1999 - 2002
- 2001 SEIS and final BiOp included closure in 2002 and seasonal apportioned opening in 2003 and beyond.

Impacts on Steller sea lions

- **Alt 1** - BiOp takes account of this provision and concludes there is no jeopardy or adverse modification
- **Alt 2** - No jeopardy
- **Alt 3** - likely to require reinitiation of consultation under the ESA

Why this conclusion for Alt. #3?

- Eliminates the season restriction
- Potential for concentration of harvest in winter roe fishery
- Season of most concern regarding possible prey depletions for foraging juveniles and lactating females
- Trigger re-consultation - likely jeopardy - probably not adverse modification
- Not considered with current suite of protection measures.

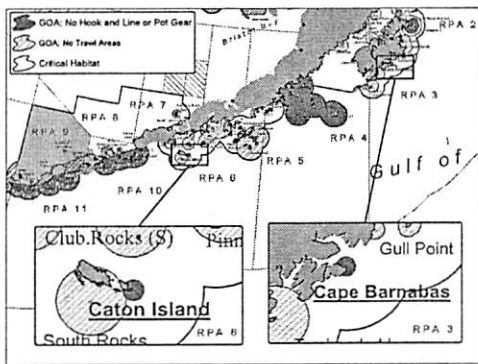
Impacts on gross revenues

- **Alt #1** - Baseline first wholesale pollock gross revenues from Aleutian Islands estimated to be about \$16 million
- **Alt #2** - Closure means a gross revenue reduction of up to \$16 million
- **Alt #3** - End of seasonal restrictions increases gross revenues est. by up to \$5.9 million

Cape Barnabas and Caton Island Pacific cod pot fishing

Two Alternatives

- **Alt #4** - No action - No pot vessels with federal permits fishing for Pacific cod within three miles of Cape Barnabas or Caton Island
- **Alt #5** - Allow pot vessels with federal permits to fish for Pacific cod within three miles of Cape Barnabas and Caton Island



Alt #4 and #5 and Stellers

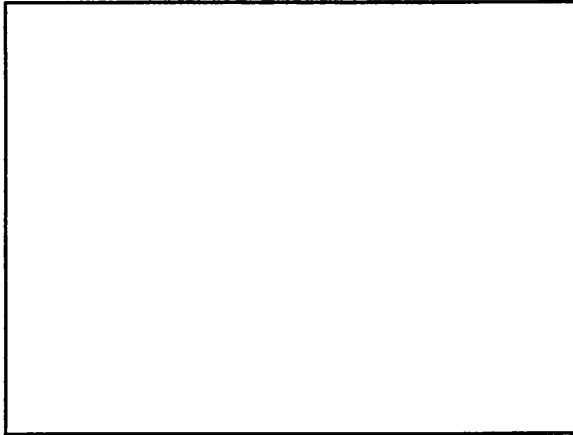
- **Alt 4** - BiOp written for closed area provision concluded no jeopardy or adverse modification
- **Alt 5** - Minimal effects expected on Steller sea lions - informal consultation subsequent to the 2001 BiOp concluded this would not significantly alter the overall level of protection to Steller sea lions

Impacts on gross revenues

- **Alt #4** - First wholesale Pacific cod gross revenues "at risk" from closed areas estimated to be less than \$63,000
- **Alt #5** - Opening areas means gross revenues "at risk" reduced by less than \$63,000

SSC Issues

- Human/Steller sea lion interactions
- Catch as proportion to fish biomass
- Catch histories and distributions
- Impacts on rebuilding SSL population




Sources

- "Draft EA/RIR/IRFA. Proposed Trailing Steller Sea Lion Amendments to Change the Management of the Aleutian Islands Pollock Fishery and to Exempt Pacific Cod Vessels Using Pot Gear From Two Haulout Protection Areas in the Gulf of Alaska." NMFS, Sustainable Fisheries, Alaska Region. May 8 2002. Available at: www.fakr.noaa.gov/npfmc/default.htm

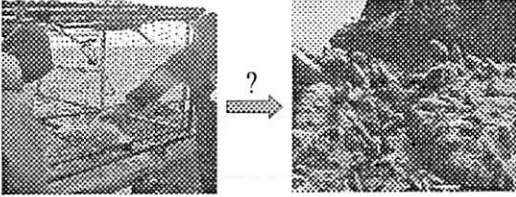
Additional Information

Ben Muse, NMFS,
Sustainable Fisheries Division.
907-586-7234 or
ben.muse@noaa.gov.

C-2c
Liz Connors
Presentation

 AFSC Cod Local Abundance Study:
Proposal for 2-Week Closure at
Cape Sarichef (Unimak Pass)

Alaska Fisheries Science Center Fisheries Interaction Team
Peter Munro, M. Elizabeth Connors, Sardi Neidetcher



Congressional Appropriations for FY 2001	AFSC FY2001 Framework for SSL Research
<p>... coordinated research and recovery program for the Steller sea lion, including...</p> <p>"interactions between commercial fishing and Steller sea lions and the localized depletion hypothesis"</p> <p>H.R. 4690, Sec. 209(a)(2) & 209(d)(4)</p>	<p>"Construct studies associated with commercial fishing that characterize the prey field before, during, and after fishing."</p>

Important - comparative study of local abundance, not a regional stock assessment

Why Cod?

- SSL scat studies show that cod is frequently present in SSL diets in winter
- Cod fishery is federally regulated
- Winter trawl fishery in "cod alley" is highly concentrated in space & time
- Cod can be effectively fished with pots

Why Pots ?

- Consistent index of local abundance (absolute abundance data not needed)
- Lower variance/less skewed than trawl data
- Larger sample size possible per sea day
- Increased power to detect differences between treatment/control groups

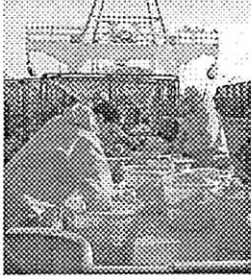
Cod Trawl Fishery
1995 Catch of P. cod by trawl gear



Key Elements of Study Design

- *Replication* over multiple sites within the trawl-exclusion zone ("control") and within the adjacent heavily-trawled area ("treatment").
- Measure pot catch at each site *before* and *after* period of most intense trawl fishing.
- Look at *change in catch rate* from before to after for each site.
- NonParametric test: Do sites in treatment and control areas show the same *change*?

Planned Work for Fall/Winter 2002/2003



Sept/Oct 2002 Gear Trials

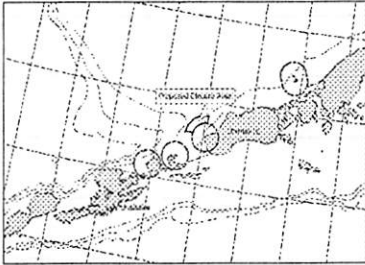
- Finalize gear design and pot-mounted sensors

Winter 2003 Full Experiment

- 14-day "Before" leg Dec-Jan
- 20-day "After" leg late March
- Additional data collection during tagging cruise (Feb ?)

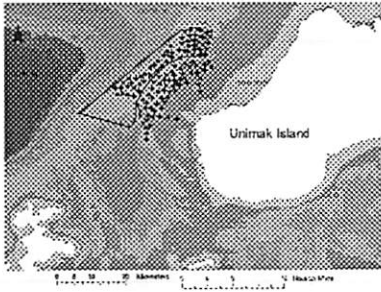
NMFS Cod Fishery Interaction Study

Proposed Area for 2-Week Trawl Closure
Increase existing 10nm no-trawl zone around Cape Sericief to 15 nm,
for the quarter arc from Long 164 9W to Lat 54.6N, between March 15 and 31

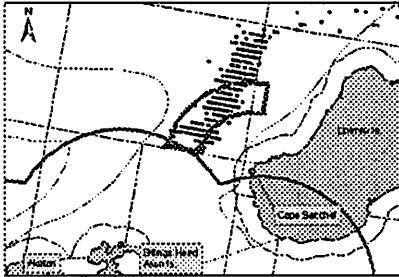


Alternative 4

Bathymetry of Unimak Pass & Possible Pot Locations



**Unimak Pass SSL 20 nm No-Trawl Zones for 1998/2001
and Location of Observed Bottom Trawls in Jan-Apr 2000**

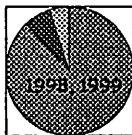


**Active vessels in late March in
Area 655430**

	Non-pelagic trawl	Pot/longline	Other trawl
1998	52	2	13
1999	54	3	7
2000	23	3	10
2001	26	12	1

Table 3 6-1, page 31

**Proportions of groundfish harvest
by species from 655430 in late
March**



Total harvest was 4,469 metric tons in 1998-99
And 2,290 in 2000-01



Table 3 6-2, page 31

Alt 1: No action

- Trawling may destroy experimental pots, reduce sample size, and make it harder to draw inferences from the experiment's results
- No burden on fishing operations that would otherwise have fished in the treatment area

Alt 2: Arc, trawlers only

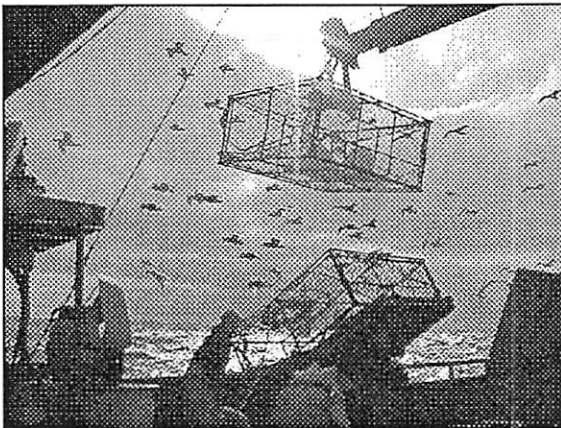
- Increased likelihood of clear results from the survey
- (although increased fixed gear activity may be misinterpreted as a trawl effect)
- Costs imposed on trawlers
- Potential by-catch issues
- Potential trawl/fixed gear conflict in early April

Alt 3: Arc, trawl, longline and pots

- Clear experimental results more likely
- Less potential for trawl/fixed gear conflicts in early April
- Some costs imposed on longline and pot operations
- Costs imposed on trawlers and potential by-catch issues

Alt 4: Modified area, all three gears

- Impact on trawlers in less than Alt 3, also less potential for PSC by-catch issues
- Provides same benefits to experiment as Alt 3 does
- Impacts on longline and pot fishing, are similar to those in Alt 3
- Little potential for April trawl fixed gear conflicts – as in Alt 3.



Source

- EA/RIR/IRFA For a Regulatory Amendment to Provide a Two-Week Trawl Closure Near Unimak Pass to Facilitate an Experiment Investigating the Effects of Commercial Fishing on Local Abundance of Pacific Cod. September 2002.



Alaska Marine Conservation Council

Box 101145 • Anchorage, Alaska 99510
(907) 277-5357 • (fax) 277-5975
amcc@akmarine.org • www.akmarine.org

C-2
Ben
Enticknap

September 30, 2002

TO: David Benton, Chairman
North Pacific Fishery Management Council
605 W. 4th Avenue, Suite 306
Anchorage, AK 99501-2252

RE: Agenda Item: C-2 SSL Trailing Amendments/ Aleutian Islands Pollock

Dear Chairman Benton:

The Alaska Marine Conservation Council (AMCC) submitted this letter to the Council for the June 2002 meeting in Dutch Harbor. However, since the Council postponed this agenda item, AMCC wishes to resubmit our comments at this time.

AMCC is writing in support of Alternative 2 in the Draft EA/RIR/IRFA for the proposed trailing Steller Sea Lion Amendments. Alternative 2 would continue the prohibition of directed pollock fishing in the Aleutians Islands region. In 1998 the Council voted to limit the catch of pollock in this region to bycatch only because of the low abundance of this stock and its importance to Steller sea lions.

“The pollock TAC for the Aleutian Islands area was set at bycatch amounts only (2,000mt) and 1,000 mt for the Bogoslof district. The Council recommended that no directed fishing for pollock occur in these areas given current low abundance and the importance of pollock as prey for Steller sea lions.” December 17, 1998. NPFMC Newsletter #6-98

To this date there is no clear indication that the Aleutian Island pollock stock has rebounded to a healthy and stable population. The 2000 triennial survey estimated the pollock biomass in the Aleutian Region at 105,554 tons, a 13% increase from the 1997 survey¹. However, the 2000 stock biomass is comparatively low to previous years. The 2000 assessment represents a 58% to 79% decline from the pollock biomass in the early 1980's. The current stock estimates do not indicate that Aleutian pollock have recovered from levels of low abundance and it remains that the status of this stock is uncertain.

Additionally, AMCC has become increasingly concerned about the adverse effects of “pelagic” trawls on seafloor habitats. During a presentation to the National Research Council in Anchorage (June 2001) on the effects of trawling on seafloor habitats, a trawl net engineer presented that pelagic trawls make contact with the seafloor - with the net's

¹ NPFMC 2001. BSAI SAFE, November 2001

footrope - up to 85% of the duration of the trawl tow. Some people claim that in the Aleutians (as opposed to the Eastern Bering Sea) there is no intentional contact by the footrope onto the seafloor. Although this may be the case in the Aleutian region, the fact remains that there has been no scientific evaluation of the magnitude of impact induced by pelagic trawls on seafloor habitats. Although pelagic trawls do not contact the seafloor with the trawl doors, the gear still may damage the seafloor and associated biological communities in potentially significant ways. Regarding the effects of trawling and dredging, the National Research Council² states,

“Mobile fishing gears are a major cause for concern because of the size of the affected fishing grounds, the associated modification of the substrate, disturbance of benthic communities, and removal of non-target species. The long-term viability of some fish populations could be threatened if essential fish habitat is degraded.”

The impacts of opening directed fishing for pollock in the Aleutian Region, on the stock itself and the seafloor habitats of the Aleutians are unknown. Due to these uncertainties, we recommend that the Council adopt Alternative 2 in the Draft EA/RIR/IRFA for Steller Sea Lions, upholding the precautionary actions taken in 1998.

Sincerely,



Dorothy Childers
Executive Director

² National Research Council 2002. Effects of Trawling and Dredging on Seafloor Habitat. National Academy Press, Washington D.C. pg 21.

Richardson Testimony — C-2 Steller Sea Lion Trailing Amendment

October 5, 2002

Good Afternoon Mr. Chairman and Members of the Council,

My name is Ed Richardson and I'm here today to testify on behalf of the member companies of the Pollock Conservation Cooperative, an association of seafood companies that catch and process pollock in the Bering Sea and Aleutian Islands.

Mr. Chairman, the member companies of the PCC support ALTERNATIVE ONE (which is the NO ACTION alternative) with regard to the Aleutian Islands pollock fishery. The NO ACTION alternative would allow the fishery to open in 2003 OUTSIDE OF Steller sea lion Critical Habitat and with a 40:60 A-B season split. We support this alternative because it is the alternative that best achieves MS FCMA National Standard One AND the mandates of the ESA with regard to the endangered western stock of Steller sea lions. With adoption of Alternative 1, the maximum pollock ABC in the Aleutian Islands would again be a component of the BSAI ABC schedule that the industry works with to obtain the Optimal Yield from the Alaska groundfish fisheries. As such, fish-stock biology and industry economics (i.e., costs and benefits) again would determine the harvest of AI pollock, but subject to an OUTSIDE-OF-Steller sea lion-critical-habitat constraint intended to safeguard the western stock of SSL.

Mr. Chairman, for the Council and the record, I'd like to provide a very brief summary of research results on SSL foraging ecology and the current status of the Aleutian Islands pollock biomass.

AI SSLs remain within 4 miles of the beach and do not prey on pollock

Source: 2001 BiOp White Papers NMFS and ADF&G; Sinclair and Zepplin

Mr. Chairman, with regard to SSL foraging ecology, although fish remains collected during 1990-1998 from SSL scat on summer and winter sites across the range of the US western stock indicate that walleye pollock and Atka mackerel are the two dominant prey species, data from the Aleutian Islands show a VERY LOW frequency of occurrence of

pollock in scats during both summer and winter. In fact, the frequency of occurrence is almost zero in winter. In the Aleutian Islands, analysis of SSL scats shows a high frequency of occurrence of Atka mackerel, squids and octopus, and salmon, but NOT pollock.

With regard to SSL locations obtained using satellite telemetry, the activities of 24 SSLs were tracked in the Aleutian Islands during 1990-1991 and during 2000. These SSL included 13 adult females, 5 juvenile males, and 6 juvenile females, and tracking occurred for about 40 days on average. The results show that in winter more than 80 percent of the locations of these animals were within four nautical miles of the nearest land mass. For pups and juveniles only, the location data shows that more than 90 percent were within four miles of the nearest land. While the sample size is small, there is no reason to believe that a larger sample would provide different results. Thus, the best available information on SSL predation habits and movement in the Aleutians indicates that during the winter season SSLs remain largely within four miles of the beach and do not prey on pollock to any great extent.

AI Pollock is Healthy and Has Increased Since a Mid- 1990s Low

Source: 2001 BSAI Walleye Pollock Stock Assessment

Mr. Chairman, with regard to the current status of the Aleutian Islands pollock biomass, it should first be noted that the AI stock is not a genetically unique stock that is reproductively isolated from the EBS stock. Rather, it is known that the stock receives its recruits largely in the form of mature individuals that "swim over" from the EBS shelf when they reach age six or older. This view is outlined in Section 1.15 of the 2001 EBS pollock stock assessment, and Figure 1.49 from the assessment shows that BSAI pollock are distributed continuously from the EBS management area into and throughout the Aleutians Islands management area. A seminal article on the biology of walleye pollock by Gary Smith in 1981 also supports this view of eastern Bering Sea pollock stock structure.

The Bering Sea and Aleutian Islands fisheries are dependent on the eastern Bering Sea stock, with the AI TAC set more or less as a way to ensure that fishing occurs somewhat "according to the distribution of biomass." In other words, without a separate AI TAC, there could be "too large" a portion of a single BSAI TAC taken in the AI management

area, and this could have adverse consequences for other ecosystem components. Fishing according to the distribution of biomass is one of those leading-edge ecosystem-based management measures that very few US Fishery Management Councils have seen fit to adopt. So here its important NOT to confuse a progressive management measure designed to limit the ecosystem impacts of the AI pollock fishery with a natural unit-stock boundary. In practice, the setting of a separate AI TAC allows for the implementation of a precautionary, exploit-according-to-biomass-in-the-area harvest strategy, and this harvest is taken at a rate that is 75% of the natural mortality rate.

With regard to the current status of the pollock biomass in the AI, examination of Table 1 from the EBS assessment shows that harvests from the AI management area began in 1979-1980. The AI catches from Table 1 and the biomass estimates in right-most column of Table 1.19 from the assessment describe the classic "virgin" fishery development scenario, where an old, slow-growing accumulated biomass is cropped out. While it could be that the relatively high harvests of the early 1990s did result in a too-heavily-exploited biomass locally within the AI management area, the adoption of BSAI FMP Amendment 44 in 1997, and subsequently Amendment 56 in 1999, served to incorporate an extremely precautionary harvest strategy into the BSAI FMP. As a result, smaller AI pollock harvests in the late 1990s resulted in increased abundance. The current harvest strategy, which maintains harvests in proportion to measured biomass levels, and constrains fishing mortality to be less than 75 percent of natural mortality, is functioning to prohibit over exploitation and the abundance of pollock in the AI has increased. The BSAI Plan Team and the SSC have provided a projected maximum ABC for AI pollock in 2003 of 23,800 metric tons.

Finally, the NMFS Alaska Fishery Science Center has just upgraded the survey frequency in the AI, such that starting this year surveys will occur every two years. Given everything that we know about the movements of pollock in the EBS area and the AI area, the extraordinarily large 1996 EBS year class should begin recruiting to the biomass in the AI area this year.